

Women's Agency in Jordan: The Impact of Marriage and Motherhood Moderated by Education

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AND MOTHERHOOD MODERATED BY EDUCATION**

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Abstract

Marriage and motherhood both represent key milestones in commitment and family responsibilities. In this context, this paper explores how women's agency in Jordan is influenced by these roles, along with education level. It highlights three elements of instrumental agency: choice-making, financial independence, and mobility—along with intrinsic agency, which is assessed through attitudes toward domestic violence among married women. The sample consists of women between the ages of 15 and 59 from the 2010 and 2016 Jordan Labor Market Panel Surveys (JLMPS). Findings suggest that motherhood reduces women's likelihood of participating in household decision-making yet enhances their freedom of mobility and intrinsic agency. The change in the impact of motherhood on both decision-making and intrinsic agency is insignificant, with education acting as a moderating factor, all else equal. Marriage increases the probability of achieving greater financial independence but restricts mobility compared to single women under similar conditions. Education significantly amplifies the positive effects of marriage on financial autonomy but does not change the impact of marriage on the freedom of mobility.

Keywords: Marriage, Motherhood, Women's agency, Gender gap, Women empowerment, Fertility, Education, Singlehood, Gender norms, Domestic violence.

JEL Classifications: J16, J12, J13, I20, J10.

ملخص

يمثل الزواج والأمومة معالم رئيسية في الالتزام والمسؤوليات الأسرية. وفي هذا السياق، يستكشف هذا البحث كيف تتأثر وكالة المرأة في الأردن بهذه الأدوار، إلى جانب المستوى التعليمي. وهو يسلط الضوء على ثلاثة عناصر للوكالة الفعالة: اتخاذ القرار، والاستقلال المالي، والتنقل — إلى جانب الوكالة الجوهرية، والتي يتم تقييمها من خلال المواقف تجاه العنف المنزلي بين النساء المتزوجات. تتكون العينة من نساء تتراوح أعمارهن بين 15 و59 عامًا من المسوحات التتبعية لسوق العمل الأردنية لعامي 2010 و2016 (JLMPS). تشير النتائج إلى أن الأمومة تقلل من احتمالية مشاركة المرأة في صنع القرار المنزلي ولكنها تعزز حريتها في التنقل وقدرتها الجوهرية. إن التغيير في تأثير الأمومة على كل من عملية صنع القرار والفاعلية الجوهرية ليس له أهمية، حيث يعمل التعليم كعامل معتدل، مع تساوي جميع العوامل الأخرى. يزيد الزواج من احتمالية تحقيق قدر أكبر من الاستقلال المالي ولكنه يقيد الحركة مقارنة بالنساء العازبات في ظل ظروف مماثلة. ويعمل التعليم على تعزيز الآثار الإيجابية للزواج على الاستقلال المالي بشكل كبير، ولكنه لا يغير من تأثير الزواج على حرية التنقل.

1. Introduction

Women with greater agency are more involved in decisions that affect their lives, families, and communities, such as fertility, household choices, mobility, education, and finances. Marriage and motherhood greatly alter women's responsibilities, setting them apart from single or childless women. These phases of life transform daily habits and self-concepts, intertwining difficulties and rewards.

Marriage and parenthood variably influence women's agency across cultures. Some studies suggest that marriage may limit agency due to societal norms, while motherhood can enhance decision-making power at home. Yet, increased fertility can pose challenges in career growth and time management. Ultimately, the impact on agency largely depends on individual relationship dynamics and circumstances.

"Women's agency and social relations" refers to women's decision-making ability within their social contexts. It examines how societal norms, power dynamics, and relationships influence a woman's capacity to act and reach her goals, highlighting the link between individual agency and the larger social environment surrounding women (Charrad, 2010; Lee and Logan, 2019).

Theoretical frameworks addressing the impact of women's agency on fertility assume that women with agency actively engage in fertility decision-making processes (Samari, 2019), but what might account for the contrasting impacts of marriage, motherhood, and education on women's autonomy? Many studies explore women's agency in the MENA region, but few consider how marriage and motherhood impact it. This gap restricts our understanding of the challenges women encounter in their daily choices, influenced by marital status, parental responsibilities, and education level.

Drawing on the seminal work of Samari (2017a) and Friedrich, Engelhardt, and Schulz, (2021) on women's agency as influenced by parenthood in the MENA region, this study is the first to explore how marriage, parenthood, and education influence women's agency in Jordan. It examines aspects of instrumental agency, including decision-making, access to finances, and mobility for women. It also explores gender role attitudes among married women with and without children, and how education moderates the influence of motherhood and marriage on these agency aspects.

The findings will guide social policies to empower women and girls, enabling them to have a stronger voice in family and societal decisions as they pursue their goals, regardless of their marital or parental status. This paper addresses the following questions:

1. Are there significant predictive marginal effects on the likelihood of women with different marital and parenthood statuses exhibiting instrumental and intrinsic agency across the two waves of the JLPMS (2010 and 2016)?
2. Do the effects of motherhood and marriage on the assessed dimensions of agency vary as education levels increase from low to high?

The paper is structured as follows. Section 2 examines existing studies on women's agency in marriage, parenthood, and education, particularly highlighting the MENA region and Jordan. Section 3 details the data, section 4 outlines the methods, section 5 shares the results, and section 6 wraps up with limitations and recommendations for future research.

2. Background

2.1. Previous research on women's agency, marriage, parenthood, and education

Enhancing women's agency is vital for reducing gender inequality. "Intrinsic agency" refers to a woman's internal power and confidence—her "power within," while "instrumental agency" denotes her ability to influence decisions—her "power to" effect change. Put simply, intrinsic agency pertains to how women view their capabilities, while instrumental agency focuses on utilizing those capabilities to reach their objectives. Both concepts influence women's decision-making (Jones et al., 2020).

Agency is flexible and attainable. Women's agency in marriage is influenced by gender inequality, family pressures, and contextual preferences. These factors affect important aspects such as age at marriage, spouse characteristics, and communication quality with partners. In a culture prioritizing marriage, the stigma of singlehood undermines women's agency by imposing societal pressures that suggest that unmarried women lack fulfillment and potential. This belief creates inadequacy and hinders ambitions due to societal judgment. Fear of stigma can push women into unfulfilling or harmful partnerships instead of embracing the choice of singlehood (Bear and Offer, 2024; Budgeon, 2015).

In societies that view parenthood as the norm, child-free women face more social backlash than mothers and infertile women. Many feel excluded from activities due to their choice, experiencing stigma and judgment (Tamas, 2018). Older generations often hold stronger beliefs in the importance of having children, leading to greater stigma and reduced agency for childless women in those societies (Gouni et al., 2022).

