IFPRI Discussion Paper 02003

February 2021

Exploring Gendered Experiences of Time-Use Agency in Benin, Malawi, and Nigeria as a New Concept to Measure Women's Empowerment

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Contents

Tables

ABSTRACT

Time use, or how women and men allocate their time, is an important aspect of empowerment. To build on this area of study, we propose and explore the concept of time-use agency in this paper, which shifts the focus from the amount of time spent on activities to the strategic choices that are made regarding how to allocate time. We draw on 92 interviews from qualitative studies in Benin, Malawi, and Nigeria to explore across contexts the salience of time-use agency as a component of women's empowerment. Our results indicate that time-use agency is salient among both women and men and dictates how women and men are able to make and act upon strategic decisions related how they allocate their time.

Our findings suggest that time-use agency is important for fully understanding empowerment with respect to time use. Importantly, this study highlights the gendered dynamics and barriers women face in exercising their time-use agency. These barriers are tied to and conditioned by social norms dictating how women should spend their time. Women often make tradeoffs throughout any given day with respect to their time, balancing their expected priorities with the barriers or limitations they face in being able to spend any additional time on tasks or activities that further their own strategic goals. Additionally, these results on time-use agency echo similar themes in the literature on gendered divisions of labor, time poverty, and decision-making, but also add new subtleties to this work. For example, we find that women can easily adjust their schedules but must carefully navigate relationships with husbands to be able to attend trainings or take on new income generating activities, results that align with previous findings that women consistently have higher involvement in small decisions compared to large ones. While these themes have been observed previously in studies of women's empowerment, to our knowledge, our study is the first to connect them to time use and time-use agency. Our study contributes the conceptualization of time-use agency, and the identification of themes relevant to time-use agency, through the emic perspectives of women and men across three diverse settings in Sub-Saharan Africa.

As a concept, time-use agency goes beyond measuring time use to understand the gendered dynamics around controlling one's time use to advance their own strategic goals and highlights any barriers one faces in doing so. It is a particularly relevant concept for interventions that aim to increase (or at least, not diminish) women's empowerment by promoting women's involvement in remunerated activities. Although time-use agency, as a concept, has yet to be addressed in women's empowerment literature. A next step in this area of inquiry is to develop survey indicators on time-use agency, which may reduce bias and cognitively burden compared to existing time use surveys.

Keywords: Qualitative methods, Sub-Saharan Africa, Time use, Time Poverty, Time-use agency, Women's empowerment

ACKNOWLEDGMENTS

The work in Nigeria was undertaken with funding from the International Fund for Agricultural Development (IFAD) to IFPRI [Grant number: #2000002043]. Funding for the studies in Benin and Malawi was provided by the Deutsche Gesellschaft für lnternationale Zusammenarbeit (GIZ) [Grant number: 81239814] and conducted in partnership with African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD). Additional support for this work was provided as part of the Gender, Agriculture, and Assets Project Phase Two (GAAP2), supported by the Bill & Melinda Gates Foundation (BMGF) [Grant number: INV-008977] and the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH). We would also like to thank the Hubert Department of Global Health, Rollins School of Public Health at Emory University for their support. We would like to thank our data collection partners: CIRFOSS Consulting in Benin; Diston Mzungu, Kenan Kalagho, Grace Mswelo, Cynthia Kazembe, Jack Thunde, and Deborah Rubin in Malawi; and Binomial Optimal Limited in Nigeria. Ruth Meinzen-Dick of IFPRI provided constructive guidance on throughout the development of this manuscript.

ACRONYMS

AUDA-NEPAD	African Union Development Agency-New Partnership for Africa's Development
ATVET4Women	Agricultural Technical Educational Vocational and Training for Women
FGD	Focus Group Discussion
GIZ	Gesellschaft für Internationale Zusammenarbeit
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
Pro-WEAI	Project-level Women's Empowerment in Agriculture Index
SDG	Sustainable Development Goal
SSI	Semi-structured Interviews
VCDP	Value Chain Development Program
WEAI	Women's Empowerment in Agriculture Index

1 Introduction

Comprehensive measures of women's empowerment and gender equity are important for monitoring progress toward Sustainable Development Goal (SDG) 5, as well as policies and programs that aim to contribute to SDG 5. Specifically, SDG 5, Target 5.4 seeks to "recognize and value unpaid care and domestic work through the provision of…policies and the promotion of shared responsibility within the household and family." Research and metric development on unpaid care and domestic work in low- and middle-income countries has traditionally focused on measuring and comparing how women and men spend their time. This work reveals highly gendered patterns of time use. Globally, women shoulder a greater burden of unpaid care and domestic work and spend more time on work than men when time-use surveys account for paid and unpaid work (United Nations 2015). As a result, women are more likely than men to experience time poverty—a state of poverty characterized by a reduced ability to make unconstrained choices about time allocation brought about by working long hours (Vickery 1977).

Time-use data are valuable for many research questions, e.g., understanding gender differences in time poverty (Bardasi and Wodon 2006, 2010; Seymour, Masuda, Williams, and Schneider 2019); monitoring potential negative spillovers of programs with high demands on participants' time (Njuki, Wyatt, Baltenweck, Yount, Null, Ramakrishnan, Webb Girard, and Sreenath 2016; Johnston, Stevano, Malapit, Hull and Kadiyala 2018; Stevano, Kadiyala, Johnston, Malapit, Hull and Kalamantianou 2019) and appropriately valuing the contribution of unpaid care and domestic work in national accounts (Esquivel 2011; Folbre 2014). Yet, there are limitations to what can be learned from time-use data. In the context of tracking progress toward SDG 5, time-use data alone are insufficient for understanding gender inequality in time poverty. Measurement of time use does not provide insight on agency, an individual's ability to define goals and act on them (Kabeer 1999). A simple accounting of how people allocate their time reveals little about their preferred activities, the trade-offs involved in spending time on certain activities, or how much power individuals wield in intrahousehold negotiations over time allocation, all of which can differ by gender. For example, subjective wellbeing and forms of affect are differentially associated with time spent on different activities for men and women (Seymour and Floro 2016).

