Received on: 25 December 2025 Revised on: 16 February 2026 Published: 30 March 2026

RESEARCH ARTICLE
DOI: 10.47703/ejgs.v3i1.109

Gender Equality in Kazakhstan: Perceptions, Unpaid Labour and Entrepreneurial Intentions

Rab Nawaz Lodhi[1]*

[1] University of the Punjab, Lahore, Pakistan

Corresponding author:
* Rab Nawaz Lodhi – PhD, Associate Professor, Hailey College of Commerce, University of the Punjab, Lahore, Pakistan.
Email: rabnawazlodhi.hcc@pu.edu.pk

For citation:
Lodhi, R.N. (2026). Gender Equality in Kazakhstan: Perceptions, Unpaid Labour and Entrepreneurial Intentions. Eurasian Journal of Gender Studies, 3(1), 45-57.

Conflict of interest:
author(s) declare that there is no conflict of interest.

Abstract

This study examines the role of age in shaping perceptions of gender equality, exposure to gender-related information, distribution of unpaid domestic labour, and entrepreneurial intentions in Kazakhstan. While the country has made significant progress in establishing formal gender equality through legal and institutional frameworks, disparities persist in labour market outcomes, access to opportunities, and household responsibilities. The research aims to determine whether age is a significant explanatory factor in understanding these gender-related dimensions. The empirical analysis is based on a quantitative research design using survey data from 1,200 respondents categorised into four age groups. The methodological approach combines descriptive statistics, Pearson chi-square tests, and logistic regression modelling to assess both distributional patterns and causal relationships. The results indicate that perceptions of gender equality remain relatively consistent across age cohorts, suggesting a widespread acceptance of formal equality norms. However, significant age differences are observed in exposure to gender-related information, with younger individuals demonstrating higher engagement with media and digital content. The findings also reveal a strong association between age and unpaid domestic labour, with middle-aged groups bearing the highest household workload, reflecting life-cycle effects. Furthermore, age is a significant determinant of entrepreneurial intentions, with younger respondents exhibiting a substantially higher propensity to engage in business activities than older cohorts. The results underscore the importance of adopting age-sensitive policy approaches to address structural inequalities, improve access to information, and promote inclusive economic participation in Kazakhstan.

Keywords: Gender, Gender Equality, Gender Role, Women's Work, Labour, Unpaid Labour, Entrepreneurial Intention, Entrepreneurial Behaviour

SCSTI: 06.52.17

JEL Code: D13, J16, J21

Financial support: The study was not sponsored.

1. INTRODUCTION

Gender equality has become a central priority in contemporary socio-economic development agendas, reflecting its critical role in promoting inclusive growth, social justice, and sustainable development. Over the past decades, many countries, including Kazakhstan, have adopted formal legal and institutional frameworks to ensure equal rights and opportunities for men and women. These efforts align with global commitments, such as the Sustainable Development Goals (SDGs), particularly Goal 5, which emphasises gender equality and the empowerment of all women and girls. However, despite notable progress in expanding access to education, employment, and political participation, significant disparities persist in labour market outcomes, income distribution, leadership representation, and the division of unpaid labour.

In Kazakhstan, the gender equality landscape is characterised by a dual structure in which formal equality coexists with persistent structural and socio-cultural inequalities. Women demonstrate relatively high levels of educational attainment and labour force participation, yet they continue to face barriers related to occupational segregation, wage gaps, limited career advancement, and disproportionate domestic responsibilities. These challenges are further compounded by institutional constraints and entrenched gender norms that shape both economic behaviour and social expectations. As a result, the existence of legal guarantees does not necessarily translate into substantive equality in everyday life.

An important dimension of gender inequality that has received increasing attention in recent research is the role of age and life-course dynamics. While many studies treat age as a control variable, emerging evidence suggests that it plays a more complex role by influencing access to information, exposure to gender-related discourse, labour market experiences, and entrepreneurial behaviour. Different age cohorts are embedded in distinct socio-economic contexts and communication environments, which may lead to variations in attitudes toward gender equality, awareness of gender issues, and engagement in economic activities. In particular, younger generations tend to have greater exposure to digital media and global narratives on gender equality, while older cohorts may rely more on traditional norms and limited information channels.

At the same time, gender inequality is closely linked to the unequal distribution of unpaid domestic labour, which remains a persistent constraint on women's economic participation. The burden of household and caregiving responsibilities varies across the life course, often intensifying during middle age due to family formation and childcare obligations. This uneven distribution not only affects labour market outcomes but also influences entrepreneurial decisions, career trajectories, and overall well-being. In this context, examining how unpaid labour and economic behaviour vary across age groups provides deeper insight into the mechanisms that sustain gender disparities.

Entrepreneurship represents another key domain through which gender and age intersect. While entrepreneurship is increasingly promoted as a pathway to economic empowerment and innovation, access to entrepreneurial opportunities is shaped by demographic characteristics, institutional conditions, and social norms. Younger individuals are generally more inclined toward entrepreneurial activity due to higher risk tolerance and flexibility, whereas older individuals may face greater constraints related to financial security, experience, and risk aversion. Understanding how entrepreneurial intentions differ across age groups is therefore essential for designing targeted policies to foster inclusive economic participation.