Classical resource theory posits that the partner with the most valued resources holds more power in a marriage. Resources include anything one partner provides to help the other meet needs or achieve goals (Blood Jr and Wolfe, 1960). Accordingly, the mother's role in a family is a major

asset (HEER, 1963). Lee-Rife (2010) and Samari (2017) argue that a woman's reproductive capacity is a key resource and essential component of her identity and social status in the family, which can influence her level of agency.

In some cultures, an extensive family may be associated with higher social status, directly influencing a woman's decision-making authority within the community. Transitioning to a larger family can boost decision-making power for women, particularly those with less education in rural areas (Friedrich, 2023). In contrast, having additional children often leads to increased dependency on the household for childcare and financial support, potentially limiting a woman's access to education or employment, both of which are crucial for improving her decision-making power (Atake and Gnakou Ali, 2019; Wodon et al., 2018).

Delaying marriage boosts women's autonomy in household roles, asset ownership, income control, and public speaking, improving their bargaining power (Tauseef and Sufian, 2024). Studies indicate that women who enter into marriage at a young age generally possess a diminished sense of agency and display a higher degree of dependence on their spouses compared to those who marry at an older age (Jensen and Thornton, 2003). Additionally, a smaller age gap between partners may also enhance empowerment levels (Batool and Jadoon, 2018).

Agency develops differently for women and men as they age, influenced by life transitions and social role changes. Middle-aged women may be seen as having more agency than younger women, leading to higher workplace status (Chatman et al., 2022). Older women, particularly those who are unmarried, may encounter prejudiced views that disempower them and maintain their dependency (Nossett, 2019).

Education empowers women, providing knowledge and skills for better choices, delaying early marriage and parenthood, and fostering female leadership (Elsayed and Shirshikova, 2023). The bargaining models state that education helps elevate women's bargaining power and expand their instrumental agency (McElroy, 1990; Kantor, 2003). Modernization Theory suggests that as societies develop economically, traditional gender roles become more flexible. This flexibility allows women to participate more actively in the workforce and public life, leading to greater empowerment (Alexander and Welzel, 2007). However, traditional gender roles that prioritize male dominance can hinder women's ability to make decisions, even for those who are educated. In several countries, laws regarding personal status can restrict women's rights in areas like marriage, divorce, child custody, and inheritance. As a result, educated women frequently encounter obstacles that impede their participation in the workforce and, consequently, their financial independence.

Financial independence empowers women by providing control over careers and lifestyles, fostering pride and confidence. Engaging in economic decisions allows women to be seen as

leaders. Managing household finances prioritizes investments in health, education, and family well-being, which boosts community development. Marriage can offer vital financial security for women in areas with limited employment opportunities.

Wealth embodies power and autonomy. Women's wealth is closely linked to their empowerment, benefiting society overall. One effective way to empower women through wealth is by investing in their education and skills development as well as fostering women's entrepreneurship, thereby allowing them to earn their own income and paving the way for greater economic independence (Goldin, Kolovich, and Newiak, 2024). Moreover, women possessing wealth can foster a more equitable society for all individuals (Houston, 2024). In Ghana, educated, employed women are more likely to engage in healthcare and household decisions than their poorer, unemployed counterparts (Boateng et al., 2014). Wealth alone doesn't ensure women's agency and can worsen gender inequalities, reinforcing patriarchal structures and marginalizing women, especially in families where men typically hold decision-making power (Zumbyte, 2021).

2.2. Women's agency in the MENA region and Jordan

In the MENA region, gender disparities often run deeper than they appear, despite advances in women's rights. The concept of low empowerment can be better understood through the "MENA paradox" (Assaad et al., 2020). This concept describes the unusual demographic circumstance in which the participation of women in the labor market is notably low (ILO, 2017) and does not align with women's higher education and lower fertility rates in the region (World Bank, 2013; Vishwanath, 2012).

Women are underrepresented in powerful political and corporate positions, with female labor force participation in the MENA region at just 22 percent (Lundvall et al., 2017). Women's labor force participation in Jordan has increased since 1990; however, in 2023, only 14 percent of women participated compared to 62.8 percent of men (World Bank, 2024). Legal and traditional regulations in Jordan could discourage married women from employment. For instance, female public sector employees lose family allowance if their husbands are alive and able to work (Majcher-Teleon, 2009). Also, a woman's partner may impede her from securing either informal or formal employment (Alsawalqa, 2021).

The agency of women in Jordan has made significant strides. Various empowerment initiatives offer training that allows women to transition from traditional homemaking roles to diverse opportunities. Legal reforms have advanced gender equality in family and employment matters, such as permitting women to retain their pensions during maternity leave. Yet, the Social Institutions and Gender Index (2014) identifies Jordan as having a high level of gender inequality. The 2018 Global Gender Gap Report ranked Jordan 138 out of 149 countries, indicating notably low levels of gender equality in the country (World Economic Forum, 2018).

In the Middle East, single women have less agency than married women due to societal norms viewing them primarily as wives and mothers, which promotes stigma and limits their opportunities. Jordanian bachelors face less stigma for being single; society sees it as a choice, despite questions about their marital status. In certain nations, single women face limitations regarding housing and travel. However, many Middle Eastern countries are witnessing shifts in social attitudes that embrace single women living independently. Additionally, women's rights movements are advancing in various areas, contributing to this evolving landscape (Friedrich, Engelhardt, and Schulz, 2021; HRW, 2023b). The variations in rights are significant depending on the country and personal situations.

In Jordan, marriage is deemed an important cultural milestone. As of 2023, 53 percent of women and 37 percent of men aged 15-49 are married (Jordanian Department of Statistics, 2023). In Jordan, transitioning to marriage can reduce women's agency as societal norms emphasize domestic roles, leading to diminished decision-making, limited education, and increased family duties after childbirth. This is evident in early marriages, where women miss out on personal development and career opportunities (Assaad, Krafft, and Selwaness, 2017). Linos, Khawaja, and Al-Nsour (2010) find that in 2002, 12 percent of married women in Jordan didn't participate at all in any decision about their own health, outside visits, household purchases, and daily meals. Married women without children are 20 percentage points less likely to engage in the Jordanian labor market compared to their unmarried counterparts (Muller and Wai-Poi, 2020). In contrast, Friedrich, Engelhardt, and Schulz (2021) find that a high percentage of Jordanian women actively participate in major household decisions.

Patriarchal marriage practices in the MENA region, such as consanguinity and child marriage, likely adversely affect women's agency. The connection between consanguineous marriages and women's agency is complex. Some studies suggest that these marriages may enhance women's status, while others argue that they may impose limitations (Malik, Nadeem, and Waheed, 2024). Consanguineous marriages could enhance women's status by strengthening family ties and securing in-law support (Hamamy, 2012). On the other hand, they also restrict women's freedom and economic opportunities, often leading them to rationalize spousal violence and be pushed into unpaid work for relatives (Khalil, 2024). Allendorf (2012) finds that women who maintain high-quality relationships with their husbands and parents-in-law experience greater agency.