Understanding the linkages between agency and time allocation requires looking deeper into the full breadth of factors that limit women's and men's control over how they spend their time.

As a bridge between the disparate bodies of literature on time allocation and agency, we propose a new concept, which we call time-use agency. Elaborated in the following section, we define time-use agency as confidence in and the ability to make and act upon strategic choices about how to allocate one's time. One important purpose of a time-use agency measure would be to assess the impact of women's increased participation in remunerative activities, which may be at odds with rigid gender norms around the intrahousehold division of labor that place responsibility for unpaid care and domestic work disproportionately on women. While women's increased participation in income-generating activities often is considered empowering for women (Kabeer, Mahmud, and Tasneem 2011; Roy, Ara, Dar, and Quisumbing 2015), this relationship is not guaranteed, especially if participation in these activities strips women of other dimensions of their agency (Laszlo, Grantham, Oskay, and Zhang 2020). For example, increasing participation in income generating activities may leave women with less control over their time if other household members do not support women's unpaid care and domestic work responsibilities (Mulema 2018; Gailè, Njiru, Heckert, Myers and Alonso in preparation). To build evidence on potential approaches for measuring time-use agency in surveys, we discuss existing approaches for measuring control over time, quality of time, and time poverty—all of which closely relate to our conceptualization of time-use agency. In this paper, we discuss findings on time-use agency from qualitative data collected as part of three studies linked to gender-sensitive agricultural development projects in Benin, Malawi, and Nigeria. Among other things, these projects aimed to increase women's involvement in and earnings from market-focused agricultural activities. Our results reveal that time-use agency is a salient concept in all study populations.

2 Background

How a person spends their time contributes to well-being and quality of life in ways that extend beyond the hours and minutes devoted to different activities (Juster, Courant, and Dow 1981; Harvey 1993; Gershuny and Halpin 1996). Men's and women's perceptions of having too little time and having too many demands on their time are common sources of daily stress that may lead to negative consequence for individuals' health and well-being (Almeida 2005). Several approaches have been developed to examine the relationship between time use or perceptions of it and measure these well-being and quality of life outcomes. Some approaches focus on measuring the benefits and costs accrued during activities as reflected in people's affective experience (Kahneman, Krueger, Schkade, Schwarz, and Stone 2004; Hektner, Schmidt, and Csikszentmihalyi 2007; Krueger, Kahneman, Schkade, Schwarz and Stone 2009). Other approaches focus on understanding the health effects of how individuals allocate their time, often in terms of physical activity and energy expenditure associated with different activities (Harms, Berrigan, and Gershuny 2019).

Table 1 Definitions and measurement examples of time use, time poverty, and time-use agency

Term	Definition	Examples
Time use (or Time allocation)	How one allocates one's time on different activities.	- 24-hour recall - Stylized questions on time use: On a typical day, how much time do you spend caring for children, working in agriculture, etc.?
Time poverty	A reduced ability to make unconstrained choices about time allocation brought about by working long hours (Vickery, 1977)	- An individual is time poor if s/he allocates more than 10.5 hours to work (paid or unpaid) in a given 24-hour period, using time-use data from the example above.
Time-use agency	The confidence and ability to make and act upon strategic choices about how to allocate one's time.	- To what extent do you agree or disagree with the following statement? In this community, women are expected to work longer hours than men. -To what extent do you make your own decisions about how much time you spend or when you go to sleep or rest?

How one allocates his or her time is an observable outcome, which depends in part on one's ability to exercise agency over such allocations. The concept of time-use agency links women's

empowerment and time use by shifting focus from how much time one spends on certain activities to the strategic choices one makes about how to allocate time. Practically, time-use agency provides a direct measure of an important but overlooked aspect of women's empowerment.

Recent measures of women's empowerment treat time use as a resource or outcome. Typically, these approaches draw on data collected through either a 24-hour recall or stylized questions (e.g., On a typical day, how much time do you spend caring for children?). Respondents are then classified as experiencing time poverty. For example, the Women's Empowerment in Agriculture Index (WEAI) and project-level WEAI (pro-WEAI) include an adapted time poverty indicator that identifies someone as deprived if he or she worked more than 10.5 hours in the prior 24 hours (Alkire, Meinzen-Dick, Peterman, Quisumbing, Seymour, and Vaz 2013; Malapit, Meinzen-Dick, Seymour, Martinez, Heckert, and Rubin 2019). A focus on time poverty is useful and intuitive from a well-being perspective insofar as a long workday decreases individual well-being, in terms of physical and mental fatigue. However, the interpretation of working long hours as a measure of empowerment is less clear. Under certain circumstances, working long hours may result from a lack of agency; whereas, under other circumstances, working long hours may result from enhanced agency, say, for instance, someone who works long hours due to personal preference (self-fulfillment) as opposed to external pressure (social expectations, care responsibilities, subsistence motives, etc.). While perhaps rare, the possibility of such situations—in which the act of working long hours reflects the potential for and actualization of agency—demonstrates the importance of measuring time-use agency.

This paper has three main objectives. First, using qualitative data collected with women and men engaged in on- and off-farm agricultural livelihoods in Benin, Malawi, and Nigeria, we examine normative perceptions about women's and men's time use and their experience exercising agency over their time use. Second, we examine how these perceptions might lead to gendered experiences with time burdens and time poverty. Finally, we reflect on these findings in a way that can inform the development of time-use agency measures for surveys.

3 Methods

3.1 Study Background

The analysis draws on 92 qualitative interviews, collected as part of three different evaluations of gender-sensitive agricultural development projects in Nigeria, Malawi, and Benin. Each study included a focus on understanding and developing measures of time-use agency, and this multi-country, multi-data source approach enables us to produce robust analysis and triangulate findings.

The Benin and Malawi studies were linked to mixed-method evaluations of Agricultural Technical Educational Vocational and Training for Women (ATVET4Women) programs conducted by IFPRI in partnership with the African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD) and Gesellschaft für Internationale Zusammenarbeit (GIZ). The program offered business skill development, leadership trainings, and information around cultivation and processing of select commodities (rice, soy, chicken, and compost in Benin; aquaculture, mango, pineapple, and vegetables in Malawi). The work from Benin and Malawi presented in this paper is from semi-structured interviews (SSIs) that included questions on the concept of time-use agency as a component of empowerment.

