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What Factors Affect Females' Decision to Pursue Leadership Careers in Higher Education in Kazakhstan?

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This dissertation is not only a reflection of my academic work, but also answers for my life questions, which brought me from Kazakhstan to Hungary. With the support and belief of all those mentioned here, and to them, I am forever grateful.

Abstract

This dissertation examines the factors influencing Kazakhstani women's decisions to pursue leadership careers in higher education, given the underrepresentation of women in academic leadership roles globally and within Kazakhstan. Grounded in Bronfenbrenner's Ecological Development Theory, this research adopts a mixed-methods approach to explore the multi-layered influences at the micro-, meso-, exo-, and macro-system levels, alongside integrating additional relevant theories to deepen the analysis. Semi-structured interviews were conducted with 17 participants, while quantitative part consisted of 168 participants. Participants of the interviews and survey questionnaire were Kazakhstani females at different stages of their careers, who are currently involved in higher education. The novelty of this research lies in its comprehensive approach to dissecting Bronfenbrenner's Ecological Development Theory, specifically tailored to the Kazakhstani context, and with integration of additional theories in each level of the Bronfenbrenner's theory.

At the macro-system level, the research explores how deeply ingrained cultural norms and historical legacies in Kazakhstan shape perceptions of female leadership, revealing a nuanced balance between traditional gender roles and attitude towards women in leadership roles. At the exo-system level, the dissertation highlights the unique impact of organizational culture within Kazakhstani higher education institutions on women's leadership trajectories, underscoring the complex interplay of mentorship, networking opportunities, and institutional support mechanisms. A significant contribution is the detailed exploration of micro-level factors, where individual motivations, self-perception, and the internalization of gender roles emerge as critical determinants of women's leadership aspirations. This aspect of the research shows the internal struggles and negotiations women engage in, which are often overlooked in broader analyses. By juxtaposing the Kazakhstani experience with international literature on female academic leadership, this dissertation shows both unique local challenges and universal obstacles faced by women, offering a comprehensive understanding of the global landscape of academic leadership.

This research provides implications for policy-makers, educators, and leaders committed to fostering a more inclusive and equitable academic environment. The research underscores the importance of addressing gender disparities in leadership through comprehensive and culturally sensitive approaches, ultimately contributing to the broader goal of achieving gender equality in higher education leadership.

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Chapter I: Introduction

1.1 Personal Contexts

1.1.1 Justification to Include Personal Contexts

Introducing a personal context in this dissertation offers several benefits. Firstly, it grounds the research in authenticity, lending credibility while emphasizing my dedication to exploring leadership in Kazakhstan's higher education. This personal touch not only provides readers with cultural nuances but also highlights experiences and challenges that have fueled my interest. Such insights enhance understanding of the local nuances. Secondly, this personal angle ensures research transparency, making readers to understand my motivations and potential biases, allowing for a deeper critical evaluation of the research's foundations. Personal elements further engage readers on an emotional level, making the findings more relatable. Lastly, this chapter can resonate with and inspire those facing academic challenges, underscoring the potential for overcoming barriers and leaving an impactful academic footprint.

1.1.2 Author's Personal Contexts

Raised in a single-parent household, I was the quieter and more academically inclined of two siblings. Following the tragic loss of my mother at age 10, my sister and I transitioned to living with our father's larger and busy family. This shift pushed me to immerse myself in diverse extracurriculars, from basketball to singing, including English courses which later fueled my passion for rapping in English. Despite academic successes in Kazakhstan and a transformative, scholarship-based year in Healdton, Oklahoma, USA, I realized that external appearances often masked underlying personalities and behaviors, especially in competitive environments like sports. Upon returning to Kazakhstan, I chose academic paths less chosen by women: physics and mathematics. This decision reflected my drive to combat stereotypes. As I navigated university, I found parallels between the assertive behavior of my American basketball peers and my own leadership style on my university's female basketball team. Later, as I approached my BSc graduation, I dived into the study of religions and grappled with traditional gender roles. This introspection led me to leave basketball and focus on building a family. My subsequent journey into the workforce introduced me to challenging dynamics, especially under a female supervisor. I channeled these experiences into my MSc thesis on intergenerational female dynamics at workplaces (Yelibay, 2021).

Seeking a broader perspective, I relocated with my family to Hungary to pursue a Ph.D degree at Eötvos Loránd University, concentrating on female leadership across various domains. This journey, combined with personal life shifts, fostered my interest in research concerning leadership, gender roles, and educational practices. My life experiences and in-born inquiry drove me to the problem statement of this research, further shaping the pragmatic approach and the mixed-methods research design.

1.2 Problem Statement

1.2.1 Diversity in Leadership: Gender Perspectives and Stereotypes

Research has indicated that diversity in leadership is integral for organizational growth (Roberts, 2007; William, 2011). Harman (2009) states that having a more diverse management team leads to the blend of approaches and perspectives, boosts creativity and broader range of thinking. Nevertheless, gender differences in the socialisation, worldview and life experiences could result in women's behaviours', management, and leadership styles (Jung, 2002; Ragins, Townsend, & Mattis, 1995).

Stereotypes regarding the difference between how men and women oversee an organization seem to exist. Females are characterised by transformational actions - offering support, encouragement, empowerment, and engagement to the team (Eagly & Carli, 2003; Fine, 2009). Males are described acting in a more transactional way, as applying a top-bottom supervision approach which confirms the existing structure, where teamwork is focused on achieving the results, while the reward and punishment system is dependent on employee's productivity (Eagly & Carli, 2003). Historically, there has been a societal consensus that leaders must be authoritative, dictative and assertive, which aligns with transactional leadership style and masculine traits that are expected from men (Gill & Jones, 2013). These perceptions of gender differences could result in a lack of women leaders, and few role models for those who aspire to become one. Next section will examine how these global trends and stereotypes are mirrored, challenged, or transformed within the Kazakhstani educational landscape.

1.2.2 Societal Expectations and Female Leadership in Kazakhstan's Higher Education

Kazakhstan's distinctive history brings with it societal expectations concerning gender roles. These expectations ripple through Kazakhstani families, women's education, and their career trajectories (Kuzhabekova & Almukhambetova, 2019). Women here are often seen as

educated and refined. Yet, societal views may box them into certain roles from an early age. Many discourage women from pursuing STEM or high-ranking leadership roles, steering them towards "more feminine" professions like education or healthcare (Almukhambetova & Kuzhabekova, 2020). This is underpinned by the belief that women should prioritize their family's comfort over personal ambition, and choose profession with the nurturing and caring nature.

Reflecting this, education in Kazakhstan is seen as a domain for women, with a significant female presence (Dubok & Turakhanova, 2018). Although Kazakhstani female educators are as qualified as their male counterparts, or even more so in some fields, they seldom reach leadership roles like rector or dean (Lipovka, 2018). As of 2022, women only held 20% of these leadership positions in higher education, with men dominating at 80% — a ratio that hasn't notably shifted in over a decade ("The ratio of women...", 2022). Kuzhabekova and Almukhambetova (2017) point to societal expectations that underpins this imbalance. Rooted in tradition, women are often seen as the caregivers, while men are the breadwinners. The Soviet era, however, propagated the idea of working women who offload childcare to daycares, but they should still earn less than their husbands to maintain familial hierarchies. Modern Western ideals further complicate this by advocating for women's career as a priority, even if it contradicts family responsibilities or their partner's desires. This clash of values poses challenges for Kazakhstani women, pushing them to strike a balance between being caregivers, professionals, and independent individuals. The next section, "Purpose of Research", will further illuminate these themes, offering a more in-depth knowledge in the literature review chapter of this dissertation.

1.3 Purpose of the Research

On a broader scale, the literature review on this subject has distinguished several themes that are relevant to females progressing towards leadership careers in academia. According to Bronfenbrenner (1979), interactions that influence individuals' decisions happen at macro-system (culture, society and economy), exo-system (institutional), meso-system (family-related), a micro-system (self-related), and all changes happen over time in chrono-system. Therefore, the theoretical framework that will guide this dissertation is the Bronfenbrenner's Ecological Development Theory (1979) and additional relevant theories on the theme, that will be embedded into the Bronfenbrenner's Ecological Development Theory (1979).

To the author's knowledge, there are no existing studies that would explain the factors that affect females' decision to pursue leadership careers in higher education in Kazakhstan the combination of the unique contextual information provided by local scholars with its interrelations according to the Bronfenbrenner's Ecological Development Theory (1979). Since research grounded in Bronfenbrenner's Ecological Development Theory, and adhering strictly to this framework ensures theoretical consistency and depth. The study was designed to explore the factors affecting females' decisions to pursue leadership roles specifically within the scope of these ecological systems (macro-, exo-, meso-, and micro-systems).

Including females at different career stages in the study, even when not analysing the data by these stages, enhances the generalizability of the findings across the career lifespan, making the study relevant to a broader audience, capturing a more comprehensive view of the experiences and perspectives of women in academia. Having a diverse sample in terms of career stage acts as a control variable, ensuring that the findings related to the ecological levels and are not skewed by career-specific challenges or advantages. Therefore, the inclusion of females at varying career stages adds layers of depth and complexity to the study without compromising the focus on Bronfenbrenner's ecological systems. While the current study focuses on ecological levels, the diverse sample provides a valuable data set that could be re-analysed or expanded upon to explore career-stage-specific trends in future studies.

Therefore, specific objectives of this research are to explore factors that affect Kazakhstani females who are at different career stages in universities, to pursue leadership careers in higher education, related to macro-, exo-, meso-, and micro-systems of Bronbrenbrenner's Ecological Development theory. Hence, next section is to introduce research questions that guides this research.

1.4 Research Questions

While the initial research question might have been centered on factors that affect Kazakhstani females who are at different career stages in universities, the participants' narratives consistently touched upon their perceptions of leadership, femininity, and masculinity. Therefore, additional research question: "How do perceptions of leadership, femininity, and masculinity intersect and influence the understanding and enactment of leadership roles within Kazakhstan's higher education sector?" was thus crafted and added to better represent and explore the emergent themes from the participants' narratives. Therefore, to fulfil the research objectives, the following research questions guide this study:

1. How do perceptions of leadership, femininity, and masculinity intersect and influence the understanding and enactment of leadership roles within Kazakhstan's higher education sector?

2. What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at macro-system?

3. What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at exo-system?

4. What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at meso-system?

5. What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at micro-system?

Moving forward, the next step is to introduce and elaborate on the research methods employed in this study.

1.5 Research Methods

This exploratory research employs convergent mixed methods research design, an approach where qualitative and quantitative data are collected and analyzed roughly at the same time (Cresswell, 2014). The data was collected online, due to time limits to complete the dissertation, COVID-19, and political restrictions in the country due to the civic unrest in 2022 it was complicated to travel to the Kazakhstan ("2022 Kazakh unrest", n.d). The semi-structured interview and questionnaire questions were developed by author based on the literature review on factors that influence females' decision to leadership aspiration in universities. There may be existing common scales or instruments that could potentially measure the constructs of this dissertation, however, there was no single interview or questionnaire tool that could measure the phenomenon comprehensively in relation to the theoretical framework of this study. Therefore, the author developed semi-structured interview and questionnaire questions using well-established literature and scales, such as:

- Multifactor Leadership Questionnaire (Bass & Avolio, 1996) and organizational behavior components (Bateman & Crant, 1993);
- "The Tailored Design Method" by Dillman, Smyth and Christian (2014);
- "The future of survey research: Challenges and opportunities" by Krosnick, Presser, Fealing, Ruggles and Vannette (2015)

- Tips from the Bureau of Educational and Cultural Affairs and Harvard University Program on Survey Research ("Tips for developing survey…, n.d"; "Tip sheet on question...", n.d).

By developing tools aligned with theoretical framework for this study, the author was able to explore the specific elements of the academic environment that impact women's career choices at different sub-systems. Next step is to introduce the theoretical framework and epistemological concepts that underpin this research, providing a foundation for understanding the principles and theories guiding the research's approach and analysis.

1.6 Theoretical and Epistemological Concepts

1.6.1 Theoretical Framework

A theoretical framework provides a framework for understanding how different elements of the theory relate to one another and how they can be used to explain or predict phenomena. It includes the concepts, principles, and assumptions that are used to explain a particular phenomenon (Cresswell, 2014; Guba, 1990). Therefore, this section explains the theoretical framework employed for this dissertation.

The main theoretical framework for this dissertation is the Bronfenbrenner's Ecological Development Theory (1979). According to Ecological Development Theory, individual is surrounded by five subsystems:

1. The macro-system describes consequences of intersecting with culture and larger socio-political context.
2. The exo-system explains how social settings, e.g., workplace, influence a person.
3. The meso-system explores the impact of relationships and upbringing within the family.
4. The micro-system refers to personal relationships with self and closest ones, which form individual's identity.
5. The chrono-system teaches how powerful can be the time over the individual who constantly changes (Bronfenbrenner, 1979).

Therefore, the literature review, data findings and analysis of this study is structured according to the Ecological Development Theory at the macro-, exo-, meso-, and micro-systems. The author strategically omitted adding chrono-system as other sub-systems (macro, exo, meso, and micro) are densely populated with variables and exceptionally complex.

The sequence of sub-systems in this dissertation is: macro-, exo-, meso- and micro-system. Starting with the macro system in a theoretical framework offers a top-down approach, emphasizing the overarching societal, cultural, and political structures that shape the phenomena under study. This approach sets the context by first highlighting the "big picture", ensuring an understanding of the wider context before exploring more intimate, individual-level interactions. By laying this foundation, the interconnectivity of other systems, will explain how changes in one system can affect the others.

While Bronfenbrenner's Ecological Development theory serves as the foundational framework, enabling the examination of various sub-systems that influence individuals within their social contexts. In the macro-, meso- and micro-systems, the author utilizes social role and gender role theories to gain insights into how societal norms, expectations, and gender identities shape females' attitudes and behaviors towards leadership. Gender Role Theory has evolved through interdisciplinary research and contributions from scholars in sociology, psychology, anthropology, and gender studies. It has been refined and expanded over time as researchers continue to examine the complex interplay between societal expectations, cultural norms, and individual experiences related to gender roles. In this research, the author deploys gender research by Alice Eagly, a prominent social psychologist known for her contributions to the study of gender and social psychology. According to Eagly (1987) gender roles are learned through socialization, and that they reflect the cultural expectations of what it means to be male or female. Gender roles are not biologically determined, but rather are shaped by cultural and social factors (Eagly, 1987; Eagly & Johnson, 1990; Eagly & Wood, 2016). Hence, it is generally accepted that communal traits as being sacrificial, caring, nurturing, concerned with others are inherent to women, whereas agentic traits such as independence, assertiveness, instrumental competence belong to men rather than women (Eagly, Johannesen-Schmidt & Van Engen, 2003; Eagly & Carly, 2003). Thus, these norms create the socially accepted behaviour for each of the sexes, where aligning with the societal expectations result in positive perception, while conforming these norms often elicit negative sanctions. Gender role theory has evolved over time, and contemporary perspectives consider the dynamic and evolving nature of gender roles in society.

One of the theories that addresses changes in gender roles is the Social Role Theory proposed by Eagly and Wood (1999). According to this theory, gender roles are shaped by social expectations and cultural norms, emphasizing the influence of socialization and societal structures on the development of gender roles. It suggests that men and women often

occupy different social roles, leading to the formation of distinct gender roles and associated behaviours. The Social Role Theory suggests that gender differences in behaviour and performance are largely the result of social and cultural expectations and roles that are assigned to men and women (Biddle & Thomas, 1966). In the context of this dissertation, the social role theory elaborated that gendered expectations about behaviour and performance can influence females' decision to pursue leadership careers in higher education. For example, if women are socialised to be more nurturing and empathetic, they may be perceived as less authoritative or commanding, and therefore less suitable for leadership roles. The social role theory highlights the importance of challenging gendered expectations and roles to create more opportunities for women to become leaders. By promoting gender diversity and inclusivity, and by providing support and resources for women in leadership positions, organizations can help to break down the barriers that prevent women from reaching their full potential (Eagly, 1987; Eagly, & Johnson, 1990).

While both theories explore the impact of societal expectations on individual behavior and identity, they have different focal points. Gender Role Theory concentrates specifically on gender-related roles, behaviors, and expectations, while Social Role Theory explores the broader impact of social roles on individual behavior and identity. In the modern world, there has been a notable transition from traditional gender roles to more egalitarian ones, driven by the pursuit of gender equality and societal progress. Research conducted by Bianchi and Milkie (2010) indicates that the increasing number of women participating in the workforce has challenged traditional gender norms, leading to changes in household division of labor and childcare responsibilities. This trend towards more egalitarian gender roles is further supported by studies from Kroska and Elman (2009), who found that younger generations exhibit more egalitarian attitudes and behaviors compared to older generations. Moreover, research by Davis and Greenstein (2009) reveals that changes in societal values and norms have contributed to greater acceptance of men engaging in traditionally feminine roles, such as caregiving. These research findings, among others, illustrate the ongoing transformation of gender roles in contemporary society, reflecting a move towards greater gender equality and a re-evaluation of traditional societal expectations. Therefore, the shifting gender roles in contemporary society emphasize the need to incorporate both gender and social role theories.

At the exo-system of Bronfenbrenner's Ecological Development Theory, the author incorporates the gendered organization theory and performative leadership theory. The Gendered Organizations Theory explores organizational structures and practices that perpetuate gender disparities in leadership roles. It suggests that organizations are structured

in ways that reflect and reinforce traditional gender roles and stereotypes. This theory argues that the norms and expectations around gender are deeply embedded in the culture and practices of organizations, shaping how work is defined, performed, and valued. Gender is not just a matter of individual identity or preference but is also deeply institutionalized in organizational structures and practices (Acker, 1990). For example, due to procreation, childrearing and emotional behaviours, females are considered as a threat to organizations, because the idea for effective work is to focus on productivity without disruptions, therefore organizations historically favoured males as "ideal" workers (Acker, 1990). As a result, senior positions in organizations are often filled with males, who act as "gatekeepers" to the career advancement, often favouring those who are alike to them (Aiston, 2014). Often the "old boys' club", the informal network with male-friendly rules, dictate the decision-making processes (Luke, 2001). Because of the embedded gender biases highlighted by the gendered organization theory, female leaders' performances might be scrutinized more intensely than their male counterparts and therefore performative leadership theory becomes relevant.

Performative Leadership Theory is a relatively new approach to gender and leadership, which focuses on the idea that leadership is a process of performing actions rather than a set of traits or characteristics possessed by an individual (Grint, 1997). That is, individuals' behaviours may differ from what is socially expected from them as depending on their biological sex. Performativity explains that since gender is socially constructed, there could be masculine-acting women and feminine-acting men. Similarly, as gender is performed, leadership also can be performative. The relevance to female academic leadership is that women leaders create a combination of feminine and masculine behaviours, switching from one identity to another when necessary (Acker, 2012). To understand that statement, it is first necessary to define leadership. Broadly speaking, a leader is a person who inspires and motivates others to reach a common goal (Mohrfeld, 2020; Shaw, 2020). Leaders "value integrity, honesty, trust, commitment, morality, shared experience, dynamic networks and demonstrate it through self-determination, risk-taking, courage, decisiveness and strong sense of ethics" (Anneli Adams, 2009, p. 240). In higher education, successful leaders are defined as:

- able to form the mission, vision and the goal of an organization and create a pathway towards success;
- can foresee the direction of actions in a pragmatic way and distribute the resources strategically;

- self-aware and self-confident, which in turn manifests communication skills that praise teamwork;

- focused on task completion, but ready to teach and mentor others;

- passionate about their work to make good changes (Cselenszky, 2012; Dunn, Gerlach, & Hyle, 2014; Pascale & Ohlson, 2020; Zulu, 2011).

Leadership is a complex and multifaceted concept, and different researchers and scholars have proposed various leadership styles based on different theoretical frameworks and observations. Leadership style is how leaders "model the way for others through the use of empowerment, collaboration, persuasion, professional development and encouragement" (Cselenszky, 2012). Here are a few leadership styles that are relevant in the context of this study:

1. Transformational leadership is a leadership style where leaders inspire and motivate their followers to achieve higher levels of performance and personal growth. These leaders are visionary and able to articulate a compelling vision for the future, which inspires and excites their team members. They encourage creativity, innovation, and continuous improvement within the organization. Transformational leaders also exhibit charisma, intellectual stimulation, individualized consideration, and inspirational motivation to empower their followers to reach their full potential. This leadership style focuses on building strong relationships, fostering trust, and creating a sense of purpose and shared values among team members. Transformational leaders are known for their ability to bring about positive change and organizational transformation (Bass & Riggio, 2005; MacGregor, 1978).

2. Transactional leadership is a leadership style based on a transactional exchange between the leader and followers. In this style, leaders set clear expectations and specific goals for their team members. They use a system of rewards and punishments to motivate employees to achieve these goals. Transactional leaders focus on monitoring performance, providing feedback, and using contingent rewards (such as bonuses, promotions, or recognition) to incentivize desired behaviors and outcomes. They also use corrective actions, such as reprimands or disciplinary measures, when employees fail to meet expectations. Transactional leadership is more focused on day-to-day operations and ensuring that tasks are completed efficiently and effectively (MacGregor, 1978).

3. Laissez-faire leadership, also known as hands-off leadership, is a style where leaders take a passive and non-directive approach to leadership. Instead of providing detailed guidance or making decisions, laissez-faire leaders delegate authority and responsibility to their subordinates, giving them considerable freedom to make their own decisions. This style can be effective in situations where team members are highly skilled and motivated, as it allows them to exercise their expertise and creativity. However, it can also be problematic when employees lack direction or guidance, leading to decreased productivity and coordination within the organization (Lewin, Lippitt & White, 1939).

4. Bureaucratic leadership is a style where leaders rely on a strict adherence to rules, policies, and procedures to guide their team and organization. Bureaucratic leaders emphasize following established protocols and maintaining order and efficiency within the organization. They place a strong emphasis on hierarchical structures and clearly defined roles and responsibilities. While this style can be effective in ensuring consistency and stability, it can also lead to rigidity and resistance to change, hindering innovation and adaptability in dynamic environments (Weber, 1922).

Leadership styles are not mutually exclusive, and leaders may use a combination of these styles depending on the situation and the needs of their team and organization, performing leadership as according to Performative Leadership Theory (Grint, 1997). Effective leaders often tailor their approach to match the specific context and challenges they face.

Throughout the dissertation, the intention is not to superficially cover all of the theories but to present them cohesively, enriching the overall analysis and providing a multidimensional understanding of the topic. Therefore, the main theoretical framework, with abovementioned theories integrated into levels of Bronfenbrenner's Ecological Development Theory (1979) for this dissertation looks as presented in Figure 1:

Figure 1

The Main Theoretical Framework Connected with Other Theories that Guide the Study, by author.
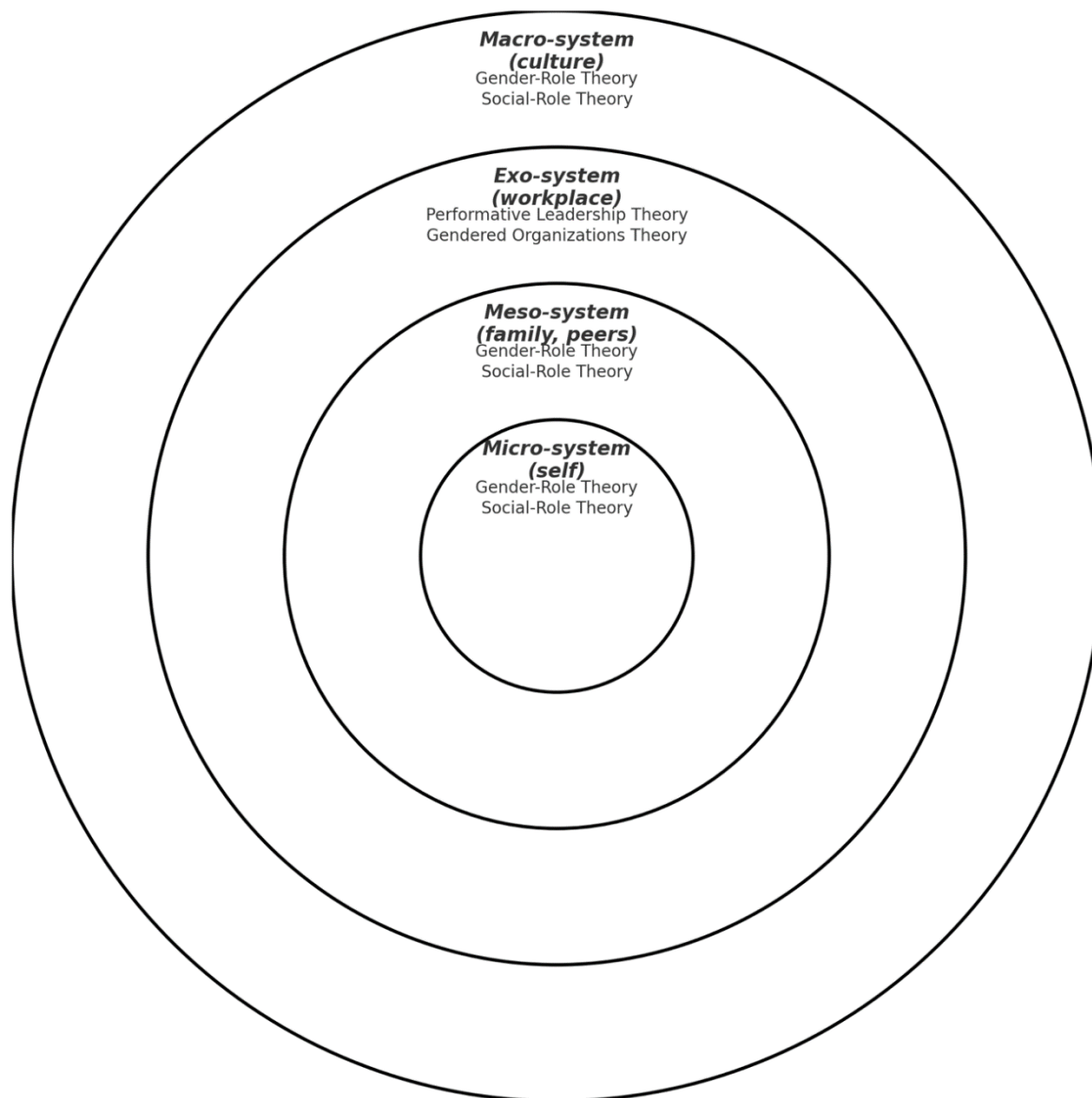
The innermost circle is the Micro-system which directly contains the individual. Here, the Gender-Role Theory and the Social-Role Theory are integrated. Encircling the micro-system is the Meso-system, which represents the interconnections between the individual's immediate environments like family and peers. Again, the Gender-Role Theory and the Social-Role Theory are listed here. The next layer is the Exo-system, encompassing the broader contexts that indirectly affect the individual, such as the workplace. In this layer, the Performative Leadership Theory and the Gendered Organizations Theory are placed. The outermost layer is the Macro-system, representing overarching cultural and societal norms.

Here, the Gender-Role Theory and the Social-Role Theory are featured. In this dissertation, the integration of Bronfenbrenner's Ecological Systems Theory with gender-role, social-role, performative leadership and gendered organizations theories represents a significant theoretical innovation. This synthesized framework is not merely an analytical tool, but also a novel contribution to theory-making in the field of educational sciences. By integrating those theories onto the various ecological systems of Bronfenbrenner, from micro to macro, the research uncovers the interplay between individual, communal, and societal factors influencing women's leadership trajectories in higher education. This complex model serves as both a guide for empirical inquiry and a theoretical advancement, underscoring the dissertation's value beyond its empirical findings. It exemplifies how layered contextual factors can be systematically examined and integrated to yield a comprehensive understanding of women's leadership development within the specific cultural aspects of Kazakhstan.

1.6.2 Epistemology, Ontology and Research Paradigm

This part will explore some of the key concepts relevant to this dissertation, which are epistemology, ontology, and research paradigm. Epistemology is a branch of philosophy concerned with the nature and scope of knowledge. It refers to the assumptions and beliefs that underlie how researchers understand, generate, and evaluate knowledge (Guba, 1990). The core of the research questions for this study is: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at macro, exo, meso, micro-systems?" which will explore actions, situations, and consequences, emphasizing the problem and putting all efforts to understand the problem. Therefore, the author employs post-positivism as an epistemological approach that recognizes that scientific knowledge is influenced by various factors, such as the researcher's biases, values, and interpretations, as well as the context in which the research is conducted. Post-positivism also acknowledges that scientific theories are not absolute truths but rather approximations or models that help us understand the world (Kuhn, 1962). Therefore, the author seeks to improve the rigor and objectivity of research by acknowledging and attempting to minimize these biases and limitations. This epistemological stance allows the author to be critical of her own assumptions, consider multiple perspectives, and be open to revising their theories based on new evidence.

Ontology refers to the study of the nature of existence, which refers to the researcher's assumptions about what exists and what can be known about it. The researcher employs a

constructivist ontology, as it acknowledges that reality is socially constructed and subjective. This is particularly relevant when studying decision-making processes, as individual experiences and perceptions can influence the choices that individuals make (Gergen, 1999).

The researcher used a mixed-methods research paradigm, combining both quantitative and qualitative methods. The questionnaire provided quantitative data on factors that influence women's decisions to pursue leadership careers, while the interviews explored rich qualitative data on participants' experiences and perspectives. This approach allowed for a more comprehensive understanding of the topic and can help to triangulate findings from different data sources (Cresswell, 2014; Mertens, 2010).

1.7 Significance and Discipline of the Study

1.7.1 Significance of the Study

Diversifying the leadership profile in educational systems is important for several reasons: (1) women could bring different perspectives to governing the system; (2) the presence of female leaders creates the diverse leadership profile and serves as role models to women aspiring top-management positions; (3) women's active participation in leadership ensures the equality in the access to leadership positions within the society (Bronznick & Goldenhar, 2008). As will be discussed further in the literature review chapter, the lack of female leadership, including the higher education system, is not only a "woman" problem. It is rather a combination of factors, which also concerns the inequality in distributing the power within all levels of system of world order.

One of the well-known international organizations that focus of developing sustainable and more equal world is United Nations. Since 2015, Kazakhstan focuses on developing Sustainable Development Goals (SDG) as a part of United Nations (UN) programs implemented in the country ("How the UN…", n.d). One of the UN's programs that addresses the issues of inequality in the country is the "Leaving No One Behind" project, which is a key element of Kazakhstan's development agenda by 2030. According to the annual country report of the organization, despite the high number of women in labour force and education, wage gap, discrimination due to maternity and marital status still occur in certain occupations (United Nations Kazakhstan, 2022).

This research is significant because it proposes an empirical work which shows insights into factors that influence females' decisions regarding leadership in higher education, complementing the existing information on the theme. The results of this

dissertation provide insights to university staff and leaders as well as for aspiring women leaders hoping to ascend to leadership in universities. The analysis of the current research contributes to the development of policies and practices in Kazakhstan, since the country supports equity and equality as a part of UN SDGs. The following study highlights a need for additional programming, training, and support from nationwide higher education organizations regarding the leadership and human capital development.

The study will contribute theoretically to interpret Western theories in a different social and cultural context. According to Walker and Dimmock (2002), most of the leadership theories are based on the Western context and are somewhat inappropriate to different cultures. Socially, this research tests existing knowledge in an original way, since the implications of this study maintain femininity/masculinity differences, in relationship to macro-, exo-, meso- and micro-systems that impact the leadership trajectories of women in higher education system.

1.7.2 Main Discipline of the Study

The main discipline of the thesis is education sciences. While the thesis draw upon various disciplinary areas such as higher education policy, management and leadership styles, psychological and sociological literature on gender roles, the primary lens through which the research is conducted is that of educational sciences. Educational studies serves as the overarching discipline guiding the investigation of the factors that affect female leadership in higher education in Kazakhstan. This interdisciplinary field encompasses the study of educational systems, policies, practices, and their impact on learning outcomes and educational environments. By adopting an educational studies perspective, the research aims to provide a comprehensive understanding of the research problem. The integration of other disciplines is done purposefully, showcasing their relevance to the research question and contributing to a nuanced understanding of leadership in higher education in Kazakhstan.

1.8 The Structure of the Dissertation

This dissertation is methodically structured to facilitate a coherent and systematic examination of the factors affecting women's decisions to pursue leadership careers in higher education within Kazakhstan. Following the introduction, each subsequent chapter is designed to address specific components of the research question, utilizing Bronfenbrenner's Ecological Systems Theory as a guiding framework. "Chapter I: Introduction" introduces the research context and personal motivation behind the dissertation. It outlines the problem

statement, research objectives, and questions that guide the research. "Chapter II: Literature Review" serves as the foundation of the research. This chapter reviews relevant literature and analyses it through the theoretical framework. It consolidates existing knowledge and identifies gaps that the current research aims to fill. "Chapter III: Research Design and Methodology" includes the rationale behind methodological choices, participant selection, data collection, and analysis procedures. Ethical considerations and research limitations are also discussed here. "Chapter IV" is dedicated to exploring the research questions in depth. They go into the macro, exo, meso, and micro-system factors influencing female leadership aspirations in higher education, supported by empirical data, thematic analysis and discussion of results alighning with the literature review and theoretical framework of the study. "Chapter V: Summary" summarizes all of the factors affecting Kazakhstani females' decisions to pursure or abstain from pursuing leadership positions. "Chapters VI: Conclusion" draws conclusions from the data analysis, discusses the implications of the study for policy and practice, offers recommendations for future research, and reflects on the contribution of the study to the existing body of knowledge.

Chapter II: Literature Review

2.1 Introduction

The literature review chapter is divided into two main sections. The first section, titled "Methods of Literature Review Analysis" explains the approach taken by the author to conduct the review. The systematic literature review method, known for its objective and comprehensive nature, was employed in this research (Richter, Bedenlier & Bond, 2020). This method ensures a thorough collection of data on the topic, highlighting past research and presenting a grounded strategy for literature analysis (Cresswell, 2014). To further organize and analyze the research studies, ATLAS.ti software, recognized for its efficacy in handling literature and qualitative data (Friese, 2019), was used. This allowed for a nuanced understanding of the referenced studies. This section also touches upon the author's theoretical and epistemological views.

The second section, "Discussion of Literature Review", presents the findings from the review of existing empirical studies. These findings are structured around the theoretical basis for this dissertation, which Bronfenbrenner's Ecological Development Theory that breaks down into macro-, exo-, meso- and micro-systems, with Gender Roles, Social Role, Gendered Organizations and Performative Leadership Theories at different sub-systems.

2.2 Methods of Literature Review Analysis

Systematic literature review allowed to map the theoretical, methodological and pragmatical structures of the existing research in the field of academic careers and educational leadership. At first, the Google Scholar keyword-search was used for: 1) to identify the initial themes about the topic of the discussion; 2) to locate the most authoritative publications and authors in the relevant domain by comparing the number of citations; 3) to gain an understanding in which databases most of the articles pertaining to the theme are located. The main challenge was to choose between the combination of the keywords, because many of them produced many articles with many irrelevant entries. Nevertheless, the author succeeded to find the specific combination of keywords which captured articles relevant to the topic, which are:

- female (women or woman or gender of feminist) AND/OR
- universit* (academi* or college) AND/OR
- education (higher or postsecondary or school) AND/OR

- leader* (manager* or administrat* or president or chair or dean or provost or principal or faculty) AND/OR
- Kazakhstan (Post-Soviet or Central Asia)

These keywords generated an overview of the studies that helped the author to examine the relevant literature further in detail in scholarly databases.

2.2.1 Construction of the Dataset for Literature Review

To investigate female leadership in higher education, the author employed a systematic literature review approach, searching the scholarly databases available through the university's subscriptions during her doctoral studies. Key databases included:

- Bielefield Academic Search Engine (BASE)
- Cambridge University Press Journals
- CORE, among others.

Using an initial keyword search in Google Scholar, the author established a search pattern for these databases. For manageability and relevance, the literature was then narrowed to empirical articles from peer-reviewed English journals published between 2012-2022. Though the primary focus was on recent articles, essential older publications, books, and select works in Kazakh and Russian were also considered. Notably, research on the topic gained momentum in Kazakhstan post-2017, attributed to a local scholar's contributions. Building the dataset involved multiple stages. The initial search, using keywords like "female", "university", and "Kazakhstan", yielded a broad range of articles on leadership. Out of 1548 articles skimmed, the author identified a subset specifically discussing female leadership in education. Each article was then thoroughly reviewed, with particular attention to methodology and conclusions. To refine this selection further, the author differentiated articles addressing factors influencing females' leadership decisions in higher education. Ultimately, the literature review chapter was constructed from 262 scholarly papers.

2.2.2 Literature Review Analysis Procedures

To analyze literature sourced from academic databases, the author utilized the ATLAS.ti software. This tool facilitated the importation, grouping, coding, and quotation of varied document formats. Among its analytical capabilities, the software can produce a word cloud or list, offering an initial perspective on prevailing themes and theories in the research papers. By selecting specific words in the cloud, one can pinpoint where these terms appear

in the documents. The resulting word cloud for this dissertation's literature review looks as presented in Figure 2:

Figure 2

The word-cloud created in ATLAS.ti software on the literature review for this dissertation (by the author)

After examining the word cloud, the author used ATLAS.ti to manually apply codes to pertinent sections of the text, with code names inspired by the word cloud itself. Additionally, a code-document table was employed to visualize code frequencies across all articles, simplifying the process of identifying recurring themes in the literature. This method also offered various ways to record findings. The snippet of the literature review's code-document table for this dissertation looks as presented in Table 1:

Table 1

Code-document table (an extract, not a full document), by the author

Code	Morley, 2013	Nyoni, 2019	Powell, 2012	Read, 2016	Total
Academic: micro: leadership perception	1	1	3	2	8
Academic: exo: organizational culture	3	1	0	3	7
Academic: exo: mentorship	0	0	2	0	2

Academic: macro: culture and conventions	3	2	0	0	5
Total	7	4	5	5	20

Note. A code-document table was created in Russian language using ATLAS.ti sofware

2.2.3 Results of Literature Review Analysis

The bulk of the research originates from North America, Europe, and Oceania. This trend is largely because these databases primarily feature English-language publications from Anglo-Saxon countries, where scientific writing has deep roots (Garcia-Navarro, 2017). However, this landscape is evolving, with countries like China and South Africa emerging as notable contributors to modern research in international higher education (Kuzhabekova, Hendel, Chapman, 2015). The author also included studies in local languages pertinent to Kazakhstan. The geographical distribution of research samples in the research studies for this dissertation looks as presented in Table 2:

Table 2

The geographical distribution of research samples in the research studies for this dissertation, by the author.

Continent	Country	Number of research studies
North America	The United States	98
Europe	United Kingdom	16
Oceania	Australia	13
Region specific	post-Soviet, including Kazakhstan	50
Africa	South Africa	9
Asia	China	7
Middle East	Saudi Arabia	3

Qualitative methodologies predominated in the research studies, while mixed methods were less common. This could be because qualitative approaches allow for a more profound exploration of subjects related to human behavior. Meanwhile, mixed methods are a relatively recent addition to research techniques (Cresswell, 2014). After considering the advantages and disadvantages of each approach and aligning it with the dissertation's epistemological stance, the author chose to use mixed methods, the rationale and processes of which are detailed in Chapter III: "Research Design and Methodology". The following section will introduce empirical studies, forming a crucial part of the literature review, to offer a comprehensive overview of existing research and insights relevant to this thesis.

2.3 Discussion of Literature Review

2.3.1 Introduction

This section of the literature review goes into studies related to academic careers and educational leadership. The aim is to broaden the scope beyond the specific research questions for a comprehensive understanding. Hence, this review incorporates studies discussing graduate education, including doctoral studies, as integral to leadership identity development and academic career progression. The research findings are then filtered and synthesized to address the dissertation's central question: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at macro, exo, meso, micro-systems?" These findings are structured using Bronfenbrenner's Ecological Development Theory, which categorizes a person's development across sub-systems and other theories embedded at the ecological-systems. Next, the author will define and introduce the key terms crucial for this study, ensuring clarity and precision in the terminology used throughout the research.

2.3.2 Definition of Key Terms

Research has indicated a blending of roles in academia, making the distinction between academic identities and roles increasingly blurred (Whitchurch, 2006; Whitchurch, 2008; Whitchurch & Gordon, 2009). To clarify these roles, this study identifies two primary dimensions within university careers: academic vs. non-academic and managerial vs. non-managerial.

1. Academic Staff (academic, non-managerial): These are individuals primarily involved in teaching, research, and institutional service.
2. Academic Managers (academic, managerial): This group includes personnel with leadership roles, such as deans and vice-deans.
3. Professional Staff (non-academic, non-managerial): These are specialists with academic qualifications, who might have roles like establishing partnerships or conducting outreach events without formal academic contracts.
4. Professional Managers (non-academic, managerial): This category encompasses individuals with decision-making authority in non-academic areas, such as finance or student services. Notably, their decisions often significantly impact the academic side of institutions (Whitchurch, 2006; Whitchurch, 2008; Whitchurch & Gordon, 2009).

Given the nuances and potential overlaps in roles, it's essential to acknowledge the fluid nature of these classifications in real-world academic settings. For clarity and relevance to the study's focus, only roles within the academic domain (both staff and managers) that pertain to women's leadership decisions in higher education will be discussed. Henceforth in this dissertation, "academic management careers" will be simplified to "leadership careers".

For the better understanding of the research questions of this study, factors that affect females to pursue or abstain from pursuing leadership careers in higher education, the terms sex and gender will be defined according to research in Journal of Applied Physiology: "it is appropriate to use the term sex when referring to the biology of human and animal subjects, and the term gender is reserved for reference to the self-identity and/or social representation of an individual" (Torgrimson & Minson, 2005, p.787). As such, the terms "female" or "woman" in this study will be referred to biological sex, not the gender. However certain gender traits that are ascribed to biological sexes will be crucial in understanding the person's self-identification. Therefore, the author of this Ph.D dissertation interprets gender as a dynamic and socially constructed concept that encompasses the roles, expectations, and norms assigned to individuals based on their perceived sex.

This research takes a comprehensive approach to understanding how gender influences females' decisions to pursue or abstain from leadership positions. The author recognizes that gender identities are not fixed but are continually enacted and reinforced through social practices and interactions. Additionally, the study acknowledges the impact of social structures and institutional norms on shaping gender roles and opportunities. By adopting this perspective on gender, the author aims to explore the complex interplay between individual performances of gender and the broader societal structures that influence women's career choices and leadership aspirations.

2.3.3 Empirical Studies Classified According to the Theoretical Framework

During the pre-defense of the dissertation, the author faced a comment from the reviewers to separate the factors influencing females' decisions to pursue or abstain from leadership positions in academia based not only on the systems of the Bronfenbrenner's Ecological Development Theory (micro-, meso-, exo- and macro-systems), but also regarding the career stages (early, middle, and senior) of females in academia. However, due to the lack of specific information in existing studies and time constraints, it proved to be unfeasible to address this request adequately. While many studies mention that the females in their research are pursuing academic careers, they often do not explicitly state their career stages.