It is common for women to transition into motherhood approximately one year after getting married in many countries within the MENA region (Gebel and Heyne, 2014). This can prove their fertility since actual or suspected infertility is of great concern and stigmatizing, which can be a challenging issue in Jordan (Mahadeen et al., 2020). In Arab societies, infertility is often associated with shame. Men might reject acknowledging fertility problems, leaving women to confront the stigma by themselves. This situation can result in marital disputes and divorce, in addition to potentially increasing the risk of domestic violence (Stellar et al., 2016). Infertile women are often

unfairly blamed for their inability to conceive and seen as burdens by their families, which can lead to physical and emotional abuse from in-laws and relatives who view them as sources of shame (Öztürk et al., 2021). Violence against infertile women in Jordan is widely documented (Alia et al., 2018; Daibes et al., 2018; Obeisat et al., 2012).

There is a strong preference for sons over daughters in the MENA region, influenced by various socioeconomic, cultural, and institutional factors (Kazenin, 2024). Having a son empowers mothers, with the number and age of their sons having a greater influence than birth order, particularly in rural and low-income households (Tanvir and Arif, 2022). Fathers often grant more authority to mothers in household decisions when an older son is present, making the son's presence a key factor in maternal empowerment (Das Gupta et al., 2003; Zimmermann, 2012). For example, in Egypt, mothers with only daughters are 496 times more likely to prefer a son than those with only sons (El-Gilany and Shady, 2007).

Domestic violence and sexual harassment are serious issues for women in MENA countries (Boy and Kulczycki, 2008; Kelly, 2010). This violence is widespread and viewed as a public health issue. Jordan has taken steps to fight violence against women, such as adopting a Guide on Combating Violence Against Women in Public Life. However, this violence remains common and underreported. In Jordan, 25.9 percent of women face domestic violence from their husbands (2017/18 Demographic and Health Survey), primarily in the form of emotional, physical, and sexual abuse (Kheirallah et al., 2023).

The Demographic and Health Survey reports that 21 percent of women have experienced physical violence from partners or family members since the age of 15 (Alsawalqa et al., 2022). Data from Egypt and Jordan show that nearly 90 percent of married women accept at least one reason for wife beating (Boy and Kulczycki, 2008). During the COVID-19 pandemic, the UN Population Fund estimated that 69 percent of Jordanian women faced gender-based violence (Alrawashdeh et al., 2024).

Awareness of wife abuse in Jordan, both physical and psychological, is significant. While people generally oppose abuse, they often blame the victims instead of the husbands or societal factors. Wife abuse is frequently viewed as a personal issue rather than a social or legal one. Preferred coping strategies expect the abused wife to change and take responsibility, often seeking support from family, community, or religious figures. Confronting the husband, separating, or seeking formal support systems are less favored options and considered only in severe cases (Btoush and Haj-Yahia, 2008).

In Arab-Islamic families, men typically serve as primary decision-makers, providers, and protectors, while women are valued for their nurturing attributes, such as childcare and family support. This tradition underscores partnership and family connections, showcasing the

significance of every member's contribution (Moghadam, 2004). Still, family laws and societal norms based on patriarchal beliefs may marginalize women and support gender inequality. Despite the protection provided by the constitution and Islamic law, women are often denied inheritance and access to housing and land. They are frequently pressured to relinquish these rights in favor of male heirs. Women often struggle to secure their rights, in part because they frequently lack awareness of the legal protections available to them (ARDD, 2021a).

In Jordan, many married women rely on their husbands' earnings, leaving them financially exposed (ARDD, 2021b). Economic abuse can make a woman reliant on her partner for essentials like food and clothing—in fact, it may persist post-relationship via financial control over child support (Eriksson and Ulmestig, 2021; Fawole, 2008). Moreover, social customs may hinder women's access to their rights. For example, parents often transfer property to their sons while alive, especially if they have only daughters, to ensure that their daughters do not inherit and pass their wealth on to their husbands' families (Ababsa, 2017a).

According to the 2017 Global Findex Database, in Jordan, a significantly lower proportion of women (less than one in three) have access to a bank account compared to men (more than half), highlighting a large gender gap in financial inclusion within the country, where the overall financial inclusion rate is below the global average at 42 percent (CBJ, 2018). Also, the discrepancy in account ownership¹ in Jordan between males and females surpasses the regional average for the MENA region (World Bank, 2021).

Property is usually registered in the husband's name, limiting women's access to credit (OECD, 2017). In 2017, women owned 16.7 percent of land and 23.7 percent of apartments in Jordan. By 2018, 11.2 percent owned a home, alone or with others (Al-Dahdah et al., 2016). Rural women own more land than urban women but are less likely to own a house. Women in northern and southern Jordan typically own more land than those in the central region (Ababsa, 2017b).

Jordanian women enjoy legal equality in various aspects, such as freedom of movement, but some restrictions remain. Women may need permission to leave home, as departing without consent may be seen as "disobedience," risking spousal maintenance rights. Married women can travel abroad without male guardian permission but need consent from the child's father, another male guardian, or a judge to travel with children. Unmarried women, however, face movement restrictions, as authorities may honor requests from male guardians to limit their travel (HRW, 2023a). Improving this limited freedom of movement—which is reflected in Jordan's low Female Mobility Indicator Score—requires granting women equal rights, including choosing where to live, leaving home without permission, applying for passports, and traveling abroad like men (World Bank, 2020).

¹ The percentage of female respondents aged 15 and older who indicate having an account at a bank or other financial institution, either individually or jointly, or have used a mobile money service personally in the past year (%).

3. Methodology

3.1. Measures of women's agency

This paper examines women's agency in Jordan across four groups: single women, married women, married women with children, and child-free married women. The sample includes women aged 15 to 59, as data on marriage, fertility, and agency is only available within this range in the JLMPS surveys. Widowed or divorced women were excluded, and cases with missing values on marital status, parenthood, agency, or control variables were removed in both survey waves.

To accurately capture the multidimensional nature of women's agency in the analysis, several common measures are considered. Table 1 shows the three aspects of instrumental agency and the views on domestic violence to capture intrinsic agency-gender role attitudes, along with the corresponding response options.

