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Shifting Roles in Gender, Kinship, and the Household: Women's Empowerment in Matrilineal Malawi

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Abstract

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Gender roles, including by definition women's rights in relation to family and home, have been a fundamental subject of anthropological inquiry from the birth of the discipline. The efforts of social anthropologists of the early- and-mid twentieth-century to study and catalogue kinship systems resulted in elaborate detail across numerous cultures on questions of how natal and marital kin formally and informally negotiate rights to children, property, and selfdetermination, and enabled cross-cultural comparison of facets of household life; in other words, definitional correlates of women's empowerment. The present study examines this question empirically in contemporary Malawi. First, the study explores theories of whether matrilineality is empowering for women. It then contextualizes Chewa matrilineality against a period of rapid historical and demographic change, seeking to reconstruct Chewa gender norms over time. The primary analysis assesses women's relative empowerment across critical individual, relational, and social domains, and compares correlates of empowerment in women in two districts in Malawi, one historically and ethnographically matrilineal (demographically majority Chewa), and one historically and ethnographically patrilineal (demographically majority Ngoni), including a direct measure of whether women reported living in a household that was matrilineal or patrilineal, the composition of their households, and characteristics that map onto historical features of Chewa matrilineality, such as ownership of land and other assets, female household headship, and whether husbands reside with them. Matrilineage membership among contemporary Malawians was not found to be associated with the features that were once described as part of Chewa life; neither did it associate with ethnicity or district as would have been expected from historical practices. However, the features that were historically described as characteristic of Chewa life explained variation in empowerment outcomes across many of the domains included in the study. Moreover, the findings give reason to question narratives common to development that view household-headship and responsibility for farm labor as disempowering for women, rather than understanding them as potential sources of independence when they co-occur with cultural gender norms that endorse women's rights to control their own property and wealth.

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Table of Contents

Chapter 1: Intro	oduction	<u>.1</u>
Т	he cultural context of a social analysis	.1
	The significance of women's empowerment and gender equity in nthropology1	0
Т	he significance of women's empowerment in intervention design1	9
	The case for revisiting study of kinship systems in light of development nd health interventions to empower women1	9
A	review of the chapters2	21
Chapter 2: Key	features of matriliny2	<u>24</u>
D	Distribution and history	24
	The "Matrilineal puzzle"2	26
	Kinship as adaptation	37
	Marital versus natal residence4	15
	Cooperativeness in matrilineality4	18
N	Matrilineality and social well-being4	
Chapter 3: The	relationship between women's autonomy and empowerment and gende	<u>r</u>
norms in Southe	ern Africa5	2
Iı	ntroduction5	52
P	re-colonial gender traditions5	53
C	olonial influence on gender relations6	Ю
E	arly anthropology of matriliny in Malawi6	35
C	ontemporary gender policy in Malawi	′3
Chapter 4: Meas	suring women's empowerment8	<u> 32</u>
Iı	ntroduction8	32

7	What is empowerment?	83
	Women's empowerment versus gender equity	83
	National-level indices	86
	Social choice theory	90
	CARE's frameworks	
	The Women's Empowerment Multi-dimensional Evaluation	
\$	Social Capital, and Relations	94
	Agency	96
	Social capital	101
	Relations	106
-	ntext of women's empowerment outcomes and autonomy in	
·····		109
]	Economic independence	109
	Employment and form of earnings	110
	Control over earnings	116
	Education	120
(Gender attitudes and beliefs	121
	Household decision-making	121
	Right to refuse sex	123
]	Experience of violence	125
	Tolerance of intimate-partner violence	125
	Physical violence	126
	Sexual violence	128
	Control in marital unions	129
	Intimate Partner Violence	129
	Summary	131
Chapter 6: Res	sults of women's empowerment survey	134
1	Independent variables	139
•	Women's empowerment domains	158
I	Associations between matrilocality and women's empowern	
•		1/0

Summary	171
Chapter 7: Association between matrilineal residence/community and women's	
empowerment across the domains	173
Results:	174
Chapter 8: Conclusion2	<u> 216</u>
Introduction2	216
Hypotheses2	20
Methodology	221
Results2	223
Agency Error! Bookmark not define	e d.
Summary of results2	235
Limitations and Future Recommendations2	239
Applicability of findings for global health and development intervention	
Findings in ethnographic context	252
Bibliography2	<u>256</u>
Annex 1: Women's Empowerment—Multi-dimensional Evaluation of Agency, Social	
Capital, and Relations (WE-MEASR) Survey Tool	270
Annex 2: Distribution of Responses to WE-MEASR Sub-Scales	
Annex 3. ANOVA results for model selection3	
Annex 4: Model Selection3	<u> 40</u>
Annex 5: Comparison of Results Across Models	<u>375</u>