The Nigeria study was linked to an evaluation of the Value Chain Development Program (VCDP) by IFPRI as part of a portfolio of six gender-sensitive rural development projects across Africa commissioned by the International Fund for Agricultural Development (IFAD). This portfolio aims to advance the development of a version of the WEAI integrated into IFAD's existing impact assessment tools in a manner that reduces the length of the WEAI instrument (for further information, see Azzarri et al. in preparation).

The VCDP employed a gender-sensitive approach to improve the collective agency of value-chain specific farmer organizations in the rice and cassava value chains. To address concerns about how the increase in women's economic activities through agriculture development programs could increase labor burdens and reduce time-use agency, researchers at Emory University and IFPRI developed a new survey module to measure time-use agency. The team then developed a cognitive interview guide to

evaluate the cognitive processes underlying responses to the proposed time-use agency survey questions and how well participants understand and respond to the proposed survey questions, and to inform potential improvements (Willis 2004; Willis and Miller 2011). These interviews were designed to identify potential discrepancies between researchers' and participants' understandings of a proposed survey question, participants' ability to recall the information requested, participants' motivation to respond (e.g., based on sensitivity of the question or social desirability), and participants' natural versus coded response options (Schuler, Lenzi, and Yount 2011; Hannan, Heckert, James-Hawkins, and Yount 2019; Qutteina, James-Hawkins, Al-Khelaifi, and Yount 2019). The findings from cognitive interviews at an early stage of module development can assist with question or module refinement to minimize sources of reporting error. This paper draws upon the open-ended responses collected during cognitive interviewing.

3.2 Data collection, Benin and Malawi

In Benin and Malawi, data collection occurred from November 2019 to February 2020. Prior to data collection, the interviewer teams were trained on the SSI instrument, background information related to ATVET4Women, and pro-WEAI. All interviewers had experience in qualitative research in Benin and Malawi, respectively, and research on gender topics. All participants were interviewed separately. Interviewers and participants were matched by sex and the participants' preferred language (Fon, Dendi, and Bariba in Benin; Chichewa in Malawi). Interviewers were also fluent in English in Malawi and French in Benin.

SSIs were conducted with men and women enrollees of ATVET4Women and women non-enrollees who were active in one of the target value chains. In Benin, participants were selected from five communes in the northern departments of Donga, Collines, and Atakora and nine communes from the southern departments of Atlantique and Ouémé. The program staff shared a list of program enrollees and non-enrollees—from the related quantitative study, from which participants were randomly sampled (see Heckert et al. 2020). Each participant ran small-scale businesses focused on various nodes of rice, soy, poultry, or compost value chains. In Malawi, starting from the study locations in the related quantitative

study, seven villages and cities in Lilongwe district in the central region and six villages and cities in Blantyre district in the southern region were selected for qualitative study sites (see Ragasa et al. 2020). Participants were then selected to include women and men who were ATVET4Women enrollees and non-enrollees, from across a diverse range of livelihood activities. Five enrollees from Malawi were women entrepreneurs, three of whom marketed dairy products, one who marketed fish and legumes, and one who processed meats. The rest were producers of mango, pineapple, vegetables, and aquaculture, regardless of their enrollment status. In total, 24 SSIs were conducted in Benin and 33 in Malawi (Table 2).

Table 2 Total number of SSIs in Benin and Malawi

	Women enrollees of ATVET4Women	Husbands of ATVET4Women enrollees	Non-enrollee women active in target value chains	Entrepreneurs
Benin				
North [Donga, Collines, Atakora]	10	4	3	--
South [Atlantique, Ouémé]	10	3	4	--
Malawi				
Central [Lilongwe]	7	5	6	2
South [Blantyre]	5	4	6	3
Total	**32**	**16**	**19**	**5**

The interview guides in Benin and Malawi were based on the qualitative protocols developed as part of pro-WEAI and prior studies on gender and agricultural value chains (Rubin, Manfre, and Nichols Barrett 2010; Meinzen-Dick, Rubin, Elias, Mulema, and Myers 2019). They were designed to examine the gender dimensions of participation in, benefits from, and empowerment at different nodes of the priority value chains in each country. Women's and men's perceptions of time-use agency were secondary topics of interest. The guides inquired about 1) how participants exercised (or were unable to exercise) independent and joint control over their time; 2) who typically decides what they do on a given day; 3) how intrahousehold disagreements over time use are resolved; 4) when in a life cycle one has most control over their time; and 5) what factors may increase their control over their time.

3.3 Data collection, Nigeria

In Nigeria, the data collection occurred in December 2019. Prior to data collection, the interviewer team was trained on the cognitive interview protocol, cognitive interviewing techniques, pro-WEAI, and background information on the VCDP. All interviewers had prior experience in qualitative research on gender topics in Nigeria. All participants were interviewed separately. Interviewers and participants were matched by sex and primary language (Hausa or Igbo).

Cognitive interviews of proposed time-use agency survey items were conducted with Hausa and Igbo speakers active in cassava and rice value chains who were not enrolled in the VCDP. Participants were purposively sampled based on their gender, primary language (Hausa or Igbo), and livelihood activities in one community in each Nigerian state of Niger and Anambra. The sampling for the cognitive interviewing data collection focused on selecting participants that mirrored the profile of the target sample for an impact evaluation of the VCDP but were not directly enrolled in the program. Data was collected in two different Nigerian states, Niger (predominately Hausa-speaking) and Anambra (predominately Igbo-speaking) to cognitively test the instrument in the two target languages for the full survey, Hausa and Igbo. Twenty individuals were invited to participate in the cognitive interviews, 10 men and 10 women divided evenly across the two language groups. Individuals selected for this study participated in different nodes (production, processing, or marketing) of rice and cassava value chains for their primary livelihood activity.