Table 1. Agency type and response options

Agency Type	Response Options
Involvement in Decision-Making/Only for Married Women	
1. Making large household purchases 2. Making household purchases for daily needs 3. Visits to family, friends, or relatives 4. What food should be cooked each day 5. Getting medical treatment or advice for herself 6. Buying clothes for herself	If the woman is married, the categories are: 1. Respondent alone 2. Husband 3. Respondent and husband jointly 4. In-laws 5. Respondent, husband, and in-laws jointly 6. One of the children
Financial Autonomy (Applicable to All Women)	
1. Do you keep the household money yourself? 2. Do you personally have savings, own land, house, jewelry, or other valuables which you can sell or use as you please?	1. Yes 2. No
Freedom of Movement (Applicable to All Women)	
1. Local market 2. Local health center or doctor 3. Home of relatives or friends in the neighborhood	1. Without permission 2. Just inform them 3. Need permission 4. Cannot go alone
Intrinsic Agency-Gender Role Attitudes/Only for Married Women	
Is a Husband Justified in Beating His Wife in Each of the Following Situations:	
1. When she burns the food? 2. When she neglects the children? 3. When she argues with him? 4. When she talks to other men? 5. When she wastes his money? 6. When she refuses to have sex with him?	1. Yes 2. No

Involvement in decision-making is measured using six variables. Married women were surveyed to identify who typically makes final family decisions on issues like household purchases,

scheduling visits, meal planning, medical advice, and clothing shopping. Answers were recoded into a binary variable for each question to indicate if married women participated in decision-making. Those involved, whether independently or with their spouse or in-laws, were coded as yes, while decisions made without their input were coded as no.

Financial autonomy is assessed with two questions for all women: “Do you keep the household money?” and “Do you have personal savings, land, a house, jewelry, or other valuables for personal use?” Answers were binary, indicating access to resources and savings. Freedom of movement is assessed through three questions. All women were inquired whether they needed permission, only had to inform, or were able to go alone to certain locations. Again, these responses were recoded into a binary variable for each question to indicate if a single or married woman could go without permission or only had to inform (yes/1) or if they couldn’t go alone and required permission (no/0).

Views on domestic violence can assess women’s intrinsic agency. It is assessed through six questions directed at married women regarding justifications for a husband to beat his wife in specific scenarios, such as burning food, neglecting their child, disagreeing with him, talking to other men, spending money irresponsibly, or denying intimacy. Responses were binary: yes or no.

3.2. Predictor, moderator and controls

In examining the two dimensions of instrumental agency—freedom of movement and financial autonomy—the main predictors in both survey waves are parenthood and marital status, comparing married versus single women, as well as married childless women against married women with children. Women are coded as child-free if they are married and have never given birth, while those who have are classified as mothers. The agency aspects concerning intrinsic agency and decision-making involvement are assessed solely among married women. Thus, parenthood serves as the primary predictor and is treated as a dichotomous variable.

Educational attainment is defined by the highest level of education a woman has completed, categorized into three groups: (1) lower education (basic or less), (2) intermediate education (secondary), and (3) higher education (post-secondary). It serves as a moderator through an interaction term to assess the change in the effect of motherhood and marriage as education increases from low to high in the second part of the analysis.

The models control for several variables known to influence women's agency. These variables include age; age squared; education level; whether they have ever worked (yes/no); region of residence: north (Irbid, Mafraq, Ajloun, Jerash), middle (Amman, Zarqa, Balqa, Madaba), and south (Karak, Aqaba, Tafileh, Ma'an); whether they live in an urban area (yes/no), and the household wealth score. The models using parenthood as the predictor variable also account for

other factors known to affect married women's agency. These factors include whether the husband is a blood relative (yes or no) and the woman's age at first marriage.

3.3. Analytic strategy

Logit regression models are used to estimate the likelihood of women's involvement in aspects related to "involvement in decision-making" (six models for married women), "financial autonomy" (two models for both single and married women), and "freedom of movement" (three models for both single and married women) across each survey wave. The probabilities of intrinsic agency-gender role attitudes are evaluated with six models for married women in every wave. In total, there are 44 models for both waves, plus an additional 44 models to assess the effect of education as a moderating factor.

Given the large number of generated Logit models, the reporting of results is simplified by automatically computing the predictive marginal effects after conducting logit regressions. The marginal effect indicates the change in the predicted probability of being involved in decision-making, possessing financial autonomy, and enjoying the freedom of movement when the marital and parenthood statuses change from single to married and from child-free to mother, respectively, assuming all other variables remain constant.² For the intrinsic agency-gender role attitudes, the marginal effect assesses how the predicted probability of justifying beating as the independent variable shifts from 0 to 1 (from child-free married women to mothers), while keeping all other variables constant.

In the second version of the logit models, the moderating effect of education is accounted for by incorporating an interaction term between marriage, motherhood, and education level. This approach measures the change in the impact of both marriage and motherhood on various agency aspects, as women move from low to high education, concerning both instrumental and intrinsic agency, all else equal.

When "no significant marginal effect" is present between two binary independent variables in a logit regression, it indicates that altering one binary variable (shifting from 0 to 1) while keeping all other variables constant does not lead to a statistically significant change in the probability of the dependent variable occurring. This suggests that the two binary variables probably do not exert a meaningful independent influence on the outcome when analyzed together.

² For example, a logit model estimating college admission likelihood, where "gender" is an independent variable, coded as 1 for males and 0 for females. A positive marginal effect for "gender" suggests that males are predicted to be more likely admitted than females, assuming constant values for GPA and test scores.

4. Data

This analysis draws on both waves of the 2010 and 2016 JLMPS, conducted by the Economic Research Forum, which provides detailed insights into women's social backgrounds, agency aspects, fertility, and educational attainment. All surveys and microdata are publicly accessible through the ERF Data Portal.³

5. Results

5.1. Descriptive results

Table 2 shows the descriptive statistics on women's agency, parenthood, marital status, education, and all control variables. It reports the number of observations and the percentage contribution in the corresponding sample in parentheses. For continuous variables, means and standard deviations are reported. The number of observations is 6,946 for 2010 and 8,879 for 2016, respectively. In terms of parenthood, a small percentage of participants in both surveys reported never having given birth, with approximately 93 percent in 2010 and 89 percent in 2016 having given birth at least once. In both survey rounds, a higher number of women were married compared to those who were single, and over half of the participants in each wave had lower education levels.

Most respondents live in urban settings, making up about 75 percent, and half of the sample in both waves reside in the central region. In both survey rounds, 78 percent and 85 percent of women indicated they had never been employed, respectively. By 2016, nearly 71 percent of women married spouses unrelated by blood, up from 62 percent in 2010. The gender distribution of the first child is nearly equal across both survey waves, and there was an increase of 1.271 years in the average age at first marriage in the second survey round.