List of Tables

Table 4.1.	List of sub-scales in each WE-MEASR domain
Table 4.2.	Scales and items of the gender attitudes and beliefs sub-domain
Table 4.3.	Scales and items of the self-efficacy sub-domain
Table 4.4.	Scales and items of the control of personal assets sub-domain
Table 4.5.	Items of the social cohesion sub-scale
Table 4.6.	Scales and items of the community support in times of crisis sub-domain
Table 4.7.	Items of the collective efficacy sub-scale
Table 4.8.	Scales and items of the community participation sub-domain
Table 4.9.	Items of the participation in collective action sub-scale
Table 4.10.	Items of the participation in household decision-making sub-scale
Table 4.11.	Items of the interspousal communication sub-scale
Table 4.12.	Items of the female mobility sub-scale
Table 6.1.	Matrilineal households by district
Table 6.2.	Distribution of family members across households
Table 6.3.	Distribution of household members across household types
Table 6.4.	Characterization of unique household cases
Table 6.5.	Post-marital residency by matrilineality
Table 6.6.	Post-marital residence by household headship
Table 6.7.	Post-marital residence by husband presence
Table 6.8.	Post-marital residence by district
Table 6.9.	Post-marital residence by ethnicity
Table 6.10.	Husband presence by district
Table 6.11.	Husband presence by ethnicity
Table 6.12.	Categorized age of husbands and respondents
Table 6.13.	Post-marital residence by household headship
Table 6.14.	Husband presence by household headship
Table 6.15.	Personal asset ownership by district
Table 6.16.	Distribution of household wealth
Table 6.17.	Agricultural landholdings by range
Table 6.18.	Livestock ownership
Table 6.19.	Number of children
Table 6.20.	Number of children who died before age one
Table 6.21.	Gender attitudes and beliefs sub-scales
Table 6.22.	Self-efficacy sub-scales
Table 6.23.	Access to and control of productive resources sub-scales
Table 6.24.	Social cohesion sub-scale
Table 6.25.	Collective efficacy sub-scale
Table 6.26.	Participation in community and help from community sub-scales
Table 7.1.	Model results, rejection of male dominance
Table 7.2.	Model results for belief in women's health rights
Table 7.3.	Self-efficacy to go to health facility
Table 7.4.	Self-efficacy to eat a variety of food
Table 7.5.	Self-efficacy to get help with childcare
Table 7.6.	Self-efficacy to breastfeed exclusively
Table 7.7.	Self-efficacy to get husband's participation

Table 7.8.	Community support while pregnant and bleeding
Table 7.9.	Community support after being beaten
Table 7.10.	Community support difficult breastfeeding
Table 7.11.	Community support when there is no food
Table 7.12.	Collective efficacy
Table 7.13.	Help from community groups
Table 7.14.	Help from community members
Table 7.15.	Collective action
Table 7.16.	Social cohesion
Table 7.17.	Household decision-making
Table 8.1.	Summary of selected household variables significantly associated with
m 11 00	women's empowerment sub-scales
Table 8.2.	Summary of selected resources variables significantly associated with women's empowerment sub-scales

List of Figures

Figure 5.1.	Women's employment status
Figure 5.2.	Employment status by seasonality, 2000 DHS
Figure 5.3.	Employment status of women relative to men
Figure 5.4.	Employment by marital status, 2000-2010
Figure 5.6.	Employment status of women in urban vs. rural settings.
Figure 5.7.	Employment status of men in urban vs. rural settings
Figure 5.8.	Occupations by year, women vs. men
Figure 5.9.	Type of earnings for women's work
Figure 5.10.	Women's control over their own earnings
Figure 5.11.	Control over earnings by marital status
Figure 5.12.	Control over cash earnings, 2010
Figure 5.13.	Proportion of household expenses met by women's earnings 2000
Figure 5.14.	Proportion of household expenses met by women's earnings 2004
Figure 5.15.	Women's and men's educational attainment over time
Figure 5.16.	Household decision-making participation by women
Figure 5.17.	Women's participation in household decision-making compared to men's endorsement of women's participation 2010
Figure 5.18.	Right to refuse sex
Figure 5.19.	Right to refuse sex, men vs. women (2004)
Figure 5.20.	Tolerance of intimate partner violence
Figure 5.21.	Experienced physical violence since age 15
Figure 5.22.	Marital control behaviors
Figure 5.23.	Change in experience of physical violence from 2004-2010
Figure 5.24.	Risk of violence by employment status
Figure 5.25.	Risk of violence by education
Figure 6.1.	Matrilineal Residence, by Ethnicity
Figure 6.2.	Ethnicity by District
Figure 6.3.	Religion by District
Figure 6.4.	Distribution of schooling
Figure 6.5.	Highest Level of Education Achieved, by District
Figure 6.6.	Asset Ownership, by District
Figure 6.7.	Distribution of Husband participation in household chores
Figure 6.8.	A man is justified in hitting his wife when
Figure 6.9.	Tolerance of intimate partner violence
Figure 6.10.	What proportion of your household expenses are met from the money you earn?
Figure 7.1.	Respondents reporting having land of their own by household land ownership

Chapter 1: Introduction

The cultural context of a social analysis

As an anthropologist by training, but working in development, I have observed that culture and cultural histories are not always given the nuanced attention they deserve within global health and development program design. To be fair, cultural influences on the social and behavioral factors that matter to development can range from ephemeral to intractable. After all, if anthropologists and other social scientists can find it difficult to agree on what culture means, how people internalize it, and how it guides behavior (the field of debate is large, but see for example (Shweder 1984; D'Andrade and Strauss 1992; Strauss 1997), then how much more difficult is it for development actors to develop flexible, field-ready tools that are capable of generating and assimilating information on culture and guidance on how it may affect their programs? Given such challenges, even when development actors attempt to account for culture, they may not be describing what anthropologists conceive of as "cultural", but rather roles that emerge from social and structural circumstance (Hahn and Inhorn 2009). These kinds of roles do, of course, have direct relevance for the work of organizations that attempt to address the structural causes of poverty and other forms of inequality. But social roles are mutable, and culture matters in a fundamentally deeper way than how it structures social roles for our understanding of how equality and well-being may be stifled or fostered at the individual level.

