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DO GENDER ROLE ATTITUDES ASSOCIATE WITH CHILDREN'S DIETARY DIVERSITY? EVIDENCE FROM RURAL WOMEN IN IGANGA AND BUGIRI DISTRICTS IN EASTERN UGANDA

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ABSTRACT

Globally, social barriers are recognized as significant contributors to nutrition-related challenges in Developing Countries. This highlights the necessity of a shift from traditional to egalitarian gender role attitudes (GRAs) that limit nutrition and dietary choices. The study aimed to determine women's GRA and how these attitudes are associated with children's dietary diversity (DDS). This cross-sectional survey examined the GRA of 445 rural women in Iganga and Bugiri districts in eastern Uganda. Stata Version 15 was employed to conduct a regression analysis. The GRAs scale included items measuring women's perspectives on socially expected roles, employment, and caregiving responsibilities. Scores on the GRA scale were generated for each respondent and subsequently categorized into two groups: egalitarian (0–30) and traditional (31–60). Mean children's DDS was 3.99, and 68.3% of children had DDS <5, meaning that the majority did not attain the minimum dietary diversity. About 57% of the women were egalitarian, representing more than half of the respondents. Furthermore, egalitarian women supported working outside the home, which provided their children with better diets compared to those in traditional households. Similarly, women who opposed raising their daughters to become housewives and their sons as breadwinners provided their children with better diets. There is a need to promote a shift in attitudes towards women's work in public spaces to improve the diets of young children.

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INTRODUCTION

Better diets for children contribute to children's growth, development, and cognitive ability while increasing the country's productivity at large (Okolo et al., 2021; Woldehanna et al., 2017; Yaya et al., 2020). However, many countries, especially in the developing world, do not provide adequate diets to their children, evidenced by the low-quality diets (Miller et al., 2022). According to UNDP reports on the Sustainable Development Goals (SDGs),

achieving SDG 2 implies a steady decline in child malnutrition rates. However, projections indicate that by 2030, one in every five children under the age of five will still experience stunting, with Sub-Saharan Africa accounting for approximately one-quarter of these cases of wasted children (22.9%)(UNDP, 2024).

Over time, the hurdles to achieving improved diets have been related with social, economic, and other environmental issues (UNDP 2024; UNICEF 2021).

Existing literature has established a relationship between children's dietary diversity and several factors caretaker's education (Abebe et al. 2019; Dadzie, Amo-Adjei, and Esia-Donkoh 2021; Raru et al. 2023), empowerment (Sraboni and Quisumbing 2018). Other scholars expound on technology advances, such as the use of mobile phones and televisions, and their impact on children's diets (Muange and Ngigi 2021). Additional determinants have been identified as access to training, participation in nutrition programmes (Cunningham et al. 2021), woman's occupation (Moga et al., 2022), income, and child's age (Cunningham et al., 2015), and household food security (Moga et al., 2022). The limited focus on how these factors, combined with social influences, affect children's dietary diversity has hindered the development of context-specific interventions to address poor diets among children. This gap continues to exacerbate malnutrition and its associated impacts in developing countries.

According to Martín-Rodríguez et al. (2022) Social and environmental factors contribute significantly to the malnutrition burden. As a result, the failure to comprehend how some contextual elements, such as gender role attitudes (GRA), have hampered interventions intended to address poor diets (Serra et al., 2022). Addressing such difficulties may increase children's cognitive capacity and productivity in adulthood while reducing countries' expenditures on managing nutrition-related burdens (Bommer et al., 2020; Saavedra and Prentice, 2022). The premise remains that a shift in GRA has occurred, with women taking on tasks that were traditionally believed to be for men (Quisumbing et al., 2021). This shift in gender role attitudes (GRA) has affected existing social systems as individuals embrace egalitarianism over traditional tendencies and beliefs in the labour markets (Knight and Brinton, 2017). By gender groups, egalitarianism was experienced more amongst older women above the poverty line in Germany (Eberharter, 2001). However, these GRA changes do not eliminate existing attitudes and norms, such as men's and women's beliefs about health and nutritional practices, as well as gender roles (Knight and Brinton, 2017). This could be because, even when people recognize the detrimental consequences of defending conventional GRA, supporting the idea demonstrates their authority and position (Dery et al., 2022; Kosec et al., 2021), and grants social identity (Breines et al., 2000). Kosec and colleagues (2021) stated that men supported women's participation

in the labor market as long as it did not impact decision-making mechanisms. In some situations, women have declined to take up new tasks beyond farm management in agriculture, claiming that financial management and decisions are for men (Lecoutere and Chu, 2023).