³ www.erfdataportal.com

Table 2. Sample characteristics by year

Variable	Year	
	2010	2016
Number of Observations	6,946	8,879
Motherhood		
Never Given Birth	308 (7.5%)	628 (11.4%)
Has Given Birth	3,779 (92.5%)	4,860 (88.6%)
Marital Status		
Single	2,858 (41.1%)	3,378 (38.0%)
Married	4,088 (58.9%)	5,501 (62.0%)
Education Level		
Low	3,847 (55.4%)	5,002 (56.4%)
Intermediate	1,491 (21.5%)	1,534 (17.3%)
High	1,608 (23.2%)	2,330 (26.3%)
Urban/Rural		
Rural	1,973 (28.4%)	2,148 (24.2%)
Urban	4,973 (71.6%)	6,731 (75.8%)
Region		
Central	3,465 (49.9%)	4,239 (47.7%)
North	2,368 (34.1%)	3,266 (36.8%)
South	1,113 (16.0%)	1,374 (15.5%)
Ever Worked		
No	5,404 (77.8%)	7,566 (85.3%)
Yes	1,542 (22.2%)	1,301 (14.7%)
Husband Related by Blood		
Unrelated	2,543 (62.2%)	3,884 (70.7%)
Related	1,545 (37.8%)	1,610 (29.3%)
Sex of First Child		
Boy	1,952 (51.7%)	2,525 (52.0%)
Girl	1,827 (48.3%)	2,327 (48.0%)
Age	30.569 (11.558)	31.232 (11.770)
Age of First Marriage	20.439 (4.605)	21.710 (4.880)
Wealth	0.103 (0.908)	0.080 (0.998)

Source: Author's calculations, JLMPS 2010 and 2016.

5.2. Results from marginal effect analysis

The results of the predictive marginal effects, shown in tables 3-6, are computed after running the Logit models, using financial autonomy, decision-making involvement, freedom of movement, and intrinsic agency as independent variables. This analysis controls for age, age squared, wealth, education level, rural or urban area, employment, and region of residency. In the model that includes parental status as a predictor, controls are also included for whether the husband is a blood relative and the age at first marriage. Section 5.2.5 explores how the effects of motherhood and marriage change when education is treated as a moderating variable. The results ll and ul represent the lower and upper limits of the 95 percent confidence interval.

5.2.1. Involvement in decision-making

Table 3 shows the predictive marginal effect between childless married women and mothers regarding their involvement in decision-making in 2010 and 2016. In 2010, there were no significant marginal effects on decision-making between married women with children and those without when controlling for other variables. However, in the later wave, significant marginal effects emerged, revealing that mothers had a nine- and 10-percentage-point lower likelihood of

participating in decisions about major household items and daily necessities, respectively, compared to married women without children, again controlling for other variables.

Table 3. Marginal effect between childless married women and mothers: involvement in decision-making, 2010 and 2016

Outcome	2010					2016				
	Effect	SE	p	CI_Lower	CI_Upper	Effect	SE	p	CI_Lower	CI_Upper
Major Household										
Items	-0.02	0.03	0.48	-0.08	0.04	-0.09***	0.03	0.00	-0.14	-0.05
Daily Needs	0.00	0.03	0.99	-0.07	0.07	-0.10***	0.03	0.00	-0.17	-0.04
Visits to										
Family/Friends	-0.04	0.02	0.09	-0.09	0.01	-0.05	0.02	0.06	-0.09	0.00
Types of Daily Food	0.00	0.02	0.93	-0.04	0.04	-0.01	0.02	0.64	-0.06	0.04
Going to Doctor	-0.01	0.02	0.73	-0.04	0.03	-0.03	0.02	0.19	-0.07	0.01
Buying Personal										
Clothes	-0.02	0.01	0.11	-0.04	0.00	-0.03	0.02	0.24	-0.07	0.02

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

5.2.2. Financial autonomy

Table 4 presents the predicted marginal effects for the aspects of financial autonomy for single versus married women, as well as between child-free married women and mothers in both survey waves. Married women show significant positive predictive marginal effects compared to single women in accessing household finances. They are also significantly more likely to have savings and own valuable items like land, houses, or jewelry, all else equal. For example, in 2010, a married woman was significantly 26 percentage points more likely to have access to household money and 13 percentage points more likely to possess financial assets and valuables than a single woman, assuming all other factors remain the same.

In terms of financial autonomy for married women, women with children in 2016 had an eight percentage points greater significant likelihood of accessing household money, all else equal. In 2010, however, they demonstrated a lower significant marginal effect of nine percentage points regarding savings or financial assets compared to women without children, holding everything constant.

Table 4. Marginal effect, all women: financial autonomy, 2010 and 2016

Outcome	2010					2016				
	Effect	SE	p	CI_Lower	CI_Upper	Effect	SE	p	CI_Lower	CI_Upper
Married Women with Children vs Childfree Married Women										
Direct Access to Household Money	0.01	0.03	0.79	-0.06	0.08	0.10***	0.03	0	0.04	0.16
Have Savings, Own Land, House, Jewellries, or Other Valuables	-0.09***	0.03	0	-0.14	-0.03	0	0.02	0.86	-0.04	0.04
Married vs Single										
Direct Access to Household Money	0.26***	0.02	0	0.23	0.29	0.15***	0.01	0	0.13	0.18
Have Savings, Own Land, House, Jewellries, or Other Valuables	0.13***	0.01	0	0.11	0.16	0.05***	0.01	0	0.03	0.06

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

5.2.3. Freedom of movement

Table 5 presents the predicted marginal effects for freedom of movement for single versus married women, as well as between child-free married women and mothers in both survey waves. Single women are notably more likely than married women to access different locations without permission. For instance, in 2010, married women were significantly four percentage points less likely to visit friends and family than single women, assuming all else is equal. Married women with children have higher but insignificant probabilities of mobility without permission during both waves, assuming all else is equal compared to their child-free counterparts. Yet, they were significantly seven and five percentage points more likely to visit a local health center or doctor without needing permission than women without children, assuming all other factors remained constant in both 2010 and 2016, respectively.

Table 5. Marginal effect, all women: freedom of movement, 2010 and 2016

Outcome	2010					2016				
	Effect	SE	p	CI_Lower	CI_Upper	Effect	SE	p	CI_Lower	CI_Upper
Married Women with Children vs Childfree Married Women										
Loc. Market	0.05	0.03	0.10	-0.01	0.11	0.03	0.02	0.25	-0.02	0.07
Loc. Health Center or Doc.	0.07*	0.03	0.05	0.00	0.13	0.05*	0.02	0.01	0.01	0.08
Home of Rel. or Fri. in Neigh.	0.04	0.03	0.19	-0.02	0.10	0.01	0.03	0.70	-0.04	0.06
Married vs Single										
Loc. Market	-0.02	0.02	0.21	-0.05	0.01	-0.09***	0.02	0.00	-0.13	-0.05
Loc. Health Center or Doc.	-0.02	0.02	0.33	-0.05	0.02	-0.09***	0.02	0.00	-0.13	-0.05
Home of Rel. or Fri. in Neigh.	-0.04**	0.02	0.01	-0.07	-0.01	-0.07***	0.02	0.00	-0.11	-0.04

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

5.2.4. Intrinsic agency

Table 6 shows the predictive marginal effect between childless married women and mothers between the ages of 15 and 59 regarding gender role attitudes in 2010 and 2016. This metric is used to examine motherhood's impact on women's beliefs about justifying a husband's physical abuse under certain circumstances.

