Journal of Biosocial Science (2024), 56: 5, 831–844
doi:10.1017/S0021932024000221

CAMBRIDGE UNIVERSITY PRESS

RESEARCH ARTICLE

Exploring the link between household structure and women's household decision-making autonomy in Mauritania

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(Received 28 July 2023; revised 22 April 2024; accepted 25 April 2024; first published online 27 May 2024)

Abstract

Governments in sub-Saharan African countries aim to increase married women's household decision-making autonomy as it remains a critical determinant of desirable health behaviours such as healthcare utilisation, antenatal care visits, and safer sex negotiation. However, very few studies explore how household structure (i.e., monogamous or polygamous) is associated with married women's household decision-making autonomy. Our paper seeks to address this gap. Using the 2019–20 Mauritania Demographic and Health Survey, a nationally representative dataset, and applying logistic regression analysis, we explore how married women's household structure is associated with their household decision-making autonomy. We find that 9% of married women are in polygamous marriages, while 63% and 65% are involved in decision-making about their health and large household purchases, respectively. Additionally, 76% and 56% are involved in decision-making about visiting family or relatives and household expenditures. After accounting for socio-economic and demographic factors, we find that compared to women from monogamous households, those from polygamous households are less likely to participate in decision-making about their health (OR = 0.65, $p < 0.001$), making large household purchases (OR = 0.65, $p < 0.001$), visiting family or relatives (OR = 0.72, $p < 0.001$), and household expenditure (OR = 0.58, $p < 0.001$). Based on our findings, we recommend the urgent need to review and re-evaluate policies and approaches seeking to promote gender equality and women's autonomy in Mauritania. Specifically, it may be critical for intervention programmes to work around reducing power imbalances in polygamous household structures that continue to impact married women's household decision-making autonomy adversely. Such interventions should centre married women's socio-economic status as a central component of their empowerment strategies in Mauritania.

Keywords: women's autonomy; household structure; polygamy; patriarchy; Mauritania

Introduction

Mauritania's government has strived to empower women over the last three decades to increase their autonomy and build a society free from gender-based inequalities. In 1992, the Mauritanian government created the Office of the Secretary of State (OSS) to handle women's issues and mainstream women's social, political, and economic rights. As observed by the International Monetary Fund (IMF), this initiative represented one of the earliest attempts to encourage women's full participation in the socio-economic and socio-political life of the Mauritanian

society (International Monetary Fund, 2004). In addition, the initiative to increase women's autonomy did not end with the creation of the OSS; other national policies that were focused on women's issues included the National Strategy for the Promotion of Women (1995–2000) and the Strategic Framework for the Fight Against Poverty in 2000, which sought to use an integrative approach to women's autonomy and empowerment across all sectors of Mauritania's society, especially among women in rural settings of the country (International Monetary Fund, 2004).

As such, we are interested in understanding how household structure influences women's household decision-making autonomy, particularly married women in polygamous unions, in light of the empowerment initiatives adopted by the Mauritanian government (we use polygamy to mean a union between one man and more than one wife). Notably, although women's empowerment has been used interchangeably in the literature with women's autonomy, the two concepts are different. While empowerment connotes support from an external source and is often seen as an end goal (Kabeer, 1999), autonomy reflects the 'current' state of a woman's lived experiences (Samari and Pebley, 2018), that is, all the support and resources available to propel women to make informed decisions about their lives. In this paper, we refer to autonomy as the ability of women to make independent decisions or contribute to decisions regarding their lives and everyday activities. Relatedly, we seek to understand how married women have at least some power to make decisions at the household level (Mason, 1986; Acharya et al., 2010). This may include three interrelated aspects of a woman's life – bodily agency, physical/spatial mobility, and financial autonomy (Samari and Pebley, 2018). Thus, while women's empowerment may address gender inequality, their autonomy may reflect the complex nature of gender power dynamics in decision-making within the household (Mason, 1986; Sano et al., 2018).

Most studies on women's autonomy in sub-Saharan Africa (SSA) and elsewhere have shown positive outcomes associated with women's control of their bodies and overall lives. For instance, across 23 SSA countries, Annan et al. (2021) found positive associations between autonomy and women's overall health, their reproductive outcomes, and the health and education of their children. In specific SSA countries, studies found that women who exhibit high autonomy tend to be more assertive and more likely to participate in public action. For instance, research conducted by Kebede and colleagues (2022) in 11 East African countries reveals that higher scores of women's autonomy tend to be associated with a lower probability of experiencing all forms of intimate partner violence, including emotional, physical, and sexual violence. Similarly, Meier zu Selhausen (2016) reported that Ugandan women with more equal intra-household power relations with their spouses were more likely to participate in collective action by joining a coffee cooperative. In Mozambique, autonomous women who reside in rural settings are more likely to enrol their female children in primary school (Luz and Agadjanian, 2015). Similar findings have also been established elsewhere in SSA (see Atchade, 2021; Guli and Geda, 2021)

Further, women's autonomy has been linked to some desirable positive health behaviours and outcomes in SSA, including the ability to negotiate safer sex and enrol in health insurance schemes. For example, Seidu et al. (2021) examined the association between women's autonomy and safer sex negotiation across 27 SSA countries and found that women with medium to greater autonomy were better positioned to negotiate for safer sex with their partners than those with lower levels of autonomy. In Ghana, it was observed that women with autonomy were more inclined to use skilled birth attendants relative to their counterparts with lower scores of autonomy (Ameyaw et al., 2016). Regarding married women's autonomy, Zegeye et al. (2023:1) reported that 'the odds of health insurance enrolment was higher among women who had household decision-making autonomy' than those with lower or no autonomy across 29 SSA countries. Similarly, married women in Malawi who reported higher levels of autonomy were more likely to reject the endorsement of HIV misconceptions, thus potentially reducing their exposure to the virus (Antabe et al., 2020).