However, this wealth of studies has primarily focused on gender role attitudes regarding the labor market and economic participation. Studies on the links between social structures and health have indicated that health and eating choices among men and women are gendered (Boman and Walker, 2010; Himmelstein and Sanchez 2016). Manhood inclinations negatively influenced men's dietary choices for meat over vegetables, which were considered women's food (Courtenay, 2000). Such attitudes are associated not just with unhealthy personal behaviour, but they also have consequences for the diets of other household members (Rothgerber, 2013). In Ethiopia, women's views about adhering to tradition disempowered them and hindered their mobility, negatively influencing eating choices (Legovini, 2004). For example, in health-related beliefs and behaviours, roles for men and women range from food choices (Stark, 2023) to preparation and serving. Like other social practices, upholding GRAs serves as a means for demonstrating femininities and masculinities (Courtenay, 2000).

The above studies, however, do not reflect the contribution of gender role attitudes towards women and their influence on children's diets. Scholars on this subject have examined the association between GRA and food security in West Africa (Akanni, 2015). Breines et al. (2000) emphasized the importance of multidisciplinary studies on social roles, particularly examining social and cultural conditions such as social role beliefs. These beliefs involve prescriptive notions about traits and behaviors considered appropriate for men and women (Himmelstein and Sanchez, 2016). This focus is especially crucial in developing countries, where standardized measures for constructs like Gender Role Attitudes (Akanni, 2015) and social role beliefs (Himmelstein and Sanchez, 2016) have been largely overlooked.

The present study aims to address this gap by examining the relationship between women's gender role attitudes and their children's dietary diversity. It assesses both the individual associations of gender role attitudes with dietary diversity scores (DDS) and their combined impact. Breines et al. (2000) emphasized the importance of multidisciplinary studies on social roles, particularly

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Other indicators reveal a shocking 28% teenage pregnancy, which could force early marriages and hinder socio-economic development for the women (Uganda Bureau of Statistics, UNICEF, WHO, World Bank, UNFPA and UNHCR, 2023). These areas have a low DDS for children under five years old, as indicated in the 2016 Uganda Demographic and Health Survey results (Uganda Bureau of Statistics and ICF, 2018). Recent statistics indicate that the Busoga region is still faced with 23% of children under five stunted, with wasting (3.2%), and 8.1% underweight. Similarly, only 9.3% of the children attained minimum dietary diversity, with the same region experiencing child mortality rates ranging between 60-70% and a fertility rate estimated at 5.6-6.1 (Uganda Bureau of Statistics (UBOS) 2023). On this premise, it is therefore essential to understand the social factors contributing to these developments. The Social Role Theory was adopted to deepen the understanding of the relationship between gender role attitudes and children's dietary diversity, as discussed in the following subsection.

Brief Theoretical Insight

This research applied the Social Role Theory by Eagly and Wood (2012). Central to this Theory is the role of gender

stereotypes in driving attitudes. According to social role Theory, attitudes about the differences in men's and women's roles develop as people adopt behaviors associated with men and women, thereby building a belief that these groups have distinct roles. The stereotypes emanate from the physical abilities of males and females such as having more strength and guiding what is defined as appropriate roles for men and women (Eagly and Wood, 2012). While applying this Theory, Boehnke and Boehnke (2011) demonstrated that these roles change as individuals socialize and vary across regions. For example, industrialized areas and those promoting empowerment had more egalitarian beliefs than culturalist societies. Based on this Theory, stereotypes can change, and individuals embrace egalitarianism through socialization, personal experiences, and policies favoring women's labor rights. However, culture and surrounding context can inform the extent to which individuals uphold such beliefs (Boehnke, 2011). Therefore, it is imperative to examine how such changes could inform women's provision of various food varieties to their children leading to dietary diversity.