Against this background, the present study aims to examine age-related differences in

perceptions of gender equality, exposure to gender-related information, distribution of unpaid domestic labour, and entrepreneurial intentions in Kazakhstan. By integrating descriptive analysis, inferential statistics, and econometric modelling based on survey data from 1,200 respondents, the study seeks to identify whether and how age influences gender-related attitudes and socio-economic behaviour. The analytical framework moves beyond treating age as a simple demographic characteristic and instead conceptualises it as a key factor interacting with institutional, informational, and life-course dynamics.

The findings of this research contribute to the existing literature by providing empirical evidence on the heterogeneity of gender-related perceptions and behaviours across age cohorts in Kazakhstan. Moreover, the study offers practical implications for policymakers by highlighting the need for age-sensitive approaches in gender policy, particularly in areas such as information dissemination, labour market participation, and support for entrepreneurship. In doing so, the research advances the understanding of how demographic factors shape gender equality outcomes in transitional and emerging economies.

2. LITERATURE REVIEW

The existing body of research on gender equality in Kazakhstan presents a nuanced and multi-layered picture, characterised by a divergence between formal institutional commitments and actual socio-economic outcomes. A number of studies consistently emphasise that, despite the presence of comprehensive legal frameworks ensuring gender equality, substantial implementation gaps persist. These gaps manifest in occupational segregation, limited access to career advancement, and discriminatory labor market practices that continue to constrain women's professional trajectories (Buribayev & Khamzina, 2019; Khamzina et al., 2020; Khamzina et al., 2021; Ryskaliyev et al., 2019; Khamzina et al., 2022). Consequently, a paradox emerges in which perceptions of gender equality may appear relatively favourable, while structural inequalities remain deeply embedded in labour market institutions.

This pattern aligns with broader post-Soviet dynamics, where relatively high female labour force participation does not necessarily translate into equitable labour market outcomes. Comparative analyses across Kazakhstan, Mongolia, and Russia demonstrate that welfare systems often facilitate women's employment participation without fundamentally transforming entrenched patriarchal norms or redistributing unpaid care responsibilities (Dugarova, 2019). Similarly, research on political and socio-economic participation highlights that, although women's access to education and employment has improved, persistent gender gaps in wages, leadership representation, and resource allocation continue to limit substantive equality (Kireyeva et al., 2021; Zulkapil et al., 2022).

A critical dimension of gender inequality in Kazakhstan relates to the unequal distribution of unpaid domestic labour. Empirical evidence indicates that women disproportionately shoulder household and caregiving responsibilities, particularly in rural and lower-income contexts (Nugmanova, 2019). This imbalance contributes to the persistence of the so-called "double burden," wherein women simultaneously engage in paid employment and unpaid domestic work. Recent studies on women-led entrepreneurship further suggest that such dual responsibilities are often normalised rather than challenged, reinforcing traditional gender roles even within economically active groups (Akybayeva et al., 2024). These findings are consistent with international research demonstrating that life-course transitions, especially marriage and parenthood tend to intensify gender specialisation in both paid and unpaid labour (Barnes, 2015). Moreover, attitudes toward gender roles are shaped through intergenerational transmission mechanisms, where both parental beliefs and everyday practices influence the reproduction of gender

norms (Platt & Polavieja, 2016; Bernhardt et al., 2016).

The literature on gender attitudes provides further insight into the relevance of age as an explanatory factor. Empirical studies from diverse national contexts reveal that cohort effects play a significant role in shaping gender-related beliefs, though these effects are neither linear nor uniform across societies. For instance, evidence from Japan and Switzerland suggests that while some cohorts exhibit increasing egalitarianism, progress may stagnate or even reverse among certain age groups depending on institutional and cultural conditions (Piotrowski et al., 2019; Bornatici et al., 2020). These findings imply that age should not be treated merely as a control variable but rather as a dynamic factor interacting with broader socio-cultural and informational environments. In Kazakhstan, attitudes toward formal gender equality are relatively homogeneous across generations, whereas exposure to gender-related discourse—particularly through digital media—varies significantly by age.

Entrepreneurship represents another important domain through which gender disparities are examined. Research indicates that women's entrepreneurial activity in Kazakhstan is shaped by a combination of institutional barriers, labour market inequalities, and persistent gender stereotypes (Akybayeva et al., 2024; Kenzheali, 2024). At the same time, studies on informal and self-employment highlight the role of structural labour market conditions in shaping economic behaviour, particularly in contexts characterised by informality and limited social protection (Mussurov & Arabsheibani, 2013). International literature further demonstrates that entrepreneurial intentions are influenced by a range of demographic and psychological factors, including age, gender, self-efficacy, and work experience. Notably, younger individuals tend to exhibit higher levels of entrepreneurial intention, reflecting greater risk tolerance and openness to alternative employment pathways (Hatak et al., 2015; Guerrero et al., 2019; Liao et al., 2022; Vancea & Utzet, 2017; Ayalew & Zeleke, 2018). These findings reinforce the importance of incorporating age-specific dynamics into analyses of entrepreneurship and economic behaviour.