In this dissertation, I apply a cultural framework to a project designed to examine gendered social roles. The project upon which this dissertation is based uses data collected by the Sexual, Reproductive, and Maternal Health (SRMH) team at CARE USA. The analysis presented here has been done in collaboration with my colleagues at CARE, and is informed by CARE's mission and approaches to women's empowerment as a fundamental part of our humanitarian and development programming. CARE is an international non-governmental organization founded in 1945. It delivers humanitarian aid and development programming in multiple sectors, including emergency response, food security, water and sanitation, economic development, climate change, agriculture, education, and health. In 2011-2012, CARE worked in 84 countries and reached 83 million people with direct programming (CARE International 2012).

Over the past 20 years, CARE has gradually shifted its focus from service delivery to household livelihoods and addressing the underlying causes of poverty, including addressing issues of social exclusion, marginalization, and inequality (McCaston and Rewald 2005; McCaston 2005). In addition, CARE has turned increasingly to an explicit focus on working with women and girls, culminating in the release of a CARE-wide gender policy in 2009 (CARE International 2009), and this has required articulating the rationale for addressing poverty in this way—because women are more likely to be poor and marginalized, and because women are a "key driver of development" (ECOSOC 2012). The rationale for this is fairly straightforward—when women are better educated, when they marry later and have fewer children, they will be healthier, their children will be healthier, they will stand a better chance of being educated themselves, and so on. This "girl effect" (see for example www.thegirleffect.org, a coalition of development actors funded by the Nike Foundation, of which CARE is a member) is a major part of the vision for a "virtuous cycle" (Womenetics interview with CARE CEO Dr. Helene Gayle, 2013) of poverty eradication that we imagine when we talk about working with women and girls.

This kind of approach requires a deeper understanding of the social processes by which social inequality, and gender inequality in particular, are produced. To this end, CARE has identified the domains of agency, structure, and relations as a framework for understanding women's empowerment processes (Wu 2009). In order to test this theory of change and to be able to evaluate the impact of its programming, CARE needed a tool that was capable of assessing women's empowerment across these three domains. My colleagues on the SRMH team, Dr. Christine Galavotti and Christina Wegs, in collaboration with others throughout the organization, set out to develop a tool that was capable of measuring women's empowerment at the individual level, and across the three domains of agency, structure, and relations. The result was the Women's Empowerment Multidimensional Evaluation of Agency, Social Capital, and Relations (WE MEASR) tool, which has 27 sub-scales in the three domains. Some elements of the survey are based on existing measures, such as the Gender Equitable Men scale (Pulerwitz and Barker 2008) and the Demographic and Health Survey's Women's Empowerment Indicators (National Statistics Office (NSO) and ICF Macro 2001), but several of the sub-scales were newly developed for this measure.

The "agency" domain focuses on women's own perceived agency (self-efficacy) as well as on gender norms for women's rights to self-determination and bodily autonomy, including issues such as intimate partner violence, the right to refuse sex, gender equitability, and health rights. Self-efficacy scales present a series of scenarios, in which women are asked how confident they are that they could take certain actions relating to the scenario, such as how confident she is that she could attend a community meeting, use family planning, or access help with child-care. The "social capital" domain assesses access to different kinds of resources, as well as a number of dimensions of social

integration and support, community support in a number of hypothetical times of crisis, and collective action with, participation in, and support from community groups.

Collective efficacy assesses confidence that women in the community can succeed by working together. The "relations" domain measures participation in decision-making within the home, inter-spousal communication, and how free women are to move within their communities as a proxy for whether a woman can access friends and family outside her home.

In order to statistically validate the scales, CARE conducted a cross-sectional study in two districts in Malawi; this study was undertaken independently from any project or other evaluation, and was conducted with the primary purpose of validating the WE MEASR tool. The project presented here is based on analysis of these data. CARE's SRMH team conducted this validation study in conjunction with CARE Malawi and a Malawi-based contractor experienced in large-scale surveys in Malawi, as well as gender-equality evaluation. The survey included 641 married women aged 18 to 49¹. Data were collected from May through July in 2012, in two districts in southeastern Malawi: Ntcheu and Lilongwe. The samples were not designed to be representative of these two districts, but were instead limited to a specific set of census areas within each one.

CARE's primary purpose for the survey was to validate the scales and subscales of CARE's WE MEASR survey tool to assess women's empowerment. However, the survey sampling frame provided the opportunity to compare a district that is populated by a historically patrilineal ethnic group, the Ngoni, with a district that is populated by a historically matrilineal ethnic group, the Chewa. Because matrilineality is one of the

¹ The reason only married women were included was that a number of the sub-scales have sections or questions relating to spouses. Although these can be adapted for use with unmarried women in the field, for the purposes of validation, CARE wanted the whole sample to be able to respond to the complete survey.

most important distinguishing cultural features in the area in question, it is a primary consideration in the present study; however, understanding matrilineality is not the fundamental purpose of this project. My purpose in conducting these analyses has been to use this opportunity to situate what is fundamentally a social epidemiological undertaking—characterizing features that promote gender equality in two districts in rural Malawi—and contextualizing them in a deeper way that can help inform our understanding of the social processes by which equality and inequality are produced.