METHODOLOGY

Study area

The study was conducted in Bugiri and Iganga districts, in the Busoga region of eastern Uganda. The area is predominantly inhabited by Basoga, a Bantu ethnic group, who are governed by a patriarchal system that positions men as the superior gender over women.

In terms of Sample size and sampling Procedure, the study was conducted in four purposively selected sub-counties of Namung'alwe and Bunyiro in Iganga and Buwunga and Nankoma in Bugiri districts. These districts were selected based on their implementation of interventions targeting both the tangible and behavioral aspects of child diets (Food and Nutrition Technical Assistance Project III Project (FANTA) 2017). A bias towards women as the primary target group for change in children's diets was crucial in guiding the examination of the extent to which women were empowered to foster dietary changes among children. The selected sub-counties had actively engaged in implementing dietary diversity enhancement activities, with a particular emphasis on empowering women and improving child nutrition. For the individual women, lists were obtained from the Health Center IIIs to support the Village Health Teams in filling gaps where needed. A table by Glenn

(1992) was used to aid in selecting 445 respondents, ensuring a precision level of $\pm 5\%$, a confidence level of 95%, and $P=0.5$ (Glenn, 2013).

The Data collection tools modified and used a 15-item short form of the Scale of Egalitarian Sex Role Attitudes to collect information on GRAs (SESRA-S) (Akanni 2015; Uji et al. 2006) As shown in *Table 5*. A five-point Likert scale was used from 'strongly agree' to 'strongly disagree' while 'unsure' represented the midpoint. Items were rated on a scale of 0 to 4, with higher scores indicating a more traditional attitude toward gender roles. Nine out of fifteen GRA statements were captured in a reverse manner, with a score of 4 indicating strong disagreement, while six of the positive GRA statements had a score of 4, indicating strong agreement. Other research (Streatfield et al., 2023) Employed agreement with statements to test people's attitudes toward gender roles.

Additional data was collected on a 24-hour dietary recall for food groups fed to the child; (i) Cereals, tubers, and roots (ii) vitamin a rich vegetables and fruits, (iii) fruits, (iv) breast milk, (v) egg, (vi) flesh food (fish, and meats), (vii) legumes, nuts and seeds, (viii) milk and milk products (Raru et al., 2023). Other data included the socio-economic characteristics of the woman, such as age, access to training, and participation in nutrition projects, as well as child demographics. The data collection was conducted in May 2023 by the lead author and trained enumerators.

The data were coded and entered into SPSS version 16, then transferred to STATA version 15 for analysis, which was conducted between 2023 and 2024. Regarding gender role attitudes, 15 items were used, and respondent scores were averaged to provide scores ranging from 0 to 60. Higher ratings were linked to traditional gender role attitudes (Streatfield et al., 2023). For univariate analysis only, respondents' scores on the gender role attitude scale were arbitrarily divided into two groups: egalitarian (0-30) and traditional (31-60) (Akanni, 2015).

On Dietary Diversity, a single point was awarded to each of the food groups consumed over the reference period, resulting in a maximum total DDS of 8 points for each individual if their replies were positive across the board. The eight food groups were divided into two dietary diversity score categories: adequate (≥ 5) and inadequate (< 5) as provided for by WHO guidelines (Jisso et al., 2022; Raru et al., 2023; UBOS and ICF, 2012).

Data was analyzed using Stata version 15, where T-tests and linear regression analysis were employed to establish

the relationship between GRA and children's diet quality. Linear regression analysis was performed to determine the specific gender role attitudes that are significantly associated with children's dietary diversity scores. Three models were evaluated: one for children aged 6–23 months (Infants Model), and another for children aged 24–59 months (Toddlers and Preschool Children Model). After performing a regression, it is crucial to rule out the influence of multicollinearity by removing the explanatory variables that are responsible for this issue. Using the variable inflation factor (VIF) method, no factor scored higher than 10, hence all elements were included in the model.