Finally, the broader gender-and-development literature underscores the macroeconomic significance of gender equality by linking it to inclusive growth and sustainable development outcomes. International evidence highlights that persistent gender inequalities in unpaid labour distribution and access to economic opportunities constrain women's participation in the labour market and limit their advancement into leadership roles (Fernández et al., 2019; OECD, 2017; Das & Kotikula, 2019; OECD, 2021). From this perspective, gender inequality is not only a social issue but also an economic inefficiency that undermines productivity and long-term development.

The reviewed literature supports a conceptual framework in which gender equality is shaped by the interaction of institutional arrangements, socio-cultural norms, and individual-level characteristics across the life course. In this context, age emerges as a critical analytical dimension that intersects with access to information, distribution of unpaid labour, labour market experiences, and entrepreneurial motivation. Therefore, examining age-related differences provides a more comprehensive understanding of the mechanisms underlying gender inequality in Kazakhstan and contributes to the development of more targeted and effective policy interventions.

3. METHODOLOGY

This study adopts a quantitative research design to examine age-related differences in perceptions of gender equality, exposure to gender-related information, distribution of unpaid domestic labour, and entrepreneurial intentions in Kazakhstan. The empirical analysis is based on a structured survey dataset comprising 1,200 respondents, grouped into

four age categories (18–28, 29–45, 46–60, and 61+). The dataset includes categorical, ordinal, and binary variables reflecting attitudes toward gender equality, labour market opportunities, and socio-economic behaviour.

At the initial stage, the dataset was prepared for statistical analysis by cleaning, coding, and transformation. Since the original data were presented in aggregated form, they were expanded into individual-level observations to enable the application of econometric models. Categorical variables were encoded using dummy variables, while key dependent variables were defined in binary form, including (1) belief that men and women have equal opportunities for promotion and (2) willingness to start a business. Age groups were included as independent variables and coded as dummy variables, with the youngest group (18–28) serving as the reference category.

The analytical strategy combines descriptive statistics, inferential testing, and econometric modelling. At the descriptive level, frequency distributions and cross-tabulations were used to identify patterns across age groups. To test for statistically significant associations between categorical variables, the Pearson chi-square test was used to assess whether observed differences across age groups are systematic rather than random.

To further investigate the determinants of key outcomes, the study employs logistic regression models, which are appropriate for binary dependent variables. The logistic regression framework estimates the probability of a given outcome as a function of explanatory variables and is formally expressed as (1):

$$P(Y_i = 1) = \frac{e^{\beta_0+\beta_1 X_{1i}+\cdots+\beta_k X_{ki}}}{1+e^{\beta_0+\beta_1 X_{1i}+\cdots+\beta_k X_{ki}}} \qquad (1)$$

where:

$P(Y_i = 1)$ - represents the probability of a positive outcome (e.g., agreement with equal promotion opportunities or willingness to start a business);

X_{ki} - denotes explanatory variables (age group indicators);

β_k - parameters to be estimated.

This model allows for the capture of non-linear relationships between predictors and the probability of outcomes, making it particularly suitable for analysing behavioural responses. Given that regression coefficients are expressed in log-odds and are not directly interpretable, the analysis incorporates marginal effects and predicted probabilities to provide a more intuitive interpretation. The marginal effect reflects the change in the probability of the outcome associated with a change in an explanatory variable and is defined as (2):

$$\frac{\partial P(Y=1)}{\partial X_k} = \beta_k \cdot P(Y=1) \cdot \big(1 - P(Y=1)\big) \quad (2)$$

For categorical variables such as age groups, discrete changes in predicted probabilities were calculated relative to the reference category. These probabilities were further visualised using confidence intervals (95%), enhancing the interpretability of the results and allowing for clearer comparison across groups.

All models were estimated using robust standard errors to address potential heteroskedasticity and ensure reliable statistical inference. Model performance and statistical significance were evaluated using Wald chi-square statistics and pseudo-R2 measures. The integration of descriptive analysis, chi-square testing, and logistic regression modelling provides a comprehensive methodological framework that enables the identification of both distributional patterns and statistically significant relationships, ensuring robustness and analytical depth in the study.

4. ANALYSIS AND RESULTS

The distribution of responses demonstrates a relatively consistent pattern across all cohorts, with most respondents in each age group. The analysis begins with an examination of respondents' perceptions of gender inequality across different age groups (Table 1).