In this dissertation, I examine women's well-being, as proxied by the various dimensions of empowerment described above, in relation to kinship practices. Specifically, I analyze social factors that contribute to domains of empowerment among the (historically matrilineal) Chewa and the (historically patrilineal) Ngoni in two districts in Malawi, Lilongwe and Ntcheu. The survey also collected data on ethnicity, kinship, household membership and headship, and other factors that relate to kinship practices described historically for this region of Malawi. My primary research interest here is to understand how women's experiences and well-being relate to social and cultural practices that are relevant in Malawi and the other areas in which CARE works. Although the study was conducted with a different purpose in mind, the design of the study made the data suitable for analyzing how cultural and social factors, in this case primarily the kinship systems practiced in the area and various features associated with them, might interact to promote equality or inequality at the individual level. In sum, the data allow for the analysis of the following question: Are women living in matrilineal households more empowered than women in patrilineal households? And if so, then through what mechanism?

The question of whether matrilineality should be expected to promote women's empowerment in the first place is one that has not enjoyed a lot of consensus within the discipline, but it is a question that goes back quite a long time. Engels and Morgan drew on Bachofen's (1973) theory of "mutterrecht", based on the irreducibility of the motherchild dyad. They argued that matrilineality must have been the archaic social form for early humans, and that as societies advanced and developed property, women became systematically disempowered. This view provides the subtext for the view that matrilineality is an inherently unstable system. The shift away from the view of cultural progression that underwrote Morgan's view of matrilineality led to the idea of matrilineality as "puzzling". This has been characterized in many different ways; in its earlier incarnation, matrilineality was seen as leading to unstable marriages, but the fundamental argument comes down to the view that the nuclear family is the primary social unit, and that men are therefore disadvantaged by a system that asks them to cede control of wife and child to her matrilineage; that having control of the nuclear family should be more important to him than having control of his sisters and nieces within his matrilineage. Because men are universally dominant, (in this world view) men should be expected to reject matrilineal systems.

The feminist reread of the matrilineal puzzle raised several questions about these explanatory frameworks: whether men are now, or have always been, universally dominant; whether that dominance truly is incompatible with matrilineality; and whether the social anthropologists who interpreted matrilineality were describing systems already deeply influenced by outside forces, colonization among the foremost. Whether you believe matrilineality could be (or could once have been) empowering for women seems to come down to whether you believe, on the one hand, that women in matrilineal societies are just as much subject to domination by men through socially

prescribed roles as women in patrilineal societies are, but the men by whom they are dominated happen to be brothers or uncles rather than husbands or in-laws; or whether you believe that adopting kinship focused on female relationships suggests an advantage for women beyond social roles—whether a symbolic appreciation for women in their roles as mothers (see for example Karla Poewe's reference to the symbolic importance of "emergence from a womb", 1979, page 116), or inherent to being the genitors of membership in a clan, as among the Ashanti women who frame their power around being the mothers of men who occupy positions of power, and therefore the bearers of those positions (Sanday 1981).

At the outset of this research, I was in the former camp, at least in the case of the Chewa, based on Audrey Richard's detailed descriptions (in Radcliffe-Brown, Forde, and International African Institute 1987) of the roles of men within the matrilineage. While I have not been convinced of the alternative hypothesis, I have at least been convinced to view some of the early ethnography more skeptically. I do not believe that the ethnographers themselves were not giving faithful accounts, as they saw them. However, the ideal forms of social roles as they were reported by informants may have been practiced very differently from how they were explained; moreover, the informants were unlikely to have been neutral or uninterested actors, in a time of high stakes and rapid change. If the potential bias in the observers led them to see women as less empowered than they were (or might once have been), and matrilineal families as more unstable than they were (or might once have been), it is easy to imagine that that they misunderstood the nature of the inequality or instability. Over the course of research, an additional explanation emerged, suggesting that forces leading social forms toward greater formalization were already underway in Malawi through early colonial policy, and anthropologists were observing the results of that process several decades in.

Whether matrilineality should empower women or not is a contested question, and it is contested in large part because of differing perspectives on what the ethnographic record really captures. These newfound insights did not necessarily change the hypotheses I would propose for the present sample, but they do serve to contextualize the findings and to change how we might apply the findings presented here to the pre-colonial past. I propose a set of hypotheses that focus on the structural aspects of matrilineality, rather than on its symbolic power or some other intrinsic quality, in favoring women's status or positive gender roles. Of primary interest to me is the practice of matrilocality; I hypothesize that living among natal kin instead of marital kin has predictable benefits for women. With respect to the three domains of the WE-MEASR tool, my hypotheses are as follows: We would expect no association between matrilineality and agency domains—if matrilineality is empowering primary through structural factors, then gender values and social roles should not differ between matrilineal and patrilineal societies. We do expect an association between empowerment and social capital, but this is mediated by living among kin. We expect an association between matrilineality and relations, but only among women who are living matrilocally. While I believe these hypotheses to be logical, I can also imagine a number of formulations and considerations that might lead to alternative conclusions. As such, I put these forward as hypotheses to test; and, in general, my findings support these hypotheses with respect to the current sample. There are additional social practices in matrilineality that favored Chewa women's access to farmland and control the products of their own labor. Because of this, in the analyses that follow, I will focus on household residence and composition, and on access to resources, in addition to matrilineality, in explaining women's empowerment outcomes.