Notwithstanding the importance of women's autonomy discussed above, certain socio-economic and demographic characteristics may shape how women exhibit autonomy within the

https://doi.org/10.1017/S0021932024000221 Published online by Cambridge University Press

household. Socio-economically, household wealth, education, and employment status have been linked to women's autonomy. For instance, women who are employed, highly educated, and from wealthy/rich households tend to report higher levels of autonomy compared to those from poor homes with little or no formal education and no employment (Antabe et al., 2020; Sano et al., 2018; Sano et al., 2017). Furthermore, demographic factors, including age, urban residency, and region of residence, have been associated with higher levels of women's autonomy (see, e.g., Osamor and Grady, 2016, 2018; Thankian, 2020). So far, the literature on autonomy and marital status has always focused on whether a woman is 'currently married' (see Hogan et al., 1999; Jejeebhoy, 2002; Acharya et al., 2010; Mondal et al., 2020) or 'ever married' (also see Niraula and Morgan, 1996; Al Riyami et al., 2004; Ram et al., 2022) and how household dynamics may influence their level of autonomy. Fewer studies have examined the relationship between autonomy and household structure (i.e., monogamy vs polygamy) (see, e.g., Dhillon et al., 2023), and almost no study has investigated this relationship in Mauritania, a country in the North-Western part of Africa with unique cultural and religious traditions that are critical to understanding women's autonomy within this context. Therefore, our study will add not only to the women's autonomy literature in SSA but also, more importantly, start a conversation around a topic that has not been explored much in Mauritania.

Given evidence about the potential impact of household structure on women's autonomy, it is concerning that no study has yet explored the association between women's autonomy and household structure. Thus, using a nationally representative dataset, we examine the potential influence of household structure on women's decision-making autonomy in Mauritania. This study is particularly useful as there are suggestions that existing attempts to empower women and make them autonomous may not yield the desired results. For example, a recent report by UN Women and the Word Bank has called for more efforts in addressing persistent gender-based inequalities, including gender-based violence and low economic participation of women due to restricted access to employment, certain jobs. and lack of legal capacity to be household heads (The World Bank, 2021).

Gender, marital status, Mauritania

Mauritania is located between the Arab Maghreb and western Sahara, and its geographical location and proximity to West Africa led to its classification as a country in SSA. This geographical uniqueness is reflected in the borrowing and practice of both Arab and African traditions. The dominant ethnic groups are the Moors (descendants of Arabs and Berbers) and the Haratins (made up of people of SSA origin and descendants of slaves dating back to the 3rd–7th centuries) (Diallo, 1993). Although there are accusations of perpetuation of modern-day slavery, the government has shown commitment to eradicating the practice by instituting a roadmap that criminalises the practice of any form of slavery in the country (Olsson and Olsson, 2022; Deschamps et al., 2023). After independence from France, Mauritania declared itself an Islamic state, with about 99% of the population being Sunni Muslims (OECD, 2010; Deschamps et al., 2023). The Mauritanian constitution and Islamic Shariah laws are used concurrently depending on the issues at hand (da Silva, 2022). Despite being traditionally nomads and following the 2012 drought that the country is yet to recover from, most people now rely on other diversified sources of livelihood, such as farming and fishing (Ba et al., 2021). Notwithstanding these diversified livelihood sources, the World Food Program reported that Mauritania had the highest food insecurity index with about 20–30% of the people being food-insecure in 2014 (Leturque, 2017; Olsson and Olsson, 2022). Alternative livelihood interventions such as farming and fishing are not enough to sustain the locals, causing about 42% of the population to live below the poverty line. The unemployment rate in the country is high, with more women (i.e., 11.5%) reporting being unemployed than men (i.e., 9.7%) (OECD, 2010; UN Women, 2024). The World Bank's Women Business and the Law Index, which measures a country's economic laws and regulations towards

https://doi.org/10.1017/S0021932024000221 Published online by Cambridge University Press

women's economic empowerment, scored Mauritania 48.1 out of 100 compared to 72.6% in SSA (The World Bank, 2021). The government's 4-year Poverty Reduction Strategy 3 (2011–2015) attempts to address these challenges, although more can be done.

Studies have discussed the implications of polygamous relationships and women's autonomy. For instance, von Struensee and Global Research Initiative (2004) observe that in contexts including Mauritania, where about 10.7% of women and 8% of men are in polygamous unions (Schroth, 2020; Ouassini and Ouassini, 2023), polygamy may perpetuate women's lower social and economic status by forcing them to share already scarce resources with co-wives and their children. Additionally, the authors argue that polygamy may negatively impact women's overall health, including mental health, sexual and reproductive health, and death from AIDS. In Nigeria, Essien (2018) also reports that polygamous unions may be marked by outbursts of verbal and physical violence, which may work to undermine such women's exercise of autonomy. Similarly, Nigatu et al. (2014) suggest that in the Bale Zone of Ethiopia, women in monogamous marriages were more likely to exercise greater autonomy in relation to maternal and child healthcare utilisation. Given the context of the sociocultural expectations of women in polygamous unions, we hypothesise that household structure can influence women's decision-making autonomy in Mauritania. In particular, we posit that women in polygamous unions may be less likely to be autonomous compared to their counterparts in monogamous unions.