Model specifications

The dependent variable of the Dietary Diversity Score is linear and can be described as a linear function of the independent variables X_i , as follows:

$Y = a + b_1 X_1 + b_2 X_2 + \dots + b_n X_n + \epsilon$. The linear model is appropriate for dependent variables that exist in the form of scores on a continuous scale where the Dependent variable follows a normal distribution. This model also allows the computation of a regression coefficient b_i for each independent variable X_i while holding other factors constant. Where;

Y = dependent variable

X_i = independent variables

a = constant (y-intercept)

b_1 and b_2 = regression coefficient of the variable X_i

ϵ = Error term

The independent variables of the research include the GRA statements described as egalitarian=1; and traditional=0 on the statements below:

1. 'A husband's job is to earn money; a wife's job is to look after the home and family'
2. Major household decisions on expenditure of income should be decided by husbands
3. Daughters should be raised to become housewives and sons to have paid jobs
4. It is important to raise a boy to make more money and a girl to make a good housewife
5. Working outside the home is equally important for women
6. Women should work even after childbearing
7. Children benefit if their mother has a job outside the home
8. Women working outside the home put a strain on the family

9. Women should work part-time because they have to raise children
10. Women should not get a job requiring much responsibility and travel
11. Women do not have to work outside the home if there is no economic need
12. Bringing up children is the most important job for women
13. Domestic chores should be shared between the husband and the wife
14. Working wives cause marital disharmony
15. Women in high social status positions cannot raise their children well

The study adhered to ethical guidelines, first obtaining approval from an accredited research and ethics council and then from the national body for research clearance. Respondents were assured of confidentiality during the interviews by being informed that the research was conducted for academic and non-profit purposes, and written consent was obtained. Anonymity was maintained by replacing names and other identifiers of respondents with codes to ensure the data remained anonymous.

RESULTS

The study included 445 women from the districts of Iganga (52.13%) and Bugiri (47.87%). On average, they had 6.6 (SD=3.156) years of schooling, suggesting that the majority of women had completed primary education.

The majority of women had an egalitarian mindset, as indicated by their mean GRA score (\bar{x} = 26.33, SD= 6.821). According to Figure 1 below, 57.75% of women supported egalitarian ideas, which may be related to their children's access to various dietary categories. This suggests that more than half of women's ideas toward gender roles are contrary to established gender norms regarding what roles are appropriate for men and women.

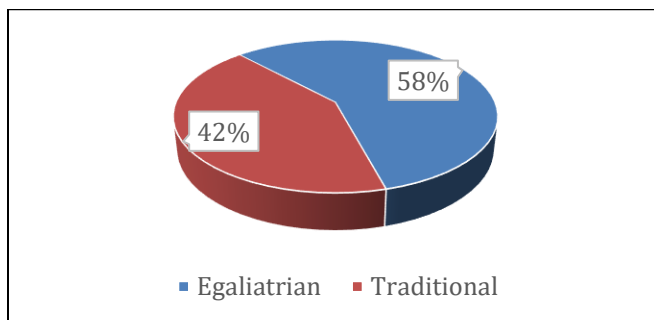


Figure 1. Women's Overall Gender Role Attitude; Source: Field survey data, 2023.

Children's Dietary Diversity Level

According to the findings of this study, 68.3% of the children consumed fewer than five food groups, indicating that they didn't meet the minimum dietary diversity requirement of consuming food from at least five food groups. Children aged 6-23 months had significantly higher mean dietary diversity scores (\bar{x} = 4.31) than those aged 24-59 months (\bar{x} = 3.70), $t(445) = -5.928$, $p < 0.01$. About 41.9% of the infants, compared to 22.2% of toddlers and preschool children, consumed food from at least five food groups. This means that children's DDS varied by their age groups, where infants consumed food from more food groups than toddlers and pre-primary children. However, according to the t-test analysis, the children's DD scores did not vary by the women's attitude towards traditional (\bar{x} = 4.00) and egalitarian gender roles (\bar{x} = 3.98), $t(445) = 0.1085$, $P = 0.9137$.