Therefore, the author will focus on exploring the broader factors classifies according to sub-systems of the Bronfenbrenner's Ecological Development Theory affecting females' decisions regarding leadership positions in academia without going into specific career stages.

2.3.3.1 Macro-System Factors

This sub-chapter presents a literature review at the macro system of Bronfenbrenner's ecological development theory, focusing on the pivotal theme of gender equality and female leadership in the context of Kazakhstan since its independence in 1991. The review aims to dissect and understand the multifaceted dimensions of gender rights and leadership roles within the nation, considering the historical, societal, and political nuances that have shaped the current landscape.

2.3.3.1.2 Historical Perspectives on Gender Equality in Kazakhstan.

Ledwith and Manfredi (2000) concluded that the culture of gendered division of labour is a historical heritage: women's careers have been shaped by their childhood, upbringing, roles in the families and in the societies. Sokoloff (1992) explains that historically professions have been recognized as "elite" and "semi professions": elite occupations required higher level education, such as law, medicine, architecture, science, leadership positions, university teaching; whereas occupations that did not require sophisticated knowledge were classified as semi professions, including nursing, elementary teaching, librarianship, and social work. As Sokoloff (1992) states, elite professions were mainly occupied by white men, whereas females went to semi professions. The gendered pattern of occupations is explained in several ways. Cott (1987) says that women were legally restricted to access higher education: for instance, in the Stanford quota system, three males were accepted for every female. According to Gordon (1997) in the 1830s and 1840's women's participation in higher education has created a great debate: some were concerned that education would destroy women's responsibilities as homemakers, while others believed that an educated woman would be a better mother and wife.

Kazakhstan, on the other hand, provides a different context from Western history of gendered division of labor. Located in Central Asia, the country has a historical background as nomads, where women played significant roles alongside men. Nomadism was the earliest way of life in Kazakhstan, dating back to ancient times. The region was inhabited by nomadic tribes who roamed the vast steppes and grasslands, leading a pastoral lifestyle and herding

livestock. Living a nomadic lifestyle required individuals, including women, to be highly adaptable to various environments and circumstances. This adaptability has translated into the ability of Kazakh women to navigate challenges and embrace leadership roles in different settings (Kandiyoti, 2007). Resilience was another key value developed through the nomadic lifestyle. Women in nomadic communities faced harsh conditions and overcame obstacles, fostering a spirit of determination and perseverance that remains evident in Kazakh women as they pursue leadership positions today. Nomadic societies in Kazakhstan were often egalitarian, with women playing essential roles in decision-making processes and community affairs (Kandiyoti, 2007; Khairullayeva, Sarybayev, Kuzembayeva, Yermekbayev & Baikushikova, 2022). This tradition of gender equality has provided a foundation for women's involvement in leadership roles throughout the country's history. Additionally, the nomadic way of life promoted a strong sense of community and cooperation. Women were valued for their contributions to the community, and their leadership capabilities were recognized and respected.

Islam arrived in Kazakhstan during the 8th and 9th centuries, through trade and cultural interactions with the Arab world (Moldagaliyev, Smagulov, Satershinov, & Sagikyzy, 2015). Over time, Islam spread and became a significant cultural and religious influence in the region. When Islam arrived in Kazakhstan, it brought with it a set of values and cultural norms that have had a profound impact on various aspects of society, including the status of female leadership. Some of these values include a strong emphasis on family and community, promoting modesty and humility, fostering a sense of identity and belonging, and encouraging a commitment to education. The blend of nomadic and Islamic values formed the principles of equality and justice, emphasizing the importance of community support and solidarity in Kazakhstan (Moldagaliyev, Smagulov, Satershinov, & Sagikyzy, 2015). In the context of female leadership, these values have both positive and challenging implications. On one hand, the emphasis on family and community can empower women to take on leadership roles, viewing them as essential caretakers and guides for their communities. The focus on modesty and humility can encourage women to lead with empathy and service, prioritizing the well-being of others over personal ambition. Kazakhstan's unique form of Islam, deeply rooted in the country's nomadic past, was marked by a harmonious blend of religious teachings and age-old customs. This confluence of traditions reflected not just in their religious practices but also in their societal norms. In traditional Kazakh society, collective norms and values were deemed paramount over individual perspectives.

Ethics, especially in family and kinship relations, played a crucial role in governing everyday behavior. This collective outlook was rooted in a blend of Islamic values and long-held traditional customs, championing virtues such as sincerity, honesty, and respect for nature and ancestral spirits. The perception and practice of Islam in Kazakhstan, however, diverge from classical interpretations. While most Kazakhs identify as Muslims, they don't necessarily align with the classical Islamic teachings (Moldagaliyev et. al., 2015)

The Soviet Union came into existence in 1922, and Kazakhstan became one of its constituent republics in 1936 (Kandiyoti, 2007; Silova & Magno, 2004). The Soviet era brought significant changes to Kazakhstan's political, social, and economic landscape, including industrialization, collectivization, and the promotion of education and workforce participation for all citizens, regardless of gender. During the period of Soviet Union influence, one of the significant changes was the emphasis on education for all, including women. This resulted in increased educational opportunities for women, enabling them to develop their skills and knowledge, and consequently, paving the way for them to pursue leadership roles in various fields. Another important aspect was the encouragement of female workforce participation. Women were actively encouraged to work outside the home, and their contributions to the labor force were valued. Moreover, the Soviet ideology promoted the idea of equality among all citizens, regardless of gender. The notion of gender equality may not have been fully realized in practice since women rather felt "double burden" - participating in the labor force and expected to perform most of the domestic work. This contradiction is known as the "Soviet paradox" where women were granted equal rights in the workforce, but the state and society failed to acknowledge and address the issue of women's disproportionate share of unpaid domestic labor, which perpetuated gender inequality in the private sphere (Kandiyoti, 2007; Silova & Magno, 2004). This ideological stance has influenced societal attitudes towards women's rights and opportunities, including their participation in leadership roles. However, it is essential to recognize that the Soviet era's legacy is multifaceted, encompassing both positive and negative aspects concerning women's status and leadership opportunities. While advancements were made in women's education and workforce participation, there were also limitations and challenges in terms of their unpaid domestic work and representation in leadership positions and decision-making roles.

With the collapse of Soviet Union, Kazakhstan embarked on a journey of self-discovery, nation-building, and redefining its ethnic composition. This transformative period ushered in a revival of traditional Kazakh norms, cultural heritage, and religious beliefs.

However, despite this shift towards religiosity, Kazakhstan has maintained its secularism as a cornerstone of its legal framework, by not conferring any special legal status on Islam (Khairullayeva, Sarybayev, Kuzembayeva, Yermekbayev & Baikushikova, 2022; Telebaev, 2003; Yerekesheva, 2020). The rise of nationalism in Kazakhstan, much like its Central Asian neighbors, brought about a renewed focus on historical narratives and traditional customs. The revival of these cultural aspects had an impact on the evolution of gender roles and the shaping of gender discourses in the nation. It was within this context that the concept of gender equality in Kazakhstan began to take shape. As Belafatti (2019) argues, although past nomadic lifestyles might have facilitated gender equality, that doesn't automatically correlate to the modern portrayals. In many instances, the resurgence of interest in nomadic heritage includes political agendas that see female subordination as part of reconnecting with that past. Some extremist advocates even view women's liberation as a decay of nomadic virtues (Belafatti, 2019). Even though the nomadic history may shape discussions on gender issues, it doesn't entirely clarify the intricacies of the relationship between gender equality and nationalism in Turkic nations (Belafatti, 2019).

Nevertheless, in author's knowledge, the traditional cultural norms and familial values that have been emphasized include more traditional gender roles, where men are seen as the primary earners and leaders, while women are often expected to focus on raising children and maintaining the household. In the case of Kazakhstan, a country with a unique blend of modernization and traditional values, the familial structure and effect on labor becomes particularly intriguing to explore. Kan's (2021) findings show that in Kazakhstan, a more egalitarian gender ideology and equal sharing of domestic work were either negatively or insignificantly related to fertility intentions. This suggests that the unequal division of labor in households may be deeply ingrained in Kazakh culture and could correlate with values that prioritize family expansion, regardless of women's employment status. Mothers with more equal divisions of household work were keener on having another child, while the same was not significant for fathers. These findings emphasize the complexity of the relationship between gender egalitarianism and fertility intentions.

The blend of nomadic, Islamic, Soviet, and modern values has given rise to a unique culture in Kazakhstan. Research on Kazakhstani female academic leaders in higher education highlights how women form multiple identities expressing femininity and masculinity at different times to succeed in work, family, and society (Kuzhabekova & Almukhambetova, 2019). The phenomenon of the "Ideal Bride" reflects societal expectations for females to marry "on time", assume responsibility for childcare and housework, exhibit modest and shy

behaviors among relative, but at the same time expected to succeed at a workplace (Kuzhabekova & Almukhambetova, 2019). Displaying multiple socially accepted behaviors, Kazakhstani female academic leaders may experience "cognitive dissonance", as they navigate between being an obedient daughter-in-law, mother, and wife according to Kazakh culture, along with the identity of progressive neo-liberal women with career aspirations (Kuzhabekova & Almukhambetova, 2017).

Also, the author's firsthand experience and understanding of the Kazakhstani culture along with extensive research practice in Kazakhstan provides valuable insights into the prevailing societal norms and attitudes towards age and gender. The author of this dissertation recognizes the pervasive influence of age-related expectations on leadership aspirations among young females. The findings from the author's previous studies revealed how young women often face cultural pressures to conform to traditional gender roles, where young females are expected to serve, but not to lead, impacting their confidence and ambition to pursue leadership roles (Yelibay, 2021; Yelibay, Karabassova, Mukhatayev& Yermukhambetova, 2022). The societal emphasis on respecting elders and valuing their wisdom, while undeniably significant, however, can inadvertently reinforce age-based biases that hinder young females' access to leadership opportunities. Balancing traditional norms, religious beliefs, and progressive ideals continue to influence the trajectory of female leadership. Next is to explore the development of feminist discourse and its implications for leadership within the country, looking at how these evolving conversations have influenced and shaped the current landscape of leadership in Kazakhstan.

2.3.3.1.3 Kazakhstan's Feminist Discourse.

The surge of feminism in Kazakhstan, has radically transformed the nation's gender ideologies. Kazakhstan's feminist movement presents a blend of hybrid identities, unifying native realities and global feminist ideologies. The roots of Kazakhstan's feminist wave are embedded in its post-socialist period, a time when feminism was often sidelined as an alien, bourgeois concept (Udod, 2018). This particular historical backdrop is essential to comprehend modern Kazakhstani feminisms, which embody an intriguing mix of Western feminism and localized reactions to the indigenous socio-cultural milieu.

Kazakhstan's journey towards gender equality and female leadership has been firmly rooted in its distinct feminist trajectory, intersecting post-colonial, post-socialist, and feminist criticisms. The collapse of the Soviet Union and subsequent neoliberal shifts brought Kazakhstan under the label of "New Europe", subjecting it to a dual influence of both

Western and Russian models of feminism (Koobak & Marling, 2014). While this geopolitical positioning has been riddled with complexities, it has also given rise to a unique feminist discourse in Kazakhstan, contributing to the moulding of women leader. Despite the dynamic global shifts, Kazakhstan's "second world" status positioned it at the fringe of the feminist discussion. Challenging the idea of "Western feminism" became a cornerstone of feminist growth in Kazakhstan. The notion of the "West" often symbolizes superiority, both politically and economically, creating an unfair dichotomy between "Western" and "Eastern European" (Tlostanova, Thapar-Björkert & Koobak, 2016). Kazakhstani women leaders did not merely echo the West but shaped their unique path by intertwining their histories and experiences, molded by the influences of Western powers, Russia, the Soviet Union, and local narratives (Koobak & Marling, 2014; Tlostanova, Thapar-Björkert & Koobak, 2016)..

The first generation of Kazakhstani feminists effectively created room for feminist discourse in politics, research, activism, and media in 1990s (Udod, 2018). Nowadays, Kazakhstan's feminist narratives are richly diverse, encompassing everything from radical, anarchist, and Marxist feminisms to liberal, intersectional, and queer feminisms. However, the feminist movement faced obstacles in extending its influence beyond urban demographics, battling persistent negative stereotypes about feminism and by the fact that younger feminists, largely unawareof the activism of earlier feministic groups like the Feminist League, believe they are the country's first generation of feminists and their perception of feminism largely shaped by global trends and developments (Udod, 2018). Also, the author of this dissertation has an insider knowledge that Kazakhstani critics on feminism argue that gender balance is part of the country's ancient nomadic values, and therefore, there is no need for a struggle for women's rights.

The complex interplay of global and local influences has led to the emergence of a distinct form of feminism that challenges traditional gender norms and advocates for gender equality. This form of feminism draws from a rich interplay of global feminist discourse while also embedding itself within the unique cultural, historical, and social context of Kazakhstan. Female leaders in Kazakhstan have not just echoed Western feminism, but have rather created their own path, intertwining their histories and experiences within the complex influences of Western powers, Russia, the Soviet Union, and local narratives. Upcoming next is to introduce how political views and policies have influenced gender roles and equality within Kazakhstan.

2.3.3.1.4 Political Perspective on Gender Studies in Kazakhstan.

As the strongest predictor of political interest, education plays a central role in fostering active participation in democratic societies. Therefore, gender studies have significantly influenced the trajectory of female leadership in Kazakhstan. As the 1990s saw numerous reform initiatives unfold across Central and Eastern Europe, South-East Europe, and the former Soviet Union countries, equality became a common theme. However, these often overlooked the distinct needs of boys and girls, leading to a perpetuation of the "equality myth" during the postsocialist transformation period (Zimmermann, 2008). Moreover, despite significant challenges, several countries managed to achieve basic gender equity in education, with equal enrollment for boys and girls. Yet, the resurgence of patriarchal ideologies and neoliberal reforms put women's rights at risk, impacting girls' educational opportunities and leading to increased school non-enrollment and non-participation (Silova & Magno, 2004)

The inception of gender studies across post-socialist nations, as noted by Zimmermann (2008), was spurred by support from Western private universities and foundations, culminating in the development of a "shadow network of higher education": informal networks of relationships and communications, by institutions like the Central European University in Budapest. Such a network, although fostering the growth of gender studies, simultaneously initiated an "Anglo-Saxonization" of gender discourse in these regions. In the geopolitical landscape of the post-socialist era, gender became a symbol of Westernization, entwined with the historical instrumentalization of women's rights as tools of political control. As Gapova (2010) highlighted, gender studies have often been viewed as an intrinsic part of Western culture and academic thought, leaving countries like Kazakhstan with the challenge of localizing these ideas within their unique socio-cultural background.

Kazakhstan's approach to incorporating gender studies in academic institutions ranged from individual grassroots initiatives to top-down strategies endorsed by entities like the UNDP and the Ministry of Education. The intent was clear: to develop gender studies within the unique national identity and language of Kazakhstan. However, the realization of this aim required a significant reorientation of academic focus from an external, Russian-influenced direction towards an inward, indigenous direction (Shakirova, 2009). The situation was further complicated by the limited financial and moral support available for gender education in the country. The integration of gender studies into Kazakhstan's political projects marked a significant evolution in the nation's approach towards gender equality. This was influenced by Western universities and foundations that encouraged the development of a "shadow

network of higher education", central to which were gender studies. These academic initiatives shaped the discourse around gender in Kazakhstan, introducing ideas of equality into the country's political and societal picture (Shakirova, 2009; 2012). Following this, next sub-chapter will explore the nation's efforts and strategies to achieve parity and the challenges it faces in this endeavor.

2.3.3.1.5 Kazakhstan's Pursuit of Gender Equality.

Kazakhstan, renowned for its landscapes and upper-middle-income status, has witnessed a transformative journey in the domain of gender equality since its independence in 1991. By engaging in both regional and global conversations on gender rights, the nation has made substantive progress, although challenges persist. The country has made considerable strides in promoting gender equality since its independence in 1991, recognizing that gender-based discrimination undermines the potential of half the global population. Though no nation has achieved complete gender parity, countries that prioritize this cause not only enhance their global reputation but also further their progress towards the United Nations' Sustainable Development Goals (SDGs). Achieving gender equality is crucial, not only for SDG 5 but also other goals like SDG 4 (quality education), SDG 8 (economic growth), SDG 10 (reduced inequalities), and SDG 16 (peace and justice) ("How the UN is supporting …", n.d).

The author of this dissertation studied the gender-related policies of Kazakhstan, and traced that since the 1990s, the Kazakh government has actively combated gender discrimination. Kazakhstani women received full voting rights in 1993, followed by the introduction of the National Action Plan for Women's Status in 1999. The government also launched a ten-year gender equality strategy in 2006 and became the first Central Asian nation to set up a national gender equality entity. By 2009, laws addressing domestic violence and ensuring equal rights for men and women were ratified. The 2016 "Concept of Family and Gender Policy" aimed to reinforce these equal rights, aligning with the UN's SDGs which Kazakhstan joined in 2015. Tracing the progress of Kazakhstan's Gender Gap Index, the author noted that the country was 32nd out of 115 in 2006, where women's economic participation stood out on 16th place globally. The ranking dropped to 60th out of 149 by 2018, and Rencz, Khakimova, Thomson, Goethals and Turkstra (2020) explain that this decrease can be attributed more to the inclusion of additional countries in the index rather than a policy failure. This indicates that Kazakhstan's gender equality initiatives have led to measurable improvements in certain areas. The country has made remarkable strides in gender equality within the education sector. In 2018, the country achieved global recognition,

ranking first for female enrollment across primary, secondary, and tertiary education. Notably:

- Girls and boys have almost equal enrollment in primary education, with figures at 86.3% and 86.2% respectively.
- In secondary education, girls lead with a 100% enrollment rate, compared to 99.7% for boys.
- Tertiary education sees 55.5% of women enrolled, significantly outnumbering men at 43.9%. (Rencz et. al, 2020)

While these statistics position Kazakhstan's success in women's educational access, some challenges persist, especially concerning rural education. Factors like early marriages and outdated teaching methods impact girls' continued education. Rising suicide rates among young girls in rural areas, linked to societal issues like early pregnancies and limited reproductive rights, are of growing concern (United Nations Kazakhstan, 2022).

In contrast to its educational achievements, Kazakhstan's employment sector reveals areas for improvement in gender equality. Women, while predominant in master's (61.2%) and doctoral programs (60.9%), are underrepresented in the broader workforce. They face higher unemployment rates (5.7%) than men (4.3%). A persistent wage gap exists, only narrowing by 3.7% from 2006 to 2015, with women often positioned in lower-paid sectors like education, healthcare, and administrative services (Akhmetkali, 2022). Their limited presence in senior roles further amplifies wage disparities. In some regions, this gap widens up to 50%. By prioritizing women for higher-ranking roles, the nation can potentially address both unemployment and the wage disparity (Rencz et. al, 2022; Akhmetkali, 2022).

Despite the considerable strides in gender equality in education, female political empowerment needs attention. In 2006, Kazakhstan was 69th globally for female political empowerment, but by 2018, it dropped to 94th. Although positive signs include the participation of a female candidate, Dania Espaeva, in the 2019 presidential elections, the nation must work harder to bridge the gender gap in politics ("Dania Espaeva...", n.d). Women held 27.1% of parliamentary seats in 2018, surpassing the global average, but held a mere 5.6% of ministerial positions ("UN Women Kazakhstan", 2022). Rencz et. al (2020) explain that this disparity is reminiscent of Soviet-era policies, where women were limited to lower political tiers. Despite these challenges, Kazakhstan's educational advancement means a reservoir of well-educated women ready to participate in governance.

According to UN Women Report (2022) the European Union (EU) has shown keen interest in promoting gender equality and women's empowerment in Central Asia, with

Kazakhstan being a central partner. The 2015 Enhanced Partnership and Cooperation Agreement between the EU and Kazakhstan, effective from March 2020, emphasizes gender equality in various spheres, from employment to decision-making. The European Commission further scrutinized gender equality in Kazakhstan with a study in 2017, identifying areas for cooperation and improvement. Moreover, the EU's evolving Central Asia Strategy accentuates gender equality, recognizing its broad societal impacts. Introduced in 2007 and revamped in 2019, this strategy underlines the importance of gender roles in social and economic development. Kazakhstan's cooperation with international bodies, like the UN and the World Bank, facilitated by the EU, has further enhanced its gender equality measures. The UNESCO-led "Education for All" initiative, which the EU indirectly funds, champions gender equality in education ("UNDP in Kazakhstan…", 2023).

Today, Kazakhstan's achievements in gender equality are recognized globally. With a recent leap from 80th to 65th position in the Global Gender Gap Report in a year, the country has showcased excellence in domains such as education, where it closed the gender gap entirely, aligning with peers like Armenia and Georgia (Akhmetkali, 2022). Moreover, the country ranks highest in Central Asia on this index and even surpasses major nations like Russia ("UN Women Kazakhstan", 2022). These strides indicate significant advancements in specific areas, notably in education and wage equality. The country also updated Concept of Family and Gender Policy targeting 2030. These documents articulate their commitment to enhancing women's representation in leadership roles, aiming for a 30% representation by 2030.

It is important to note that studies regarding Asian countries, even the ones coming from neighboring Central Asian countries (Uzbekistan, Tajikistan, Turkmenistan, Kyrgyzstan), cannot be generalized to Kazakhstan. Kazakhstan, while sharing numerous historical, cultural, and political characteristics with its Central Asian neighbors, distinguishes itself in several ways. Post-independence, Kazakhstan has pursued a path of economic reform that has seen it develop a relatively strong economy, primarily due to its vast natural resources, especially oil and gas, which have attracted substantial foreign investment compared to its regional counterparts ("The World Bank...", 2022). Furthermore, Kazakhstan has a unique geopolitical position as it bridges Europe and Asia and has large Russian and Chinese minorities, influencing its foreign and domestic policies (Goldstein, 2022; Kirisci & Le Corre, 2018). Educationally, Kazakhstan has made substantial efforts to integrate its system with European standards, such as through the Bologna Process, which aims to make academic degree standards and quality assurance standards more comparable

and compatible across Europe (Clark, 2015). While specific research detailing these impacts on leadership roles is not accessible, according to the author's lived experiences in Kazakhstan, educational transitions has implications for leadership roles in higher education as it affects the qualifications and the quality of educational leadership. Leaders in Kazakhstani higher education institutions now face the challenge of steering their organizations through these transitions, requiring an understanding of international educational standards, quality assurance practices, and the ability to engage in more extensive international cooperation. In terms of gender dynamics, while the country shares patriarchal societal norms with Central Asian countries, Kazakhstani government has implemented specific programs aimed at increasing women's participation in politics and business, potentially impacting the landscape for female leaders in the country ("UN Women continues...", 2021). However, the extent to which these initiatives have permeated the higher education sector remains a question for further research.

In summary, the literature relevant to the macro-system of Bronfenbrenner's Ecological Development Theory has examined the complex landscape of gender equality and female leadership in Kazakhstan, highlighting the transformative journey the nation has embarked upon since its independence in 1991. Despite facing numerous challenges, Kazakhstan has made considerable strides in promoting gender equality, significantly influenced by various regional and global conversations on gender rights. This journey is marked by the nation's proactive approach to combating gender discrimination, reflected in its progress on the Global Gender Gap Report and other international benchmarks. Kazakhstan's commitment to gender equality is evident in its educational sector, where it has achieved notable success, particularly in female enrollment across primary, secondary, and tertiary education. However, challenges persist, especially in the employment sector, where women, despite being predominant in master's and doctoral programs, face higher unemployment rates and are often positioned in lower-paid sectors. Political empowerment of women also remains an area needing more focus, with disparities in their representation in higher political tiers. The role of international bodies like the European Union, the United Nations, and the World Bank has been instrumental in supporting Kazakhstan's gender equality measures. Kazakhstan's cooperation with these entities has furthered its commitment to enhancing women's representation in leadership roles, aligning with global gender equality goals. Next section is to examine exo-system factors that affect females' decision to pursue or abstain from pursing leadership positions in higher education.

2.3.3.2 Exo-System Factors

This sub-chapter goes into the exo-system factors in this process of leadership aspirations of pertinent to female leadership. Systemic influences, such as socialization in academic settings, mentorship, the cultural shock of returning home with foreign credentials, and the overarching societal and organizational structures that contribute to or detract from the leadership pipeline in higher education will be discussed. By situating these findings within both global and Kazakhstani contexts, the author aim to depict a comprehensive picture of the current landscape of academic leadership relevant to females decisions to pursue or abstain from pursuing leadership positions in academia.

2.3.3.2.1 Students' Socialization and Decisions to Pursue Advanced Studies

Within the empirical studies, advanced studies are referred to graduate and doctoral degree programs. Understanding the influencing factors behind the decision to undertake advanced studies is critical, as it provides insight into the motivations and hurdles of students, as advanced degrees are often seen as essential prerequisites for assuming leadership roles in academia (Edwards, Bexley, & Richardson, 2011; Wendler, Bridgeman, Markle, Cline, Bell, McAllister & Kent, 2012). Examining these factors can unveil systemic influences on the choice to pursue doctoral studies and the consequential socialization process through the exo-system component of Bronfenbrenner's ecological development theory.

Research has shown that there are many factors that influence students' decisions to pursue advanced degrees, which also includes doctoral studies in this section of the literature review (Edwards, Bexley, & Richardson, 2011; Wendler, Bridgeman, Markle, Cline, Bell, McAllister & Kent, 2012). Career aspirations begin long before the graduate degrees: according to graduate education and workforce report from Wendler et.al (2012), 14% of American students with master's degree and 17% of those who had Ph.D. degrees already knew that they want to pursue advanced studies before entering undergraduate schools, because they were influenced by family and school settings. For them, reasons of obtaining an advanced educational degree did not vary by the field of study. American graduate students enrolled to advanced degree programs for personal development and enhancement of education (65%), to compile with job requirements for their future aspired careers (59%) and because of lack of knowledge what to do in their life (16%) (Wendler et.al, 2012).

However, according to numerous research studies, some students who aspire academic careers in universities do not fully understand the purpose of advanced educational degrees and the nature of academic professions and as a result they drop out of the academic

career pathway, because their desire to develop and progress in academia change (Cole & Hassel, 2017; Edwards, Bexley, & Richardson, 2011; Golde & Dore, 2001; Hayter & Parker, 2019; McAlpine & Emmioğlu, 2015; Wendler, et.al, 2012). For example, 33% of American students pursuing advanced degrees shared that before entering graduate schools, they have not received sufficient information about their career options after the graduation, and they lost their interests to complete the studies during the study process (Wendler, Bridgeman, Markle, Cline, Bell, McAllister & Kent, 2012; Golde & Dore, 2001). Comparatively, the report by Edwards, Bexley and Richardson (2011) on graduate students in Australia show similar findings, but with some peculiarities. More than a half of all graduate students in Australia want to pursue academic careers in long-term for personal and professional development. The "ideal" university career for them is to balance teaching and research responsibilities. Those who chose to pursue academic careers shared that they were positively influenced by observing their supervisors. However, in the reality, students did not have available career options in academia because of the lack of vacancies, insufficient networking, and discrepancies in career expectations. As Edwards, Bexley and Richardson (2011) point out, in Australia, the gap between realistic and "ideal" work intentions were especially noticeable in education, agriculture and creative arts.

Overall, before entering graduate school, students do not conceive that they might miss out on career opportunities. McAlpine & Emmioğlu (2015) say that students opt-out of their career aspirations because of their unfulfilled expectations of the availability of academic jobs. As a result, graduate students prefer to work close to their academic degree, but outside of the university sector. According to researchers (Edwards, Bexley, & Richardson, 2011; Hayter & Parker, 2019) students with graduate degrees developing their entrepreneurial potential, working in the industry, or becoming engaged in the startup projects, when they don't find academic jobs. Few studies noted that female graduate students develop inferiority complexes if they fail academically and fear to progress further in academic careers (De Welde & Laursen, 2011; Mayanja, 2018).

Comprehension of how students adapt to the academic community, known as doctoral student socialization, can shape strategies to bolster their academic success and leadership readiness. Leadership identity in doctoral students evolves throughout their academic journey, a process that's intertwined with their socialization, shaping them into future educators and leaders (Colbeck, 2008). The perception of their faculty department, along with their drive for an academic profession, directly influences this process (Weidman & Stein, 2003).

According to the framework for graduate and professional student socialization by Weidman, Twale, and Stein (2001), diversity within a faculty arises from the campus climate and the graduate institutions. Elements such as program structures, faculty role, supervision, and peer culture play crucial roles in shaping this diversity. Roach and Sauermann (2010) suggest that students valuing intellectual freedom and growth are inclined towards academic careers, whereas those primarily motivated by salary and resource access prefer corporate jobs or self-employment. Golde and Dore's (2001) study highlights a concerning trend - while white male doctoral students keener on reaching professorship, women and ethnic minorities display more hesitancy, raising questions about equitable access to academic career opportunities. Burciaga (2007) provides empirical backing for this theoretical base, indicating that support from faculty members boosts the leadership aspirations of minority female Ph.D. students. Haley (2012) corroborates this, finding that women's leadership ambitions often develop during their doctoral studies, influenced by the academic environment and the guidance they receive.

The socialization of doctoral students is a multifaceted topic, with mentorship at its core, often acting as the base for the process. Helms et al. (2016) describe a mentor as a seasoned or knowledgeable individual who guides another with less experience. Mentorship can be both formal, institution-assigned based on qualifications and requirements, or informal, stemming from shared interests and emotional bonding (Mazerolle, Nottingham, Coleman, 2018). A significant aspect of mentorship is the Ph.D. supervision, as supervisors can profoundly impact a student's journey into academic life. As Kinash et al. (2017) phrase it, they are the "institutional gatekeepers", whose role can enhance or stifle the career ambitions of doctoral students. Edwards et al. (2011) found that supervisors often serve as role models, shaping students' attitudes towards seeking leadership roles in academia. Women in particular benefit from robust academic advice and mentorship, which elevates their self-confidence and propels them towards higher-ranked positions (de Welde & Laursen, 2011; Eigi et al., 2018; Lindén et al., 2013; Lee, 2008; Weidman, Twale & Stein, 2001). According to Eigi et al. (2018), having a mentor during doctoral studies is critical for maintaining motivation and career focus. This mentorship is especially impactful for women when the mentor is also their Ph.D. supervisor (Devos, 2004; Manathunga, 2007; Meschitti & Lawton-Smith, 2017; Weidman, Twale & Stein, 2001;). However, a lack of career guidance from supervisors can leave female doctoral students struggling to navigate their path towards academic leadership roles (Lindén, Ohlin, and Brodin, 2013). Nonetheless, Fried and MacCleave (2009) state that mentor's gender does not significantly impact women's academic

career choices. Other factors such as prior teaching or research experience positively influences career choices towards academic leadership (Edwards, Bexley, & Richardson, 2011; McAlpine & Emmioğlu, 2015).

Interestingly, concerns about the transient nature of academia, such as frequent relocations and their implications on family life, deter doctoral students from pursuing academic careers (Miller & Stone, 2011). Supporting this, Baker (2010) and Hayter and Parker (2019) highlight the challenges faced by students pursuing advanced degrees, such as family relocations, from visa procedures to adaptation in new environments. Wright (2014) recommends additional research from the perspective of female graduate students seeking leadership roles, focusing on how institutional factors affect work-life balance.

Within the context of Kazakhstani academia, foreign-trained PhD holders often experience culture shock upon their return. The established academic culture, primarily controlled by Soviet-trained senior researchers, is often resistant to change, creating barriers for those with foreign credentials (Kuzhabekova, Sparks & Temerbayeva, 2019). Therefore, next section is to explore challenges and pathaways to leadership that females may face in higher education.

2.3.3.3.2 Challenges and Pathways to Leadership.

According to Hayter (2019), various barriers obstruct early-career academics from furthering their involvement in academia. These include a lack of skills and networking opportunities, inadequate career support, and rigorous university policies for post-docs or tenure-track faculty members. Morrish (2019) characterizes the academic profession as an "anxiety machine", marked by prevalent short-term contracts, high performance expectations in teaching, publishing, and service-related tasks. These constraints burden early-career academics, leaving their opportunities for stable employment and career advancement uncertain. Golde and Dore (2001) report an intriguing trend related to career progression: women are more inclined to seek faculty positions at comprehensive universities or community/liberal arts colleges than men. This inclination might be due to the overrepresentation of white males in the professoriate at research universities, thereby making these institutions less appealing to women and minority groups. The concept of "invisible rules" proposed by Airini et al. (2011) further elucidates this phenomenon. Female academics and individuals from minority groups may be deterred from pursuing certain leadership positions if they perceive the workplace culture to be unchanging and resistant to diversity.

Devos (2004) promotes mentorship in higher education as an effective tool to address power imbalances and foster professional development for academic women. Beyond professional growth, mentorship also offers invaluable opportunities for informal networking, paving the way for a smoother career progression (Meschitti & Lawton-Smith, 2017; Vasquez-Guignard, 2010). However, women are often excluded from these informal networks due to various personal or social reasons (Airini et. al, 2011). Nevertheless, Scott (2018) notes that if women have the chance to participate in informal networks and possess essential leadership skills, they are likely to progress further in their careers.

The importance of leadership role models for making decisions about pursuing leadership roles in academia is highlighted in numerous studies (Fried & MacCleave, 2009; Morley, 2013, Vicary & Jones, 2017). Young (2001) discovered that role models could invoke feelings of satisfaction, identification, or resistance among women contemplating leadership roles. Women who are content with their leaders' governance style are typically less motivated to seek leadership roles (Young, 2001).

Workplace relationships can also significantly influence one's path to leadership (Airini et. al., 2016; Ledwith & Manfredi, 2000; Longman et.al., 2018; Thornhill, 2011). Positive relationships with superiors can provide career advancement opportunities and access to job prospects. However, not all superiors prioritize individual professional development over broader organizational goals (Leslie, Lingard & Whyte, 2005). A supportive environment can lead to a culture of empowerment, which can increase skills and self-confidence through collaborative work (Thornill, 2011). Conversely, an unsupportive atmosphere can result in workplace bullying, adversely affecting women's career aspirations (Airini et. al., 2016). Interestingly, males themselves or women working in strongly "male" occupations deny the existence of gendered cultures (Ledwith, & Manfredi, 2000).
This findings isn't confined to Western experiences but extends to the Kazakhstani faculty environment as well. Kazakhstani female educators frequently grapple with the difficult task of balancing their professional and personal lives, an issue heightened by societal expectations and traditional norms. Female faculty members in STEM also face discrimination and exclusion from decision-making processes within a largely male-dominated academia (Tsakalerou, Perveen, Ayapbergenov, Rysbekova & Bakytzhanuly, 2022) The lack of mentorship and support networks for female faculty members exacerbates these challenges (CohenMiller, Saniyazova, Sandygulova & Izekenova, 2021; Tsakalerou, et. al, 2022).

Therefore next is to offer a comparative analysis of how gender influences leadership within academic institutions both globally and specifically in Kazakhstan.

2.3.3.2.3 Gender Dynamics and Organizational Culture in Female Academic Leadership

In the broader landscape of gender equality discourse, extensive research explores how organizational culture shapes female academic leadership, where women leaders frequently encounter the paradox of fitting into both "feminine" (compassionate, nurturing, empathetic) and "masculine" (rational, competitive, task-oriented) stereotypes. (Airini et al., 2011; Cubillo & Brown, 2003; Longman, Daniels, Bray, Liddell, 2018; Kuzhabekova & Almukhambetova, 2016; Sperandio, 2010). Hardy (2019) elaborates on the feelings of seclusion expressed by mid-career female academics, primarily due to the predominance of men in academia. Struggling with the necessity of "wearing multiple hats", women constantly strive to meet professional expectations while adhering to gender norms. Any deviation from the conventional female demeanor could potentially diminish their acceptability in the organization and jeopardize advancement opportunities, as indicated by Cole and Hassel (2017). Spano (2020) further complicates this scenario, outlining internal conflicts among women, which inadvertently casts a negative shadow on the gender group.

O'Connor (2020) brings to light the tendency of higher education institutions to sideline gender disparities, marking behavioral variances as either non-existent or immaterial in the professional arena. Paradoxically, Shaw (2020) asserts that these distinctions carry substantial weight in the workplace due to instinctive biological sex categorization by the brain. This subconscious act lays the groundwork for behavioral standards within professional settings. However, amidst these trials, research emphasizes that universally appreciated leadership attributes are not specific to gender (Green, Chavez, Lopez & Gonzalez, 2011; Lam, 2020; Larasatie, Barnett & Hansen, 2020). Employees value leaders who manifest integrity, empathy, and a collaborative attitude (Green, 2011; Lam, 2020). Despite this, Larasatie, Barnett, and Hansen (2020) underscore the disproportionate criticism women leaders face for exhibiting authoritative traits. This disapproval has significant psychological ramifications, as evident from the high proportion of women seeking counseling and occupational health services in several UK educational institutions (Burkinshaw & White, 2017).

An international lens on this issue reveals that female leadership trajectories in Western higher education, particularly in the UK and Australia, are significantly influenced by gender-biased organizational norms (Burkinshaw & White, 2017). Women in these

environments often face the dilemma of adapting to an organization primarily designed for men while maintaining their feminine traits to gain leadership recognition. Nevertheless, the divide in labor along gender lines is a global issue, notably pronounced in the Middle East, Eurasia, and the Global South. Despite having a substantial pool of educated women, these regions show scant representation of women in leadership roles due to entrenched beliefs associating leadership with masculinity (Alsubaie and Jones, 2017; Al-Asfour, 2017; Sperandio, 2010; Sperandio, 2008).

Cultural nuances add another layer to the complexities faced by women leaders, especially in Asian and post-Soviet contexts (Funnell & Dao, 2013; Majam-Finch, 2021; Khanukaeva & Di Puppo, 2021). These women are expected to meet collective needs to a greater extent than their male counterparts and often separate their professional and personal identities. In Kazakhstan, despite women outnumbering men in sectors like education, healthcare, and small businesses, their presence in leadership roles remains significantly low (Dubok & Turakhanova, 2017; Lipovka, 2018; Kuzhabekova & Almukhambetova, 2016). They often face a "glass cliff" in their journey to top academic positions, with promotions largely influenced by the biased view of male rectors. The unique features of Kazakhstani academia, such as the "team-approach to leadership" and corruption, further inhibit women from aspiring for leadership roles (Kuzhabekova & Almukhambetova, 2016). However, private universities in Kazakhstan, guided by a neoliberal values, seem to prioritize skills over gender in promotions (Kuzhabekova & Almukhambetova, 2016), offering a glimmer of hope amidst the prevailing challenges. Therefore, next sub-chapter is to provide literature that shows how societal and educational gender norms influence the ambitions and career trajectories of women in leadership roles.

2.3.3.2.4 Gender Constructs in Education and Their Impact on Female Leadership Aspirations in Kazakhstan

Some Kazakhstani researchers has examined how school and university education shapes understanding of biological sex, gender, and its implications to female leadership. The portrayal of gender within the educational sphere can either fuel or hinder these aspirations, molding the students' self-perception and their perceived capacity to lead. When education systems perpetuate traditional gender roles, often relegating females to passive, nurturing roles while associating males with leadership and authority, it can stifle girls' desire for leadership roles. It is therefore imperative to scrutinize how gender is represented within education, as it serves as a foundational element in shaping future leaders.

Despite education being traditionally viewed as a pathway to equality, a closer examination of the Kazakhstani schooling landscape reveals deeply entrenched gender biases that hinder the pursuit of gender equality (Durrani, CohenMiller, Kataeva, Bekzhanova, Seitkhadyrova, & Badanova, 2022). School textbooks in Kazakhstan, chosen by a centralized education system, play a crucial role in shaping students' perceptions of gender. The textbooks seem to marginalize women, painting them into confined roles of motherhood, care, and domestic responsibilities while glamorizing men as figures of authority and knowledge creators. The women, on the other hand, are relegated to the backdrop, their primary function delineated as bearers and preservers of Kazakh culture and tradition (Durrani, CohenMiller, Kataeva, Bekzhanova, Seitkhadyrova, & Badanova, 2022). The education system goes further in shaping gender constructs through the subject known as "özin özi tanu" or "self-knowledge" in English, which aims to nurture students' moral development. However, it falls short of providing comprehensive understanding of biological sex and gender. Instead, it emphasizes the traditional roles of women as keepers of cultural traditions and identifiers of ethnic and national groups, echoing the narrative portrayed in other educational materials (Arystanbek, 2021).

Universities, being pivotal institutions of knowledge dissemination and societal transformation, profoundly impact female students' ambitions, particularly within male-dominated fields such as STEM. Kazakhstani STEM female students in experiences are shaped by instructional methodologies, interaction with classmates, and gender representation among educators. This influence significantly manifests in the lack of practical STEM experiences for women, largely due to societal traditions that prioritize domestic roles for them. This imbalance poses a substantial obstacle to women's engagement in these fields (CohenMiller, Saniyazova & Rakisheva, 2022). There's a noticeable gender-based differentiation in teaching styles where female educators are considered more proficient in theoretical instruction while male educators are regarded as better at imparting practical knowledge. This differential can discourage female students who may already feel sidelined due to prevailing stereotypes or dismissive remarks from male counterparts (Almukhambetova, Kuzhabekova & Hernández-Torrano, 2023).

The evolution of gender studies in university education, particularly within post-Soviet societies, offers enlightening insights into these complexities. The inclusion of gender studies in academic curricula marked not just a pedagogical shift but also significant societal transformations that originated in the late Soviet era. As Western academic theories gained traction within these societies, novel disciplines such as gender studies emerged. As Gapova

(2010) state, these changes mirrored broader societal transitions, including a shift from socialism to a market economy emphasizing women's independence and rights. (Gapova, 2010).

It seems that in Kazakhstan, the representation of gender in the educational system significantly influences female leadership aspirations. Traditional gender roles, embedded in school textbooks and curricula, often depict women in passive roles while highlighting men as figures of authority. This portrayal not only shapes students' self-perception but also limits young women's ambitions to pursue leadership roles. In higher education, especially in STEM fields, gender-based teaching disparities and societal stereotypes further discourage women from aspiring to leadership positions. The evolution of gender studies in universities, though a progressive step, still faces challenges in fully addressing and dismantling these entrenched gender norms. Moving from education to workforce, next is to introduce literature that tells how gender-based wage differences affect the landscape of female leadership within Kazakhstan.

2.3.3.2.5 Gender Dynamics and Wage Disparities: Impact on Women's Leadership in Kazakhstan

Gender dynamics in the Kazakhstani workplace deeply impact the aspirations, self-confidence, and motivation of women to occupy leadership positions. The gender wage gap persists as a significant issue, with women earning over 30% less than their male counterparts (Tastanbekova, 2020). Although near pay parity has been achieved in the education sector, there are variances across different educational levels, with women in higher education and additional educational services earning less. Despite representing the majority in the education workforce, women often hold lower-paying positions, with only 15% of university rector roles held by women (Tastanbekova, 2020).