The time-use agency survey module was designed to assess normative expectations of workload and time allocation for men and women; awareness of inequalities in time allocation within a household; and satisfaction with time allocation. It also asked about specific activities and to what extent women and men make their own decisions about time spent on these activities, how often they talk to their spouse about each activity, and how often they quarrel with members of their household about the activities[1]. A cognitive interview guide was then developed for these survey questions, based on existing guides from

[1] In complementary work, the cognitive interviewing results are being used to refine the survey module. Once survey data are collected, analysis of these data will be the focus of future work.

studies in Bangladesh and Qatar (Schuler et al. 2011; Hannan et al. 2019; Qutteina et al. 2019). The guide included a set of four scripted general probes for each survey item. Interviewers read the survey item and then asked participants to 'think aloud' and articulate what they were thinking when they heard the prompt, how they arrived at their response, their affect or emotions when they heard the prompt, and how easy or difficult it was to determine a response.

Some survey items in the cognitive interview guide also included scripted probes about specific words or phrases in the survey item to explore the consistency or heterogeneity of lay understandings. For example, to the survey prompt, "*In this community, women are expected to work longer hours than men*", a scripted probe asked, "*When I used the word 'work', what did you think that I meant by this phrase?*" to explore how participants ascribe meaning to the word 'work'. Finally, for some survey items, additional probes asked for specific examples based on participants' experiences to contextualize their answers. For example, to the survey prompt, "*Compared to men, women have more difficulty changing their daily schedules*", a scripted probe asked, "*Can you give me examples of some reasons why an individual would have difficulty changing their daily schedules?*". All aspects of the cognitive interviewing responses were included for this study, although to varying degrees, depending how participants detailed their responses to each prompt.

3.4 Ethics and Compensation

This study and all three of the data collection efforts were approved by IFPRI's Institutional Review Board, as well as local ethics review boards in Benin (National Council of Statistics), Malawi (National Committee on Research in the Social Sciences and Humanities in Malawi), and Nigeria (Nigeria National Health Research Ethics Committee). The interviewers received training on research ethics, including the process for seeking informed consent. Prior to being interviewed, the benefits and risks of participation, along with the purpose of the study, were explained to participants. In Benin and Malawi, the explained purpose was to better understand the experiences of those working in value chains for the four commodities targeted by the study and ATVET4Women. In Nigeria, the cognitive interviewing study was

explained as a way to help researchers understand how they can ask survey questions more clearly. All participants provided oral informed consent. Separate consent was sought for audio recording. In Malawi and Nigeria, all participants consented to be recorded. In Benin, 22 participants did not consent to being recorded and detailed notes taken during the interviews were used for analysis. All participants received an in-kind gift to compensate for their time: bread, plantains, or tubers in Benin; a kilogram of sugar in Malawi; and a small bag of fertilizer in Nigeria.

3.5 Analysis

The audio recordings were simultaneously translated and transcribed verbatim into English (Malawi and Nigeria) and French (Benin) by the local field teams. All interviews were used for analysis, to avoid selectivity bias. A single codebook was developed, through discussion with the wider research team, that included deductive codes (from established themes in the literature) and inductive codes (developed from a preliminary review of the data) to analyze the qualitative data from all three studies. We then employed thematic qualitative analysis techniques by examining the data to uncover which topics or patterns arose repeatedly (Guest, MacQueen, and Namey 2012). The data were coded in NVivo 12 (QSR International Pty Ltd, 2020). Two authors led the data coding and established inter-rater reliability using a subset of transcripts prior to full coding. The authors are cultural outsiders but worked closely with local teams during data collection. Comparative analysis by country, sex, and in the case of Nigeria, language, was also conducted to examine differences or similarities between men and women's perceptions of their time-use agency. In the Nigeria sample, ethnicity, state, and language are confounded.

4 Results

4.1 Normative expectations about men's and women's time use

4.1.1. Normative expectations about men's time use

Most women and men in all three countries described prevailing gender norms and expectations in the community about how men should spend their time, centered around men as the provider, decision-maker, and protector of the household.

In Benin, participants explained that men are expected to provide for the household. One woman explained how this expectation motivates men to spend their time growing corn,

Men have wives and children who must eat… You are not going to think about how to buy corn for the household… If you have corn, even if you don't have enough financial means to make a good accompaniment sauce with chili, you will better manage the dough made from corn flour [Woman, Benin].

In Nigeria, several men and women of both language groups shared nuanced expectations of how men should spend their time. One woman explained that as the providers of the household, men are "*supposed to work harder and [for a] longer time, not women*" [Woman, Nigeria, Hausa], whereas another shared, "*The man is busy trying to make money*" [Woman, Nigeria, Igbo]. In Niger state, all men discussed expectations that men must provide for and protect their household and uphold intrahousehold harmony and order. One man explained, "*Men also do protection work in the farm against herders*" and another man said, "*I was thinking about my duties as a man, because I need to keep my family in order*" [Man, Nigeria, Hausa]. Instances where men from Niger state specifically invoked expectations of men's time use reflected such expectations; for example, one man explained, "*Taking care of my family is my responsibility. I would love to do other things, but as a family man I cannot go out and do them, because it is my duty to take care of the family"* [Man, Nigeria, Hausa].

In Malawi, many participants emphasized community norms around men as the decision-maker and leader of a household, therefore having the final say on how household members use their time. A

woman explained, *"Our culture says that a husband is a head and an elder of the household whether you are of the same age, and you need to let him decide what needs to be done. This is a family etiquette"* [Woman, Malawi]. Further, a man shared, *"The way that we make decisions at our household may give me more control over time. For example, decisions on how we should work"* [Man, Malawi].

The perspective of some participants from Malawi contrasted with those from Nigeria. While norms hold that men are, by default, the head of the household, the extent to which masculine control over household members' time use was acknowledged varied by country. For example, in Malawi, a woman explained,

You [need to] take after the cultural set up of an area. In some areas, men can go and sell vegetables and it's not a problem at all. There are some men who were socialized never to sell vegetables and it's a woman's responsibility to sell these crops [Woman, Malawi].