Methods

This study used the 2019–20 Mauritania Demographic and Health Survey (MDHS), a nationally representative survey of women aged 15 to 49 years and men aged 15 to 59 years. The National Statistics Office implemented the survey in collaboration with the Ministry of Health, with technical assistance from ICF. The MDHS provides high-quality and reliable information on basic demographic indices and health-related topics, including women's autonomy. The MDHS used a multi-staged sampling framework where systematic sampling with probability to size was applied to identify enumeration areas from which households were chosen. While the MDHS also interviewed men, this study exclusively focuses on women. The MDHS initially identified 16,331 women aged 15 to 49 years and successfully interviewed 15,714 women, with a response rate of 96%. For this study, our analytical sample includes 9,038 married women who answered the questions on their participation in decision-making at the household level.

Dependent variables

Women's autonomy is a complex construct with several interrelated components (Alsop et al., 2006). We explored four dimensions of women's autonomy to reflect this theoretical and methodological standpoint. Specifically, respondents were asked, 'Who usually has the final say in household settings on the following decisions: 1) obtaining their own health care, 2) making large purchases, 3) visits to family and relatives, and 4) household expenditure'. These variables originally had three response categories (0 = respondent only; 1 = respondent and husband; 2 = husband only). We dichotomised these variables by combining 'respondent only' and 'respondent and husband' to identify married women who had at least some power to make decisions at the household level (Acharya et al., 2010). To this end, we have four dependent variables – women's participation in decision-making about obtaining their own health care, making large purchases, visiting family and relatives, and household expenditure (0 = no; 1 = yes).

Independent and control variables

The focal independent variable measures household structure, indicating whether the household is polygamous (0 = monogamous; 1 = polygamous). Informed by previous research (Acharya et al.,

https://doi.org/10.1017/S0021932024000221 Published online by Cambridge University Press

2010), we accounted for potential confounding factors by including a range of socio-economic and demographic variables as control variables. Specifically, we included three socio-economic variables, including household wealth (0 = highest; 1 = higher; 2 = middle; 3 = lower; 4 = lowest), education (0 = higher education; 1 = secondary education; 2 = primary education; 3 = no education), and employment status (0 = employed; 1 = unemployed). In addition, there are three demographic factors such as age of respondents (0 = 45–49; 1 = 40–44; 2 = 35–39; 3 = 30–34; 4 = 25–29; 5 = 20–24; 6 = 15–19), place of residence (0 = Tagant; 1 = Hodh Echargui; 2 = Hodh Gharbi; 3 = Assaba; 4 = Gorgol; 5 = Brakna; 6 = Trarza; 7 = Adrar; 8 = Dakhlet Nouadhibou; 9 = Guidimagha; 10 = Tiris Zemour et Inchiri; 1 = Nouakchott Ouest; 12 = Nouakchott Nord; 13 = Nouakchott Sud), and place of residence (0 = urban; 1 = rural).

Statistical analysis

Due to the dichotomous nature of our dependent variables, we relied on logistic regression analysis to understand the role of household structure on women's autonomy. Eight models were built where bivariate and multivariate analyses were performed for each dependent variable. Specifically, in Models 1, 3, 5, and 7, bivariate analyses were used to understand the gross impact of household structure on women's decision-making autonomy on health care, large household purchases, visits to family or relatives, and household expenditure, respectively. We further accounted for socio-economic and demographic factors in Models 2, 4, 6, and 8. Results were reported as odd ratios. Odd ratios larger than 1 indicate that women were more likely to participate in decision-making, while those smaller than 1 point lower the odds of doing so. All analyses used STATA 17 (State Corp, College Station, TX, USA). The 'svy' function was applied in statistical analysis to adjust for the cluster sampling design and sampling weights.

Results

Table 1 shows sample characteristics. We found that 40% of married women had no formal education, while 21% were employed. It is also interesting that 9% of women were in polygamous marriages. For demographic factors, we found that the largest age category was 25–29 years (20%), followed by 30–34 years (19%) and 35–39 years (16%). In addition, the largest proportion of women lived in Hodh Echargui (14%), followed by Nouskchott Nord (12%) and Hodh Gharbi (11%). Finally, we found that 55% of women lived in rural areas.

In Table 2, we summarised the percentage distributions of four questions related to women's decision-making autonomy. We found that 63% (16% for respondent alone and 47% for respondent and husband) and 65% (19% for respondent alone and 46% for respondent and husband) of married women were involved in decision-making about their own health care and large household purchases, respectively. For their involvement in decision-making about visiting family or relatives, 76% (20% for respondent alone and 56% for respondent and husband) were involved in decision-making at the household level. In addition, 55% (13% for respondents alone and 42% for respondents and husbands) were involved in decision-making regarding household expenditures.

Table 3 shows findings from logistic regression analyses. As shown in Models 1, 3, 5, and 7, we found at the bivariate level that women from polygamous households were less likely to participate in decision-making about obtaining their own health care (OR = 0.55, $p < 0.001$), making large household purchases (OR = 0.57, $p < 0.001$), visits to family or relatives (OR = 0.64, $p < 0.001$), and household expenditure (OR = 0.48, $p < 0.001$), compared to women from monogamous household. Interestingly, as shown in Models 2, 4, 6, and 8, these relationships remained largely consistent even after accounting for socio-economic and demographic factors. Specifically, compared to women from monogamous households, women from polygamous households were less likely to participate in decision-making about their own health care (OR = 0.65, $p < 0.001$),

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Table 1. Sample characteristics