Table 1. Perceptions of gender inequality in Kazakhstan by age group

Age group	Men have more opportunities	Women have more opportunities	Equal rights and opportunities	Difficult to answer	Total
18–28	96 (39.7%)	20 (8.3%)	109 (45.0%)	17 (7.0%)	242
29–45	147 (34.9%)	38 (9.0%)	219 (52.0%)	17 (4.0%)	421
46–60	123 (42.6%)	20 (6.9%)	132 (45.7%)	14 (4.8%)	289
61+	92 (37.1%)	12 (4.8%)	126 (50.8%)	18 (7.3%)	248
Chi-square			$\chi^2 = 13.47$; $p = 0.143$		

Note: compiled by the author

Specifically, among respondents aged 18–28, 45.0% selected the "equal rights and opportunities" category, compared to 52.0% in the 29–45 group, 45.7% in the 46–60 group, and 50.8% among those aged 61 and older. At the same time, a substantial proportion of respondents across all age groups perceived that men have more opportunities, ranging from 34.9% in the 29–45 group to 42.6% in the 46–60 group. In contrast, the share of respondents who believed that women have more opportunities remained consistently low across all age categories (between 4.8% and 9.0%). The proportion of respondents who found it difficult to answer was also relatively small, not exceeding 7.3% in any group. From a statistical perspective, the results of the chi-square test ($\chi^2 = 13.47$; $p = 0.143$) indicate no statistically significant association between age and perceptions of gender inequality. This suggests that views on gender equality are relatively homogeneous across different age cohorts in Kazakhstan.

The findings reveal an important duality in public perceptions. On the one hand, the dominant narrative across all age groups reflects a belief in formal gender equality, as evidenced by the high share of respondents selecting "equal rights and opportunities." On the other hand, a considerable proportion of respondents, particularly in middle- and older-age groups continue to perceive structural advantages for men. This may indicate the persistence of implicit or structural inequalities that are not fully captured by formal equality frameworks. The chi-square test ($\chi^2 = 48.07$; $p < 0.001$) confirms a strong association between age and exposure to gender-related content in media and social networks. The results presented in Table 2 demonstrate clear and statistically significant differences in the frequency of encountering information.

Table 2. Frequency of encountering information about gender equality in media/social networks by age group

Age group	Daily	Several times a week	Rarely	Never	Total
18–28	26 (10.7%)	49 (20.2%)	102 (42.1%)	65 (26.9%)	242
29–45	27 (6.4%)	95 (22.6%)	213 (50.6%)	86 (20.4%)	421
46–60	16 (5.5%)	51 (17.6%)	136 (47.1%)	86 (29.8%)	289
61+	5 (2.0%)	33 (13.3%)	110 (44.4%)	100 (40.3%)	248
Chi-square			$\chi^2 = 48.07$; $p < 0.001$		

Note: compiled by the author

A consistent age gradient is observed in the data. Younger respondents (18–28 years) report the highest levels of exposure: 10.7% encounter such information daily, and 20.2% several times a week. In contrast, these shares decline steadily with age, reaching only 2.0% (daily) and 13.3% (several times a week) among respondents aged 61 and older. This indicates that younger cohorts are more actively engaged with or exposed to gender-related discourse, likely reflecting higher digital media consumption and greater interaction with online platforms.

At the same time, the proportion of respondents who encounter such information rarely remains high across all age groups, peaking at 50.6% in the 29–45 cohort and remaining above 44% in all other groups. This suggests that even among more active media users, gender equality is not a dominant or frequently encountered topic in information flows.

Most notably, the share of respondents who reported never encountering information about gender equality increases substantially with age—from 26.9% in the youngest group to 40.3% among those aged 61 and above. This pattern highlights a significant informational gap affecting older populations, who appear to be less integrated into channels where gender-related issues are discussed. Figure 1 presents the predicted probabilities that respondents agree that men and women have equal opportunities for promotion across age groups, based on the logistic regression model.