4.1.2. Normative expectations about women's time use

In all three country contexts, most men and women participants described prevailing expectations about how women should spend and prioritize their time. Of primary importance were gender-normative roles and responsibilities, including unpaid, caregiver roles. For example, one woman explained, "*I was thinking of how much is expected of a woman, including taking care of her husband, children and relatives, in most cases*" [Woman, Nigeria, Igbo], whereas another elaborated on the perception that women in her household are expected to work longer hours than men, "*I was thinking of how when I go to the farm with my husband, he leaves the farm before me because he is hungry. I have to stay back and farm more and I am still expected to cook when I get home"* [Woman, Nigeria, Igbo]. Likewise, a woman in Benin explained what is expected of women in her community, "*It's the woman who stays at home and takes care of the housework, and the man goes out to get money"* [Woman, Benin]. Other women in Benin linked these gender-specific activities to religious ideations. For example, one woman explained,

God did not create man for cooking. He created the woman for the kitchen. [Women do] housework because God has already given this strength to the woman, and to watch the children. It was God who made it so, and it was the woman who had to take care of the child [Woman, Benin].

Several men also agreed that there are clear expectations on women's time allocation. One man in Nigeria stated, "*It is a norm; women are expected to do all household works*" [Man, Nigeria, Igbo], and a man in Malawi shared, *"Women are associated with kitchen things. So, they are the ones who go out to sell the vegetables"* [Man, Malawi]. These examples also highlight the higher value placed on the typically remunerative work to which men allocated time and the substantially diminished social values placed on women's typically unpaid domestic labor and care work.

4.2 Men's and women's time-use agency

4.2.1. Voice with respect to time allocation

In all three study sites, several men and women shared examples of using their voice to express concern or desire about how to spend their own time and feelings regarding how their spouses spent their time. In Benin and Malawi, this discussion centered around a woman attending an agricultural training program. The discussion in Nigeria covered a broader range of situations.

In Malawi and Benin, some participants shared examples when a woman voiced interest in participating in ATVET4Women. In Malawi, one man shared, *"We discussed as a family. She explained to me that she was selected to participate in the agriculture related training. I accepted that she should go and participate"* [Man, Malawi]. Another man in Benin shared his wife's experience, "*She decided. She told me about her integration into the project and when there are trainings; she tells me and makes the decision to participate*" [Man, Benin].

In Nigeria, several men and women from Anambra state shared examples for how each would express opinions and desires over their own time use and their spouses' time use. Men described instances when their wives would voice concerns over how their husbands were spending their time, "*My wife may*

sometimes interfere by reminding me of responsibilities in the family" [Man, Nigeria, Igbo] and,

I'm thinking about my wife and her disapproval when I do not sleep or have enough rest. Sometimes, my wife is bothered that I am not getting enough rest and sleep. She mostly talks with me and makes suggestions on the best way forward to manage time for sleep and rest [Man, Nigeria, Igbo].

These examples highlight how women may express concerns over whether their husband is fulfilling his duties (insinuating that her husband sometimes deviates his time use away from his expected responsibilities), as well as concern over her husband's health and rest (aligning with women's care roles).

Some women from Anambra state shared examples of voicing concern, expressing a need for help, or discussing how they spent their time, mostly triggered by instances where they felt too tired or sick to fulfill their responsibilities. For example, one woman explained,

I have conversations sometimes with my husband when I feel I need to rest more. I always discuss with my husband when I feel too tired to go to the farm. And whenever I do, he insists I stay back and get some rest [Woman, Nigeria, Igbo].

One woman explained that her husband will talk with her when he wants her to spend time on a task she was not originally planning to do, "*If my husband needs me to do something, he talks to me about it. Even if I do not do it, I don't get punished for that*" [Woman, Nigeria, Igbo]. In these examples above, women framed these instances of using their voice as "conversations" or "talking," whereas the men framed women's voice negatively, as "interfering" or "bothered".

All men from Niger state indicated there is no need to discuss nor involve their wives in a discussion concerning men's time use. They therefore did not offer any examples where they (the man) or

their wives would voice anything related to how the other utilized his or her time. Men from Niger state are more likely to be polygynous, which may explain some of these differences between participants from Niger and Anambra states, as polygynous men are less likely than monogamous men to discuss matters with their wives (or perhaps only with the first wife) (See Eissler, Sanou, Heckert, Myers, Nignan, Thio, Pitropia, Ganaba, Pedehombga, and Gelli 2020 for a discussion of these dynaimcs in Burkina Faso).

Most women from Niger state corroborated this perspective, sharing they did not feel the need to express their voice over their time use. One woman said, "*I do not think it is necessary for me to talk with my husband about when to go to sleep or rest*" [Woman, Nigeria, Hausa]. However, men from Niger state did indicate that they would speak to their wives if they perceived their wife as tired or needing rest. One woman mentioned, "*[My husband] sometimes talks about how difficult it is for me doing household work and I need time to rest and also get some sleep"* [Woman, Nigeria, Hausa].

4.2.2. Decisions with respect to time allocation

Decision making around one's time use is largely a question of influence and control in deciding how one spends one's time. In general, women shared some control over deciding when and how to spend their time on normative and expected tasks and responsibilities, but men controlled decisions on all tasks beyond such activities.

Several women across the study sites indicated that they had latitude to decide how they spent their time on any given day, so long as expected tasks and responsibilities were accomplished. For instance, one woman shared,

I sometimes perform certain tasks that my husband assigns me. I am also able to make an excuse and do them later whenever I feel they come at an inappropriate time. For instance, giving me a task when I am supposed to prepare food for the family will make me to shift the activity to another time [Woman, Malawi].

Women in Benin indicated they can better control their time if they prioritize their normative responsibilities, such as household work and childcare, and demonstrate respect for their husband first.

They then used this approach to leverage permission to spend time on additional activities. For example, one woman shared,

To use my time better, I have to respect my husband and put my household at the center of everything I do. In doing so, my husband will not be able to refuse me anything and I will be able to do my activities that I want [Woman, Benin].