The skewed representation of women across industries also hints at a deeper systemic issue. While women are well-represented in sectors like healthcare, education, and finance, they are notably underrepresented in high-paying sectors like mining, which are traditionally male-dominated. This economic shift, fueled by oil boom, has inadvertently disadvantaged women, leading to their overrepresentation in the lower-paying education sector (Kireyeva & Satybaldin, 2019). Sectoral differentiation due to gender-biased vocational education also hinders women's access to leadership roles. Despite an increase in female employment over the past two decades, women's wages remain significantly less than men's due to gender segregation in education and in sectors offering less competitive opportunities for women,

exacerbating the "glass ceiling" effect (Kireyeva & Satybaldin, 2019). The term "glass ceiling" serves as a metaphor for an unseen barrier hindering women and various underrepresented groups from achieving greater success in their careers. These obstacles are not formal company policies but rather are ingrained as subconscious prejudices within the structure of organizations, obstructing the progress of certain individuals into top-level management roles, irrespective of their skills or experience ("100 Women…", 2017)..
Marilyn Loden, an author and advisor, first introduced this concept in 1978 during a discussion about women's workplace issues. She emphasized the societal hurdles women encounter when their professional advancement stalls at mid-level management, barring them from reaching senior leadership or executive roles ("100 Women…", 2017). This imbalance has been further strained by the COVID-19 pandemic, which has increased the load of household responsibilities for women in Kazakhstan (Nyussupova, Aidarkhanova, Kenespayeva & Kelinbayeva, 2023).

Administrative and support services, information and communication, and health and social service sectors demonstrate a lesser gender wage gap, suggesting a more equitable employment landscape in these areas, but such exceptions still do not outweigh the systemic gender inequalities in the job market of Kazakhstan (Kireyeva & Satybaldin, 2019; Nyussupova et. al, 2023). Moreover, despite strides towards gender equality, such as removing restrictions on the employment of women from the Kazakhstani Labor Code, societal gender stereotypes persist ("Women fight for occupational...", n.d). These stereotypes guide women's professional choices towards more flexible work schedules to manage familial responsibilities, further entrenching the sectoral employment differentiation.

In sum, the comprehensive analysis of factors influencing women's pursuit or abstention from leadership roles in higher education within the exo-system of Bronfenbrenner's Ecological Development Theory reveals a broad influence starting from graduate students' socialization and academic development to the broader exo-system encompassing workplace dynamics, societal norms, and institutional biases. The gender dynamics within organizational cultures, the persistence of wage disparities, and the gender constructs perpetuated by the education system can either empower or dissuade women from leadership paths. This issue is further complicated by cultural and systemic barriers such as the "glass cliff" and "glass ceiling" phenomena, which are reflected in the underrepresentation of women in high-paying sectors and decision-making roles. As the literature review move to introduce the meso-system of Bronfenbrenner's Ecological Development Theory, it is crucial to understand how these interrelated systems can be

navigated and reformed to foster an environment where women are equally motivated and empowered to assume leadership roles in academia.

2.3.3.3 Meso-System Factors

This sub-chapter examines the meso-system factors that influence women's trajectories toward leadership in academia, particularly focusing on the processes of socialization and the support systems that affect their professional development in homes, schools, and within the extended networks of aspiring leaders. The literature is centered around roles of parenting and spousal partnerships, highlighting how these personal dimensions intersect with professional aspirations, particularly within the Kazakhstani context.

2.3.3.3.1 Socialization and Support Systems

As Hofstede (2001), Moscovici (1972) and Ross (2004) say, socialization is a part of a human nature which stems from family upbringing and continues throughout the lifetime. Through socialization a person learns how to interact with the world and transfers that knowledge from generation to generation. The fundamental principles of socialization occur in childhood because of learning the language and the culture (Hofstede, 2001; Moscovici, 1972; Ross, 2004). Research shows that socialization and leadership are interrelated, as female educational leaders make strong emphasis between their leadership abilities and the socialization norms they encountered as the part of their upbringing: family members prepared those females for different situations that might arise in their life, how to deal with various aspects, not to lose self-confidence, as well as the ability to work hard and think smart (Anneli Adams, 2009; Cubillo & Brown, 2003; Scott, 2018). Women-leaders in education believe that one of the factors that boosted their careers is the socialization values they have learned from their family members as children (Anneli Adams, 2009; Cubillo & Brown, 2003; Scott, 2018). Females who chose to pursue academic staff careers mention their parents as role models because the parents had tertiary degrees or were academics themselves (Baker, 2010).

Support has been distinguished as an important factor prior to entering the field of academic leadership, especially for women, more than for men (Cubillo & Brown, 2003; Sperandio, 2010; Young, 2001) As Young (2001) say, female academic leaders seek for family, friends and spousal support prior entering the educational leadership field. Especially if friends are involved or familiar with the educational sphere, they have a positive influence on a female's decision making regarding their career aspirations. Researchers (Gross & Trask,

1976; Young, 2001) have discovered that mother backgrounds were crucial for females ' aspirations in academic leadership, because mothers have been greatest role models for females, supporting and inspiring them. According to Thornhill (2011), father's support also has a tremendous effect on female academic leaders, since women leaders report on gaining self-confidence and determination after their father's encouragement. Spousal support somehow was different from the assistance received from friends or family. Young (2001) discovered that females 'decisions to pursue academic management careers positively affected if females 'partners share domestic responsibilities and are willing to relocate if needed. And on the contrary, if females 'do not have family's, friends ,'and spousal support, they are less willing to enter the educational management careers (Cubillo, 2003; Sperandio, 2010; Young, 2001).

Additionally, researchers (Sallee, Ward, & Wolf-Wendel, 2016; McAlpine & Emmioğlu, 2015; Hayter & Parker, 2019) reveal spousal/partner relationships as a crucial factor when aspiring to leadership roles in academia, especially when the parenting was involved. Having children brings more responsibility to one's lives, especially when it comes to balancing parenthood and professional responsibilities. According to numerous studies (Airini, Collings, Conner, McPherson, Midson & Wilson, 2011; Vasquez-Guignard, 2010; Ledwith & Manfredi, 2000; Wendler, Bridgeman, Markle, Cline, Bell, McAllister, & Kent, 2012; Sallee, Ward, & Wolf-Wendel, 2016) female university leaders, who are also mothers, women show a different perception of combining leadership and motherhood, than male university leaders - fathers. As Sallee, Ward and Wolf-Wendel (2016) explain, female academic leaders refer to the sense of constant guilt of not spending enough time either on their work or on children, whereas male academic leaders mostly share the feeling of pride by being a father. Males seem to achieve more credits among their colleagues for being a caring father, while females do not get the same recognition, because being a caring mother is taken as a granted (Sallee, Ward, & Wolf-Wendel, 2016). Nevertheless, having a family has a great importance on female-leaders' lives. Thornhill (2011) reveals that by having a successful career together with a family (the extended one, spouses and children), makes women academic leaders lives meaningful.

Depending how the work-life balance situation is managed, the presence of children may hinder or motivate to pursue leadership careers. Airini et. al. (2011) shows that some female educational leaders share that they had to give up their career progression while having children, because motherhood had influenced their health. Sperandio (2010) notes that women constantly juggle between motherhood and leadership responsibilities. However,

as Thornhill (2011) believes, university leaders - mothers can succeed if intelligently manage their responsibilities. Female-leaders often share the feeling of constant management between two spheres of their lives: family and institutional responsibilities, where both aspects require much of their time, efforts, and attention (Devine, Grummell & Lynch 2011; Kim, Yoon & McLean, 2010; Probert, 2005; Moultrie & De la Rey, 2004; Raddon, 2002). Ledwith and Manfredi (2000) discovered the temporal dimension of female leadership in academics: while senior women divulge that the burden of domestic work, child rearing, and a husband ' occupation limited their decisions to pursue leadership careers in academia; the younger generation of female academic staff did not consider their partner's job as an influencing factor to their leadership aspirations. Parker (2015) adds that women themselves choose sectors where females outnumber men: because of flexible schedules or a part-time workload due to family responsibilities, personal occupation preferences or avoidance of male-dominated cultures.

Some research from Kazakhstan sheds light on the analysis of the Kazakhstani landscape, revealing that traditionally assigned gender roles continue to dictate familial and societal structures. Kazakh women, particularly outside urban settings, frequently prioritize familial responsibilities over professional endeavors (Meurs, Nugmanova, Salimzhanova & Marvin, 2021). The underlying patriarchal ideologies translate into reluctance among men to engage in child-rearing, further pressurizing women to conform to the caregiver role (Greig, Kudaibergenova, & Edström, 2019). Kazakhstani women aspiring to higher education, especially to attain a Ph.D, frequently confront resistance from their immediate family, predominantly from their husbands or mothers-in-law. The societal norm that deems "Never finish a Ph.D before getting married because few men would want to marry a highly educated woman! Make sure you find a husband before defending your thesis!" reflects the deeply rooted gender bias permeating Kazakhstan's cultural landscape (Lee, p.8, 2023). Female academic leaders in Kazakhstan and neighbouring Kyrgyzstan had to work harder than males to reach high ranked positions, because they experienced societal pressure to prioritize family over work after having children (Kuzhabekova & Almukhambetova, 2019). Discrimination against women in the labor market further complicates the picture, as employers' prejudice, coupled with inadequate childcare facilities, often forces women to retreat into domestic roles. The state's efforts to balance work-family roles, primarily through increased childcare availability, have so far failed to yield desired results, with women's labor force participation rates remaining stagnant or even declining in Kazakhstan (Roshchin & Yemelina, 2020; Dugarova, 2019). Empirical data collected from Kazakhstan shows parental duties as a major

impediment to women's career progression (Yanovskaya, Potluri, Nazyrova & Salimzhanova, 2020).

However, situation seems to be different for international female faculty members pursuing their careers in Kazakhstan. As Kuzhabekova (2019) explored, in a highly internationalized, research-intensive university without a tenure system international female faculty with children thrived. This success could be attributed to several factors, including the emerging organizational culture's high tolerance for work and family life coexistence, influenced by a child-friendly local culture and an administrative understanding of the unique needs of an international workforce. The absence of a tenure system, despite being associated with high publication pressures, alleviated some work-related pressures for women. This allowed them to devise individualized timelines for professional growth and create various strategies for balancing work and family lives school (Kuzhabekova, 2019). Administrative support structures like on-campus daycare facilities and provisions for senior relatives to share residential facilities eased the process of achieving this balance. Another important aspect was the presence of women leaders, who not only serve as role models but also raise awareness about the unique challenges faced by women faculty with children. They recognized faculty achievements despite constraints and shape a child-accepting atmosphere at the school (Kuzhabekova, 2019). However, such broad support is often elusive for local female faculty. Given that they are Kazakhstani citizens, they might not be offered the same level of consideration and assistance as their international counterparts. Assumptions that local faculty have existing familial or societal structures to aid in balancing work-life challenges can lead to a lack of institutional support (Kuzhabekova, 2019).

In conclusion, the trajectory of women in academic leadership is profoundly influenced by socialization processes that stem in the family setting and continue throughout life. The evidence underscores that early childhood experiences, particularly those involving learning from parents who are themselves academics, play a crucial role in shaping leadership capabilities in women. Support from family, friends, and spouses is pivotal, not only before but also during their careers in academic leadership, with particular emphasis on shared domestic responsibilities and the willingness to relocate. Moreover, the challenge of balancing motherhood with professional obligations can either impede or motivate women's leadership pursuits. In Kazakhstan, traditional gender roles and societal expectations often place familial responsibilities above professional aspirations, affecting women's progress in academia. Despite these challenges, international female faculty in Kazakhstan have demonstrated that with adequate support and an organizational culture conducive to work-

family life coexistence, it is possible to thrive in leadership roles. This success highlights the necessity for inclusive support structures for all faculty, emphasizing the critical role of institutional policies in creating an equitable academic environment for female leadership development. Next is to introduce literature pertaining to the micro system component of Bronfenbrenner's Ecological Development Theory, focusing on the immediate environments that directly influence individual development.

2.3.3.4 Micro-System Factors

This sub-chapter explores the micro-system factors that influence women's leadership identity and aspirations within the higher education system. Literature explores the perceptions of leadership styles, examining how attributes traditionally associated with femininity and masculinity impact leadership effectiveness and aspirations. Investigating Eastern and Western perspectives, this chapter highlights the challenges and triumphs women face in navigating their paths towards leadership in higher education, particularly within the Kazakhstani context.

2.3.3.4.1 Leadership Identity in Women's Academic Aspirations.

The issue of leadership, sex and gender traits is complicated because of multiple intersectionality that occur within the process of constructing the leadership perception (Harvey & Jones, 2022). There is an ongoing debate whether leadership styles are mastered, inherent by one's biological sex or constructed based upon on the performed gender traits (Acker, 2012). Being communicative, affectionate, cheerful, compassionate, gentle, trusting, sympathetic and understanding are referred as feminine traits or femininity, ascribed to women; whereas men are characterized by masculine traits or masculinity, by being ambitious, competitive, forceful, independent, decisive, dominant, and risk-taking (Cole & Hassell, 2017; Karami, Ismail & Md. Sail, 2011). For example, leaders that use transformational leadership style and possess more feminine traits seem to be more successful in reaching organizational goals nowadays, changing the historically formed perception on leaders, who had to be authoritative, dictative and assertive for efficient management of the team (Gill & Jones, 2013; Kabaikina & Sushchenko, 2017). The reason is that leadership is a relationship: the positive changes occur when a leader reflects on mistakes; take time to share the knowledge with followers so they have a clear understanding how to achieve organizational goals; continuously improve and encourage others to develop; and remains passionate about the work that needs to be done, inspiring others by personal example (Reding, 2017). Being inspirational is one of the most significant traits of a leader,

which is interconnected with leadership work experience, but not biological sex, education, and age (Green, Chavez, Lopez, & Gonzalez, 2011).

Interestingly, research shows how each of the sexes are perceived when it comes to leadership behaviour. Women are favourably perceived when more likely to use transformational style of leadership - gaining the trust, mentoring, and inspiring of the followers. Men, on the other hand, appeal to followers if they use the transactional style of leadership - positive and negative reinforcement which motivates or punishes the subordinates (Eagly, Johannesen-Schmidt & Van Engen, 2003). However, recent research has shown that there are no biological sex differences regarding the leadership traits: both women and men equally can be competent, hard-working, honest, ethical, and successful at reaching organizational goals (Lam, 2020).

Nevertheless, the association between the transformational leadership style and female traits has been a subject of research, shedding light on the reasons behind this connection. Academic studies suggest that this linkage is not solely due to women having family responsibilities, although they do often shoulder a significant portion of domestic work compared to men. The nurturing and caring qualities developed through these responsibilities align with the characteristics of transformational leadership (Eagly & Carli, 2007). Furthermore, women have been found to possess superior communication skills, which are essential for building strong relationships and inspiring followers, attributes commonly attributed to transformational leaders (Eagly & Carli, 2007; Northouse, 2021).

Numerous Western researchers have explored leadership aspirations, finding that they are not directly related to biological sex but rather linked to the concept of leadership identity, which intersects with masculinity and femininity traits (Amondi, 2011; Bonham, 2019; Sims et al., 2022). While identity formation may seem like a personal choice, studies reveal that women often encounter challenges in developing their leadership identities due to interplaying personal, family, workplace, social backgrounds, and societal norms related to leadership, masculinity and femininity (Bohnam, 2019; Gerdes, 2011; Raddon, 2002; Shaw, 2020). Research focusing on Eastern Europe reveals differences in the effect of social background, education, and labor market outcomes among men and women: while males with favorable social backgrounds tend to pursue higher education, females from both lower and higher social backgrounds enter tertiary education. However, after graduation, females face less advantageous positions in terms of career opportunities and salary levels compared to males (Fényes, 2012). Also, Karami et al. (2011) discovered that both sexes with feminine traits have lower leadership aspirations, while those with masculine characteristics have

higher aspirations. Some women deliberately reject socially accepted feminine roles to pursue leadership careers, while others prioritize family over career aspirations, finding self-satisfaction in their identity as predicted by gender role theory (Anneli Adams, 2009; Karami, Ismail, & Md. Sail, 2011; Mayer et al., 2018). Cubillo (2023) indicated that there is a peculiarity of female university leaders: self-esteem affects women's confidence in taking leadership roles.

Interestingly, although transformational leadership style is recognized in Kazakhstan, it seems that females' potential as being transformational leaders are still untapped. Few studies from Kazakhstan have explored the applicability and impact of various leadership styles on employee and operational performance (Lee, Alpeissova & Akisheva, 2019; Mahmood, Uddin, Ostrovskiy & Orazalin, 2020). Transformational leadership emerged as a prominent and positively influential style, resonating well with employees, and driving organizational success. Additionally, authoritative leadership also showed a modest yet positive association with both employee and operational performance, potentially influenced by employees' experiences during the Soviet era. Researchers (Mahmood, Uddin, Ostrovskiy & Orazalin, 2020; Lee, Alpeissova & Akisheva, 2019) also shed light on the crucial role of clan culture in Kazakhstan, where employees preferred a work environment resembling an extended family and placed importance on maintaining clan relationships. However, researchers indicated that democratic leadership was less effective, possibly due to the limited familiarity with democratic values in the societal context (Mahmood, Uddin, Ostrovskiy & Orazalin, 2020; Lee, Alpeissova & Akisheva, 2019). To the author's knowledge there is yet no research on transformational female leaders in Kazakhstan, the clan culture mentioned by Mahmood et.al (2020) and Lee, Alpeissova and Akisheva (2019) might explain that despite the recognized effectiveness of the transformational leadership style in the country, there are still challenges in accepting female leaders in Kazakhstan. Although women may naturally possess the skills associated with transformational leadership, they are not yet fully recognized as leaders, partly due to the dominant role of mothers in the clan culture. Therefore, next section is to explore how self-awareness and leadership skills affect females' desire to take on leadership positions in Kazakhstan.

2.3.3.4.2 Self-Awareness and Leadership Skills in Higher Education

Self-awareness is a psychological state of mind in which one: 1) is mindfully conscious about personal strengths and weaknesses, opportunities and needs for development; 2) recognizes personal goals and reasons of pursuing them; 3) has a clear understanding how to achieve

personal aims and what to expect afterwards (Cook, 1999). Being self-aware is a factor for successful leadership, which appear to be common for men and women leaders, as numerous research studies show that existing female leaders in higher education shared that being aware of their authentic self, personal traits and skills, self-actualization expectations, work-life balance, values and priorities, goals and strategies motivated and helped to be successful in leadership roles (Airini, Collings, Conner, McPherson, Midson & Wilson, 2011; Cubillo, 2003; Dunn, Gerlach & Hyle, 2014; Mayanja, 2018; Mayer, Surtee & Barnard, 2015; Mayer, Viviers, Oosthuizen & Surtee, 2017; Mullen, 2009; Reding, 2017; Shaw, 2020; Thornhill, 2011; Vicary & Jones, 2017).

According to Mayer et.al (2017, 2018), Mullen (2009) and Pierce (2017) to obtain and remain self-awareness, women university leaders referred to spirituality and praying as supporting factors, which helped them to overcome stressful events and strengthen belief in their leadership destiny. However, if women leaders demonstrated their religious practices to the university community, they felt devalued as leaders within the university setting, because as they suppose academia value only a particular identity of a leader: authoritative, objective, and emotionless male. The reason is that religious practices presuppose traditional gender roles for females, meaning that the roles of a family nurturer and a caregiver is a primary importance for females, whereas career aspirations follow afterwards (Mayer et.al 2017, 2018; Mullen, 2009; Pierce, 2017). Curiously, recent research by Fényes, Pusztai, & Engler, (2020) on gender role attitudes and religiosity among higher education students has shown that religious students do not always have a traditional gender role attitude. One could possibly imply that the future of leadership perception among the upcoming generations may alter. Yet, as Thornhill say (2011), females who are already leaders, share that not only their self-awareness, but the skill to manage things harmonically is crucial for success.

Educational skills, namely advanced educational degrees have been distinguished as a booster for females to reach leadership careers in higher education (Eggins, 2016; Martin, 2011; Nakku, 2021; Vasquez-Guignard, 2010). However, as Eggins (2016), Read & Kehm, (2016) and Reis & Grady (2019) note, having a tertiary education only is not a sufficient condition to obtain leadership positions within university setting: leadership work experience, academic reputation, and personal traits are equally important. Additionally, Pierce (2017) studied that attending to poorly funded K-12 schools and experiencing financial hardships in the family were one of the barriers female educational leaders they had to overcome on their pathway to obtaining an advanced university degree which was a necessary condition for a leadership position.

A leader should possess certain personal and professional skills to be successful. Nägele & Stalder (2017) brings up those transferable skills to be necessary for a higher education leader. These skills are the ones that can be used in different jobs and in various life situations (Nägele & Stalder, 2017). Transferable skills are a broad concept, and it might be called differently: for example, alternative names could be basic or generic skills. Amondi (2011), Eggins (2016), Scott (2018), Smiley, Zakrajsek and Fletcher (2021) distinguish following professional transferable skills that are important for a success for a higher education female leader: budget and financial management skills, conflict and stress management skill, time and personnel management skills, communication skills, problem solving and decision-making skills, ability to form interpersonal relationships, ability to plan and delegate. Scott (2018) takes into consideration that for female academic leaders these skills can be enhanced by professional development activities and the support of the family members. As for the personal transferable skills, researchers (Amondi, 2011; Eggins, 2016; Gill & Jones, 2013; Mayer et al, 2017; Mullen, 2009; Smiley, Zakrajsek & Fletcher, 2021) mention following ones as essential for a female leader in higher education: job determination and passion for a profession, decisiveness and self-confidence, honesty and integrity, sensitivity and empathy to various socio-economic, cultural and gender-related backgrounds, emotional intelligence, in particular having a tough skin, objectivity and ability to impulse control, creativity in creating collaborative work environment and team work, self-regard and self-awareness. Although these skills were mentioned in a piece of research on existing female leaders in higher education, it seems that above-mentioned professional and personal transferable skills align with a general description of a leader in higher education. Therefore, it appears to be that not biological sex, but traits and skills are important for a successful leadership in higher education. Therefore, next is to examine females' career trajectories and success in the realm of higher education leadership.

2.3.3.4.3 Career Success and Gender Dynamics in Higher Education Leadership
Undoubtfully, making headway to a leadership position is a career success. Nabi (1999) distinguish career success in two aspects: 1) objective career success is measured extrinsically, in terms of salary and job positions; and 2) subjective career success is related to personal feelings of individual accomplishments within a career. Researchers (Edwards, Bexley & Richardson, 2011; , McAllister, & Kent, 2012; Morley, 2013; Nabi, 1999; Wendler, Bridgeman, Markle, Cline, BellBaker, 2010; McAlpine & Emmioğlu, 2015; Roach, & Sauermann, 2010) note that although both male and female academic leaders share that

higher work effort and involvement is associated with higher levels of objective career success (financial rewards, organizational influence and power, flexible working conditions), there seem to be a gendered pattern of reasons why women or men choose leadership careers. As Larasatie, Barnett and Hansen, (2020), Rawson (2021), Rabii-Rakin (2019) reveal, male university leaders position themselves as breadwinners for the family and therefore seem to aspire to leadership positions because of a higher salary; whereas women university leaders share that they got to a position either by volunteering or by a chance. If females' personal values, goals and missions align with university's, they seem to feel happier, work harder and aspire to leadership because of believing into university's vision (Matthews, 2017; Shaw, 2020). According to Matthews (2017) and Rabii-Rakin, (2019) most of the female academic leaders seem to follow the traditional pathway towards leadership: they start working as academic staff, and eventually if there is a leadership position opening, they are encouraged to take it. Researchers (Fine, 2009; Hardy, 2019; Matthews, 2017) goes on to say that females seem to hold altruistic values when going into the leadership positions: they want to accomplish something meaningful in their lives by making positive changes for the students and educational system. Women seem to believe more than men that they must apply their academic knowledge to solve real-life problems for a common good (Aiston, 2014).

Wendler, Bridgeman, Markle, Cline, Bell, McAllister, and Kent (2012) observe that women leaders appear to be more concerned than men leaders about family and work responsibilities. Females perceive family responsibilities as an individual, rather than structural barrier that they need to overcome on their leadership journey (Bonham, 2019). For example, Allen, Butler-Henderson, Reupert, Longmuir, Finefter-Rosenbluh, Berger and Fleer (2021) conjectures that some female university leaders choose to delay childbirth or prefer to have only one child to minimize the years of childrearing, in order not interfere with the career commitments. Kim, O'Brien, and Kim (2016) suppose that some women intentionally prefer to live child free, because they believe in their professional success and therefore prioritize work over childrearing. On the contrary, Fine (2009) proposes that if women do not see their potential as university leaders, they prefer to prioritize family and motherhood responsibilities because it brings meaning to their lives. It seems that females aspiring to leadership careers must choose either work or family as a priority for themselves. To the authors knowledge, there is no research on female university leaders 'perception of how roles and goals of each family member should be aligned and discussed within a household setting, for each family member to be in harmony with personal and professional development.

The pathway to leadership is a complex process which might involve many hardships, such as personal and family issues, organizational and structural complications, as well as discriminatory practices. Therefore, an extensive number of empirical research shows that women's personal desire towards leadership play a crucial role in their professional development despite those hardships (Vasquez-Guignard, 2010; Zhao, & Jones, 2017; Calizo, 2011; Sallee, Ward, & Wolf-Wendel, 2016; Baker, 2010). Researchers (Cole & Hassel, 2017; Cselenszky, 2012; Davidson, 2018; Diehl, 2014; Gill & Jones, 2013; Majam-Finch, 2021; Mullen, 2009; Nakku, 2021; Vasquez-Guignard, 2010) emphasize following personal traits as self-supporting factors for females to strive towards leadership positions in universities: intentionality to become a leader, self-discipline, perseverance and resilience, positive attitude, and sense of humor. Pillay (2020) has discovered that having positive predispositions and self-awareness in one's personality is significant predictor of resilience, in other words, it seems to be possible to stay positive and resilient if one is self-aware. According to Hardy (2019), Mohrfeld (2020) and Shaw (2020) some female university leaders share that taking leadership careers were their unintentional choice: they would either be appointed on an interim basis at first, because the colleagues would support her candidature; or become leaders by a change, as a logical development of their career progression in a university. However, Mohrfeld (2020) and Nachatar Singh (2022) reveled that some intentionally aim at leadership careers in universities to have broader influence on higher education system. For those who have a purpose of becoming a university leader proactivity towards leadership seem to be crucial for their success. Researchers (Airini et al, 2011; Hardy, 2019; Harvey & Jones, 2022; Jensen, 2019; Majam-Finch, 2021; Mohrfeld, 2020) say that it could be expressed in a way of: understanding criteria for promotion, visualizing personal success, setting up small milestones, establishing networks, finding mentors and advocates, creating opportunities for professional development, building an academic reputation. Also, in a more intrinsic action as: making quick, but intelligent decisions, putting the doubts aside; taking the advantage of the situations; having inner motivation and belief to succeed; working hard; showing grit and perseverance; remaining positive. Dunn (2014) says that females' proactivity works well in a combination with effective communication skills: as a leader, it is crucial to be able to reasonably communicate with the team for positive workplace dynamics. According to Hardy (2019), in comparison to male academic, females are less assertive and less likely to advocate themselves towards leadership careers in universities.

In conclusion, literature on micro-system has provided a comprehensive exploration of the various factors affecting women's aspirations towards leadership roles, particularly in the academic sphere. The discussion was built around the complexities surrounding leadership identity, influenced by a blend of gendered traits and societal expectations. It has highlighted how certain traits traditionally ascribed to women, such as transformational leadership qualities, often align with effective leadership styles in the modern context. Furthermore, the chapter has illuminated the challenges women face in developing their leadership identities, influenced by personal, family, workplace, and societal norms. Moreover, the chapter has underscored the significance of self-awareness and leadership skills in higher education, noting the unique experiences and hurdles that women encounter in this realm. It has shed light on the interplay between personal traits, professional skills, and the broader societal context in shaping women's journey towards leadership roles.Finally, the chapter has touched upon the dynamics of career success and gender in higher education leadership, revealing the nuanced and often gendered paths to leadership positions. The discussion has emphasized that women's aspirations and successes in leadership are not merely a product of their individual efforts but are intricately linked to other systems according to Bronfenbrenner's Ecological Development Theory, including broader societal structures and norms. It is important to note here the interlinkage between the systems in Bronfenbrenner's Ecological Development Theory, which emphasizes the importance of understanding the interconnectedness of an individual's social contexts in understanding their development. Changes or experiences in one system (e.g. meso-system, family) can have ripple effects on another system (e.g. micro-system, self), creating a complex influences on an individual's development. By realizing these interconnections, the multifaceted and dynamic nature of human development within the context of their social environments could be recognized better. To further present these factors, the author created a table summarizing the key factors affecting females' desire for leadership, as gathered from the literature review. This table aims to provide a concise and organized overview of the complex interplay of elements influencing women's leadership aspirations, which looks as presented in Table 3:

Table 3

Literature review factors influencing females' decisions to pursue or abstain from pursuing leadership positions, by the author.

Bronfenbrenner's Ecological Development Theory Sub-Systems	Sub-Chapter Name	Factors
↓ Macro-system	Historical Perspectives on Gender Equality in Kazakhstan.	1. Historical Context and Gendered Division of Labor 2. Cultural Influences and Educational Access 3. Kazakhstan's Unique Historical Background 4. Soviet Influence and Women's Roles 5. Post-Soviet Nationalism and Gender Discourses 6. Contemporary Kazakhstani Female Leadership 7. Age-Related Expectations
	Kazakhstan's Feminist Discourse	1. Hybrid Feminist Identities 2. Historical Backdrop 3. Geopolitical Positioning 4. Challenging Western Feminism 5. Integration with Cultural Values
	Political Perspective on Gender Studies in Kazakhstan	1. Gender as a Symbol of Westernization 2. Grassroots and Top-Down Strategies
	Kazakhstan's Pursuit of Gender Equality	1. Education as a Catalyst for Political Interest 2. Gender Equality Initiatives 3. Government Policies and International Agreements 4. Global Recognition and Achievements
↕ Exo-system (workplace)	Students' Socialization and Decisions to Pursue Advanced Studies	1. Perceived Importance of Advanced Degrees 2. Motivations for Obtaining Advanced Degrees 3. Lack of Career Guidance: 4. Gap Between Expectations and Reality 5. Influence of Supervisors and Mentors 6. Student Socialization in Academia 7. Equitable Access to Academic Careers 8. Cultural and Institutional Barriers
	Challenges and Pathways to Leadership	1. Barriers in Early-Career Academia 2. High Performance Expectations: 3. Perception of Workplace Culture 4. Mentorship and Professional Development 5. Influence of Leadership Role Models 6. Workplace Relationships 7. Discrimination and Exclusion in Decision-Making

	Gender Dynamics and Organizational Culture in Female Academic Leadership	1. Organizational Culture and Stereotypes 2. Professional Expectations vs. Gender Norms 3. Global Gender Divide in Labor 4. "Glass Cliff" Phenomenon 5. Team-Approach and Corruption in Kazakhstani Academia
	Gender Constructs in Education and Their Impact on Female Leadership Aspirations in Kazakhstan	1. Gender Representation in Education 2. Curriculum Content 3. Gender studies and Societal Transformations
	Gender Dynamics and Wage Disparities: Impact on Women's Leadership in Kazakhstan	1. Gender wage gap. 2. Underrepresentation in High-Paying Sectors 3. "Glass Ceiling" Effect
↕ Meso-system (family, peers)	Socialization and Support Systems: The Foundation of Female Academic Leadership	1. Socialization and upbringing. 2. Support systems. 3. Parenthood and work-life balance. 4. Cultural and societal constructs.
↑ Micro-system (self)	Leadership Identity in Women's Academic Aspiration	1. Leadership Styles and Traits 2. "Clan culture" in Kazakhstan
	Self-Awareness and Leadership Skills in Higher Education	1. Self-awareness 2. Spirituality and Religion 3. Educational Attainment 4. Personal Attributes 5. Financial barriers 6. Transferable skills
	Motivation and Proactivity towards Leadership.	1. Career Success Perceptions 2. Personal Development and Desire 3. Proactivity and Communication Skills

Chapter III: Research Design and Methodology

3.1 Introduction

Chapter III details the research design and methodology underpinning this dissertation. It outlines the chosen research methods, describes the participants, and goes into the selection process and sample size. The study adopts a convergent mixed methods research design, defined by Fetters (2019, p.338) as an approach where "qualitative and quantitative data are collected and analyzed roughly at the same time". Constraints such as limited participant accessibility (due to online data collection) and a tight timeframe for completing the doctoral research made this method fitting. These limitations, however, aligned well with the mixed methods research guidelines (Whitehead & Schneider, 2007). From a theoretical standpoint, guidance was sought from Bronfenbrenner's Ecological Development Theory (1979) alongside the Social Role, Gender Role, Gendered Organizations, Performative Leadership theories.

The research design unfolded in several stages. Initially, during the design phase, the core exploration theme, rationale, and the practicality of implementing mixed methods were identified. Upon establishing the research focus and narrowing down its scope, a thorough literature review was undertaken. This involved integrating personal experiences, theories, and broader worldviews into the research design. Research questions were then formulated, guiding the subsequent literature review. Data collection came next, comprising the formulation of interview and survey questions and participant selection, all in line with mixed-method principles, as recommended by Fetters (2019). Next, is to introduce the research questions that form the core of this doctoral dissertation, outlining the specific inquiries and objectives guiding this comprehensive study.

3.2 Research Questions

1. How do perceptions of leadership, femininity, and masculinity intersect and influence the understanding and enactment of leadership roles within Kazakhstan's higher education sector?

2. What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at macro-system?

3. What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at exo-system?

4. What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at meso-system?

5. What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at micro-system?

To help provide clarity about how the author is taking concepts from the literature and measuring them with abovementioned research question, the operationalization table is created drawing upon Merten's (2014) mixed-methods research procedures. The operationalization table includes include research questions with the corresponding factors under investigation, and specific data points collected from interviews and questionnaires, which looks as presented in Table 4.

Table 4

Operalization Table of Variables Influencing Females' Decisions to Pursue or Abstain from Pursuing Leadership Positions, by author.

Research Questions and Bronfenbrenner's Ecological Development Theory Sub-Systems	**Qualitative Measures (Interview Codes)**	**Quantitative measures (Questionnaire Variables)**
RQ 1 (not part of the Bronfenbrenner's Ecological Development Theory)	1. Leadership : Aspiration 2. Leadership: Assessment 3. Leadership: Bureaucracy 4. Leadership: Burnout 5. Leadership: Career focus 6. Leadership: Communication 7. Leadership: Culture 8. Leadership: Education sector 9. Leadership: Financial independence 10. Leadership: Gender disparity 11. Leadership: Inspiration 12. Leadership: Nature vs Nurture 13. Leadership: Social roles 14. Leadership: Work ethics 15. Leadership: Challenges 16. Leadership: Development	-

	17. Leadership: Perception 18. Leadership: Potential 19. Leadership: Skills 20. Leadership: Styles	
RQ 2 (↓ Macro-system)	1. Macro: Culture 2. Culture: Cultural specifics of Kazakhstan 3. Culture: Cultural trends 4. Culture: Society 5. Macro: New Generation 6. Macro: Support 7. Macro: Structure	1. Macro:men_breadwinner_of_family, 2. Macro:women_caretaker_of_family, 3. Macro:confidence_practicality_objectivity_unemotionality_reliability_is_masculine_qualities 4. Macro:empathy,_subjectivity_rules_observance_sensitivity_and_emotionality_are_feminine_qualities
RQ 3 (↕ Exo-system (workplace))	1. Exo: Diversity in Leadership 2. Exo: Gendered Promotion Practices 3. Exo: Lack of Leaders 4. Exo: Leadership and Education Quality 5. Exo: Leadership Development 6. Exo: Leadership Realities 7. Exo: Mentorship 8. Exo: Networks 9. Exo: Organizational Culture 10. Exo: Payment 11. Exo: Role Models 12. Exo: Sacrifices 13. Exo: Structure 14. Exo: Support 15. Exo: Work load	1. Exo:Informal_friendship_with_collegueas_outside_work_career_growth 2. Exo:Desire_to_become_manager_at_university_employement, 3. Exo:Desire_to_become_manager_at_university__univeristy_policies 4. Exo:Desire_to_become_manager_at_university__informal_relationships_colleaques, 5. Exo:Desire_to_become_manager_at_university__students 6. Exo:Desire_to_become_manager_at_university__top_management 7. Exo:women_tend_lead_where_they_outnumber_men 8. Exo:Mentoring_type_of_mentoring, 9. Exo:Mentoring_influence_of_mentoring_on_desire_to_become_top_manager 10. Exo:having_a_role_model_to_become_top_manager, 11. Exo:role_model_gender
RQ 4 (↕ Meso-system (family, peers))	1. Meso: Family Roles 2. Meso: Leadership Development 3. Meso: Priorities	1. Meso:marital_status 2. Meso:kids

	4. Meso: Sacrifices 5. Meso: Support 6. Meso: Upbringing	3. Meso:informal_friendship_with_collegueas_outside_work 4. Meso:employment_type 5. Meso:having_time_energy_to_get_regalia_for_leadership
RQ 5 (↑ Micro-system (self))	1. Micro: Awareness, Skills, Confidence 2. Micro: Change of Interests 3. Micro: Payment 4. Micro: Personal Attitude 5. Micro: Proactivity 6. Micro: Status	1. Micro:Desire_to_lead_at_university_salary, 2. Micro:Desire_to_lead_at_university_status, 3. Micro:Desire_to_lead_at_university_career_opportunities 4. Micro:Desire_to_lead_at_university_previous_experience_at_university, 5. Micro:Desire_to_lead_at_university_professional_development 6. Micro:Desire_to_lead_at_university_to_be_a_role_model 7. Micro:Desire_to_lead_at_university_bringing_changes_to_educational_system 8. Micro:leadership_and_management_is_an_attribute_of_men 9. Micro:skills_I_pay_attention_to_details Micro:skills_I_use_my_time_rationally 10. Micro:skills_I_am_good_at_teaching_others 11. Micro:proactivity_I_want_to_make_the_world_better 12. Micro:proactivity_There_is_nothing_more_exciting_to_see_my_ideas_turning_into_reality 13. Micro:proactivity_If_I_see_something_I_don't_like_I_fix_it

While the designing interview and questionnaire for this Ph.D dissertation, a strategic decision was made regarding the selection of variables. The author has decided to exclude some variables related to the history, policy, and psychological traits analysis, as it is not

purpose of this dissertation, as well as concepts that are complex to measure. Other factors that stemmed from the literature review were measured either with interview questions, questionnaire parts, or both. Next is to introduce the research methods employed in this doctoral dissertation, detailing the methodologies and approaches used to systematically investigate and analyze the study's key questions.

3.3 Research Methods

3.3.1 Identifying Relevant Qualitative Research Methods for this Dissertation.

The major characteristic of qualitative research is that it happens in a natural setting, i.e. the researcher collects data by talking to people directly or observing them act within their context (Cresswell, 2014). Qualitative research design might collect multiple sources of data, such as interviews, observations, documents analysis etc. to create a complex understanding of the research problem. The semi-structured interview design was appropriate for this study because the aim was to understand factors that affect females 'decisions to pursue or abstain from pursuing leadership careers in higher education. The semi-structured interview design allowed asking participants open-ended questions and giving autonomy for participants to share the information, which in turn cultivated the understanding of the phenomena of interest, where "respondents must be allowed to answer in their own words and at length in order for researchers to understand the interviewee's meanings, perceptions, beliefs, attitudes, and descriptions of their own behavior" (Given, 2008). According to Cresswell (2014), interviews should stop when no new themes emerge in the data collection, which is known as saturation (Cresswell, 2014).

The interview protocol was developed in several steps:

1. A comprehensive review of existing literature in the research area was conducted. This ensured the relevance and significance of questions being aligned with established findings and gaps in the research domain.

2. The interview questions were constructed to align with the theoretical framework of the study: Bronfenbrenner's Ecological Development Theory with integrated theories into it: Gender Role, Social Role, Gendered Organizations and Performative Leadership Theories. This allowed the research to maintain coherence with the theoretical underpinnings guiding the dissertation.

3. Before the final implementation, the interview protocol underwent a pilot test with three Kazakhstani females, from secondary education filed. Feedback from this

> preliminary phase was instrumental in refining the questions, ensuring clarity, and eliminating potential ambiguities.

4. The interview protocol was reviewed by the author's Ph.D. supervisor and the Institutional Review Board, which gave the permission to implement it. Their feedback helped in fine-tuning the questions and ensuring their relevance and appropriateness.

5. As the interviews progressed, the protocol was occasionally revisited to make minor adjustments based on the responses and patterns observed. This iterative approach ensured that the questions remained adaptable and responsive to the research's evolving needs.

Prior data collection, invitation letters were sent to Kazakhstani female faculty members, as well as to doctoral students and leaders of universities. The invitation letter provided a detailed information on the research purpose, procedures, ethical considerations, voluntary participation nature of the interview, and a guarantee of anonymity and confidentiality of each participant. Interviewees were informed beforehand about different terms that would be used during the interview: clarification on "leadership careers", "leadership styles", "management", "mentorship", "role models", "femininity" and "masculinity" issues. Due to COVID-restrictions and political unrest at the time of data collection, the interviews were conducted online via ZOOM application, and with the participants permission, recorded. The language of the interviewing process was also chosen by participants: they could give interview either in Kazakh, Russian or English language. All the participants decided to give interviews in Russian language. Interviews lasted between 40-60 minutes. Appendices section of this dissertation includes all the documents related to the qualitative data collection procedure.

3.3.2 Identifying Relevant Quantitative Research Methods for this Dissertation.

The quantitative research design provides numeric description of hypotheses by studying the sample based on the deductive approach (Cresswell, 2014). The author decided to use quantitative non-experimental survey design as a quantitative data collection method for this dissertation. The questionnaire was collected one time; hence it was cross-sectional (Cresswell, 2014). The questionnaire was launched and distributed online, because was the safest and fastest way to collect data: at first the author could not travel to Kazakhstan during the COVID-19 pandemic, and then because of the political unrest in the Kazakhstan at the time of data collection.

The questionnaire was developed in several steps:

1. A comprehensive review of existing literature in the research area was conducted. This ensured the relevance and significance of questions being aligned with established findings and gaps in the research domain.

2. Based on the literature review and the study's objectives, variables were defined and operationalized. This step ensured that every key concept or construct was translatable into measurable terms within the survey.

3. Initial questions were drafted, prioritizing clarity, neutrality, and relevance.

4. A pilot test was conducted with 14 non-Kazakhstani early- and mid-career stage professionals from universities have taken the pilot survey. They identified the issues that would allow a better comprehension of the questionnaire: for example, to break down the survey into smaller parts, thematically organize the questions, add additional definitions to the terms etc. The author has made improvements to address these issues.

5. Based on the pilot test results, revisions by the author's Ph.D. supervisor and the Institutional Review Board, necessary amendments were made to improve the survey's structure, flow, and clarity.