Through this analysis, it is possible to examine epidemiologically whether belonging to a matrilineal household measurably enhances a woman's well-being by empowering her in the domains listed above; if so, then through what mechanisms? If matrilineality is not found to promote women's well-being in this way, then are there other features of social practice that do contribute to well-being? In this dissertation, I hypothesize that matrilineality alone does not contribute directly to women's well-being, but that cultures in which matrilineal kinship is practiced may also include practices that promote social well-being. In addition to whether women's ethnicity and district (which associate with historical practice of kinship) as well as whether they report their households to be matrilineal or patrilineal, I will consider features related to matrilocality, which is frequently associated with matrilineality, and to property rights and income.

In order to contextualize the analysis presented here, I will examine historical ethnographies of the Chewa (and surrounding matrilineal groups, for reference) and the Ngoni, who migrated to the region in the mid-to-late nineteenth century. In particular, I will examine cultural practices related to matrilineality, including gender roles and practices specifically affecting the status of women. I will further examine how social practices associated with matrilineality, and the practice of matrilineality itself, have shifted as a result of social disruptions caused, first, by migrations of people through the matrilineal belt, and subsequently by missionization, colonization, independence, and economic transformation, and I will consider the potential impact of these shifts on women's social roles.

The significance of women's empowerment and gender equity in anthropology

Sex and sexuality, and in particular gender roles, have always been the purview of anthropology, and variation in the ways in which life, work, sustenance, status, symbolism, rights, access to resources, political representation, explanatory models, relationships, social protocols, and virtually any other facet of the human project that can be named differ and are assorted by sex have been catalogued carefully across and within the world's cultures. As a result, the volume of ethnographic accounts of gender roles is difficult to inventory in its full scope here. For this reason, I will narrow my analysis to consideration of scholars who have tackled questions related to gender norms in the context of kinship.

Even with this limitation, the literature is vast: the features of social life typically assorted by kinship and residence can include gendered divisions of labor; rules governing residence, marriage, and sex; child-rearing practices; and rights to own and inherit land and property. These are fundamental and critical elements structuring any way of life, and as such, have all been objects of theory by virtually every school of anthropology since the beginning of the discipline. At the heart of so much inquiry has frequently rested the question of whether inequality between the sexes is universal (Brodkin 1982; Ortner and Whitehead 1981; Sanday 1981) and if so, is it therefore inevitable? Disputes to the universality of gender inequality have sometimes turned to matrilineal societies to make their case (Martin and Voorhies 1975; Leacock 2008). And although many scholars have seen no reason to assume that matrilineality alone—the kinship practice itself, unlinked from other cultural practices—should be particularly empowering for women from a theoretical standpoint (Maynes et al. 2014), the question seems to return perennially to the debate (Peletz 1995).

In the early years of the discipline, the role of women was framed by their function within the family and roles within kinship systems, and focused on how the mother-child bond shaped early kinship systems. Against the background of social evolutionary theories of cultural progression, matrilineal kinship systems were seen as the more ancient form (Bachofen 1973), based on the theory of mother-right and the irreducible dyad of mother and child. This view considered women categorically in their capacity as mothers, and although scholars such as Engels (1884) and Morgan (1997) criticized the impact of capitalism on women's rights—indeed, blaming the development of property on the declining position of women relative to the status that women were presumed to have under more ancient systems—cultural analysis was focused on women as mothers and as members of lineages, rather than on the roles women played in a culture. Karen Sacks argues cogently that the Social Darwinist roots of anthropology have created an "unconscious [biological] metaphor" (1982, page 5), by which dependence, and therefore subordination, are intrinsic aspects of the social roles of women, a view she challenges effectively.

On the other hand, Herbert Spencer's approach to cultural evolution, while leading to opposite political conclusions from those of Engels and Marx (ultimately culminating in a support for laissez-faire economics), initially led him to vociferously support equal rights for women (1868). He even went so far as to suggest that moral evolution should result in improving status for women, though he later reversed his opinions, based on what have been argued as more personal and political than intellectual grounds (Offer 2000). Boas' rejection of the social evolution of Spencer, Morgan and others (Degler 1993) and adoption of cultural relativism changed how anthropology examined gender. At the same time, the discipline was becoming more inclusive, featuring for the first time

prominent women scholars. The private journals of Boas' student Ruth Benedict (Benedict and Mead 1959) paint a portrait of a woman grappling with the meaning and place of gender roles in her own life and work, particularly with respect to the role of motherhood. In *Patterns of Culture*, she conceives of human behaviors (including gendered ones) as a function of culture, mediated by psychology, which informs gender development (2005). Mead (2001a) also considered issues of gender and sexuality apart from motherhood, kinship, and family roles in her work in Samoa, going on to directly address issues of gender in *Male and Female* (2001b) and *Sex and Temperament* (2001c), in which she argued for the cultural construction of sex differences. In these works, Mead contested deterministic conceptions of gender and sex based on biological difference.