Across all three sites, men held final decision-making control over what they or their wives spent their time on, particularly activities extending beyond normative responsibilities. One woman said, "*God himself said women must submit to her husband. If she doesn't, she will take the consequences"* [Woman, Benin]. One man explained, "*I have control of my leisure time. I can make time for leisure whenever I want. I decide by myself how much time I put into rest or sleep all the time*" [Man, Nigeria, Igbo]. With regard to women's leisure time, a man observed,

I don't think married women have time for leisure. Their husbands may not give them the time to go out for leisure. I was thinking that leisure cannot be associated with married women, except if they are granted permission to go out for leisure [Man, Nigeria, Hausa].

In Benin, a man shared why he needed to be informed of decisions made beyond a woman's expected responsibilities,

If it is her business, she may not inform him [of every detail], but whatever is a relevant decision, the husband should know because the wife is weak. That's why she's notifying her husband. Let the husband keep an eye on these talks with her… The woman doesn't think much. They don't see far. This is what we see at the same time, which she considers as the man makes the projections while very few women do the projections. This is part of the weakness I just listed [Man, Benin].

A few women shared that while it is not hard for women to make decisions, it is challenging to act on them, highlighting that women know what they want to do, but must revert to different strategies to navigate the barriers that prevent them from acting upon their desires. To illustrate, a woman said, "*It's not hard [for a woman] to make decisions. But it is difficult to apply [them], because she has to take her husband's consent*" [Woman, Benin]. A man shared his perspective, "*For decisions concerning [women], she must present those decisions to me. She cannot implement these decisions without presenting them to me. It would be difficult for her to make decisions and implement them without my advice*" [Man, Benin]. On the other hand, one woman expressed that given social norms, some woman may not know how to generate their husbands' support for their own desires,

Usually it is difficult, because we are in a patriarchal society, and many women do not know how to manage without their man or husband for making important decisions for their life and carrying them out. They do not know how to get men to support them in whatever they want to do [Woman, Benin].

One woman noted, "*Yes, but it depends on the type of husband you have. Your husband can stop you from visiting [family member or friends]*" [Woman, Nigeria, Igbo]. In a more extreme example, a woman started her own business and the subsequent household tension resulted in divorce, because her husband sought to control her time and feared any independence gained from her own income. She described,

I did not get the support I wanted to get from my husband, because he did not understand it then. It was something that I had to do it on my own. There was a certain business that we were doing together, and for me to pull from that business to start my own was so hard. That led to my divorce, so you can see how bad it was [Woman, Malawi].

4.2.3. Conflicts over time use

Discussions of perceived conflict about time use are resolved by the husband's authority across all three countries. However, there was variation in how men and women discussed or mitigated potential conflicts.

Most men in the Nigeria sample strongly indicated that conflict or quarrels about their time use would never arise as they are the head of the household. One man said,

I was imagining the light of irresponsibility that will amount to my wife scolding me or trying to punish me because of a decision I took to rest. I was thinking it's irresponsible for me to get scolded or punished for doing the best for the household [Man, Nigeria, Hausa].

Another man expressed a similar sentiment, "*Nobody will be bold enough to scold or punish me because of how I choose to use my time*" [Man, Nigeria, Igbo]. A few women in the Nigeria sample noted that conflicts rarely arise regarding their time use, suggesting women may not deviate from expectations around how they should be spending their time or employ alternative strategies to avoid potential conflicts.

In contrast, some men and women in the Benin and Malawi samples explained that conflicts rarely, if ever, arise about time use, as couples discuss issues to reach an agreement together. This suggests that harmonious relationships among spouses may facilitate one's agency over time use. In Malawi, one woman remarked, *"We make sure we discuss until one of us understands the need to prioritize what should be prioritized. You need to explain the need to implement what you are suggesting that day"* [Woman, Malawi]. Likewise, a man said,

We discuss, and if we fail to discuss, we still reflect on the arguments that we have had and understand the reasons why a woman wants us to start her activities first…People do not work well when they are angry with something. A woman might reject the activity because she knows maybe it requires extra resources [Man, Malawi].

In Benin, only women offered insight into this dynamic. Several women shared that they first initiate discussions with their husbands over their time use out of respect, in line with norms that wives must defer to their husbands. One woman shared, "*It is difficult if she is married, because whatever she wants to do, she has to present it to the husband for the harmony of the household"* [Woman, Benin]. Another explained further,

It is more difficult for women to make important decisions and implement them, because the man is always on her back. She cannot make decisions without informing her husband or the man. These are our customs and traditions. If the woman does not inform her husband and the man finds out afterwards, it can end in arguments and conflicts [Woman, Benin].

Some women from Malawi, Benin, and Nigeria explained sometimes employing clandestine strategies to circumvent and mitigate conflict around time use. One woman shared, *"When someone dictates that I do certain activities when I do not want, I just tell them that I am sick and really pretend to be sick. I don't like being coerced to do things"* [Woman, Malawi]. Another summarized how she navigates these challenges by employing such strategies to achieve her own goals in her time use,

For single people it is easy, but when she is married, it is difficult, because you have to present your idea to your husband, who can sometimes refuse. Sometimes, when he refuses, you have to be stubborn. When you are sure to succeed in your activity, there, when you succeed, it is he himself who is congratulated. For example, at the beginning of this year, 2019, I decided to open a shop to sell eggs. My husband refused, so I changed my strategy to get him to accept. And currently it works. And so, next time, he accepts my proposal more easily [Woman, Benin].

Another woman shared,

Most times, once a woman gets married, she is under her husband. There are times you might want to change your schedule and your husband would insist you don't. Personally, if I want to change my schedule, I do not mention it to my husband because he would say no [Woman, Nigeria, Igbo].

However, this participant did not further elaborate on the potential consequences of such actions.

Should conflicts arise, they are resolved by deferring to men. In Benin and Malawi, several men and women indicated that women must defer to their husband's choices regarding time use. As one woman shared regarding time allocation, *"We discuss further on what we need to prioritize. In most cases, if you are a good woman, you need to prioritize what your husband suggests"* [Woman, Malawi]. Likewise, a man shared, *"I decide on what should happen. If my wife tells me to do something else when I have already planned, we go with what I decide"* [Man, Malawi].