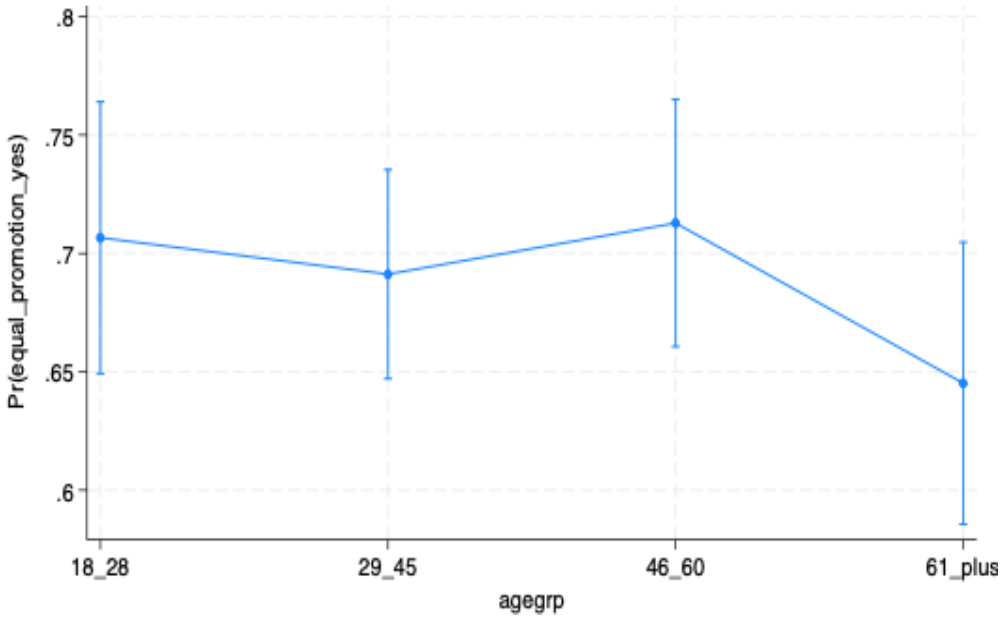

Figure 1. Predicted probability of equal promotion opportunities by age group

The results indicate relatively high and stable predicted probabilities across all age cohorts, ranging approximately from 0.64 to 0.71. The highest probability is observed among respondents aged 46–60, while the lowest is among those aged 61 and older. Despite this slight variation, the confidence intervals overlap considerably, suggesting that these differences are not statistically significant. This visual evidence supports the regression findings, confirming that age is not a significant determinant of perceptions regarding equality in career advancement opportunities. Overall, respondents across all age groups tend to perceive promotion opportunities as relatively equal between men and women. The chi-square test ($\chi^2 = 98.98$; $p < 0.001$) confirms a strong association between age and the distribution of time spent on household responsibilities. The results presented in Table 3 reveal substantial and statistically significant differences in the amount of time devoted to unpaid domestic labour across age groups.

Table 3. Time spent on unpaid domestic labour by age group

Age group	<1 hour	1–2 hours	2–3 hours	4–5 hours	5–6 hours	>6 hours	Do not do housework	Total
18–28	7 (2.9%)	57 (23.6%)	84 (34.7%)	54 (22.3%)	27 (11.2%)	11 (4.5%)	2 (0.8%)	242
29–45	3 (0.7%)	65 (15.4%)	121 (28.7%)	112 (26.6%)	76 (18.1%)	41 (9.7%)	3 (0.7%)	421
46–60	6 (2.1%)	42 (14.5%)	88 (30.4%)	88 (30.4%)	29 (10.0%)	30 (10.4%)	6 (2.1%)	289
61+	5 (2.0%)	37 (14.9%)	66 (26.6%)	67 (27.0%)	20 (8.1%)	27 (10.9%)	26 (10.5%)	248
Chi-square					$\chi^2 = 98.98$; $p < 0.001$			

Note: compiled by the author

A clear pattern emerges middle-aged respondents (29–45 and 46–60) tend to bear the highest domestic workload. In these groups, the largest shares are concentrated in the 2–3 hours and 4–5 hours categories. For instance, among individuals aged 29–45, 28.7% report spending 2–3 hours and 26.6% report 4–5 hours on household labour daily, while an additional 18.1% spend 5–6 hours. A similar pattern is observed in the 46–60 group, where both the 2–3-hour and 4–5-hour categories account for 30.4%, indicating a consistently high level of domestic engagement.

In contrast, younger respondents (18–28) are more concentrated in the lower- and moderate-time categories, particularly 2–3 hours (34.7%) and 1–2 hours (23.6%), suggesting a comparatively lower domestic burden. This may reflect life-cycle factors, such as lower rates of family formation or fewer household responsibilities at younger ages.

A distinct pattern is observed among respondents aged 61 and older. While a notable proportion still reports spending 4–5 hours (27.0%) and 2–3 hours (26.6%) on domestic labour, this group also has the highest share of individuals who do not engage in household work at all (10.5%). This likely reflects retirement status, health limitations, or redistribution of responsibilities within households. Table 4 logistic regression results and marginal effects.

Table 4. Logistic Regression Results and Marginal Effects: Belief in Equal Promotion Opportunities by Age Group

Predictor / Age group	Coef.	Robust SE	z	p-value	95% CI	Predicted probability
18–28 (ref.)	–	–	–	–	–	**0.707**
29–45	-0.073	0.176	-0.42	0.678	[-0.419; 0.272]	0.691
46–60	0.030	0.192	0.16	0.876	[-0.346; 0.406]	0.713
61+	-0.281	0.194	-1.45	0.147	[-0.661; 0.099]	0.645
Constant	0.879	0.141	6.22	<0.001	[0.602; 1.156]	–
*N = 1,200; Wald $\chi^2 = 3.34$; $p = 0.343$; Pseudo $R^2 = 0.0022$.						

Note: compiled by the author

The results of the logistic regression analysis indicate that age is not a statistically significant predictor of the belief that men and women have equal opportunities for promotion in the workplace. None of the age group coefficients are statistically significant at conventional levels ($p > 0.05$), and the overall model is not significant (Wald $\chi^2 = 3.34$; $p = 0.343$), suggesting limited explanatory power. Although the coefficients show some variation in direction, these differences are small and not statistically meaningful. For example,

respondents aged 29–45 and 61+ exhibit slightly lower log-odds of perceiving equality in promotion opportunities compared to the reference group (18–28), while the 46–60 group shows a marginally higher value. However, all confidence intervals include zero, confirming the absence of significant effects.