	Percentage
Household structure	
Monogamous	91
Polygamous	9
Household wealth	
Highest	19
Higher	21
Middle	20
Lower	20
Lowest	20
Education	
Higher	2
Secondary	18
Primary	40
No education	40
Employment status	
Employed	21
Unemployed	79
Age of respondents[†]	31.60 (range: 15–49)
Region of residence	
Tagant	2
Hodh Echargui	14
Hodh Gharbi	11
Assaba	8
Gorgol	8
Brakna	8
Trarza	6
Adrar	2
Dakhlet Nouadhibou	3
Guidimagha	9
Tiris Zemour et Inchiri	2
Nouakchott Ouest	5
Nouakchott Nord	12
Nouakchott Sud	10
Place of residence	
Urban	45
Rural	55
Total	9,038

[†]Mean reported for age.

https://doi.org/10.1017/S0021932024000221 Published online by Cambridge University Press

Table 2. Four dimensions of women's household decision-making autonomy

	Percentage
Health care	
Respondent alone	16
Respondent and husband	47
Husband alone	37
Large household purchase	
Respondent alone	19
Respondent and husband	46
Husband alone	35
Visits to family or relatives	
Respondent alone	20
Respondent and husband	56
Husband alone	24
What to do with money husband earns	
Respondent alone	13
Respondent and husband	42
Husband alone	45

making large household purchases (OR = 0.65, $p < 0.001$), visits to family or relatives (OR = 0.72, $p < 0.001$), and household expenditure (OR = 0.58, $p < 0.001$).

In addition to household structure, socio-economic and demographic factors were significantly associated with women's autonomy. For example, educated, wealthier, and employed women were generally more likely to participate in decision-making about obtaining their own health care, making large household purchases, visits to family or relatives, and household expenditures. Moreover, we found that a 1-year increase in age was positively associated with women's involvement in decision-making about their own health care, making large household purchases, visiting family or relatives, and household expenditures. Finally, we also found that, compared to their counterparts in Tagant, women in Hodh Echargui, Hodh Gharbi, Assaba, Gorgol, Brakna, Trarza, Adrar, Dakhlet Nouadhibou, Guidimagha, Tiris Zemour et Inchiri, Nouakchott Ouest, Nouakchott Nord, and Nouakchott Sud were less likely to be involved in decision-making about their own health care, making large household purchases, visiting family or relatives, and household expenditure.

Discussion

In Mauritania, like many countries in SSA, the government has made increased efforts through social policy over the last few decades to improve women's household decision-making autonomy. Improving women's autonomy has been linked to positive social and health outcomes, and these are particularly important in highly patriarchal contexts such as Mauritania. However, despite the benefits associated with women's autonomy, there has been nascent research on how household structure, that is, whether women belong to polygamous or monogamous relationships, impacts autonomy in Mauritania. Using the 2019/2020 MDHS in Mauritania, we examined the association between household structure and women's decision-making autonomy.

https://doi.org/10.1017/S0021932024000221 Published online by Cambridge University Press

Table 3. Logit models predicting four dimensions of married women's household decision-making autonomy in Mauritania

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)
Type of household								
Monogamous	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Polygamous	0.55 (0.06)***	0.65 (0.07)***	0.57 (0.06)***	0.65 (0.06)***	0.64 (0.07)***	0.72 (0.08)**	0.48 (0.05)***	0.58 (0.07)***
Household wealth								
Richest		1.00		1.00		1.00		1.00
Richer		0.91 (0.13)		0.73 (0.10)*		0.71 (0.11)*		0.81 (0.12)
Middle		0.83 (0.12)		0.71 (0.11)*		0.64 (0.11)*		0.75 (0.13)
Poorer		0.69 (0.12)*		0.61 (0.11)**		0.50 (0.10)***		0.68 (0.12)*
Poorest		0.52 (0.09)***		0.42 (0.08)***		0.29 (0.06)***		0.53 (0.10)***
Education								
Higher education		1.00		1.00		1.00		1.00
Secondary education		0.62 (0.17)		0.72 (0.18)		0.50 (0.21)		0.52 (0.13)*
Primary education		0.53 (0.15)*		0.59 (0.16)*		0.37 (0.15)*		0.40 (0.10)***
No Education		0.37 (0.11)***		0.45 (0.12)**		0.24 (0.10)***		0.30 (0.08)***
Employment								
Employed		1.00		1.00		1.00		1.00
Unemployed		0.68 (0.06)***		0.70 (0.06)***		0.65 (0.07)***		0.73 (0.06)***
Age		1.02 (0.00)***		1.02 (0.00)***		1.02 (0.00)***		1.02 (0.00)***
Region of residence								
Tagant		1.00		1.00		1.00		1.00
Hodh Echargui		0.17 (0.03)***		0.14 (0.03)***		0.28 (0.08)***		0.22 (0.04)***
Hodh Gharbi		0.30 (0.06)***		0.24 (0.06)***		0.52 (0.17)*		0.18 (0.04)***

(*Continued*)