The relationship between Dietary Diversity and Women's GRA

A closer study of the relationship between GRA and DDS in children of varying ages indicated no significant differences (Figure 2). However, the 6-23-month-old children had greater overall DDS than 24-59-month-olds. A t-test was conducted on the various items of gender role attitudes and DDS. Only one item from the societal norms and expectations category was shown to be significantly related to the children's DDS. Women who disagreed with the concept that "daughters should be raised to become housewives and sons to have paid jobs" had a significantly higher mean DDS (\bar{x} = 4.09) than those who upheld this belief (\bar{x} = 3.79), $t(445) = -2.55$, $p < 0.05$. This suggests that women who support equal employment opportunities for their sons and daughters may be more likely to seek opportunities to increase their income, which enables them to provide their children with healthier meals. This could also be an opportunity for them to seek information and become more informed about providing adequate diets for their children. Supporters of "Working outside the home is equally important for women" reported higher DDS mean scores (\bar{x} = 4.07) compared to those who did not support this idea (\bar{x} = 3.72), $t(445) = -2.80$, $p < 0.01$. Whereas support for "Women should work even after childbearing" was not significant at 5%, women who agreed with work after childbearing had better mean DDS for their children than their counterparts who were traditionalists. There were no notable GRA statements in the Women's Work and Family Dynamics GRA Belief category.

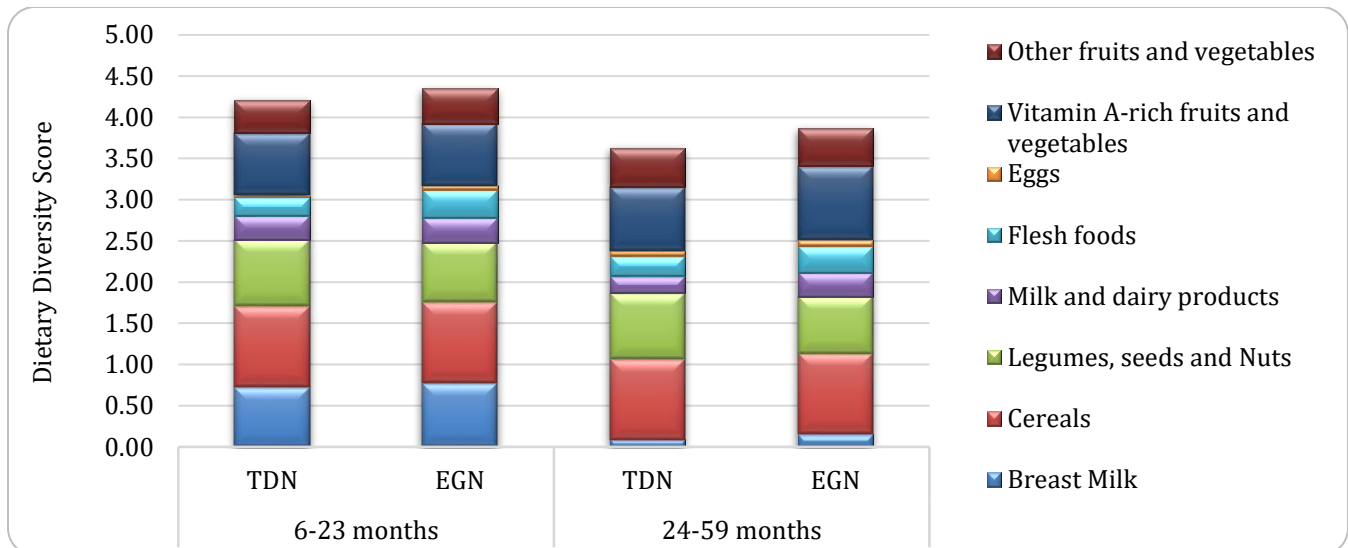


Figure 2. Children's DDS by Caretakers' GRA (TDN-tradition GRA, EGN- Egalitarian GRA); Source: Field survey data, 2023.

Infants model

None of the items were significant at the 5% level for the infant model. However, support for women working for the benefit of children and those who were against part-time work for women in favor of child upbringing were about 36 times and 46 times more likely to have higher DDS for their children. This means that women who prioritized working for the betterment of their children's well-being and avoided part-time work were more likely to provide a variety of foods to their children, leading to the attainment of dietary diversity for them.

Toddlers and school-going children (24-59 months) model

Amongst the toddlers and school-going, support for Women should work even after childbearing was positively associated with DDS, with a likelihood of high DDS of 42 times. This means that women who supported work for women in general could have prioritized allocating resources earned from their work to support better diets for their children. However, those who opposed the notion that "Women do not have to work outside the home if there is no economic need" were 29 times less likely to have better diets for their children. This means that as women embrace work outside the home, they also need to be mindful of children's dietary-related matters.