4.2.4. Awareness of unequal control over time use between men and women

Several men and women across the three country contexts discussed awareness of inequalities in control over men's and women's time use. These inequalities are considered with regard to one's ability to change their schedule, one's control or influence over their time use, and unequal time burdens and levels of time poverty.

In general, several women shared that they cannot change their schedules as readily or easily as men, because men are the primary decision-makers with regard to one's time use in a household and women often require men's permission prior to changing their schedule. Women are additionally expected to assume their husbands' tasks when their husbands make changes in their own schedules. One woman in Nigeria referenced a recent example,

It is so true that a man can easily change his schedule. I was thinking how this morning, my husband was supposed to pick up cassava from the farm but got a call that required him to go somewhere else instead of the farm. He had to plead with me to go pick up the cassava from the farm while he attends to the other issue [Woman, Nigeria, Igbo].

A woman in Benin shared a similar example, "*Sometimes you do your planning to do this or that, but my husband can tell me to do something else, and I leave what I should be doing [to do that something else]*" [Woman, Benin]. In certain instances, some women indicated they have more latitude in choosing when to complete additional tasks assigned to them by their spouses, regardless of social norms that consider men final decision-makers. One woman in Malawi shared,

There was a day that I decided that I will do household chores then go to the farm to plant pigeon peas. At the same time, my husband asked me to go help him carry charcoal—he does charcoal business. I did what I planned to do and then went to also help my husband [Woman, Malawi].

In Benin and Nigeria, some participants further elaborated on these power dynamics between men and women as an example for why men can more easily change their schedules. One woman in Nigeria shared as an example for why men can more easily change their schedules, "*Yes, because [men] have the freedom and power. It's very clear and it happens mostly, I think they have the freedom to do what they wish or do not wish to do*" [Woman, Nigeria, Hausa]. A woman shared,

To go out or go to an event, the wife must first ask permission from her husband who can accept or refuse. However, a man does not do that…It's like this, because a woman does not have the same power as a man. For example, if you decide to go out without your husband's permission, you can come back home and find your luggage outside. I think it's because of society it's like this too [Woman, Benin].

This woman highlighted potential consequences women who break norms face, inducing a level of fear she could lose her household (or security, children, etc.). This dynamic helps to prevent women from breaking these norms, reinforcing the notion that she does not have control over her time. In contrast, men are not similarly constrained; a man in Nigeria supported this idea, saying "*I am the man, so I can change my daily schedules anytime I want to*" [Man, Nigeria, Hausa]. Another explained,

A man can also change [his schedule] in a matter of time if the need arises. Women are always under control of men, so their daily schedules are hard to change. The husband may not allow this change to happen. A man can leave the home if he wishes, but women are tied to other household chores which prevents them from doing so [Man, Nigeria, Igbo].

Some participants in the data not only expressed an awareness of inequalities in control over time use between men and women, but also between married and single women. Similar to what was noted in the section on normative expectations, married women, in particular, have limited control over their time allocation because of needs or pressures placed upon them by their husbands or community. In Benin, one woman shared why a woman she knows acts in deference to her husband to avoid threatening his identity as the financial provider,

It is difficult, because a woman cannot do anything without the consent of her husband, especially if she is married. I know a woman who has learned a trade, but her husband refused her to practice it, because he is afraid that his wife would have a lot more money than him [Woman, Benin].

In contrast, another woman in Benin highlighted the freedom single women enjoy, "*If I was single, I would have some [more] time because I won't waste time at home preparing for my husband"* [Woman, Benin].

4.2.5. The gendered nature of time poverty and time burdens

Many women across the Benin, Malawi, and Nigeria data shared experiences of disproportionate time burdens in fulfilling their expected roles and responsibilities, primarily in relation to household chores such as cleaning, childcare, and food preparation. One woman shared, "*[W]omen are always working in their house, which takes them longer hours, such as sweeping the house environment, cooking, caring of children*" [Woman, Nigeria, Hausa]. Another woman shared, "*A woman has a lot of tasks at home. They get very tired, because they have to take care of the children, bathe them, and cook for the household. This is why these tasks are very challenging for a woman*" [Woman, Malawi]. To some women, the concept of *resting* may translate into doing less labor-intensive tasks, but still working. For example, one woman in Nigeria shared,

Even when women have little time to rest, they still spend it working. For instance, you will find woman breaking Egusi[2] *under a tree or at home and tell you she is resting. Most women spend their entire day working, with hardly any time for rest. There is nobody that would not like to have more time to rest, especially, if you have to combine household duties with farm work. There are times I would like to attend to other things, but my household duties come first* [Woman, Nigeria, Igbo].

Many men also discussed the disproportionate amount of time women spend on their expected tasks, and a couple men shared frustration regarding the few instances in which they have tried to alleviate women's time burden. One man said,

You know, when women are in the field, they think to return home to prepare for their husband. The man can stay in the field until 7pm or 8pm, but the woman already must return to the household around 5 or 6pm. She has to take care of the family [Man, Benin].

[2] *Egusi* is a type of seed common in Nigerian cuisine. "Breaking *Egusi*" refers to preparing the seeds for cooking.

Some men also expressed frustration with how time-consuming women's responsibilities are. One man, referring to when he helped his wife to alleviate her time burdens, shared, "*Household duties are long and boring with respect to other normal duties. For a man, household activities are considered a distraction, hence the impatience attached"* [Man, Nigeria, Igbo]. These perceptions contrast with the previously discussed perception that men are expected to work longer and more hours to provide for the family, suggesting that women's tasks and responsibilities are not valued similarly to men's tasks and responsibilities, and are therefore not considered as productive or valued labor.

Another man in Nigeria further elaborated on the comparison between the time it takes men and women to fulfill their expected roles and responsibilities, describing men's role of providing for the household as also a time-consuming task,

Men and women have different work and responsibility. So, it is difficult to explain which type of work takes longer time to complete, but men generally work longer hours than women. Women generally do things that take a longer time to finish than men, such as cooking and washing up normally takes longer time to take care of. But men have many responsibilities. School fees, feeding, and others household expenses mostly keep men on edges. This means sleep and leisure are usually sacrificed [Man, Nigeria, Igbo].