The marginal predicted probabilities further support this conclusion. The probability of believing in equal promotion opportunities remains relatively high and stable across all age groups, ranging from 0.645 to 0.713. The highest probability is observed among respondents aged 46–60 (0.713), while the lowest is among those aged 61 and older (0.645), though these differences are modest. Figure 2 illustrates the adjusted predicted probabilities of respondents' willingness to start their own business across age groups, based on the logistic regression model, along with 95% confidence intervals.

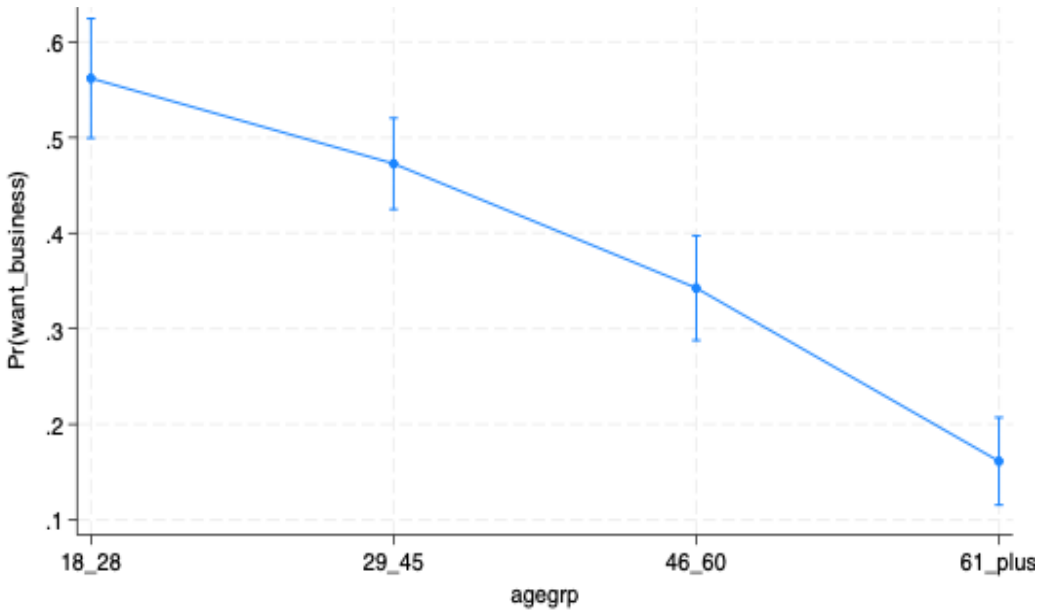

Figure 2. Adjusted predicted probabilities of willingness to start a business by age group (with 95% Confidence Intervals)

The figure reveals a clear negative age gradient in entrepreneurial intentions. Younger respondents demonstrate the highest predicted probability of willingness to start a business, while this probability steadily declines with age. This pattern indicates that individuals in the 18–28 age group are the most inclined toward entrepreneurship, whereas respondents aged 61 and older exhibit the lowest propensity.

The confidence intervals, while partially overlapping between adjacent age groups, show a noticeable downward trend, supporting the statistical significance of age differences identified in the regression model. The decline becomes particularly pronounced when comparing younger and older cohorts, suggesting that age is an important determinant of entrepreneurial motivation.

From an analytical perspective, these findings may reflect life-cycle effects. Younger individuals are generally more open to risk, innovation, and career experimentation, while older respondents may face constraints such as financial risk aversion, established career paths, or limited access to entrepreneurial resources. Table 5 shows logistic regression results and marginal effects.

Table 5. Logistic regression results and marginal effects: willingness to start a business by age group

Predictor / Age group	Coef.	Robust SE	z	p-value	95% CI	Predicted probability
18–28 (ref.)	–	–	–	–	–	**0.562**
29–45	-0.359	0.162	-2.21	0.027	[-0.677; -0.041]	0.473
46–60	-0.901	0.179	-5.02	<0.001	[-1.253; -0.550]	0.343
61+	-1.898	0.216	-8.79	<0.001	[-2.321; -1.475]	0.161
Constant	0.249	0.130	1.92	0.055	[-0.005; 0.503]	–
*N = 1,200; Wald $\chi^2 = 89.88$; $p < 0.001$; Pseudo $R^2 = 0.0655$.						

Note: compiled by the author

The logistic regression results demonstrate that age is a statistically significant determinant of willingness to start a business. The model is highly significant overall (Wald $\chi^2 = 89.88$; $p < 0.001$), indicating strong explanatory power compared to previous models. All age group coefficients (relative to the 18–28 reference category) are negative and statistically significant, showing a clear decline in entrepreneurial intentions with age. Specifically, respondents aged 29–45 are significantly less likely to express a willingness to start a business ($p = 0.027$), whereas the effect is substantially stronger for the 46–60 and 61+ groups ($p < 0.001$). The magnitude of the coefficients increases with age, suggesting a progressively lower likelihood of entrepreneurial engagement.