Meanwhile, in Britain, Malinowski and Radcliffe-Brown further fostered an approach to the discipline that emphasized fieldwork (Kuklick 1993), in this case with the support of the colonial administration. This cataloguing of cultures allowed for more detailed and empirical cross-cultural comparison. Field research accelerated after colonies became better established, and institutions such as the Rhodes-Livingstone Institute (RLI) developed to support field research. By providing thorough, wide-ranging, and systematic fieldwork in the region over the course of decades, these institutions (along with whatever biases they carried with them) arguably shaped our present understanding of the region (van Donge, 1985). Exercises such as George Murdock's cross-cultural surveys (1940), and later the Human Relations Area Files (Ember 1997), followed to facilitate the collation of these comprehensive cultural data. The empirical possibilities were boundless. Researchers could now describe patterns of cultural attributes cross-culturally and test associations between different facets of cultures, including various aspects of gender roles (for example, Murdock 1950).

In the meantime, the modern evolutionary synthesis potentiated the flourishing of behavioral ecology and evolutionary psychology from the 1970s onward, and while it provided a new framework for understanding human behavior, it also contributed to the resurgence of a form of biological determinism, in terms of an innate "nature" of sex and the sexes, driven by assumptions about a set of selective benefits of various traits supposed to accrue to the sexes bearing them. Hypotheses on the selective benefits of gendered cultural features could be tested using cross-cultural data in a fundamentally more systematic way than had been done under the social school, including explaining kinship systems within an evolutionary frame(see for example Greene's usage of the HRAF to associate endogamy with paternity uncertainty, 1978). Frequently, the hypotheses underlying these explorations of the literature also rested on assumptions about the conditions of human pre-historic evolution (Washburn and Lancaster, in Lee and DeVore 1973), whether or not these assumptions were supported by evidence, leading to a proliferation of theories explaining a number of gendered traits, such as male aggression against women (Smuts 1992).

In an early response to this trend, Sherry Ortner (1981) and colleagues called for anthropologists to understand gender roles as variable and culturally constructed. And yet, in their preface to that collection of essays, she and Harriet Whitehead also wrote the following:

"[N]one of the essays in the collection systematically analyze gender culture from the 'female point of view', although many of them incorporate a discussion of women's viewpoint within an analysis of the hegemonic (male-based) ideology. We consider this approach to be theoretically justified, in that some form of asymmetry favoring men is present in all cultures and that women's perspectives are to a great extent constrained and conditioned by the dominant ideology. The analysis of the dominant ideology must thus precede, or at least encompass, the analysis of the perspective of women. [page x]."

The sub-text of this perspective includes the assumptions that: 1) men are, in fact, universally dominant; and 2) because they are universally dominant, their contributions to the construction of culture (in general) and gender culture (in particular) inherently and systematically pre-empt or supersede contributions of women; and 3) understanding women's perspectives on gender is not critical to understanding the cultural construction of gender (when the task is to understand culture, as opposed to its meaning for people within it). It was perhaps ironic that this school proposed explicitly to challenge a naturalistic view of gender; but by emphasizing the universality of gender inequality, they reinforced a different kind of essentialism—by casting gender inequality as universal, they also imply that it is inherently *human*.

Ortner (1989) followed up with a response to critics in which she differentiated between status and power, asserting that while men universally enjoy higher status than women, this does not preclude women from having power. She also argues that the cultural assertion of male superiority is sufficient evidence to define a culture as one in which men are superior. Though she is right to try to unpack what is meant by dominance in the first place—whether power, status, strength, or political influence—it is problematic to accept the assertions of a cultural narrative—the story a people tells about itself—as accurately reflecting lived realities for all its members. This theme will reappear in the examination of descriptions of gender drawn from the ethnographic literature—how well does what people say about their cultures align with what they live out as people?

The position that women are universally subordinate to men was contested; for example, Rosaldo and Lamphere (Rosaldo 1974) sought to write from women's, rather than men's, perspectives in the field, but also to explicitly name a bias in the practice of the social sciences that allowed the gender-inequitable cultural paradigms of anthropologists to rationalize the dismissal of the interests and contributions of women, on the grounds that inequality in the description of women's lives was theoretically excusable because it mirrored the inequality in their lived experience. And if one is to interrogate the gender biases of contemporary anthropologists, and the potentially erroneous conclusions they might lead us to draw, then what should one make of the imprint of gender bias on the ethnography of the past, when anthropologists such as Margaret Read (1956), working in Malawi among the Chewa, Yao, and Ngoni, could argue that matrilineality was an inherently inefficient system by virtue of emphasizing women's roles in agriculture and in controlling food stores (Brantley 1997)? Read argued that when patrilineal groups moved into matrilineal territory, patrilineality's natural superiority as a system would lead to the eventual dissipation of matrilineal systems. Brantley (1997) suggests that Read's interpretation of the evidence was driven by her own biases and her over-reliance on Ngoni (patrilineal) men as sources, with some help from the agricultural disappointments of colonial officials in Nyasaland. Read's account may lend itself to contestation because of her particularly candid use of dismissive gender language, and the fact that she does little to disguise her view that the Ngoni are superior to neighboring tribes—for example, bemoaning the lack of modesty in Chewa girls entailed by the lack of a nursery period, found in an article that attempts a direct comparison of the ethics of the Chewa with those of the Ngoni (Read 1938), and outright expositing the superiority of the Ngoni in another article on prestige among the Ngoni (Read 1936) but we cannot altogether dismiss the possibility that even more outwardly objective

scholars were nonetheless influenced by their own biases or those of their more vocal or accessible informants.