6. To ensure the reliability and validity of the survey instrument, the author consulted professors from the university where she studies, who are experts in the field.

7. After revisions and consultations, the final version of the survey was produced and allowed to implement by the Institutional Review Board.

Salant and Dillman (1994) recommended a four-stage administration process of the online survey, and the author followed the suggestions. At the first stage, members of the sample were provided a short advance-notice letter, 4-8 days prior to sending the survey. At the second stage the actual survey was sent out to the respondents. After that, a follow up reminder, 4-8 days after the survey was sent. The last step was to provide all participants with a personalized cover letter with a handwritten signature, which could also be done online.

Invitations were sent to female faculty members, as well as to doctoral students and leaders of Eurasian National University in Kazakhstan. The invitation letter provided a detailed information on the research purpose, procedures, ethical considerations, voluntary participation nature of the interview, and a guarantee of anonymity and confidentiality of each participant. Survey participants were informed about different terms that were used in survey questions: clarification on "leadership careers", "leadership styles", "management", "mentorship", "role models", "femininity" and "masculinity" issues. The survey was

available in Kazakh, Russian and English language variations, however, all the survey participants chose the Russian language version. Appendices section of this dissertation includes all the documents related to the quantitative data collection procedure.

3.3.3 Identifying Relevant Mixed Methods Research Methods for this Dissertation.

The author has chosen to implement the mixed methods research design for this study because it provides a broader understanding of the phenomena of exploration. This notion is justified by Cresswell (2014): "The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone." In this research, the author employed convergent mixed methods research design. The data was collected roughly at the same time, and then merged to obtain a full image of the analysis of the research problem (Cresswell, 2014). This type of data collection is chosen for several reasons. First, the author believes that each type of data is valuable on its own and can provide interesting insights of the phenomena. Second, due to the time limitations of this study, collecting both types of data at the same time speeded up the process and gave more time for deeper analysis.

3.4 Selection of Research Participants

3.4.1 Population for the Study

The complexity of previous data collection efforts, owing to the sensitivity of the subject matter and a general mistrust towards research culture in the country (Yelibay, 2021), has shaped author's approach to participant recruitment. The research sought to explore the factors influencing the career aspirations of Kazakhstani female faculty members, specifically their inclination toward leadership roles within higher education institutions. The target group of the empirical research did not comprise only female leaders, because the purpose of this exploratory research is to understand females', who are at different positions in their academic careers, regarding their attitude towards leadership:

- early-career stage would include doctoral students, instructors, and lecturers at universities.
- mid-career stage would be females at different stages of their professorship (assistant professor, associate professor, etc);
- senior-career stage would include university leadership (deans, rectors, etc.)

The reason to include doctoral students is that the academic socialization happens during the graduate studies and influences further career decisions; therefore, it is important to observe female doctoral students' aspirations towards leadership position in universities (Weidman & Stein, 2003). The inclusion of doctoral students in the early-career stage rather than crafting a separate research question for them involves both practical and theoretical considerations. Given that many doctoral students are actively involved in teaching, research, and other academic responsibilities, they effectively operate as early-career stage professionals. Their experiences, though not identical to instructors or lecturers, still mirror many of the challenges and opportunities faced by those in the beginning stages of their academic careers.

Kazakhstani females who pursue their doctorates abroad were also invited for the interviews, because according Kuzhabekova, Sparks and Temerbayeva (2019) PhD holders returning to Kazakhstan have valuable insights to add into the realities of the status of educational environment in Kazakhstan. Even though the main topic is culture-dependent, including students who study outside of Kazakhstan enhances the richness and depth of the study by capturing different perspectives and experiences related to women's decisions in pursuing leadership careers in higher education. Importantly, females who participated in interviews expressed the desire to return to Kazakhstan after they finish their PhDs abroad.

In this convergent mixed methods research design, the author used the same population for both surveys and interviews. This approach ensured consistency as both qualitative and quantitative data are collected from the identical group, streamlining the research process. By targeting the same population, a more nuanced understanding of the phenomenon led to more valid and trustworthy conclusions.

Due to a lack of comprehensive and specific statistics available on the country's relevant population, the author was compelled to estimate the population using the available data. While the author acknowledges that this approach may introduce a degree of uncertainty into the study, the method used was guided by standard practices within the field, aiming to provide the most accurate and plausible representation of the population possible given the constraints.

At the time of data collection, there were 128 higher education institutions in Kazakhstan, out of which 25 females were university rectors ("Higher education in Kazakhstan", n.d). The exact number of female faculty members at other senior-career stages is unavailable, however, the available statistics show that leadership in universities female to male ratio is 21% to 79% ("Gender Statistics", n.d). There were 36 378 faculty members, out of which approximately 23 282 (64%) were females (Lipovka, 2018;). The number of all

doctoral students in Kazakhstan were estimated as 6 914, out of which approximately 4287 (62%) were females (Lipovka, 2018; "O professorsko-prepodavatelskom …", 2022). Therefore, the population for this study is estimated as 27 594 females in Kazakhstani universities at different career-stages.

In this dissertation quantitative part was structured as a comprehensive survey focused on one specific university, while the qualitative interviews were extended to all available females across different institutions in Kazakhstan and female Kazakhstani doctoral students abroad. Therefore, interview and questionnaire survey participants did not overlap. This approach was intentional, because of the time limitation of the completion of the current study and the political unrest in the country, which complicated the data collection online due to internet connection problems in and mistrust to those living outside of Kazakhstan ("2022 Kazakh unrest", n.d). The decision to limit the survey to one university allowed for an in-depth analysis of trends, patterns, and attitudes within that institution, providing valuable statistical data and insights. Meanwhile, by conducting interviews with a broader range of females, the research captured diverse perspectives and experiences, enriching the qualitative aspect of the study.

3.4.2 Sample for the Qualitative Part of the Study

The research approach was designed with an anticipation of conducting approximately 12 interviews, distributed among early-, mid-, and senior- career professionals, with four representatives in each category. This number was informed by the insight that sufficient saturation in qualitative study is often achieved around the tenth interview (Guest, Bunce & Johnson, 2006). Utilizing purposeful sampling, a form of non-probability sampling, the author selected participants according to specific criteria for the qualitative aspect of the research (Creswell, 2014; Fetters, 2019). Snowball sampling was employed, where participants recommend others for sampling, a method chosen based on previous experience with participant hesitancy in such studies (Cresswell, 2014; Yelibay, 2021). To avoid homogeneity, three different starting points for the snowballing were used.

The final sample encompassed 17 females at various stages of their academic careers: 11 early-career, four mid- career, and two senior-career stage professionals, which looks as presented in Table 5. The majority of senior-career stage professionals refused to participate, which potentially influenced by political unrest in Kazakhstan in early January 2022 ("2022 Kazakh unrest", n.d).

Table 5

The Final Sample for the Qualitative Part of the Study, by author

Participant	Age	Position	Employment	Marital status	Kids	Country
P01	31-40	Early-career	Full time	married	yes	Kazakhstan
P02	41-50	Early-career	Full time	married	yes	Kazakhstan
P03	31-40	Early-career	Full time	married	yes	Kazakhstan
P04	41-50	Mid-career	Full time	married	yes	Kazakhstan
P05	<30	Early-career	Full time	no	no	Kazakhstan
P06	31-40	Mid-career	Full time	no	no	Kazakhstan
P07	<30	Early-career	Full time	no	no	Europe
P08	<30	Early-career	Full time	no	no	Kazakhstan
P09	31-40	Mid-career	Full time	married	yes	Kazakhstan
P10	<30	Early-career	Full time	married	yes	North America
P11	31-40	Early-career	Full time	married	yes	Kazakhstan
P12	<30	Early-career	Full time	no	no	Asia
P13	31-40	Mid-career	Full time	married	yes	Kazakhstan
P14	31-40	Early-career	Full time	married	yes	Kazakhstan
P15	41-50	Senior-career	Full time	married	yes	Kazakhstan

| P16 | <30 | Early-career | Full time | married | yes | Kazakhstan |
| P17 | 31-40 | Senior-career | Full time | no | no | Kazakhstan |

3.4.3 Sample for the Quantitative Part of the Study

Sample size was determined according to Fowler's (2009) approach before the study. The margin of error was +/-5% confidence interval, which means that was the percentage of correlation of the whole population. The confidence level for this margin of error was 95 out of 100, i.e 95 out of 100 will have a true representation of the population. Using the 50/50 chance of the variance, meaning that half of the population had the needed characteristics, using Fowler's (2009) formula, the author arrived at the sample size 500, approximately about 166 females from each group - early, mid-level or senior professionals in higher education, if the sample would have been drawn from 125 universities of Kazakhstan. Cluster random sampling described by Fetters (2019, p.153) as: "select randomly a sample based on clusters defined as a unit with multiple elements (e.g., universities) rather than individual elements (e.g. teachers)" was employed for gathering the quantitative sample of the research. However, because of the time limitation of the completion of the current study and the political unrest named that the "Bloody January" that happened in Kazakhstan in early-January 2022, the author has chosen only one university for sampling ("2022 Kazakh unrest", n.d), making the quantitative part of this study as a comprehensive study of one public university in Kazakhstan named Eurasian National University (ENU).Therefore, the research cannot be generalized to the whole population (Cresswell, 2014).

ENU is in the capital of Kazakhstan and is considered as one of the leading public universities of Kazakhstan. The questionnaire invitation was sent out via publicly available emails on the university's website to females at early-, mid- and senior-career stages. According to the data available at the time of writing this dissertation, there were 13 faculties and 67 departments in ENU, with 1331 full-time faculty members and 1095 doctoral students, without the breakdown by gender ("Eurasian National University", n.d). The survey invitations were sent out to 1175 early-, mid-, senior-career stage female professionals from ENU, using the emails that were publicly available at the university's website. The final sample consisted of 168 respondents, which is 14% response rate. Since the research deals with complex and sensitive for some people issues, this response rate was expected. Also, the

research is exploratory in nature and since this is the mixed-method research using the quantitative data and qualitative data to supplement each other, this response rate is acceptable (Cresswell, 2014; Mertens, 2010). The final sample for the quantitative part of this study looks as presented in Tables 6, 7, 8, 9 and 10.

Table 6

The Final Sample for the Quantitative Part of the Study by Age, by author

Definition	Frequency	Percent
<30	49	29.2
31-40	81	48.2
41-50	18	10.7
51-60	13	7.7
60<	7	4.2

Table 7

The Final Sample for the Quantitative Part of the Study by Position, by author

Definition	Frequency	Percent
Early-career stage	127	75.3
Mid-career stage	22	13.1
Senior-career stage	19	11.3

Table 8

The Final Sample for the Quantitative Part of the Study by Employment Type, by author

Definition	Frequency	Percent
Full-time	101	60.1
Part-time	67	39.9

Table 9

The Final Sample for the Quantitative Part of the Study by Marital Status, by author

Definition	Frequency	Percentage
married	106	63.1
in a relationship	53	31.5
I do not want to answer	9	5.4

Table 10

The Final Sample for the Quantitative Part of the Study by Presence of Children, by author

Definition	Frequency	Percent
yes	84	50
no	80	47.6
maybe	2	1.2
I do not want to answer	2	1.2

There was a reason for not applying subsequent weighting to make the sample somewhat representative. First, maintaining methodological congruence between the qualitative and quantitative components is crucial for the internal consistency of mixed-methods research (Creswell & Plano Clark, 2017). Weighting the quantitative data would introduce an element that doesn't apply to the qualitative data, creating potential inconsistencies. Second, due to the nature of this research, the primary focus is on exploration rather than making inferential generalizations (Mertens, 2010).

3.4.4 Integrating Samples for the Mixed-Methods Study

After the study population and samples were identified for quantitative and quantitative parts of this research, it was important to consider how to integrate both parts of the research into the convergent mixed-methods design. The first point was to consider **the** sampling timing, which is described in Fetters (2019, p. 145) as: "the temporal relationship between when the qualitative and the quantitative data are collected". The sampling timing in this study is synchronous, because the qualitative and quantitative data of the research was collected roughly at the same time. The sampling relationship between qualitative and quantitative samples in this research is separate and multi-level, since the samples are different and collected from different categories of Kazakhstani female professionals in universities (Fetters, 2019). The sampling choices for this mixed-methods dissertation looks as presented in Table 11.

Table 11

Sampling Choices for Mixed-Methods, by author

Sampling consideration	Relevance to the study
Target populations	Kazakhstani females at early-, mid-, senior-career stages in universities

Sampling timing	Synchronous: survey and interview data were collected roughly at the same time
Sampling relationships	Separate and multilevel: N=168 for quantitative sample N=17 for qualitative sample
Hierarchical levels of sampling	Quantitative sample: N=127 early-level; N=22 mid-level, N=19 senior-level Qualitative sample: N=11 early-level; N=4 mid-level, N=2 senior-level
Qualitative sampling strategies	Purposeful, non-probability sampling using the snowball method, with 3 starting points
Quantitative sampling strategies	Comprehensive study of a university
Mixed methods sampling strategies	Convergent mixed-methods design
Sampling and organization function	Three levels: • early-career stage included doctoral students, instructors, and lecturers at a university. • mid-career stage were females at different stages of their professorship (assistant professor, associate professor, etc). • senior-career stage included university leadership (deans, rectors, etc.)
Geographic location and sampling	Kazakhstan, however, Kazakhstani females pursing their Ph.D degrees abroad were also included into the qualitative sample

3.5 Data Collection

Qualitative data was collected through interviews conducted with Kazakhstani female faculty members at early-, mid-, senior-career stages in universities. Invitation emails were sent elaborating on the study's objectives, methodologies, and ethical considerations, including a guarantee of anonymity for all participants. A structured interview protocol guided these discussions to maintain focus. Interview protocols were pilot tested was with 2 non-Kazakhstani professionals in the early and mid stages of their academic careers. The pilot testing of interview protocol helped to understand the need to logically arrange questions and clarify key terms such as "leadership styles" and "mentorship". Owing to pandemic

constraints and political unrest at the time of data collection, interviews were facilitated using the Zoom platform. Participants had the liberty to select their preferred language for the interview, and unanimously chose Russian. The duration of these interviews ranged between 40 and 60 minutes and were recorded with the consent of the participants. Prior to initiating each interview, it was reiterated that participation was entirely voluntary, and assurances regarding confidentiality were reaffirmed. Additional information is accessible in the appendices section of this dissertation.

Quantitative data was collected by online questionnaire. Before the launching a questionnaire, a pilot test was executed with 14 non-Kazakhstani professionals in the early to mid stages of their academic careers. This initial step identified areas that warranted refinement, such as the thematic arrangement of questions and the clarification of key terms like "leadership styles" and "mentorship", as suggested by Creswell (2014). Subsequent to these adjustments, the updated questionnaire was prepared. Invitation emails were then disseminated to a targeted group of potential respondents, which included female faculty members, doctoral students, and academic leaders at Eurasian National University. These invitations provided an overview of the study's goals, methodology, and ethical practices, emphasizing the voluntary and confidential nature of participation. Despite the availability of the survey in Kazakh, Russian, and English, the cohort unanimously selected the Russian version. Adhering to the four-stage distribution strategy recommended by Salant and Dillman (1994), an advance notification was initially sent to the prospective participants 4-8 days prior to the survey distribution. This was followed by the distribution of the actual survey and a subsequent reminder within a similar timeframe. Additional information is accessible in the appendices section of this dissertation.

3.6 Data Analysis

Qualitaitve data analysis of this dissertation, as well as the literature review analysis, was completed with the help of Atlas.ti software. The Atlas.ti software served multiple functions in the analysis process. It facilitates effective data management by allowing for the organization of large qualitative datasets (Friese, 2019). This was particularly important in mixed-methods research where triangulation of data requires meticulous organization (Flick, 2017). The software aided in thematic coding, offering a more structured and replicable means of categorizing qualitative data (Paulus et al., 2017). These codes later served as the basis for themes and patterns that emerged from the data, aligning with the study's exploratory objectives. The importance of these results provided context, depth, and nuance

to the quantitative findings, as recommended by mixed-methods scholars (Creswell & Plano Clark, 2017). Since the interviews were conducted and analysed in Russian, concepts cloud for the interview transcripts in Russian language and the same concepts in English translation presented in a table format looks as presented in Figure 2 and Table 12:

Figure 2

Concept cloud for the interview data in Russian language, by author

Table 12

A shortened English language version of the concept table for the interview data translated from Russian language, by author

Concept name	Count
Female	332
Human	181
Male	179

Leader	89
Quality	85
Manager	76
Child	74
University	58
Opportunity	54
Time	49
Experience	47
Family	42
Work	38
Leadership	35
Colleague	34
Skills	33
Instructor	30
Role model	29
Mentor	26
Education	25
Support	25
System (structure)	25
Stereotype	23
Atmosphere	17
Job title	17
Mother	17
Research	17
Desire	15
Wife	15
Society	15
Publication	15

Mentor	14
Payment	13
Husband	13
Parent	13

In investigating the factors influencing females' decision to pursue leadership careers in higher education in Kazakhstan, this study utilized a robust qualitative data analysis approach. The initial stage involved a two-tiered analysis, a methodological approach where data is analyzed at two distinct but interconnected levels (Friese, 2019). First tier included conceptual analysis, or named as co-occurrence analysis in ATLAS.ti. It involved identifying and categorizing basic elements within the data, by coding the data, where segments of text are labeled with codes that represent themes, ideas, concepts, or phenomena relevant to the research question. Codes and quotations were selected based on their alignment with these pre-established themes which was provided by the concept cloud provided by ATLAS.ti. This method not only helped in categorizing the data effectively but also allowed the identification of unique concepts that were not previously covered in the literature, thereby enriching the research's originality and scope. During this process, any text that was deemed excessive or not directly relevant to the research objectives was either re-coded for better alignment or excluded altogether to maintain the focus and clarity of the analysis. The result was a set of themes that organized the data into manageable parts.

The second tier of the analysis explored the relationships between the themes identified in the first tier. This relational analysis is called as code frequency analysis in ATLAS.ti. This analysis was pivotal in understanding how various factors interact within Bronfenbrenner's (1979) ecological development theory framework. Notable findings from this analysis included:

- The code "Personal Attitude" within the micro-system displayed frequent intersections, co-occurring with 14 other variables, indicating its central role in shaping leadership aspirations.
- A recurrent co-occurrence was observed between "Organizational Culture" (exo-system) and "Culture" (macro-system), appearing together in eight instances. This suggested a strong link between organizational practices and broader cultural norms in shaping leadership pathways.

- "Leadership Realities" in the exo-system and "Culture" in the macro-system were also notably interconnected, seen together four times, reflecting how real-world leadership experiences are influenced by cultural contexts.

- Other significant overlaps included variables such as "Awareness, Skills, Confidence" and "Proactivity" within the micro-system, highlighting key personal attributes essential for leadership roles.

To ensure the validity of the qualitative data, multiple strategies were employed, as suggested by Creswell (2014) and Flick (2019). Rich descriptions were used to present the findings, providing a realistic portrayal of the themes. Researcher bias was stated in the personal contexts at the beginning of this dissertation, which included the influence of gender, cultural background, and other factors that might affect interpretation. Discrepant or contradictory data were also included to ensure a balanced view. Peer debriefing involved consultation with subject-matter experts, including the researcher's supervisor. An external auditor, unfamiliar with the project, was engaged for an unbiased evaluation of the research process. As for the qualitative data reliability checks, transcripts and translations were rigorously reviewed for errors; the meanings and interpretations of codes were continually compared against the data to ensure accuracy.

In the quantitative phase of this study, the data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) software, a powerful tool for handling complex statistical data. Prior to commencing the main analysis, a fundamental step was taken to test the normality of the data distribution. The results from the normality tests, which included assessments like the Shapiro-Wilk and Kolmogorov-Smirnov tests, indicated that the data did not conform to a normal distribution, classifying it as non-parametric. This deviation from normality is common in practical research settings where data may not meet the stringent conditions required for parametric testing (Field, 2013; Greasley, 2008; Mujis, 2011).

Given this non-normal distribution, non-parametric tests were predominantly utilized for analyzing the quantitative data. Non-parametric methods are particularly advantageous in such contexts as they do not assume a specific distribution shape of the data, making them more suitable for ordinal data or data with outliers or skewed distributions. This approach aligned with best practices for statistical analysis, ensuring that the test applied is appropriate for the data's characteristics, thus ensuring the validity and reliability of the results obtained from the survey data (Field, 2013; Greasley, 2008; Mujis, 2011).

Before diving into the quantitative analysis, efforts were made to ensure both the validity and reliability of the data. According to Cresswell (2014) and Flick (2019), two major types of validity threats existed for this dissertation, internal and external. Given the non-experimental nature of this study, internal validity was less of a concern. Measures to mitigate external validity threats are outlined in Table 13.

Table 13

External Threats and the Ways to Overcome Them, by author

Types according to Cresswell (2014)	Description according to Cresswell (2014)	Actions taken by the author
Interaction of selection and treatment	Due to the characteristics of participants, the results cannot be generalized to the population who does not have similar characteristics	The author restricted generalizing results to the population who do not have similar characteristics as the sample.
Interaction of setting and treatment	Due to the certain characteristics of the setting, a researcher cannot generalize to other settings	In the future studies, the researcher decided to collect data in different settings to see if same results occur
Interaction of history and treatment	Since the result depend on the time, they cannot be generalized to past or future	The researcher will replicate the study later

Reliability of the quantitative data was evaluated using Cronbach's alpha generated via SPSS. Revising Cronbach's Alpha for the relevant subscales, such as leadership motivations, a Cronbach's alpha value was above .70 for all relevant subscales, which is considered acceptable for ensuring data reliability.

Starting the quantitative analysis, the data was sorted and categorized. This involved removing incomplete responses and filtering out entries that didn't meet the study's sampling criteria. Response bias was assessed to ensure the validity of the results. According to Cresswell (2014) and Flick (2019) two primary methods exist for this, wave analysis and respondent-nonrespondent checks. This study employed wave analysis, as it offered a thorough understanding of response patterns over time, and the survey did not collect contact details. The weekly comparison of results showed no significant variations, indicating minimal bias. A descriptive statistical overview was then generated for all variables in the

study. This included calculating means, standard deviations, and other relevant statistical metrics.

Combining qualitative and quantitative aspects, the current study is based on a convergent mixed-method design - integration of quantitative and qualitative research, which was elaborated previously in the chapter. The major assumption of this method is that both types of data collection should yield the same results (Cresswell, 2014). The collection of both types of data neutralized those weaknesses and biases of each method, adding a value to mixed methods research. By integrating qualitative and quantitative data, accuracy (validity) of databases were juxtaposed. One type of data could explore and explain the other type of data (Jick, 1979). The data in this study was analysed using the approach named a side-by-side comparison, analyzing both quantitative and qualitative data separately but alongside each other for the purpose of comparison and integration (Cresswell, 2014). Validity of the mixed methods research design is based on the validity of each of the designs that are involved, i.e, qualitative and quantitative design validities (Cresswell, 2014). As suggested by Fetters (2019) the meta inferences table is designed to systematically compare the insights derived separately from qualitative and quantitative analyses and is included in the annexes. By laying out the study findings side by side, the table facilitates a concurrent triangulation strategy, where inferences are drawn based on the convergence, complementarity, and divergence of the data. This triangulation strengthens the study's validity by corroborating evidence across methodological approaches.

During the data analysis process, the table was employed as an analytical framework to guide the side-by-side comparison of factors. For each research question, relevant qualitative themes and quantitative results were entered into the table and enabled the formulation of meta-inferences that showed the complexity of the findings. The full mixed methods data analysis process is summarized in the Table 14, and named as implementation matrix as suggested by Fetters (2019):

Table 14

Mixed-methods Implementation Matrix, by author

Phases/Aims/Research Questions	Procedures	Analysis
First aim: to gain an in-depth understanding of factors affecting females 'decisions to pursue leadership careers in higher education at the micro-, meso-, exo-, macro-systems	Conducted 17 interviews with Kazakhstani females at the different stages of their academic careers (early-, mid-, senior-level)	Conceptual and relational content analysis using ATLAS.ti software
Second aim: To develop and test survey questionnaire to measure factors affecting females ' decisions to pursue leadership careers in higher education at the micro-, meso-, exo-, macro-systems	Based on the first aim, the author developed a pool of 40 Likert scale items Pilot testing the survey with 14 females. Questionnaire from 168 Kazakhstani females at the different stages of their academic careers (early-, mid-, senior-stage)	Item reduction Cleaning and sorting data Reliability and validity checks Normality checks Descriptive statistics Correlations Difference between groups tests for non-parametic data via SPSS software
Third aim: to interpret, validate and develop the findings from interviews and survey data	Created metainferences table of mixed method findings (Fetters, 2019)	Merged qualitative and quantitative data results to finalize the findings and discussion chapters

3.7 Ethical Considerations

This research involved collecting the data from people about people, and hence ethical issues were an important aspect of this study. The researcher informed the participants about potential benefits and drawbacks from participating in the study, hence developed trust with the participants, promoted the academic integrity of research and avoided any type of misconduct during the process (Israel & Hay, 2006).

Prior to beginning the study, the researcher considered the codes of ethics of the educational institution where she studies, to follow the institutional standards. This process included applying to the institutional review board, passing examinations, and submitting the draft of the research study. The next step was to gain access to study participants, which was the invitation-letter that specified the aim of the research, the length, the potential impact, and outcomes of the process. The consent form was be provided for each participant. At the beginning of the study, the purpose of the study was clearly articulated for the participants to avoid any deception. Signing the consent form was a voluntary process, and the participants were explained with clarity about their right to withdraw from the study at any moment and extract their data. Any religious, cultural, gender or other differences were respected.

The researcher respected and considered potential power imbalances which were relevant for the study. It was important to remember how interviews and surveys enhance scientific knowledge, that the data collection process could be sensitive to participants due to personal, professional, and other reasons. Each participant was provided a "thank you for participating in the research" certificate from the researcher, to avoid exploitation of the participants and keeping them as collaborators, rather than one-time interactors. It was the researcher's ethical code to protect the privacy of the participants.

In order not to take "sides" in the data analysis process, the researcher kept in mind not only to discuss the findings that support the preliminary considerations, but the ones that contradict too. Information that could disclose participants' identity was substituted with pseudonyms. While interpreting the data, the researcher followed the validity and reliability checks for the analysis that were discussed earlier in the chapter. Participants were informed about possible risks of the non-confidentiality, that the data they have provided will be used for this study and published online. As suggested by Cresswell (2014) the raw data and other materials relevant to this study will be kept for 5 years after the completion of the study. The data is stored in the researcher's personal laptop secured with a password and files will also be kept in folders that are protected with passwords.

Chapter IV: Determinants of Women's Leadership Ambitions in Kazakhstani Higher Education

4.1 Introduction

This chapter is presents the findings and results derived from the mixed-methods approach employed in this research, which aimed to explore the factors influencing women's decisions to pursue or abstain from leadership roles in higher education in Kazakhstan. Following a methodical investigation guided by a series of research questions, this chapter synthesizes qualitative and quantitative data to offer a comprehensive analysis of the phenomena under study.

The chapter is segmented based on the research questions, with each segment examining the corresponding qualitative or quantitative findings. An important note is that research question 1 is unique as it solely comprises qualitative insights. This distinction arose due to the depth and richness of the data that emerged spontaneously from the qualitative interviews, which was not initially anticipated. These emergent findings were profound and warranted a dedicated exploration, leading to the formulation of an additional research question post hoc. Consequently, research question 1 does not feature quantitative data but offers a qualitative inquiry into an area that significantly enhances the research narrative.

For the subsequent research questions, the chapter adopts a sequential explanatory strategy, where the results from both phases are interpreted together to provide a comprehensive understanding of the research questions. The integration of qualitative and quantitative findings allows for more robust conclusions that are supported by in-depth qualitative data and broad-based quantitative data (Creswell & Clark, 2017; Fetters, 209; Mertens, 2010). The rationale for integrating qualitative and quantitative analyses is twofold. Firstly, it allows for a more robust understanding of the research questions by harnessing the strengths of both methodological approaches. Quantitative data affords a bird's-eye view of participant responses, offering measurable and generalizable outcomes. Conversely, qualitative data provides nuanced contexts and the personal experiences, which are essential for interpreting the quantitative findings. Secondly, combining these data forms is fundamental to the development of mixed-methods meta-inferences, as detailed in the "Mixed-Methods Meta Inferences Table" found in the appendix. This table serves as a crucial tool for interpreting how the combined qualitative and quantitative results not only align with each other but also how they interact to form a cohesive understanding of the research questions (Creswell & Clark, 2017; Fetters, 2019; Mertens, 2010). By cross-referencing the table, readers can see the convergence, divergence, and corroboration between the datasets,

offering a more dimensional view of the findings. This approach is designed to provide clarity and facilitate a thorough understanding of the dynamics that influence women's leadership decisions in the higher education sector of Kazakhstan.

In the context of this study, a "horizontal analysis" was employed to analyze data across a broad spectrum, comparing the experiences and perceptions of females at different ecological systems (macro, exo-, meso-, and micro) as posited by Ecological Development Theory. Horizontal analysis is common in cross-sectional studies, comparative research, and when analyzing data from different sources at a single point in time (Creswell, 2014; Flick, 2017, Fowler, 2013; Given, 2008). Horizontal analysis was chosen over vertical analysis for this study because it enabled a comprehensive comparison across various groups and cases at a single point in time, thereby allowing for the identification of broad patterns and themes related to women's leadership aspirations in higher education within the specific cultural and societal context of Kazakhstan. This approach aligned with the study's objectives to explore the complex interplay of factors at different ecological levels, providing a understanding of the influences on women's decisions regarding leadership roles.

The inclusion of participants without leadership aspirations was crucial. Their perspectives provided insights into the barriers and disincentives for leadership roles, enhancing the understanding of the wider context. By examining commonalities and variations in experiences and opinions across all participants, the horizontal analysis provided a comprehensive view of the impact of ecological systems on leadership aspirations. It moved beyond a simple categorization of career stages or leadership statuses, instead showing how the societal, institutional, and individual factors that collectively shape women's professional journeys in academia. This approach ensured that the study captured the full complexity of factors that affect women's decisions about leadership, making the findings relevant and robust. It also countered the potential bias that could arise from only considering those who aspire to or currently hold leadership roles.

In this study, text referring to interview participants labeled as P01, P02, etc., as these designations correspond to the identifiers used in Table 3 to ensure anonymity and confidentiality. Each "P" followed by a number uniquely identifies a participant's data and responses, allowing for a clear and systematic reference to the information gathered from each individual without disclosing personal details. This coding system facilitates the organization and analysis of the data while preserving the privacy of the study's participants. Therefore, next sub-chapters will introduce findings, results and discussion relevant to each research question of this dissertation.

4.2 Research Question 1: How do perceptions of leadership, femininity, and masculinity intersect and influence the understanding and enactment of leadership roles within Kazakhstan's higher education sector?

The study explored perceptions of leadership, femininity, and masculinity in the context of Kazakhstan's higher education. While these themes were not the central focus of the dissertation, the perspectives shared by participants added valuable context to the leadership realities in the country. As research question 1 emerged uniquely from the qualitative data analysis, providing rich insights specific to this area of inquiry, and hence, it solely comprises qualitative findings. Starting from research question 2, quantitative data is introduced to complement and broaden the scope of the analysis, aligning with the study's mixed-methods approach to encompass a wider range of perspectives and systematically quantify patterns observed in the qualitative phase.

This research questrions goes into the performative nature of leadership, investigating how attributes traditionally ascribed to gender roles, ranging from empathy and emotional control to strategic vision and decisiveness, blend within the leadership identity of female academic leaders in Kazakhstan. Through collected interview data, this section illuminates the shifting paradigms of leadership styles, from transformational to transactional, and the evolving nature of leadership as not merely a position but a lifestyle choice coupled with the desire for positive societal change.

4.2.1 Performative Dynamics of Leadership.

When participants were asked to describe leadership, their responses encompassed a range of qualities that align closely with the various leadership styles outlined in academic literature, such as transformational, transactional, laissez-faire, and bureaucratic leadership. The overarching theme was that leadership is performative, resonating with Performative Leadership Theory (Grint, 1997). Participants noted that leaders are not defined merely by inherent traits but through their actions and adaptability in varying contexts. They emphasized the importance of a leader's commitment to their role, often at the sacrifice of personal time, aligning with the concept that leadership is about "performing actions" and situational adaptability.

The juxtaposition of literature review and qualitative data findings indicates that in general, interview participants support the definition of leaders and leadership qualities that has been already described by researchers (Anneli Adams, 2009; Cselenszky, 2012; Dunn, Gerlach, & Hyle, 2014; Mohrfeld & Shaw, 2020; Pascale & Ohlson, 2020; Zulu, 2011). A

leader is self-confident, great communicator, able to inspire and motivate others; passionate for work, diligent and result oriented. Interview participants also highlighted attributes like empathy and emotional control, which can be considered as "feminine" traits, along with strategic vision and risk-taking, which are often labelled as "masculine". This fluidity between so-called feminine and masculine traits supports Acker's (2012) argument that female academic leaders often blend these behaviour's, switching identities as needed. The notion of leadership as a "lifestyle" was articulated by interview participant 17: "Leadership is a way of life. It is a way of thinking. The desire to change, doing for better. And in general, without love for people, without love for one's own country, this is probably impossible" (P17).

This aligns with the transformational leadership style, which emphasizes a leader's role in inspiring and motivating their team toward a shared vision or "supreme goal":

I think any leader should always be inspired by some supreme goal. Well, as they say: someone asked the builder: "What you are doing?" He said: "I am laying bricks; I am building a wall". And the other [builder] said: "I am building a temple (P11).

In contrast, interview participant P06 differentiated between the need for "leaders" during times of change and "managers" during periods of stability, echoing the distinction between transformational and transactional leadership styles:

…Everything depends on what stage the university is, because if the university needs changes, then it needs a leader. A leader who can figure out everything in advance. A leader who is not afraid to experiment, who can work well with people. Maybe has managerial skills, organizational skills, but a person who brings in some kind of contribution, well, in an era of change, leaders are probably needed. But when the university is steadily progressing, working, then, probably, managers are needed there, whose know how to manage people, they are more like performers, I guess. Not like ideologists, strategists, tactics. Probably more like performers (P06).

In summary, participants revealed that effective leadership in Kazakhstan's higher education is both a performative act and a lifestyle choice. Kazakhstani females in higher education view leadership as a lifestyle, aimed to bring positive changes for a common good. It involves a interplay of qualities that are traditionally categorized as feminine or masculine, indicating an understanding that transcends biological sex. This supports the notion that leadership, much like gender, is a socially constructed and performative act, underscoring the complexity and multifaceted nature of leadership in higher educational settings, aligning with Performative Leadership Theory, introduced in the theoretical framework of this study.

4.2.2 Redefining Leadership: Beyond Gender and Age

Most participants concurred that leadership qualities are not limited to one's biological sex. This viewpoint aligns closely with Performative Leadership Theory, which posits that leadership is a set of actions rather than inherent traits (Grint, 1997):

> The goals do not depend on the biological sex of the leader. I think that a man and a woman alike, they can set a goal in education at an equally good level. There are many goals, but the first goal is to improve our quality of education (P08).

This finding is consistent with findings from the literature review, which highlight the evolving nature of leadership styles, not confined to biological sex but shaped by social and cultural factors (Fényes, 2012; Karami et al., 2011). While most participants agreed that leadership abilities are more related to personal aspirations, values, and life choices, some suggested that these qualities might be linked to one's psychotype and personality. This notion is consistent with the multi-faceted models of leadership that include both transformational and transactional styles, focusing on individualized consideration and intellectual stimulation (Bass & Riggio, 2005; MacGregor, 1978). Echoing Acker's (2012) idea that leadership is performative and gender-fluid, one of interview participants emphasized that leadership skills are cultivated over time: "It is more acquired, leaders are not born, but made. They are tempered throughout their careers, both men and women. Both can be leaders, depending on how they developed" (P16). This perspective underscores the dynamic nature of leadership, adaptable to varying circumstances and challenges. Literature review findings suggests that both men and women are equally capable of demonstrating leadership traits, but there is a still debate about that (Acker, 2012; Lam, 2020). Interview participants believe that leadership skills can be learned, and psychotype and personality can play a role in the learning process. The political and social climate of the country also appeared to influence perceptions of leadership:

> Leadership is inherent to women and men, both masculinity and femininity are inherent too... Because of the January events everything is turbulent, and I felt that they [leaders] are more careful in what they say … As soon as a person gets into this structure, they have their own connections, meetings (P01).

Intriguingly, one participant highlighted a trend of favouring the rise of older, wiser women in leadership roles. This observation adds a layer of complexity to the study, suggesting that leadership qualities are not only gender-neutral but may also transcend ageist stereotypes. The author's perspective on this is that research cannot accept or reject this finding, since

there are existing studies that have explored the role of age and wisdom in female leadership. Some studies have looked at factors such as the unique challenges faced by older female leaders, the strengths and experiences that these women bring to leadership roles, and the potential for them to serve as effective mentors and role models for the next generation of female leaders (Yang, 2011; Dini, 2022).

The interviewees also called for governmental initiatives to change these stereotypes, such as promoting successful women as role models. Several interviewees suggested that the government should enact policies that allow for equal parental leave and promote positive discrimination to increase the representation of women in leadership roles. The consensus among interviewees indicates a need for multi-pronged governmental support to foster gender equality in academic leadership. In summary, the participants' viewpoints collectively affirm that leadership is not confined by biological sex. Instead, it is a performative act shaped by personal, social, and even geopolitical factors. Both men and women possess the potential for leadership, further blurring the traditionally accepted boundaries of gender roles in the professional sphere.

4.2.3 Gender, Authority, and Performance in Kazakhstani Higher Education

Participants frequently referred to the legacy of authoritative leadership styles, which have their roots in the Soviet era. This finding aligns with the bureaucratic leadership style, characterized by strict adherence to rules and hierarchical structures (Weber, 1922):

> Since Soviet times, there have been more male leaders, and there is a stereotype, that to survive, you need to be cruel, cold and domineering. I had that kind of deans at the university, who were like that, they didn't listen to anyone, only pushed their position (P07).

This observation resonates with the gendered expectations of transactional leadership, which often employs a system of rewards and punishments (Eagly & Carly, 2003; MacGregor, 1978). Participants acknowledged that leadership is generally perceived as a role for male leaders in Kazakhstan. These findings align with literature findings by Eagly, Johannesen-Schmidt & Van Engen (2003) who stated that transactional leadership appeal to males, more than to females. Female leaders are expected to balance multiple responsibilities as professionals, homemakers, and mothers. This results in a situation where women may distance themselves from identifying as leaders, which supports findings from Zhao and

Jones (2017) in the literature review chapter. In addition to that, participants opinions regarding leadership realities in Kazakhstan are well described by the following quote:

> If this [leader] is a man, then we expect from him the masculine qualities, common characteristics of men: to be an organizer, that is, to help you decide something…to protect your employees. If a woman becomes [a leader], masculine, if she respects her employees and protects them, helps them somehow, well, why not (P06).

Most participants felt that although leadership qualities aren't determined by biological sex, the lived experience of female leaders in Kazakhstan often involves juggling multiple roles - professional, homemaker, and mother. This observation correlates with Performative Leadership Theory, suggesting that women leaders often switch between different identities when necessary (Acker, 2012):

> The Soviet authorities encouraged them [women] to go to work, since there were not enough workers. So, the women went to work, at the same time she should be at home, even nowadays. It all pressures, you stand at crossroads, and you must compromise and decide for yourself (P01).

Nearly every interview participant indicated that a woman herself should have a choice regarding leadership positions: "The main thing is acceptance, social acceptance. A society should accept that a woman can be a leader … that she has this opportunity, that this is normal" (P03). At the same time, one participant mentioned another kind of choice that a female has, the choice of leadership in relationship to family roles in Kazakhstan:

> "Women have a choice. She has a husband, she is financially secure, and she has a choice, whether she wants to be a leader, or she does not want, or she wants to take care of herself, her development, and she does not want to be a leader…Men don't have that choice. Leadership is a material wealth, an increase in finances, and whether they [men] want it or not, if they are bad leaders, or they are good leaders, they take it… at least in our country, maybe in the West too" (P06).

Some consider that for female, it is not necessary to have a leadership title. Women may distance themselves from leadership identities due to societal pressures and expectations, a phenomenon also observed in broader Asian cultures (Cho et al., 2015; Zhao and Jones, 2017): "If a woman is self-sufficient, professional, develops in her field, achieves some goals, plans, then a next generation, they will strive, will see her as a role model. It is not necessary to have women presidents, women university rectors etc" (P10). Regarding the status of female leaders in higher education of Kazakhstan, many participants mention that stereotypes about female emotionality is not true:

"Although many men talk about [female] emotionality and operate with this argument, all women leaders that I know, despite the fact that they are impulsive, energetic women … they very clearly keep the personal and professional separately, they separate the husk from the grain, they behave very tactfully" (P03).

Some perceive female emotionality in a way of taking care of the employees:

I think a woman is more caring, quivering towards her colleagues. If there are any problems with an employee, until you don't tell a man that "this employee has such a problem and it is necessary to solve it", only then, they [men] will consider it (P14).

Literature review findings in this study (Eagly, 1987; Eagly, Johannesen-Schmidt & Van Engen, 2003; Eagly & Carly, 2003; Eagly & Wood, 2016) have found that female leaders are often perceived as being more emotional or nurturing than male leaders, and these stereotypes stemmed from societal norms and expectations on perceptions of females and their roles in the society. Although majority of participants thought of current female leaders as supportive towards other women in the same professional circle, in a deeper investigation it was different. Current female leaders' behaviour could be described according to the "Queen Bee" syndrome (1974), the term created by Staines, Tavris and Jayaratne, that described hostile behaviour of females at the upper echelons of professional ladder, towards other females. This suggests that the female leadership style is sometimes performed in a masculine way, likely an adaptation to the male-dominated environments:

there was a lot of masculinity in her, and in her leadership approach. She always told me, "… you must understand that you can make a career in higher education. Stay here, this area is for women, you don't have to go into business, here you can succeed. She was very masculine (P09).

This aligns with the notion that leadership styles can be performative and adaptable, as stated in Performative Leadership Theory (Grint, 1997). Participants believe that masculine behaviour of current female leaders is the results of abundance of males at the top-level positions : "For a woman, of course, some kind of leadership qualities are transferred from a man. Probably, this comes over the years from communication in the male team" (P14).

The need for a more flexible organizational culture was emphasized, especially for accommodating the needs of female staff. This aligns with Transformational leadership, which values the individualized consideration of team members (Bass & Riggio, 2005):

I think that we have a lot of women who are very smart, educated, delicate, advanced and who could organize the educational process in such a way that there would be enough salary, and that everyone would like… for example, [she] wouldn't put a lesson

> at 5 o'clock for a mother who has a child and who must run to kindergarten, because at this time she will be nervous, will endlessly look at the time, and at the same time she has a lesson. Even such things could be considered (P02).