Table 3. (*Continued*)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)
Assaba		0.13 (0.03)***		0.11 (0.03)***		0.17 (0.06)***		0.20 (0.05)***
Gorgol		0.04 (0.01)***		0.05 (0.01)***		0.12 (0.04)***		0.04 (0.01)***
Brakna		0.19 (0.04)***		0.16 (0.05)***		0.15 (0.05)***		0.19 (0.05)***
Trarza		0.15 (0.03)***		0.12 (0.03)***		0.13 (0.04)***		0.21 (0.04)***
Adrar		0.39 (0.10)***		0.33 (0.09)***		0.34 (0.13)**		0.49 (0.12)**
Dakhlet Nouadhibou		0.23 (0.06)***		0.29 (0.09)***		0.18 (0.07)***		0.35 (0.09)***
Guidimagha		0.10 (0.02)***		0.09 (0.03)***		0.16 (0.07)***		0.07 (0.02)***
Tiris Zemour et Inchiri		0.25 (0.05)***		0.13 (0.04)***		0.19 (0.06)***		0.34 (0.08)***
Nouakchott Ouest		0.06 (0.02)***		0.06 (0.02)***		0.08 (0.03)***		0.07 (0.02)***
Nouakchott Nord		0.29 (0.08)***		0.33 (0.09)***		0.21 (0.07)***		0.34 (0.10)***
Nouakchott Sud		0.22 (0.06)***		0.23 (0.08)***		0.14 (0.06)***		0.23 (0.07)***
Place of residence								
Urban		1.00		1.00		1.00		1.00
Rural		1.27 (0.15)		1.30 (0.18)		1.18 (0.26)		1.05 (0.12)
F test	35.17***	14.88***	31.53***	12.97***	15.32***	10.76***	48.32***	16.77***

*p < 0.05, **p < 0.01, ***p < 0.001.

Our findings reveal that household structure is associated with the level of women's household decision-making autonomy. Overall, Mauritanian women in polygamous households have a lower likelihood of being autonomous in household decision-making compared to those in monogamous unions. Specifically, women in polygamous unions are less likely to be involved in decisions about their own health, making large household purchases, visiting family or relatives, or having the final say in household expenditures. This finding may be explained by the fact that the social and household power dynamics in polygamous households, as well as the expectations of women in such unions, may work to decrease their opportunity to be autonomous. In such unions, women's household decision-making autonomy may be influenced by either their male partners or co-wives. Regarding the latter, senior co-wives may tend to exert some control over junior co-wives. Therefore, navigating household dynamics to increase women's autonomy in polygamous unions does not only require bridging the power dynamics with husbands but also with co-wives who may exert some influence and control over household decisions (Hidrobo et al., 2021). Consistent with our findings, Anderson et al. (2016) observed in Mali and Tanzania that in polygamous relationships, husbands and senior co-wives may assign lesser authority to junior co-wives with regard to assets and property acquisition. The authors contend that while a wife's asset is expected to increase her autonomy in monogamous unions, this may not be the case in polygamous unions, where co-wives may report different levels of autonomy based on their position/rank in the union. In addition, Newbury (2017) found in Sierra Leone and the Democratic Republic of Congo (DRC) that women in polygamous unions were forced to share meagre household economic resources with co-wives and their children, which may imply that women's access to autonomy-enabling resources may be compromised in polygamous relationships. Furthermore, in Nigeria, Essien (2018) posits that the constant outburst of verbal and physical violence in polygamous unions works to reduce women's autonomy relative to their peers in monogamous unions. With polygamy being legal in Mauritania, it is important for the government to create policies that will protect all women, especially those in polygamous households if the country wants to improve its gender equality indices.

We also observe that socio-economic and demographic characteristics influence women's household decision-making autonomy. While women in polygamous relationships who live in poor/poorest households were less likely to be involved in decisions across all four decision-making categories, their counterparts in middle-rich households were only limited in two of the four measures of autonomy, that is the decision to make large household purchases, and to visit family or friends. However, on the flip side, as expected, employed women were more likely to report higher autonomy. Thus, household wealth and employment status are critical elements of women's autonomy, which is consistent with the current literature, where greater household wealth and being employed are noted to provide a helpful platform where women can increase their autonomy by reducing their economic and material dependency on their partners (Kebede et al., 2021). In Nepal, Acharya and colleagues (2010) made a similar observation where women from the wealthiest households and those employed were more likely to be autonomous in all four measures of women's household decision-making autonomy. Similarly, among all the measures of women's autonomy, women with higher levels of education were found to be more likely to have household decision-making autonomy. This finding is consistent with earlier studies that found a positive relationship between formal education and women's autonomy. It is believed that knowledge gained through higher formal education tends to empower women by making them more assertive about their rights to make decisions about their wellbeing relative to those with lower levels of formal educational attainment (Sultana, 2011; Sadhu et al., 2020). Another example of this relationship can be found in Akinsuyi's (2018) work in Nigeria, where the author found that women's higher educational attainment not only made them confident and assertive about exercising their rights but also that higher education reduced the decision-making power of their male partners in the household implying that the level of a woman's educational attainment is linked to the level of independence and decision-making autonomy within the household.

https://doi.org/10.1017/S0021932024000221 Published online by Cambridge University Press

Given that only 8% of Mauritanian women have attained secondary education and 21% employed in the labour market (Olsson and Olsson, 2022), it is critical for the Mauritanian government and other stakeholders to invest in women's education since research shows a positive relationship between higher education, employment, and women's autonomy (Al Riyami et al., 2004; Sultana, 2011; Seidu et al., 2021).

Furthermore, age was an important demographic characteristic of women's household decision-making autonomy in our study. We found that a year increase in a woman's age was associated with a higher likelihood of autonomy in all four measures of autonomy in the household. This finding is consistent with studies that have explored this relationship. For example, Sadhu et al. (2020) and Acharya et al. (2010) found that in rural Rajasthan and Nepal, as a woman ages, she tends to gain greater autonomy regarding unrestrained movement than a younger woman. Thus, as women age, they gain greater autonomy in household decision-making in polygamous relationships and may acquire additional responsibilities to mentor and guide the decisions of younger women/co-wives (Hanmer and Klugman, 2016; Nepal et al., 2023). In a Southern Ethiopian study about women's autonomy and contraceptive use, the authors found that although women aged 21–30 years were twice as likely to participate in household decision-making autonomy, those who were 30 years and older were seven times more likely to participate in decision-making autonomy (Alemayehu and Meskele, 2017) alluding to the importance of age in the power dynamics within a polygamous household.