The marginally predicted probabilities provide a more intuitive interpretation of these effects. The probability of wanting to start a business decrease from 0.562 among the youngest respondents to 0.161 among those aged 61 and older, indicating a sharp and consistent downward trend. These findings highlight a pronounced life-cycle effect in entrepreneurial behaviour. Younger individuals are more likely to pursue business opportunities, potentially due to higher risk tolerance, fewer financial and family constraints, and greater openness to innovation.

6. CONCLUSION

This study examined age-related differences in perceptions of gender equality, exposure to gender-related information, unpaid domestic labour, and entrepreneurial intentions in Kazakhstan using survey data from 1,200 respondents. The results show that age plays a differentiated role across the analysed dimensions, shaping some attitudes and behaviours more strongly than others.

First, perceptions of gender inequality appeared relatively stable across age groups. The majority of respondents in all cohorts indicated that men and women have equal rights and opportunities, and the chi-square test confirmed that age differences in these views were not statistically significant. At the same time, a considerable share of respondents across all groups continued to perceive that men have more opportunities, suggesting that formal recognition of equality coexists with awareness of persistent structural advantages for men.

Second, age was found to be an important factor in explaining exposure to gender-related information. Younger respondents were significantly more likely to encounter information about gender equality in the media and on social networks, whereas older respondents, especially those aged 61 and above, were more likely to report never encountering such information. This indicates a generational information gap and suggests that the dissemination of gender-related discourse remains uneven across age cohorts.

Third, the findings revealed a strong association between age and the amount of time devoted to unpaid domestic labour. Middle-aged respondents, particularly those aged 29–45 and 46–60, reported the highest

household workload, while younger respondents were more concentrated in moderate time categories. Among older respondents, a more polarised pattern emerged: many still spent substantial time on household labour, while a larger share reported no domestic involvement at all. These results highlight the importance of the life-course perspective in understanding the unequal distribution of unpaid labour.

Fourth, the regression analysis showed that age does not significantly affect beliefs about equal promotion opportunities for men and women. Predicted probabilities remained relatively high and stable across all age groups, indicating that respondents generally perceive career advancement as formally gender equal. However, this finding should be interpreted cautiously, as perceived equality in promotion does not necessarily imply the absence of hidden or structural barriers in actual labour market practice.

Finally, age was identified as a statistically significant determinant of entrepreneurial intentions. The probability of wanting to start a business declined sharply with age, with the youngest respondents showing the highest entrepreneurial orientation and the oldest group showing the lowest. This confirms a clear life-cycle effect in entrepreneurial motivation and suggests that younger people are more open to risk, innovation, and self-employment, while older cohorts may be constrained by greater risk aversion, established career trajectories, or limited access to resources.

AUTHOR CONTRIBUTION

Writing – original draft: Rab Nawaz Lodhi.
Conceptualization: Rab Nawaz Lodhi.
Formal analysis and investigation: Rab Nawaz Lodhi.
Development of research methodology: Rab Nawaz Lodhi.
Resources: Rab Nawaz Lodhi.
Software and supervision: Rab Nawaz Lodhi.
Data collection, analysis, and interpretation: Rab Nawaz Lodhi.
Visualization: Rab Nawaz Lodhi.
Writing – review and editing: Rab Nawaz Lodhi.

REFERENCES

Akybayeva, G. S., Rezvushkina, T. A., Mussabekova, A. O., Kadyrova, A. S., & Kushebina, G. M. (2024). The priorities of women-led businesses in the economy of Kazakhstan: Gender aspects in the labor market. *Bulletin of Toraighyrov University. Economics Series*, 1, 31-45. https://doi.org/10.48081/kdfb9692

Ayalew, M., & Zeleke, S. A. (2018). Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia. *Journal of Innovation and Entrepreneurship, 7*, 8. https://doi.org/10.1186/s13731-018-0088-1

Barnes, M. W. (2015). Gender differentiation in paid and unpaid work during the transition to parenthood. *Sociology Compass, 9*(5), 348–364. https://doi.org/10.1111/soc4.12263

Bernhardt, E., Goldscheider, F., & Turunen, J. (2016). Attitudes to the gender division of labor and the transition to fatherhood. *Acta Sociologica, 59*(3), 269–284. https://doi.org/10.1177/0001699316645930

Bornatici, C., Gauthier, J.-A., & Le Goff, J.-M. (2020). Changing attitudes towards gender equality in Switzerland (2000–2017): Period, cohort and life-course effects. *Swiss Journal of Sociology, 46*(3), 559–585. https://doi.org/10.2478/sjs-2020-0027

Buribayev, Y., & Khamzina, Z. (2019). Gender equality in employment: The experience of Kazakhstan. *International Journal of Discrimination and the Law, 19*(2), 110–124. https://doi.org/10.1177/1358229119846784

Das, S., & Kotikula, A. (2019). *Gender-based employment segregation*. World Bank. https://doi.org/10.1596/31510