When describing male leaders in Kazakhstan's higher education system, participants used terms like "aggressive" and "competitive", which align with transactional leadership traits (MacGregor, 1978):

> Males can be more aggressive, more competitive, aimed at a victory. Women have been less [aimed at a competition and victory], in this sense. This is the only difference that could exist. Because men always want to prove some kind of superiority (P15).

However, some participants noted a shift towards softer, less decisive leadership among men, which resonates with laissez-faire leadership characteristics (Lewin, Lippitt & White, 1939): "Male leaders, in general male teaching staff has become loyal, soft-bodied. They do not have a clear vision, vague, unwilling to be responsible for something…they try to delegate this responsibility to someone, somewhere" (P04).

Interviewees broadly advocated for the idea of gender-based positive discrimination to rectify gender imbalances in leadership roles. This notion aligns with the Gendered Organizations Theory, which suggests that organizational structures can be inherently gendered and may require proactive measures for change. However, this advocacy came with caveats. Participant P09 stressed the importance of measuring the impact through gender analysis, linking it to organizational metrics such as employee satisfaction and company profit:

> I still advocate for positive discrimination, that you need to wind up these numbers, you need to attract and create representation of women, but! This should be done gradually and with full inclusion in terms of gender analysis, to see if there are any improvements. Not in general terms, but to say how much the company's profit increased, how much employees' satisfaction increased, how much the quality of the products or services provided where improved, to calculate and connect it in a real assessment of women. Unfortunately, in our country gender analysis can be done by limited number of people (P09)

Participants expressed concerns related to gender stereotypes and work-life balance, particularly in academia. Most interviewees highlighted the societal pressures that stigmatize women for prioritizing their careers. These observations can be contextualized within the framework of Social-Role Theory, which posits that gender roles are socially constructed and often perpetuated through organizational practices:

> In the future, for example, as a dean, I would like to introduce a different system of leadership, so that it would be such an empowerment, inspiration of our university professors so that they can not just make decisions, but participate in decisions. Hear their voices, know the problems they have and put a certain program on a high-quality level and strive for it. It is not top-down management when I dictate, as it is now happening in our universities, but more such a collegial environment (P16).

This confluence of civilizational histories profoundly impacts the country's socio-cultural dynamics, including its perceptions and treatment of gender and leadership. From the interview data collected, the significance of female leader role models from local society was highlighted:

> …"Wonder Woman" in Kazakhstan, or one of my friends made "Girl's Power", similarly. When we see that there are role-playing, a girl, a woman was able to do it, to live her full life, and follow her dreams, then this is also possible. And what I also like is that many women also talk about the difficulties that they have overcome, which also kind of inspires me (P03).

Participants discussed variety of topics related Kazakhstani realities in leadership, academia, research, and gender. One female was offered a leadership position in a new program, but upon further investigation, discovered the position was more administrative and bureaucratic, than innovative and transformational as promised. Also, as interviewees shared, many leaders in Kazakhstan do not write articles or prioritize research and use their positional power to co-author with other researchers. Interviewees believe that leadership model is complicated in Kazakhstan and emphasised the importance of working in multiple fields to gain recognition and financial independence:

> I am now working in three directions, it is daunting, it kills a lot of time, but to be an expert in my field I have to work in the academy, and I have to work in the NGO field. In NGOs I do research and I am also a trainer and a consultant. Why is this the only way to develop? Firstly, it gives an opportunity for financial independence, and secondly, it gives an opportunity for recognition, because international organizations almost never collaborate with Kazakhstani universities. (P09).

Despite women outnumbering men in sectors like education, healthcare, and small businesses in Kazakhstan, their presence in leadership roles remains significantly low. This situation is attributed to factors such as the "glass cliff" phenomenon, where promotions are influenced by the biased views of male rectors and other systemic barriers like corruption and a team-approach to leadership that inhibits women's advancement (Dubok & Turakhanova 2017; Lipovka 2018; Kuzhabekova & Almukhambetova 2017). Participants also mentioned

concerns with gender discrimination in higher education leadership positions. Despite being qualified for higher positions, men are still more likely to be promoted than women. It is related to gender stereotypes and the persistence of tokenism in leadership positions, even though it has been theoretically discredited. Participant P09 gives example of how even her university's leadership team actively seeks out men for positions, but often ends up hiring women after their male choices fail. This creates a circular pattern of male tokenism that the participant finds frustrating:

> … he is looking for a man to hire for positions of vice-rectors of different departments, and not even for a mature one. Seems like he's just burning with the desire to see more men around him. And very often they quickly leave, and these positions often are occupied with women. This is such a circular thing that happens, he hires men, then gets disappointed, and employs women again (P09).

The gender dynamics in Kazakhstani workplaces impact the aspirations, self-confidence, and motivation of women to occupy leadership positions. Despite representing the majority in the education workforce, women often hold lower-paying positions, with only a small percentage in top leadership roles like university rectors. This situation is part of a broader gender paradox in higher education leadership, where women encounter stereotypes that pigeonhole them into either "feminine" nurturing roles or expect them to exhibit "masculine" competitive traits (Airini et al., 2011; CohenMiller et al., 2021; Cubillo & Brown, 2003; Longman et al., 2018; Kuzhabekova & Almukhambetova, 2017; Sperandio, 2010; Tastanbekova, 2020; Tsakalerou et al., 2022).

The egalitarian nature of nomadic societies in Kazakhstan traditionally allowed women to play essential roles in decision-making processes and community affairs, providing a historical foundation for women's involvement in leadership roles (Kandiyoti, 2007; Khairullayeva et al., 2022). This adaptability has translated into the ability of Kazakh women to navigate challenges and embrace leadership roles in different settings, stating that having women in leadership positions can lead to more universal and adaptable decisions: "… decisions that are made are more adapted for women, at the leadership level. There may be some improvements, some kind of mentors, they will be role models for future leaders, that's why important for women be present in leadership" (P01). The importance of women as leadership role models is underscored by numerous studies. Women who identify with their current leaders' style of governance are more likely to aspire to higher positions, highlighting the need for female role models in leadership to inspire and motivate other women (Morley, 2013; Vicary & Jones, 2017; Fried & MacCleave, 2009; Young, 2001). Others argued that

quality should be the determining factor in deciding who should be in leadership roles, not the gender: "diversity, equality it is all good. But if a woman falls short somewhere, then there is no need to make her an "artificial" leader, if a man falls short, then the same thing. Because the quality suffers from these "artificial" leaders…" (P06).

Overall, all participants agreed that training and teaching women managerial and leadership skills and breaking stereotypes are necessary to increase the number of women in leadership positions. Creating equal opportunities and changing people's consciousness are also important strategies. The divide in labor along gender lines is a global issue, with scant representation of women in leadership roles in regions like the Middle East, Eurasia, and the Global South due to entrenched beliefs associating leadership with masculinity (Alsubaie and Jones, 2017; Al-Asfour, 2017; Sperandio, 2010; Sperandio, 2008):

> It's probably more important to change people's consciousness to break stereotypes. If in general there is honest, fair competition, if there are no prejudices, it seems to me that this is enough. A woman will decide when and where she will be in her career (P17).

4.2.3.1 Quality and Leadership in Kazakhstani Higher Education

Participants believe that the quality of education in Kazakhstan is often hindered by short-term goals and pressure from higher-level leaders. In general, interviewees believe that gender and quality are not necessarily connected but that it is rather a person's individual qualities and professional abilities that matter: "I think that if men will manage universities, if women, will depend on what qualities this person will have, not the gender" (P01). According to Hanson & Sokhey (2021), there is a significant state investment in higher education, with the aim of cultivating loyalty and support primarily from middle and upper-middle classes, including the youth. This heavy state control over higher education could potentially lead to a focus on short-term goals aligned with government interests rather than long-term educational quality and development. Moreover, the considerable control exerted by the state may also discourage individuals, especially women, from seeking leadership roles in academia due to concerns about autonomy and potential resistance from the regime.

They also noted that the university system in Kazakhstan lacks a quality ranking system and suffers from numerous factors that negatively impact the quality of education. Participants feel that their universities should aim to train high-quality personnel rather than focus on quantity. They also criticised the low salaries and lack of special advantages for intelligent specialists in the education industry. Participants believe that the pay in the sector

is too low, and that the leadership positions significantly offer a better pay. Interviewees discussed the low pay for professors in Kazakhstan, even for those who have achieved high honours and take positions on doctoral councils:

> Professors who are teaching even from Soviet times, they don't get much either. My MSc. Advisor, she is already an honorary professor of the Republic of Kazakhstan, she received well, 200,000 tenge (~ 450-500 $) let's say…I don't know what pensions were deducted there, but she still worked a lot for a person who was already retired (P12).

The focus on quantity over quality and the low salaries in the education sector can be seen as a reflection of broader societal and economic dynamics presented in literature review. Although near pay parity has been achieved in the education sector in Kazakhstan, variances exist across different educational levels. Women in higher education and additional educational services often earn less than their male counterparts (Kireyeva & Satybaldin (2019). Despite women representing the majority in the education workforce, they often hold lower-paying positions. Only 15% of university rector roles are held by women, indicating a significant disparity in leadership positions and salaries within the education sector (Tastanbekova, 2020).

Interviewees also commented on the style of leadership in the education system, which they believe is often determined by incompetence. The weak personnel and management are the biggest problems, and some people may desire to be leaders for personal recognition and a salary, rather than genuine interest to lead and improve the quality of education. However, females believe that quality education can prepare leaders who care about their country and the education system, and it can be a transformative experience that motivates change:

> "Education industry remains unattractive, salaries are low, there are no special advantages for a good, intelligent specialists. The level of education is very low, well, again, those received it here. So somehow, it's all natural, low-quality education provides low quality educators, low quality leaders. The style of leadership seems to me to be determined by the fact that they are incompetent and that's it (P15).

Interestingly, one female at a leadership position in a university shared that raising the quality of leadership will result in enhancement of knowledge in gender equality: "Leadership is about making a better education, high-quality education that prepares leaders who are not indifferent to their country, to their system, to the gender equality" (P17). This suggests that a shift in leadership style towards a more transformational approach could address the concerns of interviewees regarding leadership incompetence and could also be the key to creating a

transformative experience in education that motivates change (Gill & Jones 2013; Kabaikina & Sushchenko, 2017; Reding; 2017, Green, Chavez, Lopez, & Gonzalez; 2011).

In sum, key findings from research question 1 include the recognition that leadership qualities are not inherently tied to one's biological sex but are shaped by a combination of personal aspirations, socialization, and cultural influences. The research underscores the challenges faced by women in leadership roles, particularly in the Kazakhstani context where historical legacies, societal expectations, and structural barriers create unique hurdles. Despite these challenges, there is an emerging recognition of the importance of diverse leadership styles, including transformational leadership, which values empathy, emotional intelligence, and a collaborative approach.

The findings of research question 1 also point out the systemic issues in the Kazakhstani higher education sector, including the impact of government control and societal pressures on educational quality and leadership development. The focus on short-term goals, influenced by governmental interests, and the lack of a comprehensive quality ranking system in universities are highlighted as significant concerns. These challenges are further compounded by gender-based disparities in pay and opportunities, with women often occupying lower-paying positions despite representing a significant portion of the education workforce.

Interestingly, the research question 1 findings also indicate a potential shift towards more inclusive and transformative leadership styles, which could address the concerns of incompetence and motivate positive change in the education system. The notion that quality education can prepare leaders who are genuinely invested in the betterment of their country and the education system is a recurring theme. This transformative potential of education is seen as a key to addressing the systemic issues and fostering a new generation of competent and dedicated leaders.

4.3 Research question 2: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at macro-system?"

This research question explores key factors at the macro-level that influence women's decisions to pursue or abstain from leadership careers in higher education within Kazakhstan. In addressing research question 2, feminism, gender stereotypes, and cultural influences shaping female leadership is discussed. Notably, this inquiry is enriched by a dual analysis approach: while qualitative insights offer depth and personal perspectives, quantitative data

to provide a broader, statistical understanding of these determinants. This mixed-methods approach allowed to see a comprehensive picture, where qualitative interviews are quantitatively validated.

4.3.1 Feminism and Female Leadership: Cultural Dynamics in Kazakhstan

The theme that arised through interview analysis is how female leadership in the country is intertwined with Western concepts of feminism and are interpreted within the unique cultural and societal context of Kazakhstan. As one female leader noted:

> It seems to me that with my arrival, they [students] joked that even a girl became the chairperson of the student parliament. And someone jokingly wrote [on social media]: "in our country, the era of matriarchy, feminism or something begins, the university leader and the chairperson of the student council are women" (P17).

Kazakhstan's experience with feminism is a combination of global ideas and its own cultural and historical background. As described in literature review findings of this study, during post-socialist period, feminism was seen as a foreign idea (Koobak & Marling, 2014; Tlostanova, Thapar-Björkert & Koobak, 2016). However, this time shaped how Kazakhstan views feminism today. It's important to note that the study findings are that while females in Kazakhstan largely resonate with feminist values, many still tend to distance themselves from the term "feminism" and its Western connotations. This indicates a preference for indigenous interpretations of gender equality over Western feminist ideologies. Contrastingly, Kazakhstani Ph.D female students studying abroad display a different attitude. They are more accepting of the term "feminism" and align more closely with its Western interpretation. Gender and Social Role Theory suggests that the younger generation's increased gender awareness may be a wind of change. This corresponds with Bronfenbrenner's theory, which would predict that changes at the macro-system level could eventually permeate down to the individual level. As noted by one participant:

> First of all, you need to work with the heads, with the heads of women, in which there are many problems and barriers. They don't know themselves; they don't understand gender, they don't understand how society affects them. I think it is very important to say that now a new generation of Kazakhstanis is ahead. These are my new students, who are now about 20 years old. The young generation educated in terms of gender, has become so advanced that I think that in the future the situation will change, because they will be the leaders of the future (P09).

This highlights the influence of external educational environments on perceptions of feminism and a unique female leadership perception in Kazakhstan. In sum, gender and social role theories suggests that the younger females increased gender awareness may be a wind of change for Kazakhstani female leadership. The study findings are that Kazakhstan's feminism nowadays is a mix of global and local influences that creates its own understanding of female leadership in the country. Therefore, next sub-topic that emerged from data analysis is existing gender-related beliefs in educational leadership.

4.3.2 Gender Stereotypes in Kazakhstani Educational Leadership

Gender and Social Role Theory are used to explore the skepticism and stereotypes that women leaders face in Kazakhstan, particularly in the educational field. It can be highlighted by this quote:

> Because of our mentality, religious views, for women it can be inherent and very important to work in the field of education, and therefore it seems to me that's why they outnumber men. Let's speak honestly, sexism in Kazakhstan has not been cancelled yet…Even if a woman is a leader, have you noticed that in Kazakhstan they are a little skeptical about it? (P08).

According to Bronfenbrenner's macro-system, the cultural norms in Kazakhstan significantly shape women's experiences in both their professional and personal lives. These norms, deeply rooted in the macro-system, perpetuate gender roles that dictate women should prioritize family over career. As interviewee participant encapsulated this by stating:

> …women work full-time, but at the same time they must cook, wash, clean up and they are expected to give 100% at home and 100% at work. Even one of my relatives, he is a director at the school, and he says to my sisters and other cousins they should always be good wives and mothers and not think about a career, but bring a child into this world, get married on time, otherwise the good guys will be taken. I'm shocked because this is the head of an educational institution that influences children. And this is not just one example that I have (P07).

These study findings align with literature in a way that females are expected to prioritize family over career, and women comply with these societal expectations. It is well explained in literature findings by researchers (Cho et.al, 2015; Almukhambetova & Kuzhabekova, 2020; Zhao & Jones, 2017; Morley, 2013) that in Asian cultures, including Kazakhstan too, people tend to believe that women have limited leadership abilities, discouraged from pursuing leadership positions and encouraged to focus on homemaking and childrearing.

Therefore, many females prefer middle management to leadership positions in higher education (Cho et al., 2015; Almukhambetova & Kuzhabekova, 2020; Zhao & Jones, 2017; Morley, 2013). Also, Gender and Social Role Theory helps to explain the discrimination against childless and unmarried women as well as the stereotype that successful women must have male sponsors. As one interviewee commented:

> …it is very difficult, in the eyes of the local community, our society, which is very conservative... People in provincial cities are especially accustomed to judging by their own standards and making such judgments because of what they saw. If a woman is beautiful, smart, young, and successful, then a man must stand behind her. Not another a woman, not a group of men, but one man. This is difficult because people believe such information (P17).

Bronfenbrenner's theory would place the societal biases that question women's leadership aptitude in the macro-system. These biases are deeply ingrained cultural norms. The resurgence of traditional, national cultural values in Kazakhstan, as part of the macro-system, impacts the gender roles that women are expected to follow. One interviewee mentioned that:

> … national values are reborn again, mainly for women, even there is a Kazakh saying "kyzga kyryk uiden tyyim salady" (exp: "A girl is banned from forty houses": an educational concept in a Kazakh tradition, banning girls from 40 actions)… so many prohibitions that she should not do, don't be rude, etc. For men, there are none. I think that initially a girl is brought up as such a weak link, that she should take care of the house, all that, cook well, take care of the children, that she should develop only in the sphere of the family to help her husband in this regard (P14).

In the quantitative survey, participants largely agreed with traditional gender roles but rejected the idea that feminine qualities are unsuitable for leadership. This aligns with the qualitative findings, indicating a complex interplay of acceptance and resistance to traditional gender roles. This is well illustrated by correlational analysis at the macro-system, which are summarized in the table below. The author selectively included the most important significant positive correlations of variables in the Table 15 since the original correlations table includes variables in Russian language.

Table 15

*Significant positive correlations among variables at the exo-system, **p < .01, by author*

	Leadership and management are an attribute of men	Masculine qualities are suitable for leadership	Empathy, subjectivity, compliance, inwardness, sensitiveness, and emotionality are feminine qualities	Confidence, practicality, objectivity, unemotionally, reliability are masculine qualities
Teaching is an attribute of women	.534	.520	.560	.560
Masculine qualities are suitable for leadership	.734	1	.410	.678
Feminine qualities are not suitable for leadership	0.320	.410	.202	.557
Women are a care for a family	.495	.567	.450	.542
Men are breadwinners for a family	.410	.658	.370	.541

The correlational analysis presented in Table 15, which highlights significant positive correlations among variables reflecting gender roles and leadership qualities, builds upon the foundational mixed-methods approach detailed in Table 14. This approach, as described, involves a side-by-side comparison of quantitative and qualitative data to ensure a robust and valid integration of findings (Cresswell, 2014; Fetters, 2019), thereby reinforcing the convergence between the acceptance of traditional gender roles and the suitability of feminine qualities for leadership as observed across both data types. There is a significant positive correlation (ρ (N=168): 0.534, p < 0.01) between the belief that teaching is a woman's attribute and the view that leadership belongs to men. Similarly, individuals associating teaching with women also strongly agree that masculine qualities are suitable for leadership (ρ (N=168): 0.520, p < 0.01) and with the idea that empathy and emotionality are feminine qualities (ρ (N=168): 0.560, p < 0.01). A very strong correlation exists between the view that masculine qualities are appropriate for leadership and the belief that leadership is a

man's role (ρ (N=168): 0.734, p < 0.01), with an even stronger correlation linking masculine qualities to leadership suitability (ρ (N=168): .978, p < 0.01). Additionally, perceptions that feminine qualities are unsuitable for leadership correlate significantly with the idea that masculine qualities are reliable and objective (ρ (N=168): 0.557, p < 0.01). Belief that women are family caretakers and men are breadwinners also correlate positively with the suitability of masculine qualities for leadership (ρ (N=168):0 .567 and ρ (N=168): 0.658, respectively, both p < 0.01).

These findings can be explained by the discussion of the gender paradox in higher education, where despite women being the majority in the education workforce, they often hold lower-paying positions and only a small percentage occupy top leadership roles like university rectors. This situation reflects the stereotypes that pigeonhole women into either "feminine" nurturing roles or expect them to exhibit "masculine" competitive traits, contributing to the correlation between gendered beliefs and leadership qualities (Airini et al., 2011; CohenMiller et al., 2021; Cubillo & Brown, 2003; Longman et al., 2018; Kuzhabekova & Almukhambetova, 2017; Sperandio, 2010; Tastanbekova, 2020; Tsakalerou et al., 2022).

Key findings from the study highlight the integration of Western feminist concepts with Kazakhstan's unique cultural and societal context, creating a distinct perception of female leadership. While there is resonance with feminist values, many Kazakhstani women distance themselves from the term "feminism" due to its Western connotations, indicating a preference for more indigenous interpretations of gender equality. This dichotomy is especially evident among younger generations and Kazakhstani Ph.D students studying abroad, who exhibit a greater acceptance of Western feminist ideologies.

The findings also include the gender stereotypes and social role expectations that women leaders face in the educational field in Kazakhstan. Despite making up the majority of the education workforce, women often occupy lower-paying positions and are underrepresented in top leadership roles. This gender paradox is further complicated by societal expectations that prioritize women's roles in family and domestic spheres, influencing their professional trajectories. Moreover, the study's correlational analysis reveals strong associations between gendered beliefs about roles and leadership qualities, underlining the deep-rooted cultural norms that continue to influence leadership perceptions and suitability in Kazakhstan. These findings signal the need for continued efforts to challenge traditional gender roles and stereotypes, promoting a more inclusive and equitable environment for women in leadership positions.

4.4 Research question 3: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at exo-system?"

In this research question, the key factors at the exo-system that influence whether women choose to pursue or avoid leadership roles in higher education are discussed. Through a detailed examination of the structural dynamics within Kazakhstan's academic institutions, uncovered themes include how organizational culture, discrimination, and the role of personal connections shape the landscape for aspiring female leaders in Kazakhstan. Drawing from interviews, the challenges that Kazakhstani women face highlight the need for change in leadership styles and the importance of support networks. By analyzing both interview and questionnaire data, a comprehensive exploration of the factors that enable or hinder women's progress toward leadership positions in Kazakhstani academia is presented below.

4.4.1 Organizational Culture

In examining the structural influences on leadership and gender roles within Kazakhstan's higher education institutions through Bronfenbrenner's Ecological Systems Theory at the exo-system, the data from interviews elucidate the systemic challenges faced by women. Interview narratives revealed a disconnect between female leaders' experiences and the existing bureaucratic structures. Such structures perpetuate gender biases, as evidenced by participant P09's account of discrimination linked to maternity leave, reflecting broader societal constraints:

> … he told me "I'm sorry that you're leaving, and now I will look only for a man to fill your place, because I don't need a female to go on maternity leave again after 9 months. Also, when I didn't defend my Ph.D thesis in time, the department employees, vice-dean and dean, they told me that "Well, you went on maternity leave, because of this you could not defend your Ph.D on time", and so on. To which I said that "I went on maternity leave, but my child did not interfere with my Ph.D defence, and all these reasons that I had, they were not tied to the birth of my child in any way" (P09).

The implication that maternity leave inherently hinders academic progress, as inferred from P09's quote, reflects a gendered perspective on professional commitment and productivity, aligning with the Gendered Organizations Theory, which posits that organizational structures and practices are inherently gendered, reflecting and reinforcing societal gender inequalities. The findings are symptomatic of a broader cultural and institutional context that often

marginalizes and undervalues the contributions of women, particularly those who balance family and professional responsibilities.

Participants noted the need for periodic changes in universities to avoid stagnation of knowledge, as well as the need for a change in the masculine authoritarian style of leadership, aligning with Performative Leadership Theory's advocacy for flexible and inclusive leadership approaches:

> …rigidity is strongly developed our mentality, especially at universities that have been working for a long time. They are used to doing this and doesn't want to change anything. But when they start to change, they see that here are the possibilities, here are the opportunities, you just need to periodically hire someone new to the university, so it does not stagnate, to keep the flow of the energy (P03).

The interviews also bring to light the gender dynamics among women in the workplace. P07's description of hierarchical interactions among women aligns with Gendered Organizations Theory, which suggests that gender is an integral part of organizational operations:

> …the working culture must also change. I see a lot of women's communities, but women do not always support other women. My sister worked for an international company, and she had an all-female team in the administrative sector. Women-colleagues who were older always forced younger women to bring them tea, clean the office, stay up late at work. Their argument was that "you don't have children, you're not so busy, come there and put tea there or clean up, because we have children, we need to go home." Women themselves reproduce this hierarchy. And according to these beliefs in the society, a young woman, not married, child free is at the very bottom level. A lot of women do not realize it, but they reproduce this gender oppression (P07).

These observation resonates with the perspectives offered by researchers (Edwards, Bexley, & Richardson, 2011; Wendler, Bridgeman, Markle, Cline, Bell, McAllister & Kent, 2012) who discuss the influences affecting students' decisions to pursue advanced studies and the socialization processes in academia. It highlights how systemic influences, particularly those related to leadership and organizational culture within academic institutions, shape students' motivations and their journey through higher education.

The varied perceptions of maternity leave and professional commitment underscore the complexity of women's roles in the workplace. While some are viewed through the lens of stereotypes, others challenge these narratives, highlighting the diverse experiences of women in leadership. A current university female leader explains that:

> …females that go to a maternity leave, they behave in such a way that, of course you cannot generalize in any way, but these people do not have career vision, consistency and for the university for continuity of sustainable development to some extent it is a barrier. The nature of women is one thing. But we know another category of women who just gave birth, and for example, in six months she is already at work. She can give odds to any man in terms of performance. But in general, if we talk about non-professionalism, that [maternal leave] distinguish women, it distinguishes them from men, it distinguishes them from the same irresponsible, unmotivated men (P17).

This dichotomy represents the broader sociocultural context in which women leaders often find themselves navigating contrasting stereotypes at workplaces leadership (Airini et al., 2011; Cubillo & Brown, 2003; Longman, Daniels, Bray, Liddell, 2018; Kuzhabekova & Almukhambetova, 2017; Sperandio, 2010). On the one hand, they are expected to fulfill traditional "feminine" roles associated with nurturing and caregiving, exemplified by the cultural expectations surrounding maternity leave. On the other hand, they are also expected to exhibit "masculine" traits like competitiveness and task orientation to succeed in leadership roles. This complex dynamic was elaborated by Hardy (2019), who discusses the feelings of seclusion expressed by mid-career female academics, primarily due to the predominance of men in academia. While this is not relevant to Kazakhstan, since majority of university staff are females, it still works true for Kazakhstani women in academic leadership positions, who often struggle with the necessity of "wearing multiple hats", attempting to meet professional expectations while adhering to societal gender norms.

Interestingly, one interview participant shared her perception of coming to a new workplace with a solid academic background from Kazakhstan's leading international university, acting humble and being disliked for that. However, she received an endorsement when she behaved in a more masculine way:

> Apparently, just by my mere existence, I was a kick in the throat for the majority, because I came from that university. Although I kept a low profile, did not touch anyone at all. At first, I thought why they are acting this way, and then I thought, why should I be ashamed of something, excuse me, did I buy it, or someone just gave it [the workplace] to me? And only then, when I became assertive, then everyone welcomed that, like "well done!" and so on (P12).

In the context of Bronfenbrenner's Ecological Systems Theory, the discussion around the role of personal connections and networking within academic career advancement highlights the significance of the exosystem. The narratives provided by participants reflect how decisions

made within the academic institution's power structures, departmental support systems, and informal networking opportunities—all elements of the exosystem—can shape career trajectories:

> … the one who is now our dean, she just made an agreement with every member that she knew from the deciding commission. She went to them in advance, agreed that they vote for her candidature. She has already established the connections in advance, and so it happened as she planned. She even said in advance about this, that she will be chosen. And this is what happens in the system (P13).

The narratives provided by interview participants highlight the significance of personal connections and networking within academic career advancement. This is exemplified through P13's quote above, aligning with performative leadership theory, where proactive engagement and strategic networking with key decision-makers are crucial for career progression. This form of leadership, where authority and power are negotiated and maintained within university settings, aligns with the broader concept of the exosystem in Bronfenbrenner's Ecological Systems Theory. The exosystem encompasses the larger, more indirect influences in an individual's environment, such as institutional policies, societal norms, and networking opportunities. Moreover, the experiences shared align with the Gendered Organizations Theory, which posits that organizational structures and practices are inherently gendered, reflecting and reinforcing societal gender inequalities. The described scenario where a woman secures a deanship by networking could be interpreted as a response to navigating a gendered institution where formal opportunities may not be readily accessible or presented equitably. This proactive strategy indicates an awareness of the gender dynamics at play and a means of leveraging the existing system to advance one's position. The quote from interviewee reveals the duality of personal connections serving as both enablers and barriers within the exosystem:

> I have a colleague, a post doc, as she has been at that position for more than three years now, but she has been offered other opportunities, she has been invited to work in the regions. But she honestly says that my mother is sick, I can't leave her, no matter how well she will be paid to work in those regions. That is, connections decide, because she is invited through connections (P14).

While the colleague's network affords her invitations to positions in various regions, indicative of her recognized merit and potential, the decisions are still constrained by personal circumstances, such as family responsibilities, which often disproportionately affect women in the workforce. The importance informal networking in academic career

progression, especially for women, is underscored. Meschitti & Lawton-Smith (2017) and Vasquez-Guignard (2010) note that informal networking offers invaluable opportunities for career progression. However, women often face exclusion from these informal networks due to various personal and social reasons, as mentioned by Airini et al. (2011). Moreover, the experience shared by above, by participant P14, illustrates the duality of personal connections, serving both as enablers and barriers within the exosystem. The colleague's network affords her multiple job invitations, yet her decisions are constrained by personal circumstances such as family responsibilities. This situation highlights the interplay between individual micro and meso-system factors, like family responsibilities, and the broader exosystem, including career opportunities and networking.

In the questionnaire, items (i) employment type (part- time or full-time job), (ii) university policies, (iii) students, (iv) faculty members, (v) leadership members, (vi) informal networking were to assess how organizational culture influences females desire for leadership in higher education sector. Table 16 shows the descriptive statistics for accessing the organizational culture and leadership desire.

Table 16

Descriptive statistics on organizational culture variables effect on leadership desire, by the author

Items					
	N	Minimum	Maximum	Mean	Std. Deviation
Employment type	159	1	5	3.67	1.286
University policies	157	1	5	3.35	1.372
Informal networking	154	1	5	3.72	1.019
Students	157	1	5	4.24	.916
Faculty members	158	1	5	3.89	1.117
Leadership members	155	1	5	3.45	1.368

Note. The Questionnaire Part 6: 4)"Atmosphere in the organization affect career choices. Relating to that, please rate how each influence (or influenced) your career choices towards leadership career in a university?". Participants were asked to put the scale from 1 to 5 representing '1' meaning 'significantly discouraged' and '5' meaning 'significantly inspired'.

The questionnaire results indicate that students are the most inspirational factor for respondents considering leadership careers in academia, followed by faculty members and informal networking. Employment type and the influence of leadership members also provide some inspiration, but with more variation in responses, pointing to a range of individual experiences. University policies are seen as the least inspiring, with a mean score leaning

toward the neutral point and the widest range of opinions, suggesting complex interactions with policy that may affect career ambitions differently for each respondent.

The influence of students, faculty, and networking aligns with the insights by Edwards, Bexley, & Richardson (2011) and Wendler et al. (2012), who emphasize the importance of advanced studies, particularly doctoral programs, in shaping leadership aspirations. This research highlights that the decision to undertake advanced studies is influenced by a multitude of factors, including family, school settings, personal development goals, and career aspirations, which are critical in the socialization process of students within the exo-system component of Bronfenbrenner's ecological development theory. Moreover, the observed variation in responses regarding the inspiration derived from employment type and leadership members resonates with findings from Golde & Dore (2001) and Edwards, Bexley, & Richardson (2011), who discuss how graduate students' understanding of academic professions and their consequent career pathways are shaped by their experiences within the academic environment. This includes influences from their academic supervisors, the availability of career options, and networking opportunities, which are integral to their career progression and leadership aspirations. The least inspiration from university policies, as indicated by the survey, can be tied to the research by Edwards, Bexley, & Richardson (2011) and McAlpine & Emmioğlu (2015), which points to discrepancies between students' ideal work intentions and the realistic opportunities available within academia. These studies suggest a gap between students' expectations of academic careers and the realities of the academic job market, influenced by institutional policies and the broader academic culture.

The chi-square test of independence was conducted to examine the relationship between leadership desire and (i) position in a university (doctoral student, instructor/lecturer, professor, university leader) and (ii) employment type (full-time, part-time). The results indicated a significant association between the variables leadership desire and position in a university ($\chi^2(24) = 93.008$, $p < .001$), suggesting that leadership desire varies by university position. The significant association between leadership desire and university position is illuminated by Edwards, Bexley, & Richardson (2011), and Wendler et al. (2012), who emphasize the role of advanced degrees in shaping leadership roles in academia. Their research suggests that the path to leadership often starts early in academic careers, influenced by the level of study and academic exposure.

As for variables leadership desire and employment type, the Chi-square test of independence indicated no significant association ($\chi^2(4) = 7.415$, $p = 0.116$), suggesting that leadership desire is independent of whether an individual is employed full-time or part-time.

These findings align with the findings of Golde & Dore (2001) and McAlpine & Emmioğlu (2015), who note that the pursuit of academic careers and advanced degrees is influenced by a range of factors beyond employment status. This could suggest that leadership aspirations in academia are driven more by personal ambitions and academic environment rather than the nature of employment.

Also, the chi-square test of independence was conducted to examine the relationship between influence of informal networking on career progression (yes, no, can't/don't want to answer) variables (i) the age of participants (>30, 31-40, 41-50, 51-60, 60+), (ii)-the employment type (full-time, part-time). In exploring the impact of informal networking on career progression among various age groups, chi-square test of independence ($\chi^2(12) = 23.921$, p =0.021), indicated that the perceived influence of informal networking on career advancement differs significantly across age categories. Additionally, the relationship between the influence of informal networking on career progression and employment type ($\chi^2(3) = 10.368$, p = 0.016) suggested that perceptions of the impact of informal networking on career advancement vary between individuals employed full-time and those employed part-time.

The literature review supports the idea that informal networking plays a crucial role in career progression. Devos (2004) discusses the value of mentorship in higher education, particularly for academic women, noting its effectiveness in addressing power imbalances and fostering professional development. This mentorship often extends into opportunities for informal networking, which can significantly smooth the pathway for career progression. This aligns with the finding that the perceived influence of informal networking on career advancement differs across various demographics. The literature review highlight the challenges women face in accessing informal networks due to various personal or social reasons and suggests that when women do participate in such networks and possess leadership skills, they are likely to make further progress in their careers. This supports the broader notion that access to and participation in informal networking is a key factor in career advancement, although it does not specifically address the age and employment type variables in your findings. The literature does not directly address the specific relationship between age or employment type (full-time vs. part-time) and the impact of informal networking on career progression.

In a series of Spearman's rank-order correlations conducted to assess various relationships within a university setting, strong, positive correlations were consistently observed. The author selectively included the most important significant positive correlations

of variables in the Table 17 since the original correlations table includes variables in Russian language.

Table 17

Significant positive correlations among variables at the exo-system, **p < .01, by the author

	My university invests in my professional trainings and education	Influence of current employment type to become a leader in a university	Influence of university's leaders to become a leader in a university
My university gives opportunities to apply my talent and expertise	.733	.080	.615
There are career advancement opportunities in my university	.747	.141	.622
Influence of university's policies to become a leader in a university	.524	.625	.562
Influence of university's leaders to become a leader in a university	.533	.037	1
Influence of university's faculty members to become a leader in a university	.372	.565	.588

There is a strong positive relationship (ρ (N=168): 0.733) between the chances given to people to use their skills and talents and how much a university invests in professional training and education. This means that more investment in training and education is associated with greater opportunities for individuals to apply their talents. The quantitative analysis found a strong link (ρ (N=168): 0.615) between how university leaders affect people's ambitions to become leaders themselves and the opportunities those people have to use their talents and expertise. Basically, when university leaders positively influence individuals, there are more chances for these individuals to use their skills effectively. There's a strong and positive correlation (ρ (N=168): 0.747) between the perception of career advancement opportunities and the university's investment in training and education. This means that when a university invests more in professional training, individuals perceive

better chances for career growth. Also, the influence of university leaders on people's leadership aspirations is positively related (ρ (N=168): 0.622) to these perceived career advancement opportunities. There's a moderate to strong positive relationship (ρ (N=168): 0.524) between the influence of university policies on leadership aspirations and the university's investment in professional training. This indicates that supportive university policies, combined with investment in training, can significantly impact leadership aspirations. Additionally, the influence of university leaders on leadership aspirations also shows a moderate to strong correlation (ρ (N=168): 0.562) with the investment in professional training and education. The analysis also examined how much faculty members and university leaders impact leadership aspirations. Both showed moderate to strong positive correlations (ρ (N=168): 0.565 and ρ (N=168): 0.588, respectively). This suggests that both faculty members and university leaders play a significant role in shaping individuals' ambitions to become leaders.

The correlations observed here can be contextualized by Young (2001), who found that role models and workplace relationships significantly influence the path to leadership. The Kazakhstani academic environment, as described by Kuzhabekova & Almukhambetova (2017), often faces challenges such as the "team-approach to leadership" and corruption, which can inhibit women from aspiring for leadership roles. This environment might influence the strong correlation observed in the study, as the university's investment in professional training could be seen as a counterbalance to these challenges, providing vital opportunities for individuals to apply their talent and expertise. According to CohenMiller et al. (2021) and Tsakalerou et al. (2022), Kazakhstani female educators often struggle with discrimination and lack of mentorship, which impacts their career aspirations. This context might reflect the strong correlation between the influence of university leaders and opportunities to apply talent and expertise, as leadership plays a crucial role in shaping career paths, especially in challenging environments. The Kazakhstani academic culture, resistant to change and controlled by Soviet-trained senior researchers, as highlighted by Kuzhabekova, Sparks, & Temerbayeva (2019), could influence perceptions of career advancement opportunities. This resistance to change might make the university's investment in professional training and education more crucial, as it provides the necessary skills and opportunities for career progression in a rigid academic environment. Nevertheless, while the literature review provides challenges and factors influencing leadership aspirations among women in academia, it does not directly address the specific statistical findings mentioned

about the correlation between opportunities to apply talent and expertise, university investments in training, and the influence of university leaders on leadership aspirations.

The Kruskal-Wallis H test is a statistical test used to determine if there are significant differences between three or more groups. In this case, the test was used to examine differences among groups of participants based on their responses to whether they have regalia for leadership positions. The groups were divided into "yes", "no", "maybe", and "can't/don't want to answer". The test showed that there was a statistically significant difference among the different groups in terms of their ability to teach others well ($H(3) = 8.872$, $p = .031$). A follow-up test (Mann-Whitney U test) was conducted to compare the groups. This comparison found a significant difference between those who said they have regalia (mean rank = 80.81) and those who were uncertain (mean rank = 63.87). Participants with regalia were perceived as having a higher ability to teach others well. There was also a significant difference among the groups in terms of their ability to develop a strategy and vision for the organization ($H(3) = 19.730$, $p < .001$). Again, using the Mann-Whitney U test for pairwise comparisons:

1. Participants who confirmed having regalia (mean rank = 85.34) were seen as having greater capabilities compared to those who were uncertain about having regalia (mean rank = 57.01).

2. Additionally, participants who didn't have regalia (mean rank = 49.33) also reported greater abilities compared to the uncertain group (mean rank = 35.84).

The selection of the Mann-Whitney U test as a post hoc analysis following the Kruskal-Wallis test was informed by the nature of the data collected for this study. The Kruskal-Wallis test is a non-parametric method used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. When the Kruskal-Wallis test indicates significant differences, it does not specify between which groups these differences occur. Therefore, a post hoc test is necessary to determine the specific groups between which differences are observed. The Mann-Whitney U test is a non-parametric test that is appropriate for comparisons when the data do not meet the assumptions required for the parametric equivalent, the independent samples t-test. This is particularly relevant when the data are not normally distributed, as was the case with the current dataset (Field, 2013; Greasley, 2008; Mujis, 2011).

In summary, the tests revealed that there were significant differences between groups based on whether they had regalia for leadership positions. Those who had regalia or didn't have regalia were generally perceived as being more capable in teaching others well and in

developing organizational strategies and visions, compared to those who were uncertain about having regalia. These specific findings which relate to the perceived abilities of participants based on their possession of regalia for leadership positions, are not discussed in the literature review.

An ordinal regression analysis was conducted to examine the relationship between various independent variables and a set of dependent variables and it was found that participants who engaged in informal networking for career progression demonstrated better teaching abilities compared to those who did not. This was indicated by an estimated coefficient of -19.553 (SE = 0.686, Wald $\chi^2(1)$ = 812.222, $p < .001$). Meschitti & Lawton-Smith (2017) and Vasquez-Guignard (2010) supported the notion that informal networking can lead to smoother career progression, which could include the development of teaching abilities. It's important to note, as mentioned by Airini et al. (2011), that women are often excluded from these informal networks due to various personal or social reasons. This exclusion could impact the ability to develop teaching skills through informal networking channels. Nevertheless, Scott (2018) notes that women who participate in informal networks and possess leadership skills are likely to make further progress in their careers. This progress might manifest in improved teaching abilities as well, supporting the findings of this research.

Questionnaire participants were asked whether they formed friendships with colleagues outside of work and if these friendships contributed to their career growth. A majority (136 participants) indicated that they formed friendships with colleagues outside the workplace. A smaller number did not form such friendships (22 participants), or couldn't or didn't want to answer (10 participants). Thirty-eight participants felt these friendships had a positive impact on their career growth. Eighty participants reported no significant impact, while thirty-six could not or did not want to respond, and fourteen skipped the question. The Figure 3 below shows the number of participants who reported different responses regarding forming friendships outside of work and the Figure 4 chart illustrates participants' responses to whether these friendships contributed to their career growth:

Figure 3

Formation of friendships with colleagues' descriptive statistics, by author
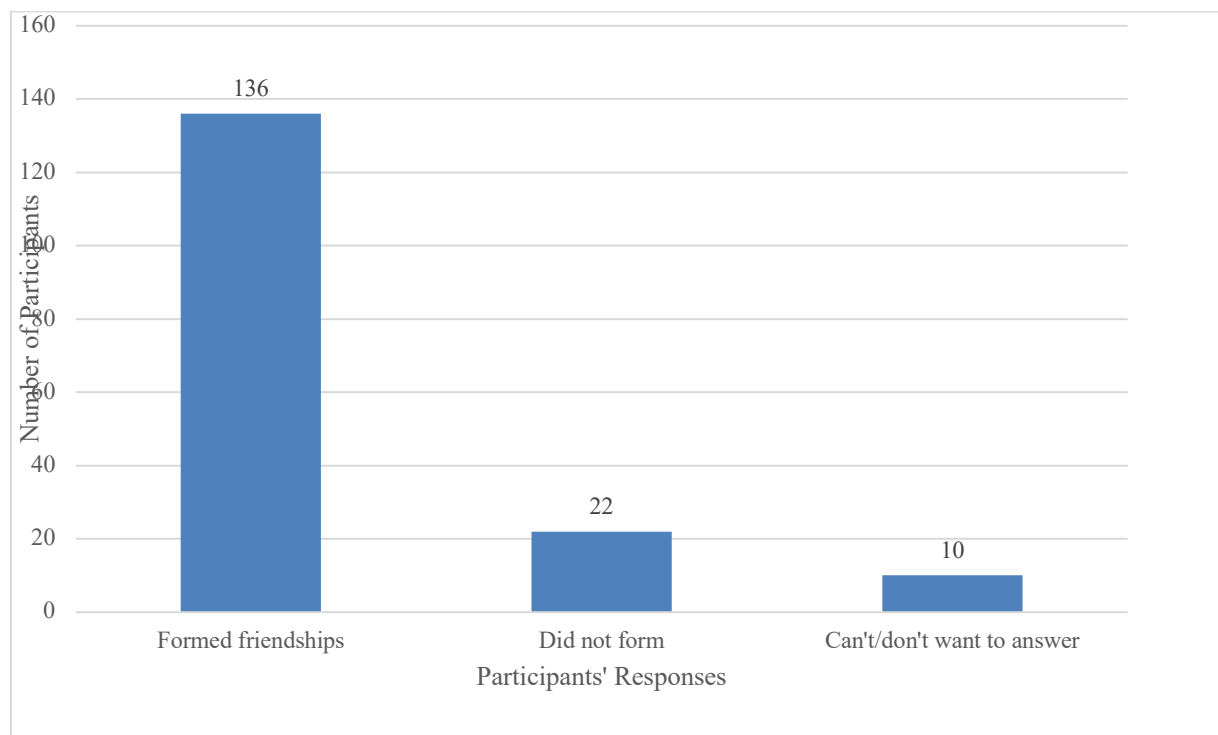
Note. Questionnaire Part 6: 1) Have you ever formed friendships outside of workplaces with your colleagues or met for informal gatherings? Answers: Yes, No, I can not/do not want to answer.