Combined model

In the combined model for all the children, the woman's egalitarian attitudes on "Daughters should be raised to

become housewives and sons to have paid jobs" "Women should work even after child bearing" and "Children benefit if their mother has a job outside the home" positively associated with DDS. Egalitarianism by women on the need to raise children equally increased the likelihood of higher DDS for children by about 37 times. This means that as women seek equal life chances for their sons and daughters, they are also practicing this, which could be associated with the present DDS for the children.

For women's work after childbearing, egalitarian women were about 34 times more likely to have higher DDS scores for their children than those who held a traditional attitude. This could mean that these egalitarian women are also working, giving them a chance to access foods that are unlikely to be available in the home, making it possible for them to have higher DDS for the children. Relatedly, support for women working outside the home increases the chances of higher DDS by 24%. This suggests that women who are opposed to working outside the home have a greater ability to provide better nutrition for their children than traditional women. However, a negative association with DDS was observed on the attitudes that "Husbands should decide major household decisions on expenditure of income" and "Women do not have to work outside the home if there is no economic need." For example, women who do not uphold the belief that the man is the primary decision maker were 24 times less likely to have high DDS for their children. This could mean that women who make major decisions in the household may already be

resource-constrained and unable to afford different foods for their children. Also, those who were against women staying within the confines of the home in search for work were 20 times less likely to have higher DDS for

the children. This could mean that women who opposed this notion might be spending time away from home and unable to provide different meals for the children, leading to reduced opportunities for them to have better diets.

Table 1. T-test Results on association between DDS and GRA statements.

Gender Role attitude statement	Observations		Mean		diff	St Err	t value	p value
	TDN	EGN	TDN	EGN				
Societal Norms and Expectations								
1. 'A husband's job is to earn money; a wife's job is to look after the home and family'	148	297	3.91	4.04	-0.13	0.113	-1.15	0.243
2. Husbands should decide major household decisions on expenditure of income	240	205	4.05	3.92	0.13	0.106	1.25	0.215
3. Daughters should be raised to become housewives and sons to have paid jobs	140	305	3.79	4.09	-0.29	0.114	-2.55	0.011
4. It is important to raise a boy to make more money and a girl to make a good house wife	128	317	3.86	4.05	-0.19	0.117	-1.6	0.109
5. Women in high social status positions cannot raise well their children	171	274	4	3.989	0.011	0.11	0.1	0.920
Redefining roles and opportunities								
6. Working outside the home is equally important for women	78	367	4.08	3.98	0.10	0.14	0.75	0.468
7. Women should work even after child bearing	99	346	3.72	4.07	-0.36	0.127	-2.80	0.005
8. Children benefit if their mother has a job outside the home	108	337	3.82	4.05	-0.22	0.123	-1.80	0.071
Women's work and family dynamics								
9. Women working outside the home put a strain on the family	189	256	3.98	4.00	-0.02	0.107	-0.15	0.883
10. Women should work part-time because they have to raise children	41	404	3.78	4.02	-0.24	0.183	-1.3	0.202
11. Women should not get a job requiring much responsibility and travel	147	298	3.95	4.02	-0.07	0.113	-0.65	0.529
12. Women do not have to work outside the home if there is no economic need	182	263	4.06	3.95	0.11	0.108	1.05	0.293
13. Bringing up children is the most important job for women	57	388	4.07	3.98	0.09	0.159	0.55	0.58
14. Domestic chores should be shared between the husband and the wife	220	225	3.96	4.03	-0.07	0.106	-0.65	0.525
15. Working wives cause marital disharmony	203	242	4.054	3.942	0.112	0.106	1.05	0.294

*TDN-tradition GRA, EGN- Egalitarian GRA; Source: Field survey data

Table 2. Association between women's Gender Role Attitudes and Children's Dietary Diversity Score.