Dugarova, E. (2019). Gender, work, and childcare in Kazakhstan, Mongolia, and Russia. *Social Policy & Administration, 53*(3), 385–400. https://doi.org/10.1111/spol.12479

Fernández, R., Luna, F., & Rambousek, B. (2019). *Gender equality and inclusive growth*. United Nations. https://doi.org/10.18356/99c72bc4-en

Guerrero, M., Amorós, J. E., & Urbano, D. (2019). Do employees' generational cohorts influence corporate venturing? A multilevel analysis. *Small Business Economics, 57*, 47–74. https://doi.org/10.1007/s11187-019-00304-z

Hatak, I., Harms, R., & Fink, M. (2015). Age, job identification, and entrepreneurial intention. *Journal of Managerial Psychology, 30*(1), 38–53. https://doi.org/10.1108/JMP-07-2014-0213

Kenzheali, Y. (2024). Challenges of empowering gender equality in the small and medium enterprises of the Republic of Kazakhstan. *Qainar Journal of Social Science, 2*(4), 21-32. https://doi.org/10.58732/2958-7212-2023-4-20-32

Khamzina, Z., Buribayev, Y., Taitorina, B., Baisalova, G., Yessengazieva, A. N., & Kuttygalieva, A. (2022). Towards nondiscrimination and gender equality: The role of international labor standards. *Sustainability, 14*(9), 5349. https://doi.org/10.3390/su14095349

Khamzina, Z., Buribayev, Y., Yermukanov, Y., & Alshurazova, A. (2020). Is it possible to achieve gender equality in Kazakhstan: Focus on employment and social protection. *International Journal of Discrimination and the Law, 20*(1), 5–20. https://doi.org/10.1177/1358229120927904

Khamzina, Z., Buribayev, Y., Taitorina, B., & Baisalova, G. (2021). Gender equality in employment: A view from Kazakhstan. *Anais da Academia Brasileira de Ciências, 93*(4), e20190042. https://doi.org/10.1590/0001-3765202120190042

Kireyeva, A., Kenzhegulova, G., & Rajkhan, O. (2021). Gender equality and women participation in government: The case of Kazakhstan. *Economy: strategy and practice*, *16*(2), 197-205. https://doi.org/10.51176/1997-9967-2021-2-197-205

Liao, Y.-K., Van Anh, N., Yeong, H., Vu, V. T. H., & Trinh, H. T. (2022). Unraveling the effects of entrepreneurial passion and entrepreneurship education on entrepreneurial intention: The moderating role of demographic characteristics. *Global Business and Organizational Excellence, 42*(1), 41–57. https://doi.org/10.1002/joe.22190

Mussurov, A., & Arabsheibani, G. R. (2013). Informal self-employment in Kazakhstan. *IZA Journal of Labor & Development, 4*, 9. https://doi.org/10.2139/ssrn.2429398

Nugmanova, M. (2019). Food security in Kazakhstan: Do gender inequalities affect? In *Education, human rights and peace in sustainable development*. IntechOpen. https://doi.org/10.5772/intechopen.90339

OECD. (2017). *The pursuit of gender equality: An uphill battle*. OECD Publishing. https://doi.org/10.1787/9789264281318-en

OECD. (2021). Entrepreneurship policies through the gender lens. In *OECD studies on SMEs and entrepreneurship*. OECD Publishing. https://doi.org/10.1787/71c8f9c9-en

Piotrowski, M., Yoshida, A., Johnson, L., & Wolford, R. (2019). Gender role attitudes: An examination of cohort effects in Japan. *Journal of Marriage and Family, 81*(4), 863–884. https://doi.org/10.1111/jomf.12577

Platt, L., & Polavieja, J. G. (2016). Saying and doing gender: Intergenerational transmission of attitudes towards the sexual division of labour. *European Sociological Review, 32*(6), 820–834. https://doi.org/10.1093/esr/jcw037

Ryskaliyev, D., Zhapakov, S., Apakhayev, N., Moldakhmetova, Z., Buribayev, Y., & Khamzina, Z. (2019). Issues of gender equality in the workplace: The case study of Kazakhstan. *Space and Culture, India, 7*(2), 16–30. https://doi.org/10.20896/saci.v7i2.450

Vancea, M., & Utzet, M. (2017). Does unemployment and precarious employment lead to increasing entrepreneurial intentions among young people? Results from a survey-based study in Spain. *Central European Business Review, 6*(2), 5–17. https://doi.org/10.18267/j.cebr.176

Zulkapil, D., Nurkatova, L., & Giritli, S. (2022). Observance of women's rights in modern Kazakhstan: Sociological analysis. *Woman in Russian Society, 2*, 36–49. https://doi.org/10.21064/winrs.2022.2.3

AUTHOR BIOGRAPHIES

***Rab Nawaz Lodhi** – PhD, Associate Professor, Hailey College of Commerce, University of the Punjab, Lahore, Pakistan. Email: rabnawazlodhi.hcc@pu.edu.pk, ORCID ID:https://orcid.org/0000-0001-5330-4962