However, a woman shared her perspective on the unequal time burdens men and women experience in fulfilling their respective responsibilities,

I was thinking a woman has to go to the farm, market, cook, and still take care of her husband and children. Men most times only have to go to the farm then come home to rest or rest. A woman can cook, wash, fetch water, fetch firewood etc. all in one day while the man only farms. Women do most of the household chores in addition to running a business, working or farming [Woman, Nigeria, Igbo].

Additionally, many men and women across the three countries discussed women's time poverty, as women could not often participate in activities because their expected and prioritized tasks consumed so much of their time. A woman in Benin shared that she could not participate in an agricultural group available to women in her community, due to many demands on her time, and perhaps an inability to devolve her unpaid labor tasks onto others, "*The group appealed to me so much, but because of my availability, I couldn't [participate]. I do not have time"* [Woman, Benin]. In Nigeria, another woman further elaborated,

Women have more work to do in ensuring they deliver on their household responsibilities. When I am not engaged in household activities, I have other things to do, like go to the farm and market. That keeps me occupied [Woman, Nigeria, Igbo].

In Malawi, the tasks women may prioritize for their or their household's wellbeing, such as selling goods at the market, fetching water, or attending a training in the community, are often located far from their homes; necessary travel to faraway places increases women's time poverty and further exacerbates the competing demands on their time. One woman explained,

We sell our vegetables a bit far. It is practically impossible for a woman to walk this long distance and go and sell these vegetables there. If she has to do this task, it means she has to depart this area when it is still dark around morning hours. So, this is why men have to take this task and cycle to the market [Woman, Malawi].

5 Discussion

Herein, we present a comparative qualitative analysis of time-use agency among women and men who depend primarily on agricultural livelihoods (both on- and off-farm) in Benin, Malawi, and Nigeria. We find clear patterns around how women and men are expected to use their time to fulfill gender-specific normative roles and responsibilities and how these norms influence one's time-use agency. Whereas men are expected to use their time to provide for and protect their households, women are expected to assume and prioritize care roles and unpaid domestic labor. Women's work is daily and time consuming; they have some latitude to decide how and when to complete expected tasks throughout a day, so long as they complete their tasks or can delegate them to someone else. These latitudes do not extend to social or leisure time, or activities outside of expected roles and responsibilities, for which a woman would need to first, fulfill her expected roles, and then receive her husband's permission for any such a deviation. Ultimately, her husband is in control of how she spends her time or changes her schedule in a given day. The acceptance of normative expectations about time use, along with women's limited voice and input into time allocation decisions, contributes to perceived gendered differences in experiences of time burdens and time poverty.

These findings suggest that time-use agency is important for fully understanding empowerment with respect to time use. This is particularly the case for interventions that aim to increase (or at least, not diminish) women's empowerment by promoting women's involvement in remunerated activities. The results of this study highlight the extent to which women and men can make strategic decisions in how they spend their time, especially as new opportunities emerge. It also highlights the barriers preventing them from acting on those decisions, many of which are rooted in normative expectations. Women often make tradeoffs throughout any given day with respect to their time, balancing their expected priorities with the barriers or limitations they face in being able to spend any additional time on tasks or activities that further their own strategic goals. Measuring women's agency over their time use is key to understanding the motivations for how women spend their time (aligned with expected roles and responsibilities), as well as how women may prefer to spend their time, whether it be on leisure, rest,

social, or productive activities.

These findings on time-use agency echo similar themes in the literature on gendered divisions of labor, time poverty, and decision-making, but also add new subtleties to this work. The associations between the gendered division of labor and time poverty have long been acknowledged (Arora and Rada 2017; Lyon, Mutersbaugh, and Worthen 2017; Adeyeeye, Oluwatope, Ilevbar, and Oyeniran 2019; Rao and Raju 2020), as have the ways in which women use their voice and agency in response to inequalities in time allocation (Agarwal 1997; Wodon and Blackden 2006; Doss 2013). Similarly, our findings that women can easily adjust their schedules but must carefully navigate relationships with husbands to be able to attend trainings or take on new income generating activities align with previous findings that women consistently have higher involvement in small decisions (e.g., on household purchases for daily needs) compared to large ones (e.g., for large household purchases) (Kishor and Subaiya 2008). While these themes have been observed previously in studies of women's empowerment, to our knowledge, our study is the first to connect them to time use and time-use agency. The contribution from our study, then, is the conceptualization of time-use agency, and the identification of themes relevant to time-use agency, through the emic perspectives of women and men across three diverse settings in Sub-Saharan Africa.

5.1 Considerations for future work on time-use agency

As noted above, the concept of time-use agency is not addressed in current women's empowerment metrics. Thus, a natural next step for this work is the development and validation of a survey instrument for measuring individual time-use agency. Such an instrument could be embedded in household surveys alongside existing time-use instruments (e.g., 24-hour recall time diaries, stylized questions) to provide greater depth of measurement or replace them. The latter approach may be particularly appealing given concerns over the cognitive burden imposed by standard time-use methods (Seymour, Malapit, and Quisumbing 2020). A time-use agency instrument would likely be shorter, impose less cognitive burden, and be easier to train survey enumerators on, compared to, say, a 24-hour recall time diary. In addition, focusing measurement on time-use agency, rather than time use per se, may mitigate other biases, such as

seasonality, often attributed to standard time-use methods. If confirmed through empirical studies, time-use agency could be incorporated into a greater variety of research designs. In addition, further work is warranted to understand the motivation behind women's acceptance of normative expectations, which itself may be a strategic decision taken by women to further their long-term goals (Rao 2012).

In conclusion, findings from this comparative qualitative study indicate time-use agency is a salient aspect of women's empowerment. Normative expectations around gendered roles and responsibilities, coupled with women's limited voice and influence in decisions around time allocation, lead to perceived differences between men's and women's experiences with time burdens and time poverty. As a concept, time-use agency goes beyond measuring time use to understand the gendered dynamics around controlling one's time use to advance their own strategic goals and highlights any barriers one faces in doing so. Future work should examine how to measure time-use agency in surveys. And development interventions should consider the gendered dynamics of time-use agency and address any such barriers women may face in controlling their own time.

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