Figure 4

Formation of friendships with colleagues' effect on career progression descriptive statistics, by author
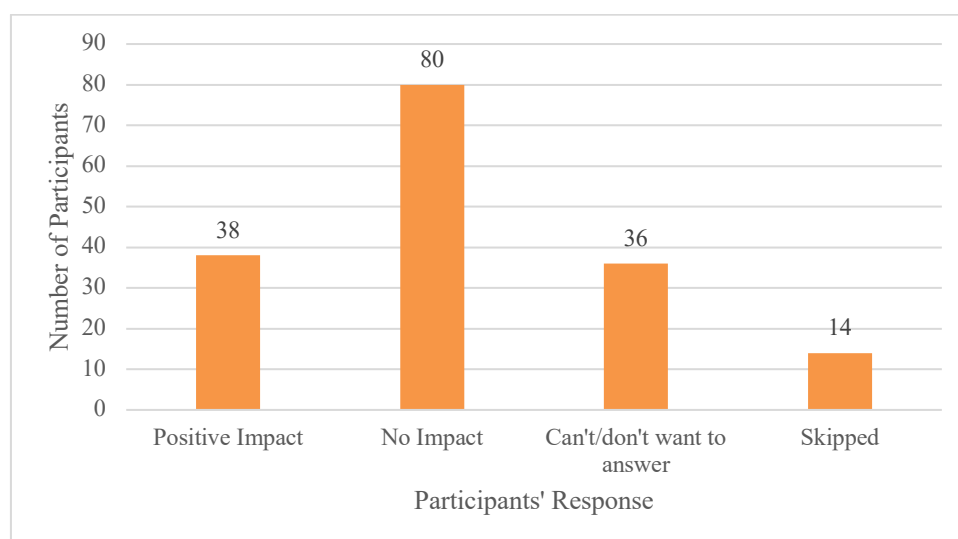
Note. Questionnaire Part 6: 2) If yes, did it somehow help your career advancement? Answers: Yes, No, I can not/do not want to answer.

The work environment and its cultural dynamics, as discussed by Young (2001), Airini et al. (2016) and others, can also influence the impact of workplace friendships on career progression. In environments where there is unsupportive culture or gendered norms, as seen in the Kazakhstani faculty environment, the potential career benefits of informal networks and friendships might be limited or varied. This could be a factor in why a considerable number of participants in the study reported no significant career impact from these friendships. Overall, these insights highlight the multifaceted nature of how the university atmosphere can shape career aspirations toward leadership roles. Therefore, the next emerged theme is the higher education structure in Kazakhstan.

4.4.2 Kazakhstan's Higher Education Structure

Interview participants discussed various issues related to the education sector structure in Kazakhstan. Majority mentioned a lack of autonomy and too much bureaucracy in the management system of universities, with a masculine authoritarian style of leadership. They lamented on the hierarchical structure and classism in universities. However, participants agreed that in general private institutions have democratic style of management and offer more freedom and flexibility. This reflects the exo-system level of Bronfenbrenner's Ecological Development Theory, wherein the Kazakhstani government's dominance over higher educational institutions is evident (Hanson & Sokhey, 2021). Such a structure, with its heavy state investment and control, could dissuade women from seeking leadership roles due to the threat to their autonomy and potential resistance from the regime:

> I would agree [to become a leader] only if this institution is private. I worked in public institutions; I had experience and saw how everyone wears out. Because you must follow all the instructions from the ministry. But I also worked in private institutions. And all my previous bosses, they are women, they opened their own businesses, got in partnerships with foreign firms, and they had that freedom (P07).

Private universities in Kazakhstan, operating under a neoliberal approach, appear to offer a contrasting environment. They prioritize skills over gender in promotions, providing a more equitable landscape for female leadership (Kuzhabekova & Almukhambetova, 2017).

Interviewees especially noted a need for global changes and improvements in the education sector, including reducing unnecessary paperwork and focusing on small details to help students develop their talents. They mentioned problems such as the career orientation of graduates, a lack of opportunities and connections, particularly in emerging fields. Interviewee participants noted that for changes to happen, a person should not be bounded by

the bureaucratic system: "Of course the opportunity to bring changes, yes, but I believe that when a person is autonomous [from bureaucracy] and he or she has more options to make choices, then there are more opportunities to make any changes" (P17).

An interesting quote from female university leader could be also related here, as she shared that she would never agree to manage a state university, because of a bureaucracy: "… this is an interesting job and the main motivator is the opportunity to decide something, and how you are given [a power] to do it. This is why I will never go to a state university" (P15).

Hanson & Sokhey (2021) mention that Kazakhstani government's considerable control over higher education, aiming to cultivate loyalty and support, particularly from the middle and upper-middle classes, including the youth, could impact the aspirations of individuals seeking leadership roles. The state's dominance might dissuade women from seeking leadership positions, especially if they feel their autonomy could be threatened or they fear resistance from the regime. These insights help to understand why early career participants might be inclined toward leadership roles to bring about change, while also being conscious of the potential limitations posed by bureaucratic systems and family responsibilities. The decision to seek leadership positions in non-bureaucratic settings, such as non-governmental organizations, could be influenced by these factors, allowing for more autonomy and alignment with personal and professional goals.

There was also a discussion on the lack of objective criteria for appointing people to specific positions in universities. Interviewees showed the desire to have greater influence and to eradicate dishonest work:

> We do not have objective criteria that would be observed when appointing to a particular position…It's just that this position can be filled by someone who pleases our dean. Perhaps I would not even aspire to be a dean, I would continue to work as an associate professor. But I understand that we have this problem, and being in my position, I still contribute, but it is not the same as if I were the dean (P13).

These findings align with research by Edwards Bexley and Richardson (2011) identifies a gap between ideal and realistic career opportunities for graduate students, highlighting a lack of available academic positions, insufficient networking, and discrepancies in career expectations, especially in fields like education, agriculture, and creative arts. McAlpine & Emmioğlu (2015) note that students often abandon their academic career aspirations due to unfulfilled expectations about job availability, leading them to seek employment in related industries or startups, with female graduate students particularly vulnerable to inferiority

complexes and fear of academic failure. Morrish (2019) characterizes the academic profession as fraught with challenges, including short-term contracts and high performance expectations, which disproportionately affect early-career academics and their prospects for stable employment and advancement; this is particularly notable among women who are inclined to seek positions in less research-intensive institutions. Additionally, the transient nature of academia, including frequent relocations and their impact on family life, is highlighted as a deterrent for doctoral students pursuing academic careers, with foreign-trained Ph.D holders in Kazakhstan facing culture shock and resistance in the established academic culture:

> …in my subjective opinion, this [structural problems] is not related to gender. Rather, it is connected to the existing rigid, hierarchical structure. While you are a teacher [early-career professional in a university], you are nobody. Although they are the main ones, the people who create the value. But they are always considered as second-class people. But if you become a leader, you have a completely different approach. Well, now it seems that they are trying to do something in this sense, for example, state universities put some "bolashakers" (exp: state funded graduates from world's best universities) into top positions. But I don't know how free their hands are to do what needs to be done, is there support inside the structure? (P15).

Participants discussed issues related to workload and life balance while working in higher education Kazakhstan. The demands of administrative work in universities can be so high that it absorbs a significant amount of time and energy, making it difficult to do research, and the requirements for academic publications are often unrealistic:

> I would not want to become a leader in a university in Kazakhstan and, in general, would not want to become a leader in any organization in Kazakhstan. Well, at the university because it is impossible to do research at the same time. At my university, what is the problem, if I do administrative work, it absorbs so much time and the amount of work is so high that you can't do research even at night, because you work very hard, you get very tired. And they require such, well, not that the quality of work, but the volume of work is high (P09).

The literature review supports the interview findings regarding the challenges of workload and life balance in higher education in Kazakhstan. Morrish (2019) characterizes the academic profession as an "anxiety machine", with early-career academics burdened by short-term contracts, high performance expectations in teaching, publishing, and service-related tasks. These demands significantly impede their ability to find stable employment and

hinder career advancement. These insights corroborate the interviewees' experiences of the high demands of administrative work in universities in Kazakhstan, impacting their research activities and overall work-life balance.

Work-life balance is almost non-existent at the leadership positions, which require a lot of time and effort that is not proportional to the salary. However, some participants think that working in the university sector provides more opportunities and time to maintain a balance between work and family compared to the civil service, and it inspires and motivates them to some extent:

> I am a former civil servant. I would say that at the university there are a lot more opportunities and time to maintain balance, both professionally, and in terms of motherhood. The reason for my leaving the civil service, although I worked in a very interesting field, it was very difficult to maintain a balance between family and work (P08).

Kuzhabekova (2019) explored the experience of international female faculty in a research-intensive university in Kazakhstan, finding that these faculty members with children thrived due to an organizational culture that supports the coexistence of work and family life, influenced by a child-friendly local culture and administrative understanding of the needs of an international workforce, however, the same was not true for local faculty. Additionally, Thornhill (2011) suggests that university leaders, particularly mothers, can succeed by intelligently managing their responsibilities between family and institutional roles. This need for balance is highlighted in the experiences of senior women in academia, who report that domestic work and child-rearing influenced their career decisions, while the younger generation of female academics does not view their partner's job as a significant factor in their leadership aspirations. These findings indicate that the academic environment, especially in certain contexts, may offer more flexibility and support for balancing professional and family responsibilities than other sectors like the civil service.

The lack of support in universities for women pursuing a career progression was also discussed. Some participants shared their experiences of not receiving any response their emails while asking for support in research and possibility to enter academic networks. Interviewees mentioned that the universities offer state-funded scholarship programs for advanced degrees, funding for international trips and career development programs, but there is room for improvement, since those opportunities are often limited. The lack of women support and development programs was also mentioned as a barrier for career progression.

Participant mentioned that family-friendly policies could potentially help development of women leaders:

> … for me it would personally help if when I was studying for a master's degree and a Ph.D, if I received some kind of voucher for a kindergarten or if my children could be taken care of on campus. Or if there at least would be the room for the mother and child. That is why support, including financial support, is very important (P01).

Interviewees emphasized the need for financial and institutional mechanisms to support women who are pursuing higher education while also being primary caregivers:

> … government should solve the social issues for childcare. To create more effective institutions, where women can leave their children younger than 1 year, to give to a nursery, which is now almost impossible now. Only a home nanny can be hired for such babies, they are not taken to a nursery (P09).

The lack of institutional support, such as inadequate childcare facilities, as mentioned by Roshchin & Yemelina (2020) and Dugarova (2019), often forces women into domestic roles, impeding their career progression.

In the analysis of questionnaire, the author utilized Kruskal-Wallis's test to determine if there were significant differences across variables linked to the exo-system in the survey, such as university position and employment type. The analysis revealed noteworthy findings:

1. Seniority Level: There was a significant variation in the desire to become a leader in a university concerning the participants' seniority level (early-, mid-, senior-level career stage) $(H(6)=13.078, p=0.042)$.

2. Employment Type: A difference was also observed in the desire to become a leader between full-time and part-time employed females $(H(1)=5.470, p=0.019)$.

These results indicate a statistically significant difference between the two groups regarding their desire to assume leadership roles in a university. Specifically, the low p-value (less than 0.05) suggests that the differences observed in the desire for leadership between the groups based on seniority level and employment type are not likely due to random chance. Conducting post-hoc Mann Whitney test to observe differences between groups, the results were obtained and presented in Table 18:

Table 18

Mann Whitney U test SPSS output analyzing variables on leadership desire and seniority level, by author

Ranks				
	Seniority level	N	Mean Rank	Sum of Ranks
Do you want to become a leader in a university?	doctoral student	76	40.45	3074.50
	president, dean, rector, vice-dean, vice-rector, vice-president	9	64.50	580.50
	Total	85		

Test Statistics[a]	
	Do you want to become a leader in a university?
Mann-Whitney U	148.500
Wilcoxon W	3074.500
Z	-3.060
Asymp. Sig. (2-tailed)	.002
a. Grouping Variable: seniority level	

There was a statistically significant difference in the ranks of leadership desire between doctoral students (N = 76, Mdn = 40.45) and higher seniority positions such as president, dean, vice-rector, and vice-president (N = 9, Mdn = 64.50), U = 148.50, z = -3.060, p = .002. The results are presented in Table 19.

Table 19

Mann Whitney U test SPSS output analyzing variables on leadership desire and seniority level, by author

Ranks				
	seniority level	N	Mean Rank	Sum of Ranks
Do you want to become a leader in a university?	Instructor, lecturer	51	27.86	1421.00
	President, dean, rector, vice-dean, vice-rector, vice-president	9	45.44	409.00
	Total	60		

Test Statistics[a]	
	Do you want to become a leader in a university?
Mann-Whitney U	95.000
Wilcoxon W	1421.000
Z	-2.927
Asymp. Sig. (2-tailed)	.003
a. Grouping Variable: seniority level	

A Mann-Whitney U test also showed a statistically significant difference in the ranks of leadership desire between instructors/lecturers (N = 51, Mdn = 27.86) and higher seniority positions (N = 9, Mdn = 45.44), U = 95.00, z = -2.927, p = .003. The results are presented in Table 20.

Table 20

Mann Whitney U test SPSS output analyzing variables on leadership and employment type, by author

Ranks				
	employment type	N	Mean Rank	Sum of Ranks
Do you want to become a leader in a university?	Part time	66	73.70	4864.50
	Full time	101	90.73	9163.50
	Total	167		

Test Statistics[a]	
	Do you want to become a leader in a university?
Mann-Whitney U	2653.500
Wilcoxon W	4864.500
Z	-2.339
Asymp. Sig. (2-tailed)	.019
a. Grouping Variable: employment type	

Similarly, there was a statistically significant difference in the ranks of leadership desire between part-time (N = 66, Mdn = 73.70) and full-time employees (N = 101, Mdn = 90.73), as indicated by a Mann-Whitney U test, U = 2653.50, z = -2.339, p = .019. These findings could be interpreted to suggest that factors such as seniority level and employment type play

a significant role in influencing individuals' aspirations to leadership positions in the academic sector.

While discussing various aspects of female leadership and the challenges faced in the higher education sector in Kazakhstan, literature review in this study does not explicitly go into how seniority level and employment type specifically impact women's aspirations for leadership roles. While the literature review addresses broader themes like the impact of cultural and societal constructs, family socialization, and gender biases in leadership (Hanson & Sokhey, 2021; Dubok & Turakhanova, 2017; and Vasquez-Guignard, 2010), it does not specifically discuss the nuances of how seniority level and part-time or full-time employment status might affect women's leadership ambitions in the Kazakhstani context.

The next emerged theme from the data analysis includes the influence of role models and mentorship, hence, it will be discussed further.

4.4.3 Role Models and Mentorship

Interviewee participants unanimously agreed that they lack female leadership role models in Kazakhstan, not only in higher education, but in general. Majority of interviewees expressed that they have not found a female role model in Kazakhstani educational leadership and instead follow male role models. Despite Kazakhstan's historical context of gender equality and significant female involvement in leadership roles in nomadic societies (Kandiyoti 2007; Khairullayeva et al., 2022), the data document reveals a notable gap in the presence of female leadership role models in contemporary Kazakhstan. This contrast suggests a divergence from the historical norms and raises questions about the status of female leadership in various sectors, including higher education.

Interview participants mentioned that perceive male leaders as educational leadership role models because of following qualities: being calm, humble, loyal, energetic, able to think critically, interest and motivate others, admiring the work they do experience, and the able to listen and take everyone's opinion into account, balancing work and family responsibilities. This finding shows a preference for male role models, could indicate a societal preference or bias towards male leadership styles, impacting women's decisions to pursue leadership roles:

> He has professional qualities, critical thinking. He is also a leader, but not an obvious one, that is, there are such leaders who will enter the room, and you immediately know that this is the boss. They are very attentive, insightful, they let everyone speak, they consider the opinions of everyone. They do not only listen, but also hear. They seem to take everyone's opinion into account. There is inner peace, when people see this peace,

they are also calm down. He also has a family, he has a wife, children. He understands women too, because he helps his wife to raise children, he picks up the children from kindergarten. It seems to me that they have a clear distribution of responsibilities (P10). The effectiveness of transformational leadership in Kazakhstan, as found by Mahmood et al. (2020) and Lee et al. (2019), resonates with the performative leadership theory. Despite the recognized effectiveness of transformational leadership, the acceptance of female leaders remains a challenge, partly due to the dominant role of mothers in the clan culture, as discussed by Mahmood et al. (2020) and Lee et al. (2019). Also, literature notes that female academics might be deterred from leadership roles if they perceive the workplace culture as resistant to diversity (Devos 2004; Meschitti & Lawton-Smith 2017; Vasquez-Guignard 2010). This reflects the interconnectedness of micro and macro systems in shaping individual development and societal norms.

Some participants mentioned that female professors, female teachers, and their success in their careers while balancing family life, served as an inspiration to them:

> For me at that time she was a direct example that you can be super professional, achieve great success at work and be an ideal mother, wife, and so on. She had a balance in everything where needed. She used her leadership qualities, and somewhere she used her other qualities such as understanding, care (P08).

Some interviewees explained that although they do not have a specific person as a role model, but they are constantly learning and trying to borrow aspects from the people around them, because they focus more on interesting projects than following specific individuals: "Nowadays people probably, go to some interesting projects. People now go where they are interested, but this has nothing to do with people. Because if a person has already developed, she/he will not look at anyone, she/he will develop himself/herself" (P06). These findings underscore the significance of role models and supportive environments in inspiring and shaping the career trajectories of women in academia, particularly in leadership roles, as was stated by Thornhill (2011).

Mentoring was seen as an important institutional tool that have been developed during Soviet times, but has been lost in recent years, and there is a call to cultivate it again. This aspect of mentoring is not addressed in the literature review study, which instead highlights broader leadership styles and the impact of clan culture in Kazakhstan (Mahmood et al., 2020; Lee et al., 2019):

> I studied during a Soviet system and after graduation, even before the 90s, I experienced a little bit the period when this system of mentoring was a wide practice.

> But the mentoring practice was already gradually subsiding. After the 90s, the whole mentoring system was completely lost. I even once asked a question from our leadership, why aren't you working on mentoring policy, it needs to be cultivated step by step, as we used to have in those [Soviet Union] days (P04).

Participants discussed wide range of themes related to mentoring and guidance in the academic and personal spheres. Although participants were explained the term "mentoring' during the interview, it seems that they perceive Ph. D supervision duties as informal mentoring. Majority of participants have talked about how mentors have helped them navigate their careers and make difficult decisions:

> …she was my supervisor both during the magistracy and doctoral studies. She explained what options there are after a bachelor's degree because I did not understand at all what I can do with this specialty. Of course, this is mentoring. i.e. tell and show what possibilities there are (P03).

For some interviewees female mentors provided guidance, support, and inspiration. They helped her to overcome challenges, encouraged to continue studies, and demonstrated what qualities were necessary to become a successful female academic. Interviewees suggested that mentoring and community support can be helpful for those pursuing a career in academia, particularly in managing time and work demands. One mentor provided ongoing support, even after the finishing the Ph.D. studies:

> …I didn't contact her [after the graduation], but she sends me some opportunities for post-docs, journals in which I can publish. She continues to keep in touch with me, even though she is in America, she is retired, she still devotes time and motivates me with the need to keep up saying "you need to publish, you need to get your doctoral dissertation published, you need to participate in conferences." (P16).

An interesting finding was that some participants perceived mentoring in Kazakhstani academia to grow in your career, when the benefits are mutual to both sides. This perspective introduces a pragmatic approach to mentoring that may reflect contemporary attitudes within Kazakhstani academia:

> When you come to the university, if suppose you do something for the leadership, in addition to the work itself, there may be some personal services there, then this person becomes your mentor, i.e is responsible for your career growth. As if one hand washes another, you help him/her and this person helps you climb the career ladder, that is how it works, probably more in our country (P06).

Overall, participants believe that family, school, and society play a key role in encouraging women to pursue education and leadership, and that the availability of funding and mentorship can also be important factors for development, as already stated by researchers (Devos, 2004; Scott, 2018). The societal emphasis on respecting elders and valuing their wisdom, as discussed in the in the literature review by Yelibay (2021) and Yelibay et al. (2022), can inadvertently reinforce age-based biases, hindering young females' access to leadership opportunities. This societal norm might contribute to women's reluctance to aspire for leadership roles in academia.

In the quantitative part of the study, most of the questionnaire respondents (N = 168) reported having role models. Specifically, 96 respondents (57%) identified as having role models, 37 respondents (22.0%) did not have role models, 35 respondents (21%) were could not or did not wish to answer this question, as depicted in Figure 8:

Figure 8

Presence of survey participants' role models, by author
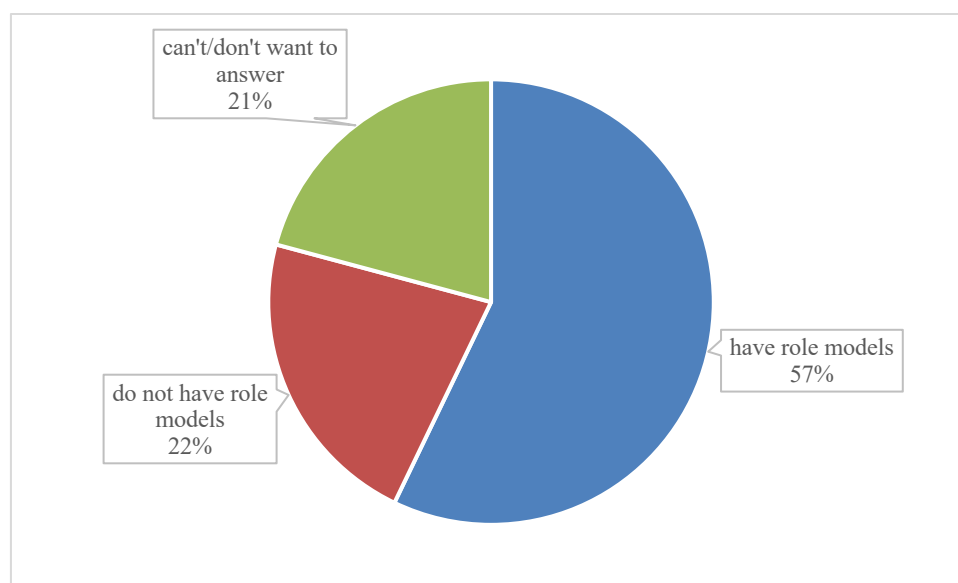
Note. The Questionnaire Part 5: 1) Do have any role model that motivates (or motivated) you towards leadership? Answers:Yes, No, I can not/do not want to answer

Regarding the gender of these role models, 79 respondents (47.0%) identified their role models as female, 40 respondents (24%) as male, 12 respondents (7%) could not or did not wish to answer, and 37 respondents (22%) skipped the question, as presented in Figure 9:

Figure 9

Gender distribution of survey participants' role models, by author
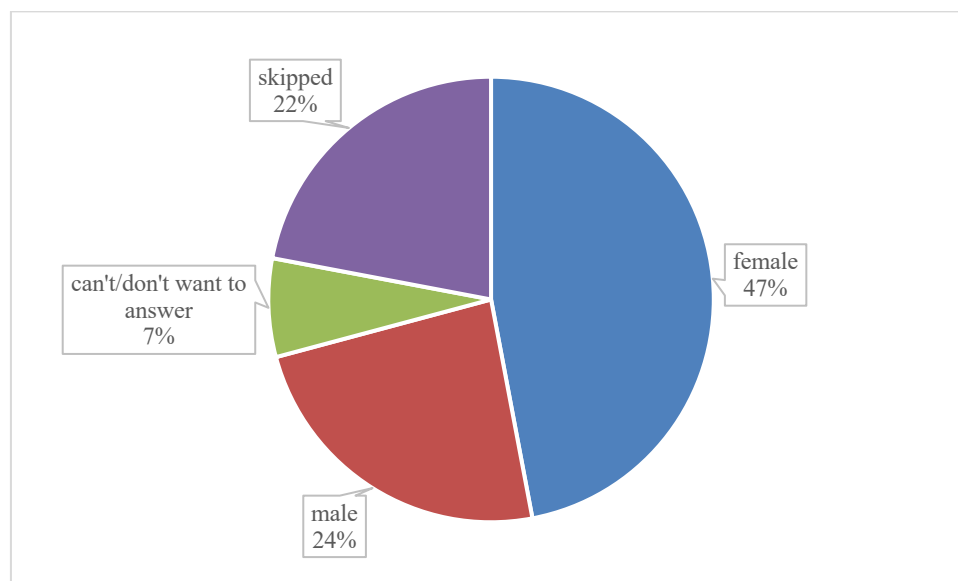
Note. The Questionnaire Part 5: 2) If yes, was your role model male or female? If you didn't answer yes, skip to the next question. Answers: Male, Female,I can not/do not want to answer

As for the mentorship, a significant proportion of the respondents (N = 168) reported that mentorship' somehow inspired' them to pursue leadership careers in universities. Of these, 134 respondents (80%) were mentored, 16 respondents (10%) were not, and 18 respondents (10%) could not or did not want to answer, presented in Figure 10.

Figure 10

Presence of survey participants' mentors, by author
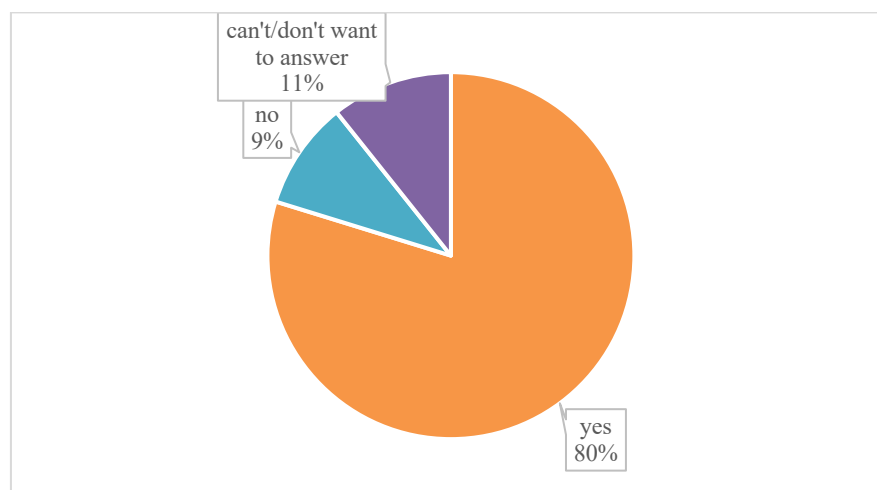
Note. The Questionnaire Part 5: 1) A mentor is a person who will help you think through what you need to navigate your career more effectively (for example a PhD supervisor, a colleague, or a friend). Were you mentored at some point of your experience in a university? Answers: Yes, No, I can not/do not want to answer

Figure 11 shows data concerning the nature of mentorship, 81 respondents (48%) experienced formal mentorship, 58 respondents (35%) had informal mentorship, 13 respondents (8%) could not or did not wish to answer, and 16 respondent (10%) skipped the question.

Figure 11

Nature of mentorship, by author
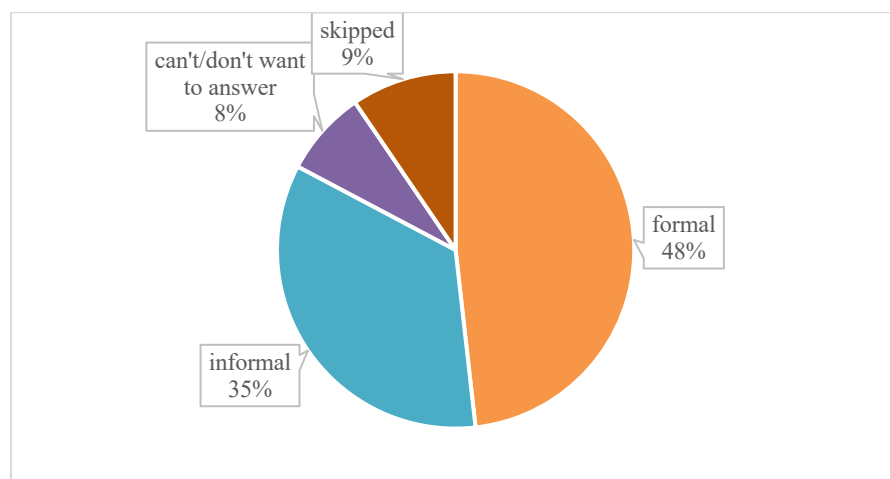
Note. The Questionnaire Part 5: 2) Was mentoring a part of a formal program in a university, or informal (resulted from personal relationships with a person)? If you answered no to the previous question, skip t the next part of the survey . Answers: Formal, Informal, I can not/do not want to answer

Interestingly, a significant difference was observed among groups with different mentorship experiences (yes, no, maybe, can't/don't want to answer) in terms of the effect of mentorship on the desire to become a university leader (H(2) = 8.612, p = .013), suggesting that mentorship really does have an impact on this desire. Subsequent Mann-Whitney U post hoc test showed that there was a statistically significant difference in the ranks of effect of mentorship on desire to become a leader in a university between those who have been mentored (N = 132, Mdn = 73.95) and those who have not been (N = 11, Mdn = 48.64), as indicated by a Mann-Whitney U test, U = 469.00, z = -2.045, p = .041. These findings align with previous studies done by CohenMiller et al. (2021) and Tsakalerou et al. (2022), who emphasize how the lack of mentorship exacerbates challenges for women in academic leadership, and Mazerolle et al. (2018) and Kinash et al. (2017) who describe mentorship as a crucial factor in guiding less experienced individuals, particularly in academia, where Ph.D. supervisors can profoundly impact a student's journey and career ambitions.

In examining the influence of role models on individual aspirations and leadership ambitions, a significant variance was observed among groups categorized by their

acknowledgment of having role models (yes, no, maybe, can't/don't want to answer), evidenced by a Kruskal-Wallis H test yielding a value of 8.908 with a corresponding p-value of .031. A post hoc Mann-Whitney U test was conducted to assess the difference in the aspiration to become a leader between participants who had role models, who did not and who was unsure. The results indicated that there was a statistically significant difference in the ranks of the aspiration to become a leader between participants who reported having a role model (Mdn = 73.95, n = 132) and those who reported not having a role model (Mdn = 48.64, n = 11), U = 469.00, z = -2.045, p = .041 (two-tailed). The mean rank indicates that participants with role models had a higher aspiration to become leaders. Also, the aspiration to become a leader was significantly higher for participants who reported having a role model (Mdn = 77.78, n = 132) compared to those who were uncertain (Mdn = 53.41, n = 17), U = 755.00, z = -2.298, p = .022 (two-tailed).

The role of leadership role models in academic career choices has been underscored by multiple researchers (Morley, 2013a; Morley, 2013; Vicary & Jones, 2017; Fried & MacCleave, 2009). Young (2001) found that role models might elicit a range of reactions from women considering leadership positions, from satisfaction and identification to opposition. Women satisfied with the leadership approach of their superiors tend to have little inclination towards seeking leadership roles themselves (Young, 2001).

The interview and questionnaire results revealed that systemic challenges and gender biases within bureaucratic structures of higher education institutions in Kazakhstan significantly influence women's decisions regarding leadership careers. Instances of discrimination, particularly surrounding maternity leave, highlight the gendered perspective on professional commitment and productivity. These findings align with the Gendered Organizations Theory, which posits that organizational practices reflect and reinforce societal gender inequalities. The data suggests a need for change from the masculine authoritarian style of leadership to more flexible and inclusive approaches, as advocated by Performative Leadership Theory. This shift is essential to avoid stagnation and encourage diverse perspectives in leadership roles. Hierarchical interactions among women, indicate that women do not always support each other due to competition for resources. This observation resonates with the Gendered Organizations Theory and highlights the complex dynamics of gender in organizational structures. The study reveals diverse views on maternity leave and professional commitment, indicating a complex interplay of stereotypes and actual experiences of women in leadership

Personal connections and networking within academic career advancement play a significant role. The proactive engagement and strategic networking with key decision-makers, are crucial for career progression. This aligns with the Performative Leadership Theory and Bronfenbrenner's Ecological Systems Theory, emphasizing the importance of the exosystem in shaping career trajectories. The questionnaire survey results indicate that students, faculty members, and informal networking are significant inspirational factors for leadership aspirations. This is consistent with previous research emphasizing the role of advanced studies and academic environment in shaping career aspirations (Edwards, Bexley, & Richardson, 2011; Wendler et al., 2012). The research indicates that seniority level and employment type significantly influence leadership aspirations, with a noted difference in the desire for leadership between full-time and part-time employed females.

However, the literature review does not explicitly address how seniority level and part-time or full-time employment status affect women's leadership ambitions in the Kazakhstani context, as well as does not specifically discuss the differences in leadership styles and organizational cultures between public and private institutions in Kazakhstan, which is highlighted in the findings of the study. The findings about hierarchical interactions among women and the reproduction of gender oppression within women's communities are specific insights that are not detailed in the literature review, adding depth to the understanding of gender dynamics in academia. While the research discusses challenges in the higher education sector of Kazakhstan, including the need for systemic improvements and career orientation for graduates, deeper investigation is needed to suggest specific systemic improvements or focus on career orientation.

4.5 Research question 4: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at meso-system?"

In this research-question, meso-level factors influencing women's decisions regarding leadership roles in higher education, drawing from both qualitative interviews and quantitative data analysis, uncovered the societal and organizational structures that simultaneously empower and constrain women's leadership pathways. Amidst gendered dynamics of higher education workplaces, the research question examined how societal expectations and family responsibilities shaped the professional lives of women. Flexible work arrangements, while beneficial, often came with increased domestic responsibilities.

Additionally, quantitative findings that underscored the prevalence of traditional gender roles and the impact of family support on women's career aspirations.

4.4.1.2 Flexible Workplace, but Additional Responsibilities at Home.

Interview participants perceive higher education as a gendered workplace. They emphasised that there is a gender imbalance in leadership positions in universities in Kazakhstan, with more men in leadership positions than women. Females explain that the reason of this imbalance is due to the societal expectations that women have additional responsibilities such as cooking, cleaning, and raising children, which can make it difficult for them to balance their responsibilities at work and in their personal lives. Some females expressed readiness to take up deanship, as it has more decision-making power, but still accounts for a lesser level of responsibility, leaving the time for family life. The gendering of university careers can be noticed in this quote:

> I would like to become, for example, maybe in the position of a dean, but not in the position of a vice-rector or a rector. It is quite a responsible job, and it takes a lot of personal time. Maybe you will have to be there, probably 15 hours at work, or more. The position of the dean seems to me the most acceptable for women, because now there are a lot of women [in higher education] (P06)

or as participant P02 notes:

> They told me to go to a teaching career, because for a woman it's super cool, I didn't understand back then, I thought, why would I teach? And now, over time, when you have a family, children, you think teaching is really for a woman… It is important to guide your children, your future generation in the right direction, to give them the right education, guide them somehow and help them, their development (P02).

Additionally, participants acknowledge that women in the education sector often have lesser pay and more flexible schedules, but these benefits come at the cost of additional responsibilities at home:

> …when you have small children, it is a woman who takes care of them more. Some household chores are also mostly done by a woman. Therefore, it would be very difficult to combine it, because this [leadership] work naturally requires a lot of responsibility, you come late, you spend the whole day at work, in fact, many women choose entry-level or mid-level work in universities because it allows you to have a free schedule (P15).

Females also mention that men face similar challenges in balancing their family and work responsibilities, but they are often more able to prioritize their careers over their personal lives:

> …it happens that men in our team say: "I have a family, I have a wife, I don't have time for data collection", for example. But I think, we [women] also have children, small children, babies too, why we must do that work then? (P10).

The participants' perception of higher education in Kazakhstan as a gendered workplace, with a gender imbalance in leadership positions, is supported by several theoretical perspectives discussed in the literature review of this study. Socialization, as outlined by Hofstede (2001), Moscovici (1972), and Ross (2004), plays a key role in shaping attitudes and behaviors, influencing women's leadership aspirations due to societal expectations around family and childcare responsibilities (Anneli Adams, 2009; Cubillo & Brown, 2003; Scott, 2018). This is further compounded by the need for support systems, as highlighted by Young (2001), and Sperandio (2010), where women's choices of less demanding university roles for flexible schedules are indicative of the impact of support or lack thereof on their career trajectories. The challenges of work-life balance and parenting, discussed by Sallee, Ward & Wolf-Wendel (2016), and Airini et al. (2011), also resonate with the participants' views, as managing familial and institutional responsibilities becomes a significant factor in career decision-making (Devine, Grummell & Lynch, 2011; Kim, Yoon & McLean, 2010; Moultrie & De la Rey, 2004; Probert, 2005; Raddon, 2002). Additionally, sociocultural constructs and family influences, as examined by researchers (Dugarova, 2019; Greig, Kudaibergenova & Edström, 2019; Lee, 2023; Kuzhabekova & Almukhambetova, 2019; Meurs, Nugmanova, Salimzhanova & Marvin, 2021; Roshchin & Yemelina, 2020; Yanovskaya, Potluri, Nazyrova & Salimzhanova, 2020) underscore the societal expectation for women to prioritize family over work, contributing to the gender imbalance in leadership positions.

Analyzing quantitative survey, a Kruskal-Wallis H test showed a significant difference in the desire to become a leader in a university based on the perceived influence of career opportunities, $H(4) = 17.464$, $p = .002$. Subsequent Mann-Whitney U tests were performed for post-hoc analysis. Significant differences were found between the group that reported being "Somehow discouraged" by career opportunities and the group that was non-committal or unwilling to answer about their leadership aspirations, $U = 107.500$, $p = .015$. Moreover, there was a significant difference between the group that felt "Significantly inspired" by career opportunities and the group that did not disclose or did not want to answer, $U = 1170.500$, $p < .001$. Several insights from literature review suggest that the

choice of women to pursue certain leadership roles like deanship may be influenced by the balance it offers between professional power and personal life responsibilities. For example, Larasatie, Barnett, and Hansen (2020), Rawson (2021), and Rabii-Rakin (2019) contrast the motivations of male and female university leaders. Male university leaders often position themselves as breadwinners and aspire to leadership roles for higher salaries. In contrast, female university leaders tend to enter leadership positions either by volunteering or chance. When females' personal values, goals, and missions align with the university's vision, they feel more satisfied, work harder, and are motivated to aspire to leadership roles, aligning with the belief in the university's vision. This indicates that for many female academic leaders, the path to leadership often begins as academic staff, eventually moving into leadership roles as opportunities arise (Matthews 2017; Shaw 2020). The next theme that emerged from data analysis is division of family roles and responsibilities, which is discussed further.

4.4.1.3 Division of Family Roles and Responsibilities.

The interview participants touched upon the theme of gender roles in society and their impact on career and family life. Females discussed the challenges faced by women in balancing work and family responsibilities, with some of them acknowledging that household duties fall mostly on women:

> I know that I could have made a much better career, there's a lot to achieve in less time if I didn't have such big family commitments. This is indeed a very important problem, which many do not pay attention to. They accept it as a routine part of life. I understand perfectly that the great share of my time is spent on establishing a family life, caring for my children, my house, my spouse. It is the fact that in most household duties fall on a woman and we have only 24 hours in a day (P09).

The interview participants also mentioned the societal perception of women as caretakers and the difficulty in breaking these gender stereotypes. They expressed their views on the importance of balancing work and family life and the role of a partner in this balancing act. Some speakers highlighted that women can be both leaders at work and at home but need support from their partners. The ideal scenario according to females is when both partners are leaders and support each other:

> Marriage should be considered as a partnership and a husband also should be involved in household issues. For some men, of course, it is convenient that the wife takes that kind of position, where she does everything at home and he only leads at work and is also considered as a leader at home, without being involved in household duties.

> However, it is the ideal attitude when a man understands and admits that his wife is not lower than him, she can also be in a leadership position at work, and the housework should be done together (P14).

Participants believe that co-existence of two spouses as both leaders at work and at home is possible, but it involves deep understanding of healthy relationships and respect for each other. This finding align with Thornhill (2011) and Young (2001), who highlighted the impact of fathers' support and spousal assistance, noting that fathers' encouragement and partners sharing domestic responsibilities can greatly affect women's confidence and determination to pursue academic management careers.

However, the qualitative findings showed that the patriarchal ideologies prevalent in Kazakhstan, as discussed in the literature review. These ideologies lead to a reluctance among men to engage in child-rearing and domestic responsibilities, pressuring women to conform to caregiver roles (Greig, Kudaibergenova & Edström, 2019). Furthermore, the participants' belief in the coexistence of spouses as leaders both at work and home, involving deep understanding and respect for each other, is supported by the literature on the need for societal and familial support for women pursuing leadership roles. It is noted that Kazakhstani women often confront resistance from family, especially when aspiring to higher education, reflecting deeply rooted gender biases (Kuzhabekova & Almukhambetova, 2019; Roshchin & Yemelina, 2020; Dugarova, 2019). Therefore, the next emerged data analysis theme explores how upbringing values are related to female leadership aspirations.

4.4.1.4 Cultivation of Family and Female Values through Upbringing.

The interview quotes reflect the females' views on relationships, family, and gender roles from their upbringing:

> I have reverent attitude towards men. My daughter is growing up now and I will also instil the same attitude in my daughter. But I will not accept any kind of domestic violence, God forbid (P02).