Finally, the participants' region of residence affected their autonomy level. Except for the Tagant region, women who reside in the other 13 regions were less likely to report household decision-making autonomy. This is an interesting finding because we expected women in at least the capital to report higher autonomy because of their exposure to empowering government initiatives. The plausible explanation for this relationship can be attributed to location-based contextual factors in Mauritania. The Tagant region has one of the highest prevalence rates of poverty in Mauritania and has attracted attention from the government of Mauritania and other local and international non-governmental organisations (NGOs) who have introduced strategies to improve the socio-economic wellbeing of residents, including women (International Monetary Fund, 2004; Food and Agricultural Organization of the United Nations Nations, 2015; Bouasria et al., 2020). The combined efforts of these organisations and their activities may have worked overtime to improve the household decision-making autonomy of women in this region.

In summary, although our study fills a knowledge gap, it has some noteworthy limitations. First, our data were collected contemporaneously, meaning our findings are limited to statistical association and should be interpreted cautiously. Second, our construct of women's household decision-making autonomy may be limiting as autonomy goes beyond the four constructs we used in this paper to include the ease and comfort of making these decisions. In addition, other contextual nuances may contribute to women's household decision-making autonomy that is/are not captured in our paper. For instance, it would be interesting to study the relationship between women's autonomy and ethnicity – whether being Moor or of SSA descent – and whether there is any link to the level of household decision-making. We hope future studies will adopt a mixed methods approach to explore the cultural and ethnic dynamics of women's autonomy in Mauritania. Notwithstanding the limitations, our study is among the first to examine the influence of household structure on women's decision-making autonomy in the study context. The findings serve as a base study for understanding the factors contributing to women's decision-making autonomy in this highly patriarchal context and elsewhere with similar characteristics.

Conclusion

In conclusion, this study examined the association between household structure and women's decision-making autonomy. Our findings demonstrate the need to pay increased attention to women, specifically those in polygamous unions when implementing gender equality interventions.

https://doi.org/10.1017/S0021932024000221 Published online by Cambridge University Press

It would be necessary for policy stakeholders to design targeted approaches for women in polygamous unions, considering the household power dynamics that may be affecting their experiences of lesser household decision-making autonomy. In addition, interventions by the government and other policy stakeholders should target improving women's educational attainment and provide access to economic opportunities for women to work or be employed, which will help improve women's household decision-making autonomy. Finally, it is critical to pay attention to younger women and residents in the rest of the regions of Mauritania.

Acknowledgements. The authors thank the Demographic and Health Survey (DHS) programme and the study respondents. The authors also thank the editor and reviewers for providing very useful feedback and comments to earlier versions of the paper.

Funding statement. The authors declare that there was no funding for this study.

Competing interests. All authors declare that they have no conflict of interest regarding this research, authorship, or publication of this article.

Ethical standard. Ethics approval and permission to use the DHS data were obtained from the Mauritania National Statistics Office in collaboration with the Ministry of Health, with technical assistance from ICF. *The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.*

References

Acharya DR, Bell JS, Simkhada P, Van Teijlingen ER and Regmi PR (2010) Women's autonomy in household decision-making: A demographic study in Nepal. *Reproductive Health* **7**(1), 1–12. https://doi.org/10.1186/1742-4755-7-15.

Akinsuyi T (2018) *Women Autonomy in Household Decision Making in Nigeria: Analysis of 2013 Demographic and Health Survey Data School*. Charleston, IL: Eastern Illinois University.

Al Riyami A, Afifi M and Mabry RM (2004) Women's autonomy, education and employment in Oman and their influence on contraceptive use. *Reproductive Health Matters* **12**(23), 144–154. https://doi.org/10.1016/S0968-8080(04)23113-5.

Alemayehu M and Meskele M (2017) Health care decision making autonomy of women from rural districts of Southern Ethiopia: A community based cross-sectional study. *International Journal of Women's Health* **9**, 213–221. https://doi.org/10.2147/IJWH.S131139

Alsop R, Bertelsen M and Holland J (2006) Empowerment in practice: From analysis to implementation. In *Moral Wages* (1st ed.). World Bank Publications. https://doi.org/10.1525/9780520958661-004

Ameyaw EK, Tanle A, Kissah-Korsah K and Amo-Adjei J (2016) Women's health decision-making autonomy and skilled birth attendance in Ghana. *International Journal of Reproductive Medicine* **2016**, 1–9. https://doi.org/10.1155/2016/6569514.

Anderson LC, Reynolds TW, Biscaye P, Greenaway M and Merfeld J (2016) Polygamous Households and Intrahousehold Decision-Making: Evidence and Policy Implications from Mali and Tanzania 1–5. https://epar.evans.uw.edu/sites/default/files/EPAR_UW_330_Polygamy%20and%20Intrahousehold%20DecisionMaking_Brief_6.22.16_0.pdf (accessed 5 June 2023)

Annan J, Donald A, Goldstein M, Gonzalez Martinez P and Koolwal G (2021) Taking power: Women's empowerment and household Well-being in Sub-Saharan Africa. *World Development* **140**, 105292. https://doi.org/10.1016/j.worlddev.2020.105292.

Antabe R, Sano Y and Luginaah I (2020) HIV misconceptions among married women in Malawi: the role of household decision-making autonomy. *Journal of Public Health (Germany)* **0**(0), 1–8.