DDS	(1)	(2)	(3)
	Combined model	Children 6-23 months	Children 24-59 months
Societal Norms and Expectations			
'A husband's job is to earn money; a wife's job is to look after the home and family'	.108 (.137)	.179 (.211)	-.045 (.176)
Major household decisions on expenditure of income should be decided by husbands	-.227** (.115)	-.244 (.167)	-.145 (.153)
Daughters should be raised to become housewives and sons to have paid jobs	.388** (.157)	.373 (.252)	.362* (.202)
It is important to raise a boy to make more money and a girl to make a good house wife	-.072 (.161)	-.077 (.263)	-.028 (.197)
Redefining roles and opportunities			
Working outside the home is equally important for women	-.242 (.148)	-.293 (.219)	-.188 (.195)
Women should work even after child bearing	.339** (.141)	.293 (.206)	.429** (.186)
Children benefit if their mother has a job outside the home	.23* (.138)	.332 (.203)	-.024 (.184)
Domestic chores should be shared between the husband and the wife	.079 (.107)	-.021 (.154)	.228 (.144)
Women's work and family dynamics			
Women working outside the home put a strain on the family	.094 (.121)	.047 (.18)	.128 (.158)
Women should work part-time because they have to raise children	.188 (.19)	.493* (.271)	.02 (.263)
Women should not get a job requiring much responsibility and travel	.17 (.121)	.248 (.173)	.014 (.166)
Working wives cause marital disharmony	-.179 (.123)	.079 (.18)	-.247 (.163)
Women in high social status positions cannot raise well their children	-.004 (.121)	-.187 (.175)	-.002 (.162)
Women do not have to work outside the home if there is no economic need	-.186 (.117)	-.034 (.173)	-.282* (.151)
Bringing up children is the most important job for women	-.109 (.173)	-.256 (.246)	.073 (.242)
_cons	3.499*** (.273)	3.527*** (.39)	3.438*** (.382)
Observations	445	215	230
R-squared	.068	.099	.085

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: Field survey data

DISCUSSION

This study aimed to determine whether women's attitudes toward their gender role had an impact on their children's dietary diversity. First and foremost, the data indicate that approximately 58% of the women held an egalitarian attitude towards gender roles. This supports Eagly and Wood's (2012) Social Role Theory,

which posits that gender roles, like all other social qualities, are fluid and can change, resulting in new identities under the right circumstances. The data also supports other scholars' findings that some women support egalitarianism as a result of gender equality promotion and rising pressure on household requirements (Kosec et al., 2021; Doss et al., 2022). The

surprising fact that more than half of women embrace egalitarianism could be attributed to several project interventions aimed at women's empowerment, such as the MSFN, which have been shown to raise awareness and change attitudes over time (UNICEF, 2015; Bandiera et al., 2018; Hillenbrand and Miruka, 2019). Women in this study area reported obtaining information from a variety of sources, including radio (87.64%), where they listened to counseling and development-related sessions, such as "nakapanu," on a local radio station of Nile Broadcasting. The study's respondents were also mostly young, with an average age of roughly 31 years, including women of reproductive age, who may have had exposure that influenced their current views on men's and women's responsibilities. This could also be explained by the increased pressure on households to provide basic needs, such as education, medical care, and even food, to household members, which was not the case previously. This may inform the current gender role attitudes of women, particularly towards women's employment, which supports their husbands (Malapit et al., 2020).

Association between women gender role attitudes and children's dietary diversity

In this study, the guiding hypothesis was that "The specific gender role attitudes of the primary caregiver are significantly associated with the dietary diversity of children, with more egalitarian attitudes leading to greater dietary diversity." This study's findings partially support the Theory that women's desire for balanced rearing of males and daughters is associated with healthier child diets. Second, women's belief that women can work even after having children was positively and significantly connected with DDS. However, women's hostility to husbands making important household decisions about money expenditure had a negative association with DDS.

First of all, support for a balanced raising of sons and daughters in itself is a key indicator that women are playing a pivotal role in changing their children's views towards gender roles as they raise them. Such an initiative could also demonstrate that women are learning and unlearning certain beliefs about traditional gender roles, which confined women to the home, and now think beyond the home domain. The parents are key players in informing how children learn and reproduce behaviors and beliefs, which are passed on to

the next generation as either conservatives or liberals. (Grinza et al., 2022). This finding could suggest that some women may come from homes where they observed the benefits of raising girls and boys for different roles, which can have adverse effects in life, leading them to desire change. Research has over time shown that past and present experiences always cause people to resist oppressive norms and embrace change in pursuit of a better future (Berding-barwick, 2023).