Table 6 shows no significant marginal effect on gender role attitudes between mothers and child-free women, all else equal. In the later wave, the marginal effect becomes significant, with mothers less likely to agree on all aspects. For example, mothers are 14 and 15 percentage points significantly less likely to agree that a husband is justified in hitting his wife for burning food or refusing intimacy, respectively. This shift in significance may arise from the smaller share of child-free women compared to mothers, making conclusions less reliable.

Table 6. Marginal effect between childless married women and mothers: intrinsic agency, 2010 and 2016

Outcome	2010					2016				
	Effect	SE	p	CI_Lower	CI_Upper	Effect	SE	p	CI_Lower	CI_Upper
Burns Food	0.01	0.01	0.62	-0.02	0.03	-0.14***	0.03	0.00	-0.20	-0.08
Neglects Child	0.02	0.03	0.62	-0.05	0.08	-0.15***	0.04	0.00	-0.22	-0.08
Argues with Him	-0.03	0.03	0.43	-0.10	0.04	-0.14***	0.03	0.00	-0.21	-0.07
Talks to Men	-0.05	0.04	0.13	-0.12	0.02	-0.15***	0.04	0.00	-0.22	-0.08
Wastes Money	-0.03	0.03	0.31	-0.10	0.03	-0.15***	0.04	0.00	-0.22	-0.08
Refuses Sex	-0.02	0.04	0.55	-0.09	0.05	-0.15***	0.04	0.00	-0.22	-0.08

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

5.2.5. The role of education

Tables 7 to 10 demonstrate the moderating effect of education on the change in the impact of motherhood and marriage when transitioning from low to high education levels concerning both instrumental agency and intrinsic agency.⁴ For instance, to determine the change in the effect of motherhood moderated by the education level on a specific agency dimension, the predictive marginal effects of highly educated childless married women and mothers are summed, then the predictive marginal effects of low-educated childless married women and mothers are subtracted.

⁴ The marginal effect of education on women with similar marital or parental status can be calculated. For example, the predictive marginal effect in the likelihood of freedom in movement between low- and high-educated women can be found by subtracting the low-education effect from the high-education effect while keeping a marital or parental status constant, though this is beyond this paper's scope.

5.2.5.1 Change in the effect of motherhood when going from low to high education for decision-making involvement

Table 7 shows the change in the effect of motherhood on involvement in decision-making when going from low to high education in both waves. The change in motherhood's influence on decision-making is insignificant across both waves, with education as a moderating factor.

However, there are some significant negative marginal effects observed between mothers and child-free married women who have low educational backgrounds in the later wave. This indicates that motherhood significantly decreases the likelihood of decision-making involvement for married women with lower education, all else equal. For instance, in 2016, married women with children and lower education levels were significantly less likely to engage in decisions regarding daily and major household purchases, visits to family and friends, doctor appointments, and buying personal clothing when compared to their child-free married counterparts who also have a low educational level, holding all else constant.

Table 7. Change in the effect of motherhood when going from low to high education, involvement in decision-making, 2010 and 2016

Outcome	Education	Effect	SE	2010			Effect	SE	2016		
				p	CI Lower	CI Upper			p	CI Lower	CI Upper
Major Household Items	High	-0.03	0.05	0.56	-0.14	0.07	-0.02	0.06	0.76	-0.13	0.09
	Low	-0.04	0.04	0.27	-0.12	0.03	-0.14***	0.03	0.00	-0.20	-0.08
	Delta	0.01	0.07	0.85	-0.12	0.14	0.12	0.06	0.06	0.00	0.25
Daily Needs	High	-0.01	0.06	0.89	-0.13	0.11	-0.02	0.07	0.72	-0.15	0.11
	Low	-0.02	0.04	0.70	-0.10	0.07	-0.17***	0.04	0.00	-0.24	-0.09
	Delta	0.01	0.07	0.91	-0.14	0.15	0.14	0.08	0.06	-0.01	0.29
Visits to Family/Friends	High	-0.06	0.04	0.16	-0.14	0.02	0.03	0.06	0.57	-0.08	0.15
	Low	-0.03	0.03	0.38	-0.09	0.03	-0.08***	0.03	0.00	-0.14	-0.03
	Delta	-0.03	0.05	0.53	-0.13	0.07	0.12	0.07	0.07	-0.01	0.25
Types of Daily Food	High	0.00	0.03	0.98	-0.06	0.06	0.03	0.06	0.53	-0.08	0.14
	Low	0.00	0.03	0.91	-0.06	0.06	-0.04	0.03	0.12	-0.10	0.01
	Delta	0.00	0.04	0.92	-0.08	0.09	0.08	0.06	0.21	-0.05	0.20
Going to Doctor	High	0.00	0.03	0.98	-0.05	0.05	0.04	0.06	0.49	-0.07	0.15
	Low	-0.01	0.03	0.79	-0.06	0.05	-0.06**	0.02	0.01	-0.10	-0.01
	Delta	0.01	0.04	0.83	-0.06	0.08	0.10	0.06	0.12	-0.03	0.22
Buying Personal Clothes	High	0.01	0.02	0.69	-0.04	0.06	0.05	0.06	0.46	-0.08	0.17
	Low	-0.03*	0.01	0.03	-0.06	0.00	-0.06**	0.02	0.01	-0.10	-0.02
	Delta	0.04	0.03	0.13	-0.01	0.10	0.11	0.07	0.11	-0.02	0.23

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

5.2.5.2 Change in the effect of motherhood and marriage when going from low to high education for financial autonomy

Table 8 shows the change in the effect of motherhood and marriage on the financial autonomy aspects when going from low to high education in both waves. The change in motherhood's influence on both aspects of financial autonomy is insignificant across both waves when moving from low to high education. However, both mothers with low and higher levels of education are significantly more likely to access household money compared to child-free married women with the same level of education in 2016, all else equal.

When examining the change in the effect of marriage on the likelihood of having financial autonomy as education levels rise, we see a significant positive marginal effect on both the probability of having direct access to household funds and the saving or ownership of financial assets, holding all else equal in both cases. This suggests that married and single women with higher education are significantly more likely to achieve greater financial autonomy compared to their counterparts with lower levels of education, all else constant.

For example, in 2010, married and single women with higher education have a four- and five-percentage points greater likelihood of direct access to household money and having financial assets, respectively, compared to their less-educated counterparts, all else being equal.