The example above illustrates one of the limitations of the ethnographic record. Ethnography can provide an account of cultural practices that represents what the anthropologist, or her informants, see as the norm. And while social norms can give us some idea of the frameworks that guide social life—of Bourdieu's "field of cultural production" (1993)—they are less well equipped for examining the patterns within a culture that explain variation in adherence to the social framework, and the consequences for individuals of "violating" norms. As William Dressler has shown in his work in southern Black communities and in Brazil, how individuals internalize and conform to social norms is associated with social support (Dressler et al. 1997), mental health (1988), and physical well-being through the physiological effects of psychosocial stress (1991). Norms may neither fully describe nor prescribe behavior, but they do shape well-being.

While relative inequalities are affected by macro-level processes, at the level of culture or of ethnographic or geopolitical or social unit, they are also mediated through mechanisms by which cultural practices are translated into well-being at the individual level through the processes of embodiment as described by Nancy Krieger (Krieger 2001; Krieger and Smith 2004). Ethnographic data can be used to illuminate whether Chewa women are better off than Ngoni women or other women elsewhere, through the application of some set of criteria (of the kind that would be required to determine from ethnographic sources alone whether matrilineality benefits women relative to other systems of kinship, an exercise not entirely dissimilar from attempts to measure "women's empowerment" at national levels based on a pre-selected set of indicators).

And ethnography provides the, albeit imperfect, historical context for the present study, by which we understand the intersections between gender roles and practices and matrilineality among the Chewa. However, this study is not an ethnographic one. Ultimately, the work here is an effort to understand the epidemiology of inequality—the social risk-factors for women's well-being. The approach taken here—examining women's well-being, empirically, as a function of social factors—is fundamentally attempting to ask a slightly different kind of question than ethnography seeks to answer. Here, I attempt to understand what social practices and factors contribute to women's empowerment, at the individual level, as well as within their relationships, their households, and their communities.

I chose this study for my work, opportunistically, because the location and nature of the survey guaranteed rich ethnographic context against which to interpret and understand my findings. For that reason, I have attempted to describe some of the perspectives on matrilineality and associated cultural practices, and their presumed or potential benefits for women's well-being, that have emerged from the literature over time. Malawi, as the home of the RLI, is well-studied, ethnographically. I have also attempted to trace some patterns in how observers have thought and written about kinship and gender in Malawi, including consideration of historical and economic influences (on both the observers and the observed). Ultimately, the results presented here shed only uncertain light on the place of matrilineality in contemporary Malawi (with respect to women's empowerment or otherwise), they do contribute to an understanding of what social factors are associated with greater self-efficacy, greater independence, greater self-determination, more equitable relationships, and greater social capital. These social factors, however, have a historical provenance deeply intertwined with culture for both of the groups represented here, and for both of them, cultural practice is inextricable from kinship.

The discussion below will trace a history of gender within the practice of matrilineal kinship among the Chewa of Malawi, through the influences of multiple forces over the past 300 years. It will explore the ethnographic record of gender construction and practice among the Chewa and neighboring groups in Malawi from pre-contact oral histories, through early missionary accounts, representations by colonial government agencies, and ultimately the broad and systematic ethnographic project of the midtwentieth century. Of particular interest are traditions associated with matrilineality and common throughout the matrilineal belt of sub-Saharan Africa, including both historical and contemporary constructions of these traditions vis à vis gender equality. Finally, several traditional practices associated with matrilineality and with Chewa and Ngoni culture will be described empirically and tested for association with women's empowerment across a variety of domains.

This analysis will test these features of Chewa and Ngoni life utilizing survey data from 641 primarily Chewa and Ngoni women in two neighboring districts of Malawi. It will then test the associations between these practices and women's empowerment outcomes, focusing in particular on the question of whether matrilineality (as it was practiced among the Chewa) was empowering for women, and if so, which features? In an oblique way, this analysis will challenge the view of inequality as inevitable, and will suggest a framework that, rather than pitting culture and equality against one another (the idea that to achieve equality, culture must be changed; to preserve culture, we must resign ourselves to inequality), instead identifies a longer arc of traditions with deep roots in Chewa culture and that are also empowering for women in contemporary Malawi.

The significance of women's empowerment in intervention design

The survey instrument utilized to collect the data upon which the present analysis is based was designed explicitly to characterize variability in gender equality systematically and across a comprehensive set of domains. Understanding what political, economic, and social circumstances contributed to greater empowerment for women can help organizations such as CARE, by whom the tool was originally designed, to tailor interventions to promote an environment most conducive to gender equality.