Atchade T (2021) Determinants of woman's decision-making power in the household: evidence in Benin in Ivory Coast and in Niger. *Repères et Perspectives Economiques* **5**(1), 319–339.

Ba M, Anwar A and Mughal M (2021) Non-farm employment and poverty reduction in Mauritania. *Journal of International Development* **33**(3), 490–514. https://doi.org/10.1002/jid.3533.

Bouasria M, Ashta A and Ratsimalahelo Z (2020) Bottlenecks to financial development, financial inclusion, and microfinance: a case study of Mauritania. *Journal of Risk and Financial Management* **13**(10), 239. https://doi.org/10.3390/jrfm13100239.

da Silva MC (2022) Unsettling gender and feminism: Views from Mauritania. In Freire F (ed), *State, Society and Islam in the Western Regions of the Sahara*, issue 1. Bloomsbury Publishing Plc, 143–166.

Deschamps HJ, Gerteiny AG and Stewart CC (2023) Mauritania. Britannica. Available at https://www.britannica.com/place/Mauritania/additional-info#contributors (accessed 5 June 2023)

Dhillon S, Amoak D, Chidimbah Munthali GN, Sano Y, Antabe R and Luginaah I (2023) Polygamy and safe sex negotiation among married women: evidence from Cameroon. *BMC Infectious Diseases* **23**(1), 817.

Diallo G (1993) *Mauritania-The Other Apartheid. Current African Issues*, vol 16. Uppsala: Nordiska Afrikainstitutet.

Essien ED (2018) The interplay between conflict and solidarity in co-wife family relationship: Experience from Africa. *International Journal of Development and Sustainability* **7**(4), 1544–1563. www.isdsnet.com/ijds

Food and Agricultural Organization of the United Nations Nations (2015) Analysing Resilience for better targeting and action: FAO Resilience Analysis No. 6. https://www.unisdr.org/preventionweb/files/57018_i8365en.pdf (accessed 8 June 2023)

Guli VME and Geda NR (2021) Women's autonomy on healthcare decision making in Sub-Saharan African Countries: A synthesis. *The Anthropologist* **43**(1–3), 1–12. https://doi.org/10.31901/24566802.2021/43.1-3.2056.

Hanmer L and Klugman J (2016) Exploring women's agency and empowerment in developing countries: where do we stand? *Feminist Economics* **22**(1), 237–263. https://doi.org/10.1080/13545701.2015.1091087.

Hidrobo M, Hoel JB and Wilson K (2021) Efficiency and status in polygynous pastoralist households. *Journal of Development Studies* **57**(2), 326–342. https://doi.org/10.1080/00220388.2020.1762863.

Hogan DP, Berhanu B and Hailemariam A (1999) Household organization, women's autonomy, and contraceptive behaviour in Southern Ethiopia. *Studies in Family Planning* **30**(4), 302–314.

International Monetary Fund (2004) Islamic Republic of Mauritania: Statistical appendix. *IMF Staff Country Reports* **2003**(315), 64. https://doi.org/10.5089/9781451827538.002.

Jejeebhoy SJ (2002) Convergence and divergence in spouses' perspectives on women's autonomy in rural India. *Studies in Family Planning* **33**(4), 299–308. https://medium.com/@arifwicaksanaa/pengertian-use-case-a7e576e1b6bf

Kabeer N (1999) Resources, agency, achievements: reflections on the measurement of women's empowerment. *Development and Change* **30**, 435–464.

Kebede AA, Cherkos EA, Taye EB, Eriku GA, Taye BT and Chanie WF (2021) Married women's decision-making autonomy in the household and maternal and neonatal healthcare utilization and associated factors in Debretabor, northwest Ethiopia. *PLoS ONE* **16**, 1–16. https://doi.org/10.1371/journal.pone.0255021.

Kebede SA, Weldesenbet AB and Tusa BS (2022) Magnitude and determinants of intimate partner violence against women in East Africa: multilevel analysis of recent demographic and health survey. *BMC Women's Health* **22**(1), 1–8. https://doi.org/10.1186/s12905-022-01656-7.

Leturque H (2017) Strategic Collaboration between World Bank Group and World Food Programme: Bridging Humanitarian Assistance and Social Protection Systems-Mauritania Case Study. Available at https://documents1.worldbank.org/curated/en/241671517827262697/pdf/123144-WP-StrategiccollaborationsWFPWBMauritania-PUBLIC.pdf (accessed 5 June 2023)

Luz L and Agadjanian V (2015) Women's decision-making autonomy and children's schooling in rural Mozambique. *Demographic Research* **32**(1), 775–796. https://doi.org/10.4054/DemRes.2015.32.25.

Mason KO (1986) The status of women: Conceptual and methodological issues in demographic studies. *Sociological Forum* **1**(2), 284–300.

Meier zu Selhausen F (2016) What determines women's participation in collective action? Evidence from a Western Ugandan coffee cooperative. *Feminist Economics* **22**(1), 130–157. https://doi.org/10.1080/13545701.2015.1088960.

Mondal D, Karmakar S and Banerjee A (2020) Women's autonomy and utilization of maternal healthcare in India: Evidence from a recent national survey. *PLoS ONE* **15**, 1–12. https://doi.org/10.1371/journal.pone.0243553.

Nepal A, Dangol SK, Karki S and Shrestha N (2023) Factors that determine women's autonomy to make decisions about sexual and reproductive health and rights in Nepal: A cross-sectional study. *PLOS Global Public Health* **3**(1), e0000832. https://doi.org/10.1371/journal.pgph.0000832.