Table 8. Change in the effect of motherhood and marriage when going from low to high education, all women: financial autonomy, 2010 and 2016

Outcome	2010						2016				
	Education	Effect	SE	p	CI_Lower	CI_Upper	Effect	SE	p	CI_Lower	CI_Upper
Married Women with Children vs Childfree Married Women											
Direct Access to Household Money	High	0.00	0.06	0.9368	-0.11	0.12	0.13**	0.04	0.0020	0.05	0.22
	Low	0.02	0.05	0.7345	-0.08	0.11	0.09*	0.04	0.0370	0.00	0.17
	Delta	-0.01	0.07	0.8818	-0.16	0.14	0.05	0.06	0.4020	-0.06	0.16
Savings, Own Land, House, Jewelleries, or Other Valuables	High	-0.10	0.05	0.0504	-0.20	0.00	-0.03	0.04	0.4080	-0.11	0.05
	Low	-0.02	0.04	0.6678	-0.09	0.06	0.01	0.02	0.6990	-0.03	0.04
	Delta	-0.08	0.06	0.1639	-0.20	0.03	-0.04	0.05	0.3750	-0.13	0.05
Married vs Single											
Direct Access to Household Money	High	0.29***	0.02	0.0000	0.25	0.32	0.17***	0.02	0.0000	0.13	0.20
	Low	0.25***	0.02	0.0000	0.22	0.28	0.14***	0.01	0.0000	0.12	0.17
	Delta	0.04**	0.01	0.0016	0.01	0.06	0.02	0.01	0.0760	0.00	0.05
Savings, Own Land, House, Jewelleries, or Other Valuables	High	0.17***	0.02	0.0000	0.13	0.21	0.06***	0.01	0.0000	0.04	0.08
	Low	0.12***	0.01	0.0000	0.09	0.14	0.03***	0.01	0.0000	0.02	0.05
	Delta	0.05***	0.01	0.0001	0.03	0.08	0.03**	0.01	0.0050	0.01	0.05

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

5.2.5.3 Change in the effect of motherhood and marriage when going from low to high education, freedom of movement

Table 9 shows the change in the effect of motherhood and marriage on the freedom of movement aspects when going from low to high education in both waves, all else being equal. Notably, there is no considerable change in the effect of both motherhood and marriage on women's freedom of movement when comparing those with higher education to those with less education across both survey waves. This suggests that women with higher education experience similar levels of mobility freedom to those with lower education, irrespective of their marital or motherhood status, assuming other factors remain constant.

Nevertheless, certain significant negative marginal effects have been noted among married and single women with similar educational backgrounds in the later wave. This suggests that marriage

substantially reduces the freedom of movement for married women compared to their single counterparts who possess the same level of education, assuming all other factors are equal. For instance, in 2016, married women with high education levels were significantly less likely to visit local markets, local health centers, and family and friends compared to their single counterparts, holding all else constant.

Table 9. Change in the effect of motherhood and marriage when going from low to high education, freedom of movement, 2010 and 2016

2010							2016				
Outcome	Married Women with Children vs Childfree Married Women										
	Education	Effect	SE	p	CI_Lower	CI_Upper	Effect	SE	p	CI_Lower	CI_Upper
Loc. Market	High	0.02	0.05	0.76	-0.09	0.12	0.04	0.04	0.28	-0.03	0.12
	Low	0.07	0.04	0.13	-0.02	0.15	0.02	0.03	0.46	-0.04	0.09
	Delta	-0.05	0.07	0.44	-0.18	0.08	0.02	0.05	0.73	-0.08	0.12
Loc. Health	High	0.06	0.06	0.29	-0.05	0.17	0.01	0.03	0.68	-0.05	0.08
Center or	Low	0.07	0.04	0.11	-0.02	0.16	0.06*	0.02	0.01	0.02	0.11
Doc.	Delta	-0.01	0.07	0.88	-0.15	0.13	-0.05	0.04	0.2	-0.13	0.03
Home of	High	-0.03	0.06	0.57	-0.14	0.08	-0.06	0.07	0.35	-0.2	0.07
Rel. or Fri.	Low	0.09*	0.04	0.01	0.02	0.16	0.05*	0.02	0.05	0	0.09
in Neigh.	Delta	-0.12	0.07	0.07	-0.25	0.01	-0.11	0.07	0.14	-0.25	0.03
Single vs Married											
Loc. Market	High	-0.02	0.02	0.21	-0.05	0.01	-0.11***	0.02	0	-0.15	-0.06
	Low	-0.02	0.02	0.22	-0.05	0.01	-0.09***	0.02	0	-0.13	-0.05
	Delta	0	0	0.49	0	0	-0.02	0.01	0.08	-0.04	0
Loc. Health	High	-0.02	0.02	0.33	-0.05	0.02	-0.1***	0.02	0	-0.15	-0.06
Center or	Low	-0.02	0.02	0.33	-0.05	0.02	-0.09***	0.02	0	-0.12	-0.05
Doc.	Delta	0	0	0.4	0	0	-0.02	0.01	0.19	-0.04	0.01
Home of	High	-0.04*	0.02	0.01	-0.07	-0.01	-0.08***	0.02	0	-0.12	-0.04
Rel. or Fri.	Low	-0.04*	0.02	0.01	-0.07	-0.01	-0.07***	0.02	0	-0.11	-0.03
in Neigh.	Delta	0	0	0.09	-0.01	0	-0.01	0.01	0.46	-0.03	0.01

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

5.2.5.4 Change in the effect of motherhood when going from low to high education, intrinsic agency

Table 10 illustrates the change in the impact of motherhood on intrinsic agency as education levels rise from low to high in 2010 and 2016. Importantly, the change in the effect of motherhood on women's intrinsic agency is insignificant across both survey periods, indicating no significant differences when comparing mothers and child-free married women with higher education to those with lower education levels on gender role beliefs, all else equal.

However, there are some significant negative marginal effects observed between mothers and child-free women, particularly among those with low education levels. This suggests that motherhood in the context of low education notably reduces the chances of justifying a husband's abuse, assuming all other factors remain equal.

Table 10. Change in the effect of motherhood when going from low to high education, intrinsic agency, 2010 and 2016