Participants identify themselves as women who value family and marital connections. It is well illustrated by an interviewee, who is a leader in a university: "I am also an oriental woman, I can't imagine myself without a family, without a husband, without official marriage" (P17). Nevertheless, interview participants believe that these social identifications do not interfere with their personal development and leadership identity. However, according to researchers (Bohnam, 2019; Gerdes, 2011, Raddon, 2002; Shaw, 2020) formation of leadership identity is influenced by personal, family, workplace, and societal norms.

Participants highlighted the role of upbringing and society in shaping gender stereotypes and expectations. Particularly females spoke about how family values are cultivated in them from their upbringing:

> I grew up in a conservative family. My father is the head, he was akim (eng: mayor of the city). My mother was a teacher. She was the shadow of her husband - the father is right, the father speaks truth, the father is always correct. My mother is so typical [Kazakhstani woman], let's say so… My father put this phrase in my head "No matter how beautiful woman you are, you are no better than a bow-legged man. If you were a thrice educated woman, the most beautiful, a scientist, an akim, and so on, you will still stand lower on the stairs than the most unfortunate, bow-legged man. No matter how much worse the education and outlook of that man of yours, he is still a head. And women is like hair. Hair can be cut (P02).

This finding reflects societal constructs of male dominance and female submissiveness, which are prevalent in many cultures and have been a subject of discussion by researchers like Hofstede (2001), Moscovici (1972), and Ross (2004). Females' expressed frustration with the common belief that women should be submissive and not pursue leadership roles. They also mentioned the impact of parents and family, who often propagate these stereotypes, and the need for changes in education, including textbooks, to promote a more equal view of genders. Some interview participants also shared their own experiences growing up in families that encouraged education and careers for women, rather than just being housewives:

> My parents always said that I should have a career. I always told I want to be like Marie Sklodowska-Curie, to be a wonderful researcher. My parents never scolded me for the mess in my room or because I didn't know how to cook (P07).

This findings well illustrates the importance of support systems, especially from family, friends, and spouses, for women before entering the field of academic leadership, as discussed by Young (2001), and Sperandio (2010).

The analysis of the questionnaire data revealed participants' perceptions regarding family roles. There was a tendency for participants to somewhat agree with the statement "Women are the primary caretakers of the family". This suggests a prevalent belief among respondents that women typically assume a more significant role in family caregiving responsibilities. Detailed distributions of these responses are presented in the accompanying Table 21.

Table 21

Frequency table of the answer to the statement "Women is the primary caretaker of the family", by author

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally disagree	46	27.4	28.2	28.2
	Disagree	28	16.7	17.2	45.4
	Agree	7	4.2	4.3	49.7
	Totally agree	49	29.2	30.1	79.8
	I do not/can not answer	33	19.6	20.2	100.0
	Total	163	97.0	100.0	
Missng	System	5	3.0		
Total		168	100.0		

Participants predominantly disagreed with the statement "Men are the primary breadwinners of the family". This indicates a general consensus among respondents that men are not viewed as the sole or primary financial providers in the family context, and results are shown in Table 22.

Table 22

Frequency table of the answer to the statement "Men is the primary breadwinner of the family"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally disagree	45	26.8	28.0	28.0
	Disagree	30	17.9	18.6	46.6
	Agree	6	3.6	3.7	50.3
	Totally agree	45	26.8	28.0	78.3
	I do not/can not answer	35	20.8	21.7	100.0
	Total	161	95.8	100.0	
Missing	System	7	4.2		
Total		168	100.0		

These findings align with the discussion in the literature about the historical roots of gendered labor and the changing perspectives on gender equality in Kazakhstan (Ledwith & Manfredi, 2000; Sokoloff, 1992; Kandiyoti, 2007).

A Kruskal-Wallis H test was conducted to determine if there were differences in the belief that women are the primary caretakers of the family across different age groups (>30; 31-40; 41-50; 51-60; 60+). The results indicated a statistically significant difference in belief

across these age groups (H(4) = 21.597, p < .001). The post-hoc Mann-Whitney U tests conducted across various age comparisons consistently indicated statistically significant differences in the ranking of being the primary caretaker of the family. Older age groups (60+ and 51-60) were often ranked higher in caretaking responsibility compared to younger age groups (41-50 and <30). Specifically, significant differences were found between 41-50 vs. 60+ (p = 0.035), 41-50 vs. 51-60 (p < 0.001), 31-40 vs. 60+ (p = 0.040), 31-40 vs. 51-60 (p < 0.001), <30 vs. 60+ (p = 0.025), and <30 vs. 51-60 (p < 0.001). These results suggest that age plays a critical role in the perceived primary caretaking responsibilities within the family, with older individuals being more likely to be seen as the main caretakers. Although there is no specific literature that can explain this finding, it can be related to the societal norms and attitudes towards age and gender in Kazakhstan that emphasize respecting elders and valuing their wisdom, which may reinforce age-based biases and expectations for older individuals to assume caretaking roles. Moreover, the societal construct in Kazakhstan traditionally assigns women to roles of motherhood, care, and domestic responsibilities, thereby influencing the expectations of their primary functions within families (Durrani et al. 2022; Arystanbek 2021). Additionally, Kazakh women, especially those outside urban settings, often prioritize familial responsibilities over professional endeavors, demonstrating the influence of family and sociocultural constructs on women's career aspirations (Meurs et al. 2021). These cultural and societal expectations highlight the significant role of age in designating primary caretakers within families, as older women may be seen as more suited to fulfill these roles due to traditional and social norms. The other theme that emerged from data analysis includes the influence of family and peers on leadership aspirations of females, and it is discussed further.

4.4.1.5 Family/Peer Influence.

Participants often mentioned how support from family members is important for females who wish to advance in their careers. Some interviewees believe that having support from family, particularly grandparents, can greatly aid in balancing work and family responsibilities:

> In Central and Eastern Europe there is no such strong family institution as we have [in Central Asia]. Grandparents do not babysit their grandchildren. But we have this very good support, many of my colleagues go to work very quickly [after maternal leave], because they send their children there [to grandparents] and they take care of their grandchildren (P09).

Others highlight the importance of having close friends or family members to provide advice and support. Some interviewees mention the influence of the mother-in-law on career decisions and the need for emotional and moral support from family:

> If there is a mother-in-law at home who constantly nags that tea is not so fresh, or that it is dirty at home, it does affect [the emotional state of a female]. It seems to me that what kind of person you are, what is your mission, a goal, or a dream, what do you want for yourself, for your children or the world also affects career decisions (P07).

Researchers (Cubillo & Brown, 2003; Sperandio, 2010; Young, 2001) discovered that female academic leaders emphasize the role of family, friends, and spousal support prior to entering the field of educational leadership. Such support, especially from individuals familiar with the educational sphere, positively influences females' decision-making regarding their career aspirations. In particular, mothers often serve as critical role models, providing support and inspiration for their daughters' aspirations in academic leadership (Baker, 2010; Gross & Trask, 1976; Young, 2001).

The importance of having a strong support system is emphasised as it can help alleviate stress and provide encouragement in pursuing education or career goals:

> My relatives, especially my mother and aunts, they are waiting for me to defend a Ph.D degree, because they know that for me it is so difficult. I consult with them, ask advice and they always support me, offer their help to take care of my daughter, and so on (P14).

This resonated with the participants' emphasis on the importance of having a strong support system to alleviate stress and provide encouragement in pursuing education or career goals, as was already discovered by researchers (Sallee, Ward & Wolf-Wendel, 2016; McAlpine & Emmioğlu, 2015; Airini et al., 2011).

The statistical analysis examined the potential influence of family factors, such as having children and being married, on individuals' aspirations to take on leadership positions. The chi-square test of independence showed that there is no meaningful link between wanting to be a leader and being married ($\chi 2(12)=13.485, p=0.335$), nor is there a significant connection between the desire to lead and having children ($\chi 2(12)=8.6020, p=0.73$). This means that whether a person is married or has children does not appear to affect their ambition to be a leader. Despite suggestions from prior research by Ledwith and Manfredi (2000) and Sallee, Ward, and Wolf-Wendel (2016) that female leaders in academia may struggle with the dual demands of leadership and motherhood, the current findings imply that marital status and parental responsibilities might not be as influential on leadership

aspirations as previously considered. On the other hand, the study did find a significant relationship between possessing regalias for leadership (such as awards or titles) and having children ($\chi2(9)=28.670$, $p<0.001$), indicating that these two factors are related in some meaningful way. In the literature review of this study, there is no research that either supports or contradicts the specific finding about the significant relationship between possessing leadership regalias and having children.

Additionally, a significant association was found between the presence of a role model for leadership and marital status ($\chi^2(9) = 25.780$, $p = 0.002$). This indicates a noteworthy relationship between these factors. The literature doesn't directly address the relationship between having a role model for leadership and marital status. However, it does emphasize the importance of support systems in pursuing academic leadership careers. For instance, females in academic staff roles often cite their parents as role models, particularly if the parents had academic or professional accomplishments (Baker, 2010). This suggests that family background and the presence of role models in one's life, which could be influenced by marital status, play a significant role in shaping leadership aspirations.

A significant association was also evident between the presence of a role model for leadership and the presence of kids ($\chi^2(9) = 31.952$, $p < 0.001$). Thornhill (2011) notes that having a successful career along with a family makes the lives of women academic leaders meaningful, while Airini et al. (2011) indicate that the presence of children may either hinder or motivate women to pursue leadership careers. This aligns with the finding that having children is significantly associated with having a role model for leadership, as the experience of parenting might influence the perception.

Lastly, there was a significant association between the gender of the role model and the presence of kids ($\chi^2(6) = 12.835$, $p = 0.046$). This finding highlights the potential influence of role model gender on family dynamics. These results provide insights into the complex interplay between personal circumstances, such as marital status and family structure, and attitudes toward leadership. This finding aligns with the research by Gross & Trask (1976) which emphasizes the impact of mother backgrounds and fathers' support on females' aspirations in academic leadership. The gender of the role model could influence perceptions and attitudes towards balancing professional and family responsibilities. Another theme that emerged from data collection is the family sacrifices on the leadership pathaway, and it is discussed next.

4.4.1.6 Leadership-Family Sacrifices.

Interview participants argue that as a Kazakhstani woman, you either must choose to become a successful leader or build a happy family. Females suggest that being a leader or achieving success in one's profession, particularly in Kazakhstan, can come with the sacrifice of family life and time:

> I am aware that there will be some barriers and I will unfortunately have to make sacrifices, mostly family, perhaps. That is what you do to achieve your goals as a university leader in Kazakhstan (P01).

Interviewees also mentioned that leaders at their universities work tirelessly, often at the cost of their personal lives. They express admiration for their leaders' dedication, while others express concern that this level of commitment can be difficult to balance with family responsibilities. Participants also acknowledge that being a professional often requires making sacrifices, but some believe that this doesn't have to mean choosing between one's family or career: "if you want to be a leader, it is not necessary to sacrifice yourself, or a family, or a career, like it something in an opposition. Leadership and family is not a dichotomy" (P17). While the literature review does not explicitly mention the necessity of choosing between leadership and family life, it underscores the challenges and societal perceptions that female leaders, especially in academia, face in balancing professional aspirations with family responsibilities. Females may feel a sense of guilt for not spending enough time on work or with their children, a sentiment not commonly shared by male leaders, who are more often credited for being caring fathers (Sallee Ward & Wolf-Wendel, 2016). This gender disparity in the perception and recognition of parenting roles indicates a societal bias that may contribute to the sentiment expressed by the interviewees that women have to choose between leadership success and a fulfilling family life.

Many of interview participants make a personal choice to prioritize family over their careers, citing reasons such as caring for sick family members, being able to take care of children, and being on maternity leave:

> There is a young female professor at our university with outstanding leadership skills. She also has family and kids. Several times I asked why you don't you apply to a position to become a vice-rector. She replied that she doesn't want to, because her family and children are more important to her. Her reasoning was that: "I want to be calm, healthy, do my own research, so I don't need to be among the leaders all the time (P04).

In conclusion, findings at the meso-system factors influencing Kazakhstani women in higher education leadership roles highlights ainterplay between societal norms, family responsibilities, and personal aspirations. Women, despite having leadership capabilities, often choose family over career advancement, adhering to societal expectations that prioritize traditional gender roles. This choice is multifaceted, with some women seeking ways to maintain their professional engagement through part-time work or research while still prioritizing family. These findings underscore the necessity for supportive structures and policies that enable women to balance professional and personal responsibilities effectively. Implementing flexible work arrangements, improved childcare support, and societal shifts to challenge traditional gender roles are crucial steps toward fostering a more inclusive and equitable professional landscape in Kazakhstan, allowing more women to pursue and thrive in leadership positions.

4.6 Research question 5: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at micro-system?"

This research question focuses on the determining factors at the micro-level that influence women's decisions to either pursue or abstain from leadership roles in higher education through an in-depth analysis combining both qualitative interviews and quantitative survey data. A significant relationship between the desire for leadership and the age of doctoral students was found, particularly the ambitions of those within the 31-40 age bracket. This research question not only sheds light on the essential skills and attributes deemed valuable for leadership, such as effective communication and strategic visioning, but also explored how societal and personal factors, including marital status and the presence of children, impact these leadership trajectories.

4.6.1 Motivation for Leadership

In the survey developed by the author for this dissertation to explore females' aspiration for leadership roles within a university context, respondents were asked, "Do you want to become a leader in a university (dean, vice-dean, rector, vice-rector, president, vice-president of a university)?" The responses varied significantly, with 41 respondents expressing a desire to become a leader, 44 indicating they did not wish to pursue such roles, 66 respondents were uncertain, 15 respondents already held leadership positions, and 2 respondents could not or

did not want to answer the question. The Figure 12 below illustrates the responses of survey participants.

Figure 12

Survey Participants' Responses to a Question "Do you want to become a leader in a university?", by author
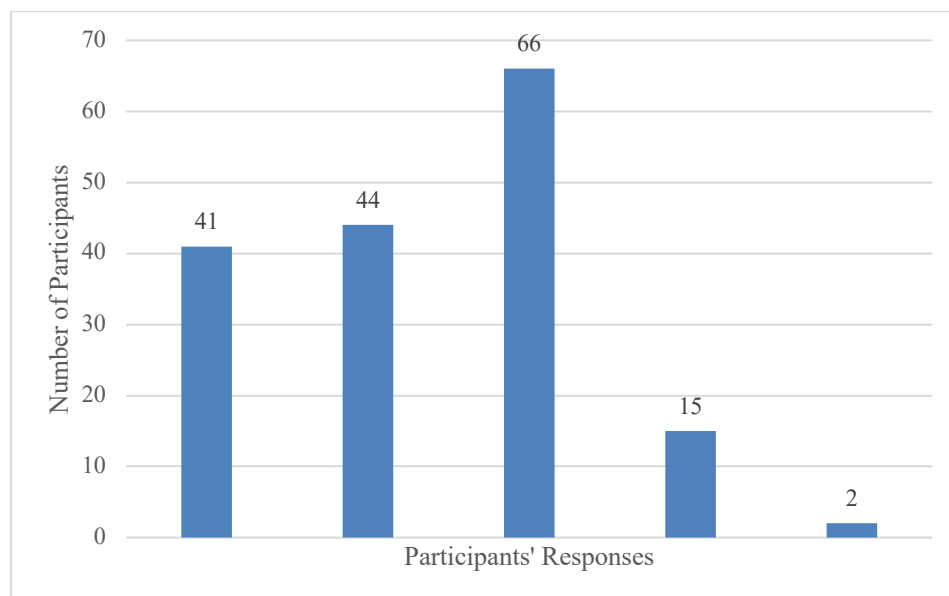
Note. The Questionnaire Part 2: 1) Do you want to become a top-manager in a university (dean, vice-dean, rector, vice- rector, president, vice-president of a university)? Answers: Yes, No, Maybe, I am already a top-manager, I can not/do not want to answer .

Further SPSS analysis of quantitative data revealed a significant association between the aspiration to leadership positions and the age of the doctoral students, particularly within the 31-40 age bracket. The chi-square statistic indicated significance ($\chi^2(16) = 37.917$, $p = 0.002$), implying a higher propensity for leadership roles among doctoral students in this age range compared to other age groups. Literature review did not include specific research that directly supports or rejects the finding about the significant association between the aspiration to leadership positions and the age of doctoral students, particularly within the 31-40 age. This finding was also supported during the interviews, where majority of participants who were at the early stage of their career in a university expressed willingness to become a university leader. They felt like becoming a university leader to bring a change:

> ...now I understand what I want, and I am thinking of becoming a dean, I plan to, because in Kazakhstani education you can make a big contribution by becoming a dean, for example. And there are only certain key positions that interest me, this is the dean or the vice-rector and later the rector of the university. Because the rest of the positions,

in our system, unfortunately, not decisive, not the key positions which make some kind of contribution (P16).

Therefore , the next theme explores how females self-assess themselves as having leadership qualities and qualifications.

4.6.2 Leadership Qualities and Self-Assessment

The survey inquired about participants' perceptions of their own qualifications for leadership roles in universities. Among the respondents, 87 indicated possessing all necessary qualifications, 15 lacked them, 63 were uncertain, and 3 either could not or chose not to respond.

Further quantitative analysis revealed revealed a strong positive correlation between effective communication skills and the ability to use time rationally (r (158) = 0.520, $p <$ 0.001). This means females who are good at communicating also tend to be good at using their time wisely. Furthermore, a positive correlation was observed between effective communication skills and the ability to teach others (r (161) = 0.575, $p <$ 0.001), meaning that good communicators are also likely to be good at teaching others. Additionally, a desire to learn and improve correlated with a desire to make the world a better place (r (158) = 0.553, $p <$ 0.001), implying that females who want to learn and get better often also want to make the world a better place. A strong positive correlation was also found between the ability to motivate others and to form trust and sincere relationships (r (161) = 0.599, $p <$ 0.001), meaning that those who can motivate others are usually good at building trust and sincere relationships. Also correlations were found between the desire to improve the world and the excitement to see ideas become reality (r (159) = 0.570, $p <$ 0.001), which means that females who want to improve the world are excited about turning their ideas into reality. Although literature review can not directly explain these findings, they are in line with research that states the importance of effective communication skills, proactivity, and the desire for personal and professional development among leaders (Dunn, 2014; Hardy, 2019). These traits and skills are often emphasized as crucial for success in leadership roles and could inherently be linked to other qualities like time management, motivation, and aspirations to make positive changes.

Conducting Kruskal-Wallis test showed significant difference in the ability to develop a strategy and vision of the organization across different positions held by women in universities ($H(6) = 15.747$, $p = 0.015$). Post hoc analysis showed that there was a statistically significant difference in the ranks of the "ability to develop a strategy and vision of the

organization" between doctoral students and instructors/lecturers (U = 1441.50, z = -2.243, p = 0.025), with lecturers (M rank = 70.67) having higher ranks on average compared to doctoral students (M rank = 56.98). Another statistically significant difference was also observed between doctoral students and leadership positions (dean, vice-dean, rector, president, vice-president) on the "ability to develop a strategy and vision of the organization" (U = 183.50, z = -2.390, p = 0.017). Individuals in higher positions (M rank = 58.61) had higher ranks on average than doctoral students (M rank = 39.98). Both results suggest that people in higher academic or organizational positions (lecturers and leaders like deans) are seen as better at planning and setting directions for their organizations than doctoral students. These findings from the statistical analysis are supported by literature that suggests successful leadership in higher education is linked to self-awareness and strategic vision, as researchers (Airini et al., 2011; Cubillo, 2003; Dunn et al, 2014; Mayanja, 2018; Mayer et al., 2015, 2017; Mullen, 2009; Reding, 2017; Shaw, 2020; Thornhill, 2011; Vicary & Jones, 2017) have found that understanding one's personal traits and skills, along with setting clear goals and strategies, are important factors that motivate and help individuals to be successful in leadership roles.

Interestingly, significant difference was found in the ability to develop a strategy and vision of the organization across and across marital status (H(3) = 10.460, p = 0.015). Examining the ability to develop a strategy and vision of the organization based on marital status, individuals who were single (N = 54) had a higher mean rank (M = 42.28) than those in relationships (N = 23, M = 31.30). The post-hoc analysis in the form of Mann-Whitney U test indicated that this difference was statistically significant (U = 444.00, z = -2.149, p = 0.032) suggesting that single individuals were rated higher in their ability to develop a strategy and vision of the organization than those in relationships. Similarly, there was a significant difference in the ability to develop a strategy and vision of the organization when comparing single individuals (N = 54, M = 76.92) to married individuals (N = 77, M = 58.34). The Mann-Whitney U test revealed this difference to be statistically significant (U = 1489.50, z = -2.929, p = 0.003), indicating that single individuals had a higher rank in this ability than their married counterparts. The literature does not directly address marital status in relation to the ability to develop a strategy and vision of the organization, but it does discuss related aspects of gender roles and societal expectations that could indirectly explain these findings. Kuzhabekova & Almukhambetova (2019) explore the cognitive dissonance experienced by female academic leaders in Kazakhstan as they balance traditional roles and professional aspirations, potentially implying that marital status and societal expectations

could influence women's strategic leadership capabilities. Greig et al. (2019) and Lee (2023) discuss the societal pressures that might deter married women from advancing in higher education and leadership due to entrenched gender biases. Furthermore, Sallee et al. (2016) and Airini et al. (2011) highlight the significance of work-life balance and the differential recognition of parenting roles between genders, suggesting that family responsibilities may impact women's career progression and possibly their ability to develop organizational strategies. These studies suggest that while marital status itself is not directly linked to leadership abilities in the literature, the associated social roles and expectations could have an indirect impact.

The survey data also indicated a positive relationship between communication skills and teaching efficacy ($\rho = 0.575$, $p < 0.01$), which in turn was linked to a love for learning for work improvement ($\rho = 0.574$, $p < 0.01$) and the ability to motivate others ($\rho = 0.599$, $p < 0.01$). Simply put, females who are good at communicating also tend to be good at teaching. Furthermore, those who are good at teaching usually like to learn new things to get better at their job, and they are also good at encouraging others to do their best. While literature do not directly address these specific correlations, authors (Amondi 2011; Eggins 2016; Gill & Jones 2013; Mayer et al. 2017; Mullen 2009; Smiley, Zakrajsek & Fletcher 2021) discuss related concepts and themes: key transferable skills essential for female leaders in higher education. These include job determination, passion, decisiveness, self-confidence, honesty, integrity, sensitivity, empathy, emotional intelligence, creativity, and teamwork. These skills, particularly emotional intelligence and creativity, can be linked to the ability to motivate others and foster a love for learning, aligning with the survey findings about the positive relationships between these variables.

During interviews, some doctoral students were more interested in developing their research and teaching skills, rather than getting involved in the bureaucratic system: "At this stage, I'm not interested in leadership positions. Well, for several reasons. Since I understand, let's say, the workload, a bureaucratic system, and I personally more interested in research and teaching activities" (P01). Although many early career professionals expressed willingness to become a university leader, only several of them had a clear plan and vision of how to do so:

> I know that in such and such a year I have to finish [doctoral studies]. Then I must do so-and-so, then I know I want to run for this position [the name is hidden]. I want to create a [the name is hidden] a league. Then I will lead a project, the study of [the name is hidden] (P02).

The literature review did not directly explain the interview findings about some doctoral students preferring to develop research and teaching skills over engaging in the bureaucratic system, and the observation that many early career professionals expressed a willingness to become a university leader but only a few had a clear plan and vision for it. However, based on the general themes discussed in the literature review, it's reasonable to infer that these findings could be related to the broader topics of career aspirations, professional development, and the challenges of navigating academic institutions. Therefore, the next theme is what it takes for females to become leaders in higher education.

4.6.3 What it Takes to be a Leader.

All the interview participants perceive that to become successful at the leadership level in a university, it is important to have relevant leadership experience. Majority of them do not have leadership experience and perceive that they have not yet developed a leadership identity and skills, therefore currently not willing to become a leader at a university:

> I still have very little experience in leadership activities, and I want to start at my faculty, where I know most of my colleagues and I am familiar with their work. It will be easier for me in terms of not only the management, but also in terms of properly organising the work (P13).

Interview participants recognise management and leadership skills as interrelated and complementary abilities for being successful at senior-level positions in a university, especially regarding balancing work and life:

> I think that you can always find time for work, for children. The main thing is to plan [the time] correctly. I don't believe to people who say "oh, I don't have enough time, I decided to quit my job, devote more time for my family", or "I got tired of it all, I decided to work, because building a family is hard for me". I believe that you can find the right balance, you just need to manage the time (P05).

Proactivity was mentioned as a way of having a successful career and advancing towards leadership. Particularly proactivity of winning scholarships, looking for professional development opportunities, self-reflecting on personal skills and its applicability, as well as to take quick decisions:

> No one would offer me a place at the table until I myself sit down on this chair, and demand a place and attention for myself. I do not want just to be an ordinary teacher, I want to do something else (P07).

The interview findings regarding the importance of proactivity in advancing toward leadership are echoed and supported by several authors cited in the literature review chapter. Hardy (2019), Harvey & Jones (2022), and Jensen (2019) discuss various expressions of proactivity such as making quick decisions, seeking professional development opportunities, and visualizing personal success as contributing to career advancement. Amondi (2011) and Scott (2018) highlight professional skills like decision-making and the ability to plan, which are enhanced by proactivity and professional development.

Majority of interview participants mentioned that obtaining a state scholarship was a tool they used for personal and professional development. Interestingly, a doctoral student with a family shared the following attitude towards prioritising financial resources between professional and family needs:

> I entered the master's program on a scholarship basis. If with my own money, I would have thought: "why I need it?" Because I would be using the resources of the family, that are for my children. I doubt that my husband would have wanted to pay for my studies, I doubt it very much and I'm almost sure that no, he wouldn't pay. I also received a scholarship to do a doctorate degree, and perhaps this is the only reason I am studying (P02).

These finding could be explained through research done by Pierce (2017), Amondi (2011), Eggins (2016), Scott (2018), Smiley, Zakrajsek and Fletcher (2021), who discusses the interplay between socialization, upbringing, support systems, and the need to balance work-life commitments. They emphasizes the importance of leadership self-awareness, career goals, financial barriers, and transferable skills. This context suggests that scholarships can play a significant role in overcoming financial barriers and supporting the pursuit of leadership aspirations.

All the interview respondents expressed a high sense of self-awareness, in relationship to their personal and professional lives. They were also conscious about elevated level of responsibility that follows at the leadership careers. Majority of participants shared that although they perceive themselves as having good leadership skills, they are not willing to become one, because of the high level of responsibility that follows at the senior-level positions: "Ten years ago I would be sure, but now I think ahead how much I can do, and I need to take the responsibility in doses" (P08). This finding could be explained by research that highlight the importance of self-awareness for successful leadership, emphasizing that female leaders in higher education have shared that being aware of their authentic self, personal traits and skills, self-actualization, work-life balance, values, priorities, goals, and

strategies has motivated and helped them to be successful in leadership roles (Airini et al., 2011; Cubillo, 2003; Dunn, Gerlach, & Hyle, 2014; Mayanja, 2018; Mayer, Surtee & Barnard, 2015; Mayer, Viviers, Oosthuizen & Surtee, 2017; Mullen, 2009; Reding, 2017; Shaw, 2020; Thornhill, 2011; Vicary & Jones, 2017).

Whereas some participants expressed the lack of self-confidence of becoming a leader, the interviewee, who is at a leadership position in a university shared that confidence in her professional skills helped her to win all the competitions on her leadership journey:

> And of course, I wouldn't be able to answer questions if I behaved uncertain, despite the experience, despite the education. It would also probably be difficult to be convincing and win at the second stage. Therefore, it's inconvenient of course to say… that this is my knowledge, my experience (P17).

These insights indicate that self-confidence, coupled with a range of other personal and professional skills, plays a vital role in the journey towards leadership, particularly for women in the academic sector. Self-confidence is a key factor for the success of the interview participant in her leadership journey, as identified by researchers like Amondi (2011), Eggins (2016), Gill & Jones (2013), Mayer et al. (2017), Mullen (2009), Smiley, Zakrajsek & Fletcher (2021).

Interviewees explained that traditional gender roles are mirrored to professional roles, and hence might influence females' leadership confidence:

> This is exactly the situation with the female professor, when there were a lot of male professors, and they just laughed at her [for the desire to become a leader in a university]. I think it affected her self-esteem, because after that she never took leadership opportunities (P14).

Maheshwari (2021), Baker (2010), Howe-Walsh & Turnbull (2016), and Sallee Ward & Wolf-Wendel (2016) discuss how females, particularly those with family responsibilities, may be reluctant to pursue leadership careers due to societal norms. These norms emphasize feminine qualities and the role of women as family nurturers. Female academic staff, especially mothers, often feel guilty about pursuing their career aspirations because they struggle to balance them with family life. This situation can lead to a lack of self-confidence in moving towards leadership positions, as the leadership identity within a university setting may not align with their perception of themselves as women, influenced by the societal norms they are exposed to.

Several interviewees said that both men and women lack awareness regarding the femininity and masculinity issues, because it is a novel theme in the culture, and it has effect on university leadership:

> Women themselves do not understand their gender roles, they do not understand that there are great opportunities in front of them, that there are fictitious barriers in front of them. If we fight the barriers in our heads, this will help a lot. And not only women. Such barriers are much more in the mind of men. This will help us form a more stable basis for future leadership in universities. To make women feel more confident (P09).

or as participant P12 explained:

> It seems to me that this is the internal misogyny between women... when you talk about feminism, about leadership, they are like "no, I'm not a feminist!" as if it is some kind of insult… even I sometimes internally notice this "I am a feminist, but!" This is internal misogyny, this [feminism] is a new level. I saw this probably only in Kazakhstan (P12).

Although no specific studies in the literature review chapter discusses the awareness of people about gender and leadership issues, researchers (Burkinshaw & White, 2017; Green, Chavez, Lopez, & Gonzalez, 2011; Lam, 2020; Larasatie, Barnett, & Hansen, 2020) highlight that universally appreciated leadership attributes are not specific to gender. Employees value leaders who exhibit integrity, empathy, and a collaborative attitude. However, they also note that women leaders often face disproportionate criticism for exhibiting authoritative traits. Women in these environments often face the challenge of adapting to an organization primarily designed for men while maintaining their feminine identity. These insights highlight the impact of traditional gender roles and societal norms on women's confidence and willingness to pursue leadership roles, reflecting the influence of these roles on professional aspirations and identity, explaining interview findings that traditional gender roles are mirrored in professional roles and might influence females' leadership confidence. Therefore, the next emerged theme from data analysis is what one gets from being in a leadership position in higher education.

4.6.4 What You Get as a Leader.

In investigating factors influencing the aspiration to attain leadership roles in universities, the survey incorporated a Likert-type scale question, "How do the following factors influence your desire to become a leader in a university?" The findings indicated that several factors, including salary, career opportunities, previous experience, professional development, the

potential to effect change in the educational system, and being a role model, significantly motivate individuals to pursue leadership positions in academic settings. All correlations made are based on N = 168 participants, and $p < 0.01$, and will be discussed in separate sub-chapters below.

4.6.4.1 Contribution to Society.

When asked about motivating factors, majority mentioned the importance of contribution to a society:

> To contribute to a society, it's just that over time, really brings a pleasure to a person, not only the material achievements, but a contribution to social life too. When you can say, "Yes, I took part in it in it, with my help something was managed to move forward. This kind of knowledge about my life brings me pleasure (P11).

Interviewee P17 at a leadership position in a university highlighted that her pride and personal mission motivates her internally:

> My current environment, my current conditions are inferior to those that were before. But pride… I just felt sorry for such a university...there was no transparency. And, I thought that in order to change the university, it is not enough to be a vice-rector. I often ask myself what moves me forwards, what still charges me, despite the difficulties, despite the fatigue. It's a mission. And you believe in this mission. And you want to do it. If I have strength, I have energy, despite some meanness from people, I still hold on, I believe in it (P17).

The belief in mission was also noticed in several other participants responses, who were not at leadership positions:

> A kind of small reform to do, to hammer in the heads of the students that this is not only about it [the classroom studies]. Life does not end with a university… I personally felt the responsibility for it. And the students were grateful, probably, that's the only thing that made me not to give up, because it was not easy when you are alone through the system. Because most of the teachers, they already gave up (P12).

The literature notes that females often hold altruistic values in leadership positions, aiming to accomplish something meaningful in their lives by making positive changes for students and the educational system. This aligns with the idea that women are more inclined than men to apply their academic knowledge to solve real-world problems for the common good (Matthews 2017; Shaw 2020; Fine 2009; Hardy 2019; Matthews 2017; Aiston 2014). These insights help explain why some doctoral students and early career professionals prioritize

research and teaching skills and are motivated to pursue leadership roles to effect positive changes, rather than getting involved in bureaucratic systems. The alignment of personal and professional values with the university's mission is a key factor in their motivation and willingness to aspire to leadership roles.

4.6.4.2 Status.

Majority of respondents shared that social status changes over time, and it is more important for them to have a good professional reputation, rather than only a leadership status. However, a small number of interview respondents indicated that leadership status is crucial for a Kazakhstani woman:

> In Kazakhstan, it [leadership status] matters. Earlier, I didn't care about it at all. Why does this bother me now because we have three girls in the family, there is no son in the family, and I encountered a biased attitude towards me: "you are a woman, you are a daughter, you hardly decide anything" (P16).

In the literature review, authors collectively provide a framework to understand the complex interplay of societal expectations, personal aspirations, and how these influence perceptions of leadership status among women. For example, Fényes (2012) and Karami et al. (2011) highlight how social background and gender roles impact career aspirations and leadership roles. They note that some women choose to reject traditional feminine roles to pursue leadership positions, indicating that personal choices and societal norms play a role in how leadership status is valued. Also, Roach and Sauermann (2010), and Golde and Dore (2001) suggest that motivations for career paths vary, with some individuals valuing intellectual freedom and growth over positions of status. This aligns with the finding that professional reputation may be more important to some individuals than leadership status itself.

A quantitative analysis of survey showed a significant difference in leadership aspirations based on status-related motivation among university staff, conducting Kruskal-Wallis H test provided results as $H(4) = 15.214$, $p = 0.004$. Post hoc analyses with the Mann-Whitney U test indicated a significant distinction between the group that indicated status "Somehow discourages" their desire to become a leader and those indicating "I can't/don't want to answer" ($U = 98.000$, $p = 0.006$). Furthermore, a notable difference was observed between respondents who reported that status "Significantly inspires" their leadership aspirations and those who "I can't/don't want to answer" ($U = 1138.000$, $p = 0.001$). Similarly, there was a clear difference between people who felt that their status greatly motivated them to be a leader and those who couldn't or didn't want to answer. Additionally,

status-related aspirations were also linked to career opportunities ($\rho = 0.721$, $p < 0.01$). Simply put, these findings show that females' views on their status can influence whether they want to take on leadership roles. Also, those who had strong feelings about status were more likely to see good chances for their careers. In the literature review chapter, Nabi (1999) suggests that individuals who feel successful or perceive a high status are more likely to be motivated toward leadership positions. This research provide evidence that supports the idea that females' perceptions of status are important in determining their leadership ambitions and perceived career opportunities.

4.6.4.3 Salary.

Half of the interview participant mentioned salary as a motivating factor for them to strive to leadership positions at a university, because the wage gap between an ordinary university professor and the one at the top management level is significant. However, bringing the changes to the educational system had more influence on their decisions, and increased salary level was considered as an important bonus: "Salary, well, yes, now it plays a role, but still it is not as important as I am interested in the transformation in our university, aimed at improving the quality of all processes" (P13).

Comparing this findings to quantitative results indicated a significant association between the desire to become a leader in a university and the perceived influence of salary on this desire, as according to Kruskal Wallis test $H(4) = 14.483$, $p = 0.006$. Post hoc analyses using the Mann-Whitney U test revealed significant differences between several groups: there was a significant difference between respondents who reported being significantly discouraged by salary considerations and those who either could not or did not want to answer ($U = 237.000$, $p = 0.025$). Similarly, a significant difference was noted between respondents who were somewhat discouraged and those who were somewhat inspired by salary ($U = 57.000$, $p = 0.028$), as well as between respondents who were somewhat discouraged and those who did not disclose their stance on the influence of salary ($U = 386.000$, $p = 0.003$). According to Aiston (2014) women tend to believe that they should apply their academic knowledge to solve real-life problems for the common good. This perspective supports the notion that while salary is a motivating factor, the desire to contribute meaningfully to society and the educational system plays a more significant role in their leadership aspirations.

In an assessment of leadership aspirations within Bronfenbrenner's Ecological Development Theory micro-system, significant positive correlations were observed among

various motivating factors. Specifically, salary-driven aspirations to lead at a university correlated with both status ($\rho = 0.597$, $p < 0.01$) and career opportunities ($\rho = 0.621$, $p < 0.01$). In simple terms, females who are motivated to be leaders at universities for the salary also care a lot about their status and see good career opportunities in these roles. In the literature review, researchers provide a perspective that aligns with the interview findings, suggesting that while leadership status may be important for some, factors like professional reputation, personal values, and work-life balance are more influential for many individuals in academic settings, especially women. For example, Larasatie Barnett and Hansen (2020), Rawson (2021), and Rabii-Rakin (2019) reveal that male university leaders often aspire to leadership roles due to the higher salary associated with these positions. In contrast, female university leaders often attain their positions by volunteering or chance, and their aspirations are aligned more with the university's vision and personal values than with salary. This suggests that women in academia may place a higher value on professional reputation and alignment with institutional goals rather than purely on leadership status. Furthermore, Miller & Stone (2011), Baker (2010), and Hayter and Parker (2019) discuss the challenges and concerns faced by students and academics, such as the transient nature of academia and the need to balance work and family life. These factors can influence career aspirations, supporting the idea that factors other than leadership status, such as work-life balance and the desire for stability, are significant for many in academia. Another theme that emerged at micro-system is the understanding of leadership itself, and it is discussed next.

4.6.5 Personal Leadership.

For majority of interview participants leadership identity meant a personal leadership, rather than a career title. Disentangling female identity from leadership identity was noticed in several participants responses: "Not a leader at work, but for me the priority will always be just to be a woman. After all, you can be a leader in other areas, for example, to organize some kind of women's club and be a leader among women there" (P08).

Gerdes (2011) and Mayer Surtee & Barnard (2015) illustrate that women in academia may prioritize family over career aspirations, choosing not to identify primarily as career-oriented individuals. This aligns with the finding that personal leadership is more important than mere leadership status, suggesting that the perception and significance of leadership roles among women in academia are influenced by a range of personal, cultural, and societal factors, validating the interview findings.

Comparing qualitative results with quantitative ones indicated a significant association between self-perceived ability to envision, strategize, and shape organizational direction and the desire to become a university leader, according to Kruskal-Wallis H test $H(4) = 10.606$, $p = 0.031$. Subsequent post hoc analysis using Mann-Whitney U tests revealed significant differences between respondents who fully believe in their strategic visioning ability (Mann-Whitney $U = 123.000$, $p = 0.016$; Mann-Whitney $U = 572.000$, $p = 0.042$; Mann-Whitney $U = 1170.500$, $p < 0.001$) and those who do not wish to disclose or are unsure of their leadership aspirations. Research by various authors including Airini et al. (2011), Cubillo (2003), and Mayer et al. (2015, 2017) emphasizes that being aware of one's authentic self, personal traits and skills, and having clear goals and strategies are key motivators for success in leadership roles in higher education. This aligns with the finding that those who believe in their strategic visioning ability are more inclined towards leadership aspirations. Also, Roach and Sauermann (2010) and Golde and Dore (2001) note the differences in motivations for career paths, with intellectual freedom and growth being more aligned with academic careers. This suggests that those with strong strategic abilities and vision may naturally incline towards academic leadership roles, rather than being primarily motivated by salary or resource access.

Aditionally, professional development motives were positively associated with prior leadership experience ($\rho = 0.563$, $p < 0.01$), the desire to bring positive educational changes ($\rho = 0.518$, $p < 0.01$), and the ambition to serve as a role model ($\rho = 0.506$, $p < 0.01$). This finding could be explained by Airini et al. (2011), Cubillo (2003), and Mayer et al. (2015, 2017) shows that being aware of one's authentic self and having clear goals and strategies are crucial for success in leadership roles. This aligns with the finding that professional development motives, including self-awareness and strategic thinking, are positively associated with the desire to become a university leader and serve as a role model.

In conclusion, this section has systematically explored the micro-system factors influencing females to either pursue or abstain from pursuing leadership careers in higher education. The study revealed varied aspirations among university staff, with a significant proportion expressing the desire for leadership roles. A notable finding is the association between the aspiration for leadership positions and the age of doctoral students, particularly those within the 31-40 age bracket. The research also highlighted the importance of certain qualities, such as effective communication skills and the ability to use time rationally, in shaping leadership aspirations. These qualities are positively correlated with the desire to lead and the ability to bring about significant changes in the educational sector. The findings

underscore the complex interplay of personal attributes, professional skills, and demographic factors in shaping leadership trajectories in academia.

Chapter V: Summary of Factors that Affect Females' Decision to Pursue Leadership Careers in Higher Education in Kazakhstan

Research question 1: "How do perceptions of leadership, femininity, and masculinity intersect and influence the understanding and enactment of leadership roles within Kazakhstan's higher education sector?" explored that leadership in this context is perceived as a performative and adaptive practice rather than a set of inherent traits tied to biological sex. The interplay of traditionally feminine and masculine qualities among leaders in higher education indicated an understanding of leadership that goes beyond being just men or women. Participants articulate leadership as a lifestyle choice aimed at driving positive changes for the common good, aligning with the transformational leadership style, which emphasizes a leader's role in inspiring and motivating their team toward a shared vision. Participants also shared the view that effective leadership in Kazakhstan's higher education is not confined by biological sex but is a performative act shaped by personal, social, and geopolitical factors. Both men and women are seen as possessing the potential for leadership, further blurring the traditionally accepted boundaries of gender roles in the professional sphere. The legacy of authoritative leadership styles, rooted in the Soviet era, continues to influence current perceptions, with male leaders often expected to be domineering. Female leaders are expected to balance multiple responsibilities as professionals, homemakers, and mothers, resulting in a situation where women may distance themselves from identifying as leaders. The findings also highlight the importance of the socio-political climate in shaping leadership perceptions, with a trend favoring older, wiser women in leadership roles suggesting that leadership qualities may also transcend ageist stereotypes. The findings from research question 1 suggests that both men and women are capable of demonstrating leadership traits, although there is ongoing debate about this. Leadership skills are seen as acquired and developed over time, emphasizing the role of psychotype and personality in this process. Findings that are new to this Ph.D. dissertation and have not been explained in the previous literature studies are:

- The perception of Kazakhstani females in higher education that leadership is a lifestyle aimed to bring positive changes for the common good.
- The political and social climate of Kazakhstan influencing perceptions of leadership.
- The emphasis on the personal choice of women in leadership in relation to family roles.

- Instances where leadership roles are seen as more administrative and bureaucratic, rather than innovative and transformational.