"Women should work after childbearing," and high dietary diversity demonstrates the sacrifice made by the woman in favor of the child's wellbeing. This has been alluded to by several scholars, who suggest that women often work in the interest of their children and the entire household by providing care and food. (Afoakwah et al., 2020; Grinza et al., 2022; Ochieng et al., 2017). Consistently, over time, women's engagement in work was found to be of more importance than owning assets in ensuring better health for children (Kumar et al., 2020). This confirms that women entering the labor force consider the well-being of children, which may not be realized when household wealth is inadequate. Theorists Eagly and Wood (2012) posit that context is always important in shaping the roles performed by men and women in the labor force, and their contributions can inform further changes. However, the unanswered part remains: can every kind of work make them effective in attaining this goal? Women in formal employment have been noted to provide better health services to their children than those in agriculture and casual employment, meaning that the type of employment matters (Shajan, 2022).

Women's opposition to their husbands is the main factor associated with the likelihood of low DDS. This means that women could be in a position of negotiation for better decision-making processes within the household. This, however, could mean that as women push for independence or joint decision-making, it creates tension and makes it harder for them to access and utilize existing household resources to improve children's diets. Additionally, women either do not participate in decisions on how to use income or feel that changes are needed to balance resource use within the household, where they are included in key decisions. In the area of our research, which is driven by patriarchal principles, women could have a missing link to household decisions as manifested by the poor diets for the children. This could be dangerous because men

tend to focus on their traditional gender roles, such as making significant financial contributions, paying school fees, medical bills, and providing shelter for household members. Many men, especially in rural areas, tend to overlook issues of household food security, leaving it to resource-constrained women who can only afford a few food groups for their children from the produce generated on the farm. This was demonstrated by a limited consumption of flesh foods, eggs, milk, and milk products that can be acquired through purchase. Additionally, women may become demoralized and cease making contributions to household welfare, including children's diets, if they feel excluded from major household decisions. As a result, they may start to hide their meager resources for personal needs instead of sacrificing them (Salifu, 2021). According to Kosec et al. (2021), men often support women's work outside the home, although this support can sometimes interfere with household decision-making processes. As such, interfering with this power dynamic could also lead the man to exhibit his authority by withdrawing support from the household as a form of discipline, which ultimately results in the children having poorer diets. Some even stereotype such women as "men" and even abandon the home for another wife, claiming, "we cannot be two men in the same household." This has sometimes been done to comply with existing societal norms and avoid sanctions and stereotypes of weakness as a man. Such actions have sometimes left all responsibilities to the women, who sometimes fail to provide specific diets to their children.

CONCLUSION

Women have embraced egalitarian gender role attitudes, and some of these are associated positively with DDS, and these attitudes play differently for children of different age groups. For the infants, women embracing attitudes of working for children's benefit and not accepting part-time work attitudes for women supported the attainment of high DDS for these children. For toddlers and preschool children, women's attitudes supporting women's work after childbearing and balanced upbringing of daughters and sons for employment are associated with high DDS. However, attitudes against men's decision-making position in the household are related to low DDS.

This study therefore recommends promoting interventions that provide work opportunities for

women. Addressing stereotypes about women's employment needs to be prioritized to improve children's diets. Further research can be carried out to understand why women's opposition to men's supremacy in decision-making is negatively associated with DDS for the children.

LIMITATIONS

The study undertook a cross-sectional analysis and focused solely on women's views. Longitudinal research could help explain changes in roles over time and their association with children's diets, alongside other determinants known to be associated with children's dietary diversity.

ETHICS STATEMENT

This study sought ethical approval from recognized bodies to ensure that it underwent a rigorous review process, aligning with established social and ethical standards. The institutions were Makerere University College of Agricultural and Environmental Sciences, REC, and the Uganda National Council for Science and Technology (UNCST). Throughout the research, confidentiality was maintained, ensuring that all information collected from participants remained private, with utmost respect for individuals and their perspectives. Informed consent was obtained from all participants prior to their involvement in the interviews.

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