Outcome	Education	2010					2016				
		Effect	SE	p	CI_Lower	CI_Upper	Effect	SE	p	CI_Lower	CI_Upper
Burns Food	High	-0.03	0.03	0.37	-0.09	0.03	-0.14*	0.07	0.04	-0.27	-0.01
	Low	0.02	0.01	0.29	-0.01	0.04	-0.17***	0.04	0.00	-0.25	-0.09
	Delta	-0.04	0.03	0.18	-0.11	0.02	0.03	0.08	0.69	-0.12	0.18
Neglects Child	High	0.00	0.05	0.97	-0.11	0.11	-0.16*	0.08	0.03	-0.31	-0.01
	Low	-0.01	0.04	0.83	-0.10	0.08	-0.17***	0.05	0.00	-0.26	-0.08
	Delta	0.01	0.07	0.87	-0.12	0.15	0.01	0.09	0.91	-0.16	0.18
Argues with Him	High	-0.03	0.06	0.64	-0.15	0.09	-0.16*	0.07	0.02	-0.29	-0.02
	Low	-0.05	0.05	0.25	-0.14	0.04	-0.16***	0.04	0.00	-0.24	-0.07
	Delta	0.03	0.07	0.73	-0.12	0.17	0.00	0.08	0.99	-0.16	0.15
Talks to Men	High	-0.05	0.06	0.42	-0.16	0.07	-0.18*	0.07	0.01	-0.32	-0.04
	Low	-0.09	0.05	0.08	-0.18	0.01	-0.16***	0.05	0.00	-0.25	-0.07
	Delta	0.04	0.07	0.61	-0.11	0.18	-0.02	0.08	0.84	-0.18	0.14
Wastes Money	High	-0.05	0.06	0.37	-0.16	0.06	-0.17*	0.07	0.02	-0.31	-0.03
	Low	-0.07	0.05	0.17	-0.16	0.03	-0.16***	0.04	0.00	-0.25	-0.08
	Delta	0.02	0.07	0.83	-0.12	0.16	-0.01	0.08	0.95	-0.17	0.16
Refuses Sex	High	-0.06	0.06	0.29	-0.18	0.05	-0.17*	0.07	0.02	-0.31	-0.03
	Low	-0.03	0.05	0.54	-0.12	0.07	-0.16***	0.04	0.00	-0.24	-0.07
	Delta	-0.03	0.07	0.65	-0.18	0.11	-0.01	0.08	0.90	-0.17	0.15

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

6. Conclusion

6.1. Conclusion and discussion

This paper examines how women's agency in Jordan is shaped by marital and parental roles, alongside education level. Relying on data from the 2010 and 2016 waves of the JLMPS, it focuses on three dimensions of instrumental agency—choice-making, financial independence, and mobility—as well as intrinsic agency, captured through married women's attitudes toward domestic violence.

The findings indicate that mothers are less likely to participate in household decisions than married women without children. Mothers are less inclined than child-free women to believe that a husband could justify physically assaulting his wife in specific situations, all else being equal. They also show a marginally greater likelihood of moving without permission compared to child-free women, while single women are more likely than married women to access the indicated locations without permission. Married women are more likely than single women to access household finances and possess personal savings and financial valuables.

The change in motherhood's influence on decision-making involvement and intrinsic agency dimensions is insignificant across both waves, with education serving as a moderating factor, all else constant. Education boosts the marriage effect, resulting in greater financial autonomy, but it doesn't significantly alter the impact of marriage on freedom of movement, all else being equal.

Women's involvement in household decision-making is linked to their income contributions. In the MENA region, although mothers may plan, final decisions are usually made by the husband, especially if the wife is not financially contributing. Married women are generally more involved in financial matters than those without children or single women, especially those living with their parents. This increased involvement often stems from making joint financial decisions with their husbands regarding the needs of their children. In many families and religious communities, married women often need approval from their husbands or in-laws for activities such as traveling, working, or going out. This dependency helps explain why married women generally have less freedom of movement compared to single women.

Educated women may not achieve increased bargaining power through motherhood or marriage, as these roles can reduce their income and job prospects. Married mothers often spend more time on domestic duties and child-rearing, limiting their leisure, social visits, and personal activities compared to single or childless women. Traditional roles often require women to prioritize household tasks and childcare, limiting career opportunities despite advanced degrees. Balancing family responsibilities with work can result in career breaks or part-time hours. They also face barriers to leadership roles, as societal norms encourage prioritizing others' needs over their own (Torres et al., 2024).

Women often face challenges in leveraging their education due to societal gender norms, stereotypes, discrimination, early marriage, and family obligations. In Jordan, women earn less than men for the same roles, hindering their participation in the workforce despite attaining higher education levels (Alkawasbeh, 2024). This disparity could eventually reduce their financial contribution to the household and ultimately diminish their role in decision-making. This suggests that gender outcomes are biased, regardless of a woman's efforts in work and education.

Progress in women's empowerment continues, yet challenges remain. While global modernization fosters a shift from traditional to egalitarian roles, this change is slow in the MENA region despite educational advancements. Societal attitudes and inadequate support restrict women's potential, emphasizing the need for true gender equality. To promote equality, the cultural norms and legal barriers restricting women's control over careers, finances, and mobility must be addressed. Overcoming such barriers enables women to exercise their rights and make empowered choices. Raising awareness helps women assert their rights by understanding gender inequalities and accessing skills training and entrepreneurial opportunities.

Every woman possesses unique aspirations and is entitled to respect for her autonomy. Policymakers should empower single women by promoting individual autonomy, embracing diverse lifestyles, challenging stereotypes, and supporting policies that ensure economic independence and decision-making in housing and careers. Policymakers should also challenge societal narratives by combating stereotypes that label single and child-free women as

"incomplete" or "less than." It is important to highlight their achievements and create networks for them to share experiences and uplift one another.

A comprehensive approach to gender equality enhances women's self-confidence and independence, which are crucial for financial empowerment and challenging societal norms. Policymakers can improve decision-making through economic empowerment, gender equality education, and family involvement. Ensuring women's mobility with safe transportation, childcare access, and addressing harassment is essential. Preventing partner violence requires strengthening legal protections, expanding supportive services, and promoting healthy relationships. Challenging societal norms and promoting positive representations of all women fosters an inclusive environment for everyone to thrive, regardless of marital status or life choices.

6.2. Limitations and future research on women's agency

It is crucial to note the limitations of this study. Firstly, current measures of women's agency often fall short, neglecting several aspects, especially the psychological dimension. They do not account for how decision-making changes over time and across various contexts. This lack of cohesion makes it more difficult to understand the constraints that women encounter in exercising their agency. The data fail to reflect women's participation in vital areas, such as education, career, and partners; whether romantic or strategic. These elements serve as more precise indicators of autonomy and the power of decision-making.

The data also do not clarify whether child-free women are without children due to choice or infertility, complicating conclusions about gender roles among married women regarding paternal status. Women's agency may differ between those delaying childbirth for education or career and those facing infertility, who may experience stigma affecting their decisions and overall agency. Another limitation is that many measured agency aspects occur more frequently among married women or heads of households compared to single women or those living with parents. Married women are more likely to make significant purchases, manage daily needs, prepare meals, and handle finances, and they participate in outings like market or hospital visits due to greater responsibilities. The metrics used to assess agency may introduce bias, diminishing single and child-free married women's likelihood of higher involvement in life choices. Finally, a significant limitation involves the sample size; in both waves of the study, the percentage of childless women remains low, with merely a small fraction of married women not having children.

Understanding the evolution of women's agency is crucial for formulating effective social policies. Adapting research methods to women's unique cultural contexts globally is vital. Future research on women's agency could delve into how empowerment factors intersect, particularly focusing on the role of education, supportive relationships, and the influence of mental health issues, such

as depression and anxiety, on women's agency throughout different life stages. Also, exploring reproductive events such as puberty, abortion, menopause, and stillbirths is essential for understanding women's agency. Investigating the impact of children's gender on mothers' agency is significant due to the preference for sons in the MENA region.

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