Newbury E (2017) Understanding Women's Lives in Polygamous Marriages: Exploring Community Perspectives in Sierra Leone & DRC. Polygamy. https://www.trocaire.org/sites/default/files/resources/policy/1-overview-report-polygamy_0.pdf (accessed 5 June 2023)

Nigatu D, Gebremariam A, Abera M, Setegn T, and Deribe K (2014) Factors associated with women's autonomy regarding maternal and child health care utilization in Bale Zone: A community based cross-sectional study. *BMC Women's Health* **14**(1), 1–9. https://doi.org/10.1186/1472-6874-14-79

Niraula BB and Morgan SP (1996) Marriage formation, post-marital contact with natal kin and autonomy of women: Evidence from two Nepali settings. *Population Studies* **50**(1), 35–50. https://doi.org/10.1080/0032472031000149036.

OECD (2010) "Mauritania", in Atlas of Gender an Development: How Social Norms Affect Gender Equality in Non-OECD Countries. https://doi.org/10.1787/9789264077478-en.

Olsson H and Olsson C (2022) Mauritania. In *Africa Yearbook Volume 17* (pp. 138–144). Koninklijke Brill NV. https://doi.org/10.1163/9789004503182.

Osamor P and Grady C (2018) Factors associated with women's health care decision-making autonomy: Empirical evidence from Nigeria. *Journal of Biosocial Science* **50**(1), 70–85. https://doi.org/10.1017/S0021932017000037.

Osamor PE and Grady C (2016) Women's autonomy in health care decision-making in developing countries: A synthesis of the literature. *International Journal of Women's Health* **8**, 191–202. https://doi.org/10.2147/IJWH.S105483.

Ouassini N and Ouassini A (2023) Domestic violence, human rights, and reform in Mauritania. *International Responses to Gendered-Based Domestic Violence: Gender-Specific and Socio-Cultural Approaches* **2019**, 220–228. https://doi.org/10.4324/9781003264040-24.

Ram R, Kumar M and Kumari N (2022) Association between women's autonomy and unintended pregnancy in India. *Clinical Epidemiology and Global Health* **15**, 101060. https://doi.org/10.1016/j.cegh.2022.101060.

Sadhu G, Das A and Mishra HK (2020) Factors influencing women's decision-making authority and autonomy in rural Rajasthan. *Indian Journal of Public Health Research & Development* **11**(9), 30–36. https://doi.org/10.37506/ijphrd.v11i9.10979.

Samari G and Pebley AR (2018) Longitudinal determinants of married women's autonomy in Egypt. *Gender, Place and Culture* **25**(6), 799–820. https://doi.org/10.1080/0966369X.2018.1473346.

Sano Y, Antabe R, Atuoye KN, Braimah JA, Galaa SZ and Luginaah I (2018) *Married women's autonomy and post- delivery modern contraceptive use in the Democratic Republic of Congo*. 4–10.

Sano Y, Sedziafa AP, Vercillo S, Antabe R and Luginaah I (2017) Women's household decision-making autonomy and safer sex negotiation in Nigeria : An analysis of the Nigeria Demographic and Health Survey. *AIDS Care* **0**(0), 1–6. https://doi.org/10.1080/09540121.2017.1363363.

Schroth RK (2020) *North Africa: Algeria, Egypt, Libya, Mauritania, Morocco, Sudan, Tunisia, And Western Sahara. Gender and Identity around the World*. [2 Volumes]:[2 Volumes]. 81. USA: Bloomsbury Publishing.

Seidu AA, Aboagye RG, Okyere J, Agbemavi W, Akpeke M, Budu E, Saah FI, Tackie V and Ahinkorah BO (2021) Women's autonomy in household decision-making and safer sex negotiation in sub-Saharan Africa: An analysis of data from 27 Demographic and Health Surveys. *SSM - Population Health* **14**, 100773. https://doi.org/10.1016/j.ssmph.2021.100773.

Sultana AM (2011) Factors effect on women autonomy and decision-making power within the household in rural communities. *Journal of Applied Sciences Research* **7**(1), 18–22.

Thankian K (2020) Factors Affecting women's autonomy in household decision-making among married women in Zambia. *Journal of Scientific Research and Reports* **26**(4), 109–123. https://doi.org/10.9734/jsrr/2020/v26i430252.

The World Bank (2021) Gender Equality: A Necessary Condition for Promoting Inclusive Growth in Mauritania. The World Bank. Available at https://www.worldbank.org/en/news/press-release/2021/06/01/gender-equality-a-necessary-condition-for-promoting-inclusive-growth-in-mauritania (accessed 5 June 2023)

UN Women (2024) Mauritania. UN Women. Available at https://data.unwomen.org/country/mauritania (accessed 5 April 2023)

von Struensee S and **Global Research Initiative** (2004) The Contribution of Polygamy to Women's Oppression and Impoverishment: An Argument for its Prohibition. 1–89.

Zegeye B, Idriss-Wheeler D, Ahinkorah BO, Ameyaw EK, Seidu AA, Adjei NK and Yaya S (2023) Association between women's household decision-making autonomy and health insurance enrollment in sub-saharan Africa. *BMC Public Health* **23**(1), 610. https://doi.org/10.1186/s12889-023-15434-z.

Cite this article: Anfaara FW, Amoak D, Kye NO, Sano Y, and Antabe R (2024). Exploring the link between household structure and women's household decision-making autonomy in Mauritania. *Journal of Biosocial Science* **56**, 831–844. https://doi.org/10.1017/S0021932024000221