Research question 2: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at macro-system? reveals that while females in Kazakhstan largely resonate with feminist values, there is a notable tendency to distance themselves from the Western label of feminism. This suggests a preference for indigenous interpretations of gender equality, reflecting a cultural dynamic where global feminist ideologies are tempered by local traditions and values. This blend of global and local influences creates a unique understanding of female leadership within the country, signifying a wind of change by increased gender awareness among the younger generation. Yet, gender stereotypes and discrimination persist, presenting barriers to women's leadership advancement. The societal expectation for women to prioritize family responsibilities over professional aspirations continues to influence their career choices, leading many to prefer middle management over leadership positions. This is compounded by discrimination against childless and unmarried women and the stereotype that successful women must have male sponsors, highlighting deeply ingrained cultural norms that question women's leadership aptitude.

The resurgence of traditional national cultural values further complicates the gender roles women are expected to follow. The study findings indicate that while there is an acceptance of and resistance to these traditional roles, the overall societal expectation remains for women to prioritize family over work. Interestingly, the quantitative survey results reveal an interplay of acceptance and resistance to traditional gender roles among the participants. Despite agreeing with traditional gender roles, there is a rejection of the idea that feminine qualities are unsuitable for leadership. The correlational analysis within the macro-system underscores significant associations between gendered beliefs about roles and leadership qualities, indicating strong societal influences on perceptions of leadership and gender. In essence, the findings describe a society where cultural norms and gender roles, deeply rooted in the macro-system, significantly shape women's experiences and decisions regarding leadership in both their professional and personal lives. The cultural context of Kazakhstan is evolving, influenced by both internal and external forces that are reshaping perceptions of femininity, masculinity, and leadership. These changes at the macro-system level could eventually permeate down to the individual level, altering how women view leadership and their place within it. Findings at the macro-level of Bronfenbrenner's Ecological

Development Theory that are new to this Ph.D. dissertation and have not been explained in the previous literature studies are:

- The integration of Western feminist concepts with Kazakhstan's unique cultural and societal context, creating a distinct perception of female leadership.
- A nuanced understanding of how Kazakhstani women, especially the younger generation and those studying abroad, juxtapose local cultural narratives with Western feminist ideologies.

Research question 3: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at exo-system?" portrays the organizational culture within Kazakhstan's higher education institutions as a pivotal factor influencing women's leadership journeys. Systemic challenges, deeply embedded in the bureaucratic structures of these institutions, perpetuate gender biases, significantly impacting women's career trajectories. This is particularly evident in attitudes towards maternity leave, where women are often seen as less committed or motivated due to familial responsibilities. Such perceptions, ingrained in the organizational psyche, align with the Gendered Organizations Theory, which posits that organizational structures and practices are inherently gendered, reflecting broader societal constraints. The study also brings to the contrasting perceptions of maternity leave and professional commitment among women in leadership. While some are viewed through stereotypes, others challenge these narratives, highlighting the diverse experiences and resilience of women in leadership positions. Furthermore, the research highlights the need for a shift in the leadership style within these institutions. The authoritarian and rigid approach, a legacy of the past, is increasingly being questioned, with a call for more flexible, inclusive, and adaptable leadership practices. This aligns with Performative Leadership Theory, which advocates for leadership styles that are responsive to changing contexts and diverse needs.

Interviews also shed light on the gender dynamics among women in the workplace, revealing a hierarchical structure where older women often enforce traditional roles on their younger counterparts. This not only perpetuates gender stereotypes but also illustrates the interplay of power dynamics within female communities in the academic sphere. The impact of personal connections and networking on career advancement emerged as a significant theme. The proactive engagement and strategic networking with decision-makers are crucial for career progression, underscoring the relevance of the Performative Leadership Theory in this context. Moreover, the exo-system's influence is evident in how institutional policies, societal norms, and networking opportunities shape career paths. Findings at the exo-level of

Bronfenbrenner's Ecological Development Theory that are new to this Ph.D. dissertation and have not been explained in the previous literature studies are:

- The contrasting stereotypes and expectations of women in the workplace, including balancing "feminine" roles with "masculine" traits necessary for leadership success.

- The finding that perceptions of the impact of informal networking on career advancement vary significantly between individuals employed full-time and part-time.

Research question 4: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at meso-system?" uncovers the interconnections between various immediate environments such as family, community, and workplace, which significantly influences women's leadership journeys. A key finding is the persistent gender imbalance in leadership positions within universities in Kazakhstan, which is primarily attributed to societal expectations that place additional responsibilities such as childcare and household duties predominantly on women. Such expectations make it challenging for women to balance their professional and personal lives, often leading to a preference for roles that offer greater flexibility but may limit career advancement. The study revealed that while men also face challenges in balancing family and work responsibilities, societal norms often allow them more freedom to prioritize their careers. This discrepancy underscores the entrenched societal perception of women as primary caretakers, a role that continues to influence women's professional growth and leadership aspirations.

Participants in the study voiced the challenges they face in breaking gender stereotypes and balancing work and family life. They highlighted the importance of having a supportive partner who shares household duties. The ideal scenario, as expressed by the participants, is a partnership where both spouses are leaders and support each other in their respective domains, both at home and at work. Furthermore, the research uncovers how family roles and gender stereotypes are cultivated through upbringing, shaping women's perceptions of their roles in society and their potential for leadership. The societal constructs of male dominance and female submissiveness prevalent in many cultures are mirrored in the Kazakhstani context, influencing women's career decisions and aspirations. The findings at meso-system align with the Performative Leadership Theory, suggesting that leadership skills and identity are developed through personal experiences, societal interactions, and cultural influences. Similarly, the Gendered Organizations Theory is reflected in the way organizational cultures and societal norms create gendered expectations and barriers for women in leadership. Findings at the meso-level of Bronfenbrenner's Ecological

Development Theory that are new to this Ph.D. dissertation and have not been explained in the previous literature studies are:

- Age being a critical factor in perceived primary caretaking responsibilities within the family.
- A significant relationship between possessing regalia for leadership and having children.

Research question 5: "What are the determining factors influencing females to either pursue or abstain from pursuing leadership careers in higher education at micro-system? The study reveals a diverse array of aspirations among university staff, with a significant number expressing a desire for leadership roles. A notable finding is the association between the aspiration for leadership positions and the age of doctoral students, particularly those within the 31-40 age bracket. This suggests a higher propensity for leadership roles among individuals in this age range, indicating that age and experience are significant factors in shaping leadership aspirations.

Another aspect uncovered by the research is the importance of certain qualities, such as effective communication skills and the ability to use time rationally, in shaping leadership aspirations. These qualities are positively correlated with the desire to lead and the ability to bring about significant changes in the educational sector. This finding aligns with the Performative Leadership Theory, suggesting that leadership is not merely a title but a set of skills and qualities that can be developed and honed. Furthermore, the study highlights that personal attributes, professional skills, and demographic factors play a crucial role in shaping leadership trajectories in academia. The complex interplay of these elements within the micro-system level demonstrates the importance of individual factors in the pursuit of leadership careers. Women in the academic sector navigate through challenges and opportunities shaped by their personal experiences, skills, and societal influences. Findings at the micro-level of Bronfenbrenner's Ecological Development Theory that are new to this Ph.D. dissertation and have not been explained in the previous literature studies are:

- The significant variation in leadership aspirations among respondents based on their age, particularly within the 31-40 age bracket.
- A strong positive correlation between effective communication skills and various leadership-related abilities, such as time management and teaching others.

In summary, the research across these research questions showed a complex picture of the factors influencing female leadership in higher education in Kazakhstan. They illustrated how cultural, societal, organizational, and individual factors intertwine, creating a landscape

where women navigate various challenges and opportunities on their leadership journeys. The findings contribute to a deeper understanding of the ecological systems affecting female leadership in higher education and highlight the need for systemic changes to support and empower women in leadership roles. The full mixed-methos metainferences table, which summarize factors influencing females' aspiration to leadership in higher education from the literature review, the current Ph.D. study, and the authors comments are included in the annexes. The Table 18 introduces only factors from this mixed-method study that summarizes factors influencing Kazakhstani females in higher education to pursue or abstain from pursuing leadership position:

Table 18

Factors influencing females' decisions to pursue or abstain from pursuing leadership positions, by author.

Research Questions and Bronfenbrenner's Ecological Development Theory Sub-Systems	Sub-Chapter Name	Factors
RQ 1 (not part of the Bronfenbrenner's Ecological Development Theory)	Performative Dynamics of Leadership Redefining Leadership: Beyond Gender and Age Gender, Authority, and Performance in Kazakhstani Higher Education - Quality and Leadership in Kazakhstani Higher Education	1. Leadership as a Dynamic Interplay of Qualities 2. Leadership Qualities Unrelated to Biological Sex 3. Leadership Skills as Cultivated and Learned 4. Influence of Political and Social Climate
RQ 2 (↓ Macro-system)	Feminism and Female Leadership: Cultural Dynamics in Kazakhstan Gender Stereotypes in Kazakhstani Educational Leadership	1. Cultural Norms and Gender Roles 2. Discrimination and Stereotypes 3. Resurgence of Traditional National Cultural Values 4. Acceptance and Resistance to Traditional Gender Roles
RQ 23 (↕ Exo-system (workplace))	Organizational Culture Kazakhstan's Higher Education Structure Mentorship and Role Models	1. Organizational Culture and Structural Challenges 2. Gendered Perspectives on Professional Commitment 3. Gender Dynamics among Women in the Workplace

		4. Influences on Students' Decisions and Socialization Processes 5. Complexity of Maternity Leave and Professional Commitment 6. Sociocultural Context and Stereotypes 7. Influence of Personal Connections and Networking
RQ 4 (↕ Meso-system (family, peers))	Flexible Workplace, but Additional Responsibilities at Home. Division of Family Roles and Responsibilities. Cultivation of Family and Female Values through Upbringing. Family/Peer Influence. Leadership-Family Sacrifices.	1. Gender Imbalance in Leadership Positions 2. Societal Expectations and Additional Responsibilities 3. Flexible Workplace with a Trade-off 4. Impact of Support or Lack Thereof on Career Trajectories 5. Division of Family Roles and Responsibilities 6. Societal Perception of Women as Caretakers 7. Co-existence of Spouses as Leaders 8. Patriarchal Ideologies and Family Resistance 9. Cultivation of Family and Female Values through Upbringing
RQ 5 (↑ Micro-system (self))	Motivation for leadership Leadership Qualities and Self-Assessment What it Takes to be a Leader. What You Get as a Leader -Contribution to Society -Salary -Status Personal Leadership	1. Motivation for Leadership 2. Perception of Qualifications and Self-Assessment 3. Communication Skills and Time Management 4. Desire for Personal and Professional Development 5. Traits and Skills Crucial for Leadership Success

Chapter VI: Conclusion

5.1 Concluding Remarks

In conclusion, this thesis integrates multiple theories across Bronfenbrenner's Ecological systems, providing a holistic view of the factors influencing women's leadership in higher education of Kazakhstan. This integrative approach contributes to a more profound understanding of how individual, organizational, and societal factors collectively shape women's leadership trajectories.

The types of new knowledge generated in this study can be discussed through each system and their interrelation. Reconceptualization of leadership in a gendered context provides a nuanced understanding of how leadership is perceived and enacted within the unique socio-cultural context of Kazakhstan. Leadership emerges not merely as a position of authority but as a performative and adaptive practice, where traits traditionally labeled as masculine or feminine are blended, suggesting a transcendent approach to gender norms in leadership. At the macro-system, the thesis uncovers the profound impact of societal and cultural norms on women's leadership decisions. The tension between traditional Kazakhstani values and contemporary feminist ideals creates a unique position where women's leadership roles are both challenged and redefined. Within the exo-system, the thesis highlights how organizational structures and practices in higher education institutions in Kazakhstan are inherently gendered, perpetuating biases and creating systemic barriers to women's leadership advancement. The meso-system analysis reveals the significant role of familial and community expectations in shaping women's leadership paths. The balancing act between professional roles and societal expectations of women as primary caretakers underlines the challenges in achieving gender parity in leadership positions. At the micro-system, the study identifies the critical role of individual factors, such as personal motivations, self-perception, and professional aspirations, in shaping women's decisions to pursue leadership roles. It underscores the importance of personal empowerment and the development of leadership skills over time. The research synthesizes a shift in gender roles and leadership perceptions, suggesting an evolving cultural narrative. This evolution is characterized by a growing acceptance of diverse leadership styles and the gradual dismantling of traditional gendered expectations.

5.2 Implications for Policy and Practice in Higher Education

There are several implications for policy and practice in Kazakhstani higher education. This research underscores the necessity of enhancing leadership training and development

programs within higher education institutions. By focusing on developing crucial leadership skills such as effective communication and strategic planning; providing mentoring and coaching, these programs can play a pivotal role in nurturing future leaders, particularly at the early stages of their careers. Those programs should be aimed not only at women, but to all staff overall, along with raising the awareness of gender perpetuated biases and the ways to overcome them. In creating more inclusive and egalitarian organizational cultures within higher education institutions, there is an imperative need to challenge and transform existing structures and practices that sustain those gender biases. This transformation involves revisiting and reforming policies, particularly those related to maternity leave and work-life balance, to support and facilitate women's career progression.

The influence of societal and cultural norms on women's leadership aspirations cannot be overlooked. Educational institutions, in collaboration with government and non-governmental organizations, should support initiatives to challenge traditional gender stereotypes and advocate for gender equality in leadership roles. This can be achieved through public awareness campaigns and educational programs that aim to reshape societal perceptions and encourage a more balanced representation of genders in leadership positions. Supporting work-life balance is another critical area of focus. Implementing flexible working arrangements, providing childcare support, and recognizing the dual role many women play as professionals and primary caretakers are essential steps in creating an environment conducive to women's leadership. These measures not only benefit women but also contribute to a more diverse and productive academic environment.

For women aspiring to leadership positions, the foundation of success often lies within the supportive dynamics of their personal lives. Crucially, the presence of nurturing relationships within the family, and particularly with spouses or partners, plays a pivotal role. Partners who actively share domestic responsibilities not only alleviate the burden of household management but also affirm the shared values of gender equality and mutual respect. Emotional support from family members fosters a sense of security and confidence, empowering women to pursue their ambitions with vigor. This equitable distribution of domestic labor and the provision of emotional support are instrumental in creating an environment where women can grow professionally and ascend to leadership roles without being encumbered by traditional gender roles that often confine them to a limited sphere of influence.

Encouraging diversity in leadership positions is vital for higher education institutions. This includes not only implementing policies that promote the recruitment and promotion of

women into senior roles but also ensuring clear and accessible pathways for career advancement. Such diversity not only enhances the quality of leadership but also serves as a model for students and the community at large.

Continuous research and monitoring are necessary to assess the impact of policies and practices aimed at promoting female leadership. This ongoing evaluation will provide valuable insights into the effectiveness of these initiatives and allow for necessary adjustments to be made over time. Networking and community building among women in academia should be encouraged. Professional networks and communities can offer essential support systems, providing platforms for sharing experiences, fostering collaborations, and enhancing the visibility and recognition of women's contributions in academia.

Finally, higher education institutions have a crucial role in driving societal change. They should exemplify their commitment to gender equality not only in their leadership structures but also in their educational programs, research agendas, and community engagement. By doing so, they can influence broader societal attitudes towards gender roles and leadership.

5.3 Research Limitations

Several limitations of this study are acknowledged and addressed in the following ways:

1. The novelty of the research: Existing meta-analyses show that there is little difference between management capabilities of males and females (Northouse, 2021). Therefore, this study will not question whether females are capable of being leaders or not, but rather explore the factors that might affect their desire for leadership careers in higher education. The lack of previous research studies on the theme in the region allows the further analysis, making the lack of local data as a limitation, but a novelty of research rather as a significance.

2. Issues with sample and selection: There was a narrow regional focus within the country itself, majority of participants coming from the capital city, although there were participants from other parts of the country and Kazakhstani females who pursue doctorates abroad. The participants distribution in each group (early, mid, senior-level) were not balanced, as the majority of participants early early-level academic staff aged 31-40. Therefore, the findings cannot be generalised to the whole country.

3. Participants limitation: Sample included only those females who were classified as early, mid and senior-level academic staff in universities, not exploring opinions of males of professional staff in higher education institutions.

4. Researcher bias: Although the researcher aimed to eliminate the preconceived notions and opinions, the interpretation of the data and analysis by the researcher is still a considered limitation. To overcome this, the researcher applied validity and reliability checks, which were elaborated before.

5. Language of data collection: The collected data was in Russian language, which could lead to some unintended language limitations while translating to English language. However, the translations were done with careful attention and with use of translation services, such as translation in context, using Context Reverso website.

6. Participant bias: The study relied on self-reported data from participants, which may be subject to biases or social desirability effects.

The limitations of the text above could potentially impact the research findings in a few ways. Since the data sources are limited to a particular group, which are female faculty members, the research findings may be skewed towards that group. The limited timeframe of the data cutoff also impacts the research findings. As new information and developments continue to emerge, the research findings may become outdated. It is important to continuously review and update research to ensure that the findings remain relevant and accurate over time. In future, researchers should strive to address these limitations through additional data collection, analysis, and review to improve the accuracy and relevance of their findings.

5.4 Recommendations for Future Research

For future research, an exploration into the deeper nuances of cultural and societal norms is essential. Given the unique blend of local and global feminist ideologies in Kazakhstan, future studies could focus on how these ideologies are interpreted across different generations. Understanding the evolving societal norms and their impact on female leadership could provide a richer context for these interactions. The reality of organizational change within higher education also presents substantial ground for further research. Longitudinal studies could shed light on how organizational cultures evolve over time, particularly in response to gender equality initiatives. Such research could track the long-term effectiveness of various policies and practices aimed at fostering a more gender-balanced leadership landscape.

Comparative research across various sectors, such as business, government, and education, could broaden our understanding of female leadership. Investigating whether the challenges and opportunities observed in higher education are unique or reflective of broader

societal patterns could provide valuable insights into gender dynamics in different professional fields. The role of support systems, including mentoring and networking, and their impact on women's leadership advancement is another critical area for investigation. Research could extend to understanding the role of males in higher education and how their support can contribute to dismantling gender barriers. Work-life balance strategies and their effectiveness in higher education institutions requires closer look. Research in this area could include examining the impact of flexible working arrangements on women's career progression and job satisfaction, providing insights into practical measures that can support women's leadership journeys.

Additionally, the influence of educational policies and curricula on shaping perceptions of leadership among students and staff could offer a new dimension to this research. Investigating how gender roles and leadership qualities are portrayed within academic settings could reveal underlying biases and opportunities for curricular reforms. Exploring the psychological and sociological aspects of leadership could reveal how individual traits, self-perception, and societal expectations interact to form leadership identities. This research area could provide a deeper understanding of the personal and societal factors that influence women's decisions to pursue leadership roles. Exploring non-traditional pathways to leadership could also provide insights into how women navigate and succeed in leadership roles through unconventional routes. Such research could highlight alternative models of leadership development and success.

Comparative studies that place Kazakhstan's context within the global trends in female leadership could shed light on the unique challenges and opportunities faced by women in different cultural and political environments. This comparative approach could help contextualize Kazakhstan's progress in a global setting. Lastly, investigating the impact of recent sociopolitical changes in Kazakhstan on female leadership in higher education could offer timely insights into how external factors influence the internal dynamics of institutions.

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Appendix 1: Qualitative Data Collection Materials

Informed Consent and Description of Research (online study, interviews)
IN CASE PERSONAL DATA ARE COLLECTED

You are about to participate in a research coordinated by Gabor Halasz and Moldir Pocstar. The research is carried out by highly qualified professionals and their assistants. The aim of this study is to understand the individual, personal, institutional and larger factors that affect females' decisions to pursue leadership positions in higher education.

Participation is utterly voluntary. Performing the various tasks and filling out the questionnaires is harmless without any detrimental after-effects. It is possible to suspend participation so that it should not be tiresome. It is also possible to terminate participation at any time and to decline from answering questions without having to give reasons for this. Monetary compensation is not due for participation.

You will be invited to an online interview via Zoom platform, which will last for about 60 minutes. The interviews will be recorded with your permission. The results of this study will later be used in publications and will also be presented at scientific conferences. If requested, written or verbal information will be provided on these events.

All information *(including video and/or audio material, personal emails and phone numbers, if it was part of the research)* collected during this research will be handled with strict confidentially. Data obtained during the research is stored as coded information on a secure computer and paper-based material (e.g. questionnaires) is kept in a safe or a locked office also in a coded format. The individual codes are provided by the assistant in charge, and these are accessible and known only to her/him. Data of the research are analyzed statistically during which no personal identification is possible. The document with the rules regulating personal data processing (General Data Protection Regulation, GDPR) is attached with its enclosures.

No medical or laboratory report will be prepared about the results of the study. Verbal account can be provided about the findings upon request.

Please sign the agreement below if you agree with the conditions outlined above and endorse participation in the study. We thank you for your collaboration.

I………………(undersigned) declare that I was given thorough information regarding the circumstances of my participation in the present research. I agree with the conditions and to

participate in the study. I also give my consent to use the anonymous data collected during this process so that these may be accessible to other researchers. I reserve the right to terminate my participation at any time in which case the data belonging to my person should be erased.

I am not (and have not been) treated for any kind of neurological or mental disease . If you have any questions about the study or about taking part in an interview, please write to Moldir Pocstar (PhD candidate, Eotvos Lorand University, Budapest, Hungary) at moldir@student.elte.hu or Gabor Halasz (Professor, Eotvos Lorand University, Budapest, Hungary) at 1075 Budapest, Kazinczy u. 23–27, Hungary.

ELTE FEP Gabor Halasz, as data processor handles my above personal data confidentially and does not allow access to these for other data processing or data analyzing organizations of any kind. Details of this statement are found in the "Information of Processing of Data (GDPR)" which I agree with as proven by my signature.

I read the "Agreement to Data Processing" document and….

O I agree and accept   O I do not agree, do not accept
By proceeding you agree that data collected on your person - which cannot be identified as those belonging to your person - may be used for research purposes and that these will be accessible to other researchers.

I declare that I am over 18 years of age. I have received full detailed information concerning the conditions of my participation of the study. I agree with these conditions and I am willing to participate.

O yes   O no

Budapest,…………………………………………………….
                            date   signature

Interview protocol
There will be three main categories of interviewees:

1. Kazakhstani female PhD students (any field of discipline, enrolled in local or foreign university)
2. Kazakhstani female faculty members (any field of discipline, any stage of their professional career, employed in local university)
3. Kazakhstani university leaders (deans, vice-deans, rectors, vice-rectors and presidents of universities, employed in local university)

Part 1: What factors favourably and destructively affect females' decision to pursue top-managerial/leadership careers in higher education at the individual micro-level

1. Did you have previous experience with teaching and research in academia before entering your PhD studies? How did it affect your career choices towards top-managerial/leadership career in academia?
2. Did you know about the opportunities in academic professions before entering your PhD studies How did it affect your career choices towards top-managerial/leadership career in academia?
3. Did you know about the competition in academic professions before entering your PhD studies How did it affect your career choices towards a top-managerial/leadership career in academia
4. From personal and career-wise perspective did/do you have support during your career? Who supports you? How? Did it affect your career choices towards top-managerial/leadership career in academia?
5. Do you want a top-managerial/leadership career in academia (dean, vice-rector, rector)? Why/why not?
6. Do you have necessary requirements for top-managerial/leadership career in academia? Do you have enough time and energy to obtain necessary requirements necessary for top-managerial/leadership career in academia?

Part 2: What factors favorably and destructively affect females' decision to pursue top-managerial/leadership careers in higher education at the personal meso-level?

1. Do you struggle balancing career and family responsibilities? Why? -if yes, does it affect your confidence as a professional? Why?
2. Does your spouse/partner will be willing to shares domestic responsibilities for you to have more time for development for top-managerial/leadership career in academia? If no, why?

3. Will you relocate for top-managerial/leadership career in academia? Why? Does your spouse/partner will be willing to relocate if you have an opportunity for top-managerial/leadership in academia? If no, why?

4. Did/does parents affect your career choices towards top-managerial/leadership career in academia (consider past, present and future)?- If yes, how?

5. Did/does extended family members affect your career choices towards top-managerial/leadership in academia (consider past, present and future)?- If yes, how?

6. Did/does partner/spouse affect your career choices towards top-managerial/leadership in academia (consider past, present and future)?- If yes, how?

7. Did/does motherhood affect your career choices towards top-managerial/leadership in academia (consider past, present and future)?- If yes, how?

8. Did/does friends affect your career choices towards top-managerial/leadership in academia (consider past, present and future)?- If yes, how?

9. Did people who raised you, explained how to deal with life situations as a leader? How did it affect your top-managerial/leadership aspirations in academia?

Part 3: What factors favorably and destructively affect females' decision to pursue top-managerial/leadership careers in higher education at the institutional meso-level?

1. Did/do you have a mentor during your career in university? *A mentor is an individual with expertise who can help develop the career of a mentee. If yes, is it formal or informal? *Informal mentoring starts from the relationship between the two people, and so the actual mentoring process is not structured. Formal mentoring starts with a certain objective within an organization. Who is it?

2. Did/do you have a role-model during your during your career in university?-If yes, who was it?-If no, why?

3. Have you ever worked part-time in academia? How did it affect your career choices towards top-managerial/leadership career in academia (consider past, present and future)?

4. Is there an informal networking in your organization that helps each other career-wise for those who are involved in it? If yes, are women involved in it? How about married women with children? How about single women?

5. Do you experience pressure to publish, teach and do service in academia? - If yes, how it affects your career aspirations?- If no, why?

6. Does university's policies affect females' career paths towards top-managerial/leadership career in academia? Why?

7. Does superiors affect females' career paths towards top-managerial/leadership career in academia? Why?

8. Does colleagues/peers affect females' career paths towards top-managerial/leadership career in academia? Why?

9. Does informal networking affect females' career paths towards top-managerial/leadership career in academia? Why?

10. Do you think that women tend to aspire top managerial career in academia where women outnumber men? Why?

11. Do you think that depending on the discipline, women's desire to leadership differs? Why?

Part 4: What factors favorably and destructively affect females' decision to pursue top-managerial/leadership careers in higher education at the larger macro-level?

1. Should females prioritize homemaking and childrearing to their careers? Why?

2. Does the society around you think that females should prioritize homemaking and childrearing to their careers? Why?

Appendix 2: Quantitative Data Collection Materials

Informed Consent and Description of Research (online study, questionnaire)
IN CASE PERSONAL DATA ARE COLLECTED

You are about to participate in a research coordinated by Gabor Halasz and Moldir Pocstar. The research is carried out by highly qualified professionals and their assistants. The aim of this study is to understand the individual, personal, institutional and larger factors that affect females' decisions to pursue leadership positions in higher education.

Participation is utterly voluntary. Performing the various tasks and filling out the questionnaires is harmless without any detrimental after-effects. It is possible to suspend participation so that it should not be tiresome. It is also possible to terminate participation at any time and to decline from answering questions without having to give reasons for this. Monetary compensation is not due for participation.

You will be invited to take a questionnaire via Google Forms, which will last for about 20 minutes. The results of this study will later be used in publications and will also be presented at scientific conferences. If requested, written or verbal information will be provided on these events.

All information *(including personal emails and phone numbers, if it was part of the research)* collected during this research will be handled with strict confidentially. Data obtained during the research is stored as coded information on a secure computer and paper-based material (e.g. questionnaires) is kept in a safe or a locked office also in a coded format. The individual codes are provided by the assistant in charge, and these are accessible and known only to her/him. Data of the research are analyzed statistically during which no personal identification is possible. The document with the rules regulating personal data processing (General Data Protection Regulation, GDPR) is attached with its enclosures.

No medical or laboratory report will be prepared about the results of the study. Verbal account can be provided about the findings upon request.

Please sign the agreement below if you agree with the conditions outlined above and endorse participation in the study. We thank you for your collaboration.

I………………(undersigned) declare that I was given thorough information regarding the circumstances of my participation in the present research. I agree with the conditions and to participate in the study. I also give my consent to use the anonymous data collected during

this process so that these may be accessible to other researchers. I reserve the right to terminate my participation at any time in which case the data belonging to my person should be erased.

I am not (and have not been) treated for any kind of neurological or mental disease .

If you have any questions about the study or about taking part in an interview, please write to Moldir Pocstar (PhD candidate, Eotvos Lorand University, Budapest, Hungary) at moldir@student.elte.hu or Gabor Halasz (Professor, Eotvos Lorand University, Budapest, Hungary) at 1075 Budapest, Kazinczy u. 23–27, Hungary.

ELTE FEP Gabor Halasz, as data processor handles my above personal data confidentially and does not allow access to these for other data processing or data analyzing organizations of any kind. Details of this statement are found in the "Information of Processing of Data (GDPR)" which I agree with as proven by my signature.

I read the "Agreement to Data Processing" document and….
O I agree and accept   O I do not agree, do not accept

By proceeding you agree that data collected on your person - which cannot be identified as those belonging to your person - may be used for research purposes and that these will be accessible to other researchers.

I declare that I am over 18 years of age. I have received full detailed information concerning the conditions of my participation of the study. I agree with these conditions and I am willing to participate.

O yes   O no

Budapest,…………………………………………………….
                    date   signature

WHAT FACTORS AFFECT FEMALES' DECISION TO PURSUE LEADERSHIP

Questionnaire

Understanding the Lack of Female Leadership in Higher Education

Hello, and thank you for your support in this research!

My name is Moldir Pocstar and I am a doctoral student at Eötvös Loránd University, Budapest, Hungary. This survey is a part of my PhD thesis. I am exploring factors that influence females to become leaders in higher education, that is, positions of a dean, vice-dean, rector, vice-rector, president, vice- president of a university.

The survey is anonymous. It has 7 parts, which will approximately take 20 minutes of your time. If you have any question regarding the survey or the research itself, please feel free to contact me at moldir@student.elte.hu, or my supervisor Gábor Halász at halasz.gabor@ppk.elte.hu

Part 1

1) What is your gender?

- Female

- Male

- I can not/do not want to answer

2) What is your age?

- >30

- 31-40

- 41-50

- 51-60

- 60+

- I can not/do not want to answer

3) What is your employment in a university?

- PhD student

- Instructor, lecturer

- Associate professor, assistant professor

- Docent, candidate of sciences, professor

- Dean, vice-dean, rector, vice-rector, president, vice-president of a university

- Other:

4) Do you study/work full-time or part-time?

- Full-time
- Part-time

5) What is your marital status?

- Single
- Married
- In relationships
- I can not/do not want to answer

6)Do you have children?

- Yes
- No
- Maybe
- I can not/do not want to answer

7) In which discipline do you study/work:

Part 2

1) Do you want to become a leader in a university (dean, vice-dean, rector, vice-rector, president, vice-president of a university) ?

- Yes
- No
- Maybe
- I am already a leader
- I can not/do not want to answer

2) How the statements below affected (or affect) your desire to become a leader in university? Please rate:

- Salary

- Status

- Career opportunities

- Prior experience in university

- Professional development

- Bringing changes to the educational system

- Becoming a role model

- Please rate following sentences

as:

1. "Significantly discouraged me

2. Somehow discouraged me

3. Somehow inspired me

4. Significantly inspired me

5. I can not/do not want to answer"

3) Please rate following sentences:

- I am attentive to details

- I am good at communicating directions and feedback

- I am good at time- management

- I am good at instructing others

as:

1. "Fully Disagree

2. Somewhat Disagree

3. Somewhat Agree

4. Fully Agree

5. I can not/do not want to answer"

Part 3

1) Despite your desire to be or NOT to be a leader in a university, do you have necessary requirements for it (for example, years of experience, academic publications, educational degrees etc)?

- Yes
- No
- Maybe
- I can not/do not want to answer

2) If no, do you have enough time and energy to obtain necessary requirements for a leadership career in university? If you have obtained all necessary requirements, skip to next question

1. Fully Disagree
2. Somewhat Disagree
3. Somewhat Agree
4. Fully Agree
5. I can not/do not want to answer

3) Please rate following sentences:

- I am able to envision, strategize and shape the direction of an organization
- I love to learn and grow to do my work better
- I am good at empowering and encouragement
- I am good at establishing trust and genuine connections

as:

1. "Fully Disagree
2. Somewhat Disagree
3. Somewhat Agree
4. Fully Agree
5. I can not/do not want to answer"

Part 4

1)A mentor is a person who will help you think through what you need to navigate your car more effectively (for example a PhD supervisor, a colleague, or a friend). Were you mentored at some point of your experience in a university?

- Yes
- No
- Maybe
- I can not/do not want to answer

2) Was mentoring a part of a formal program in a university, or informal (resulted from personal relationships with a person)? If you answered no to the previous question, skip to the next part of the survey

- Formal
- Informal
- I can not/do not want to answer

3) How mentoring affected (or affects) your desire towards a leadership career in a university?

1. I totally abandoned a career in a university
2. I almost abandoned a career in a university
3. I decided to work in a university
4. I decided to work and advance in a university I can not/do not want to answer

Part 5

1) Do have any role model that motivates (or motivated) you towards leadership?

- Yes
- No
- I can not/do not want to answer

2) If yes, was your role model male or female? If you answered differently than yes, skip to the next question

- Male
- Female
- I can not/do not want to answer

3) Please rate following sentences:

- I am constantly on the lookout for new ways to improve my life
- I feel driven to make a difference in my community, and maybe the world
- Nothing is more exciting than seeing my ideas turn into reality
- If I see something I don't like, I fix it

as:

1. "Fully Disagree
2. Somewhat Disagree
3. Somewhat Agree
4. Fully Agree
5. I can not/do not want to answer"

Part 6

1) Have you ever formed friendships outside of workplaces with your colleagues or met for informal gatherings?

- Yes
- No
- I can not/do not want to answer

2) If yes, did it somehow help your career advancement?

- Yes
- No
- I can not/do not want to answer

3) Please rate how your university supports your career advancement:

- My university invests in my professional trainings and education
- My university gives opportunities to apply my talent and expertise
- There are career advancement opportunities in my university

as:

1. "Fully Disagree
2. Somewhat Disagree
3. Somewhat Agree
4. Fully Agree
5. I can not/do not want to answer"

4) Atmosphere in the organization affect career choices. Relating to that, please rate how each influences (or influenced) your career choices towards leadership career in a university:

- Your current employment type
- University policies
- Informal relationships with colleagues
- Students
- Faculty members
- Administration members
- Leadership members

as:

1. "Significantly discouraged
2. Somehow discouraged
3. Somehow inspired
4. Significantly inspired me
5. I can not/do no want to answer"

Part 7

1) Women tend to aspire leadership careers in university in the spheres where they outnumber men (for example education, medicine, social sciences etc)

1. Fully Disagree
2. Somewhat Disagree

3. Somewhat Agree
4. Fully Agree
5. I can not/do not want to answer

2) Research says that women and men's roles in society reflect on leadership at workplaces Relating to that, please rate following sentences:

- Leadership and management is an attribute of men
- Teaching is an attribute of women
- Empathy, subjectivity, compliance, inwardness, sensitiveness and emotionality are feminine qualities.
- Feminine qualities are not suitable for leadership.
- Confidence, reactivity, practicality, objectivity, emotionlessness and reliability are masculine qualities.
- Masculine qualities are intended for leadership
- Men is the primary breadwinner of the family
- Women is the primary caretaker of the family
- Gender roles are not separated from professional roles in your workplaces.

as:
1. "Fully Disagree
2. Somewhat Disagree
3. Somewhat Agree
4. Fully Agree
5. I can not/do not want to answer"

Appendix 3: Mixed-Methods Meta Inferences Table

Bronfenbrenner's Ecological Development Theory Sub-Systems	Literature Review Sub-Chapter Name	Literature Review Factors	Research Questions	Research Questions Findings Sub-Chapter Names	Research Questions Findings Factors (qualitative and quantitative)	Metainferences
-	-	Leadership styles: transformational, transactional, laissez-faire, bureaucratic leadership Performative Leadership Theory	RQ 1 (not part of the Bronfenbrenner's Ecological Development Theory)	Performative Dynamics of Leadership Redefining Leadership: Beyond Gender and Age Gender, Authority, and Performance in Kazakhstani Higher Education Quality and Leadership in Kazakhstani Higher Education	Leadership as a Dynamic Interplay of Qualities Leadership Qualities Unrelated to Biological Sex Leadership Skills as Cultivated and Learned Influence of Political and Social Climate	Research findings factors align with literature review factors regarding leadership styles, and performative leadership theory. New findings include leadership as a lifestyle for positive change and autonomy in leadership choices
↓ Macro-system	Historical Perspectives on Gender Equality in Kazakhstan. Kazakhstan's Feminist Discourse Political Perspective on Gender Studies in Kazakhstan Kazakhstan's Pursuit of Gender Equality	Historical Context and Gendered Division of Labor Cultural Influences and Educational Access Kazakhstan's Unique Historical Background Soviet Influence and Women's Roles Post-Soviet Nationalism and Gender Discourses Culture-Related Expectations Gender as a Symbol of Westernization Education as a Catalyst for Political Interest Gender Equality Initiatives	RQ 2 (↓ Macro-system)	Feminism and Female Leadership: Cultural Dynamics in Kazakhstan Gender Stereotypes in Kazakhstani Educational Leadership Organizational Culture Kazakhstan's Higher Education Structure Mentorship and Role Models	Cultural Norms and Gender Roles Discrimination and Stereotypes Resurgence of Traditional National Cultural Values Acceptance and Resistance to Traditional Gender Roles	Gender and Social Role theories help to explain strong correlations between gendered beliefs about roles (like teaching and family caretaking) and leadership qualities, with a tendency to associate leadership with masculine qualities. However, the study findings highlight a unique understanding of female leadership in Kazakhstan, influenced by both global and local factors, and differing attitudes across generations, showing that Western feminism is adapted to fit the unique cultural and societal context of Kazakhstan.

| ↕ Exo-system (workplace) | Students' Socialization and Decisions to Pursue Advanced Studies Challenges and Pathways to Leadership Gender Dynamics and Organizational Culture in Female Academic Leadership Gender Constructs in Education and Their Impact on Female Leadership Aspirations in Kazakhstan Gender Dynamics and Wage Disparities: Impact on Women's Leadership in Kazakhstan | Perceived Importance of Advanced Degrees Motivations for Obtaining Advanced Degrees Lack of Career Guidance Gap Between Expectations and Reality Influence of Supervisors and Mentors Student Socialization in Academia Cultural and Institutional Barriers Perception of Workplace Culture Mentorship and Professional Development Influence of Leadership Role Models Workplace Relationships Discrimination and Exclusion in Decision-Making Organizational Culture and Stereotypes Global Gender Divide in Labor "Glass Cliff" Phenomenon Team-Approach and Corruption in Kazakhstani Academia Gender Representation in Education Gender studies and Societal Transformations Gender wage gap. "Glass Ceiling" Effect | RQ 3 (↓ Exo-system) | Organizational Culture Kazakhstan's Higher Education Structure Mentorship and Role Models | Organizational Culture and Structural Challenges Gendered Perspectives on Professional Commitment Gender Dynamics among Women in the Workplace Influences on Students' Decisions and Socialization Processes Complexity of Maternity Leave and Professional Commitment Sociocultural Context and Stereotypes Influence of Personal Connections and Networking | The existing bureaucratic structures in higher education institutions perpetuate gender biases, particularly around maternity leave, reflecting societal constraints on women's professional advancement.There's a need for leadership approaches within universities to evolve from masculine authoritarian styles to more flexible and inclusive practices.The significance of networking within academic career advancement is highlighted, with an emphasis on proactive engagement and strategic relationships for career progression. Significant associations are found between leadership desire and university position, suggesting that aspirations vary by role within the institution, and highlighting the importance of academic exposure and advanced degrees in shaping leadership ambitions. A significant lack of female leadership role models in Kazakhstan is noted, impacting women's leadership aspirations. The effectiveness of mentorship in inspiring leadership ambitions is underscored. Challenges such as lack of autonomy, excessive bureaucracy, and the preference for a masculine authoritarian leadership style in public institutions contrast with the more democratic management styles of private universities. |
| ↕ Meso-system (family, peers) | Socialization and Support Systems: The Foundation of Female Academic Leadership | Socialization and upbringing. Support systems. Parenthood and work-life balance. Cultural and societal constructs. | RQ 4 (↕ Meso-system (family, peers)) | Flexible Workplace, but Additional Responsibilities at Home. Division of Family Roles | Gender Imbalance in Leadership Positions Societal Expectations and Additional Responsibilities | The perception of higher education as a gendered workplace where societal expectations place additional responsibilities on women, affecting |

				and Responsibilities. Cultivation of Family and Female Values through Upbringing. Family/Peer Influence Leadership- Family Sacrifices.	Flexible Workplace with a Trade-off Impact of Support or Lack Thereof on Career Trajectories Division of Family Roles and Responsibilities Societal Perception of Women as Caretakers Co-existence of Spouses as Leaders Patriarchal Ideologies and Family Resistance Cultivation of Family and Female Values through Upbringing	their ability to balance work and personal life, and influencing their leadership aspirations. The significant influence of career opportunities on women's desires to become leaders, with variations in motivation based on the level of encouragement or discouragement perceived from these opportunities. The division of family roles impacts women's leadership pursuits, with societal and familial expectations often placing the bulk of caregiving and domestic responsibilities on women. The role of upbringing in cultivating values that may both support and hinder women's development and identity as leaders, alongside societal constructs of gender roles..The perceived necessity for women to sacrifice family life for professional success, reflecting societal biases and personal choices prioritizing family over career advancement.
↑ Micro-system (self)	Leadership Identity in Women's Academic Aspiration Self-Awareness and Leadership Skills in Higher Education Motivation and Proactivity towards Leadership.	Leadership Styles and Traits "Clan culture" in Kazakhstan Self-awareness Spirituality and Religion Educational Attainment Personal Attributes Financial barriers Transferable skills Career Success Perceptions Personal Development and Desire Proactivity and Communication Skills	RQ 5 (↑ Micro-system (self))	Motivation for leadership Leadership Qualities and Self-Assessment What it Takes to be a Leader What You Get as a Leader: -Contribution to Society -Salary -Status Personal Leadership	Motivation for Leadership Perception of Qualifications and Self-Assessment Communication Skills and Time Management Desire for Personal and Professional Development Traits and Skills Crucial for Leadership Success	Strong positive correlations were found between effective communication, time management, teaching abilities, and the desire for continuous learning and improvement.The ability to develop a strategy and vision for the organization varied significantly across different positions within the university. Marital status influenced perceived abilities to develop a strategy and vision, with single individuals rating higher than those in relationships or married. A positive relationship between communication skills and teaching efficacy

						was noted. Proactivity in seeking scholarships and professional development opportunities was highlighted as important for career and leadership advancement. Scholarships played a significant role in overcoming financial barriers for doctoral students, especially those with family obligations. Traditional gender roles were seen to impact women's confidence in pursuing leadership positions, with societal norms and family responsibilities playing a significant role. The desire to contribute to society was a major motivating factor for pursuing leadership roles, with a focus on making positive changes over attaining a leadership status or financial benefits.