The idea of intervening in a "culture" with the explicit intention of changing cultural practice runs against the grain of a field with relativism so deeply at its core. Reconciling an inherent respect for the role of culture with a critique of social norms that disadvantage women is challenging at first glance; it requires as a foundation a refusal to consider any single cultural practice as sacrosanct, a recognition that cultural patterns and practices are ever-changing already, even the ones that seem deeply rooted in tradition, and an acceptance that promoting equality for women, even when it requires that gender constructions change, is not threatening to culture writ large. The perspective of this anthropologist, as a development worker independently dedicated to work that addresses inequality for the world's poorest women, is that not only is gender inequality not a natural condition, it is also not an essential condition for any culture nor for any cultural identity.

The case for revisiting study of kinship systems in light of development and health interventions to empower women

Since the social anthropology of the British school of the mid-20th century, the study of kinship has changed dramatically, a history summarized succinctly (and with humor) by Michael Peletz (1995). As described by Carsten in her edited volume of essays (2000),

new approaches to kinship have focused on the meaning for people of relationships and relatedness. David Schneider played a major role in this process of redefinition. In his Critique of the Study of Kinship (1984), he argued that the analytic framework of early kinship theorists was inherently wrong in its assumption that kinship is based on reproduction. He argued, instead, that kinship is about the cultural meaning of roles and how they are emically defined, in other words that it is in inherently symbolic, and any assumption about the primacy of biological relatedness was a consequence of the importance of such relationships within the Western kinship framework itself being imposed by those anthropologists who were blind to its presence. In a volume on the Schneider's legacy (Feinberg and Ottenheimer 2001), Dwight Read argued against the view of prior anthropologists that cultural definitions hinging on the parent-child relationship and the relationship between the co-parents of a child are universal among human cultures, with reference to variation in cultural understandings of how children are produced. He details the ways in which a set of symbolic rules for determining relatedness can be abstracted from genetic definitions of relatedness and still reflect observed kinship maps. In the same volume, Feinberg argues that because of his move away from genetic determinism in kinship roles, Schneider laid the path for feminist reinterpretation of gendered roles within kinship systems.

If the perceived utility of kinship theory has fluctuated wildly in the century among anthropologists, kinship—pertaining to culturally mediated lineage systems—is rarely considered at all in development. The primary exception to this includes studies of the matrilineal belt and HIV in the 90s, which identified some cultural practices that are often associated with matrilineal societies as being more risky for or more protective against HIV. Since then, a number of articles have been written examining the theoretical risk for HIV of sexual practices associated with these cultural practices in

sub-Saharan Africa, such as levirate marriage and "ritual cleansing". Although these studies rarely measure the actual risk of contracting HIV entailed by such, they are assumed to increase risk because they increase numbers of partners, and potentially expose the uninfected male partners to women widowed by HIV, who might also be infected (Audet et al. 2010; Dworkin and Ehrhardt 2007; Higgins 2010). As such, these are considered inherently dangerous cultural traditions (although not necessarily ones exclusive to matrilineality); the fact that they are antithetical to women's bodily autonomy can also be a consideration for those concerned about the practices, but the primary impetus for inquiry is an epidemiological one.

Beyond these specific types of practices, kinship itself, and the ways in which kinship systems organize social life, has mattered very little to development actors. While relationships and the household are significant units of analysis for development actors (UNECE 2007), the cultural constructions by which people assort themselves into relationships and households have rarely been of real consideration. It is hoped that the present study will illustrate a case example for the ways in which kinship—even when proxied through household residence patterns and traditional allocation of land rights—can influence the lives of the people who are so often the subject of development efforts. It will also consider the ways in which development interventions might be conducted differently and more effectively if they were to include consideration of kinship and family relationships as a mainstreamed component of their situational analyses.

A review of the chapters

Chapter 2 will broadly discuss theories of matrilineality. This will include a review of how anthropology has viewed matrilineality over its history as a discipline, as well as theories of when and how matrilineality developed, and under what circumstances it might be adaptive. This chapter will also review the confluence of gender and matrilineality, and the general debate surrounding the relative gender equitability of matrilineal societies.

Chapter 3 will provide an ethnographic history of the Chewa of Malawi, including descriptions of matrilineal kinship over time and the influences that changed matrilineal practice, including the influx of patrilineal clans, changing bride service practices, colonial imposition, and the impact of a changing economy. It will also review the fundamental elements of matrilineality that shape the primary hypothesis of the present analysis.

Because this thesis will attempt to test empirically the associations between cultural features of matrilineality and women's empowerment outcomes, Chapter 4 will review approaches to the empirical assessment of women's empowerment, gender roles, and gender equity.

Chapter 5 provides a brief review of the Malawian context against which to understand the findings of the present analysis, including data over time from the Demographic and Health Surveys that have been conducted since 1992 on work and income, gender rights, land ownership, education, marriage, and other facets of women's lives relevant to the work undertaken here.

Chapter 6 presents the results of descriptive and exploratory analysis of the data-set used in this study, including the primary dependent and independent variables of interest, and considering how the results reflected on the primary hypotheses.

Chapter 7 presents the methodology utilized to analyze 17 sub-scales reflecting various aspects of women's empowerment across three primary domains, and presents the results and interpretation of each of the 17 scales.

Chapter 8 reflects on the overall findings with respect to the primary hypotheses explored in this work. It further discusses some of the limitations of the present approach, and provides some recommendations for this question might be more deeply explored. Finally, it provides some recommendations for development programming based on these findings, and how development work in general and work focusing on gender might benefit from a firm understanding of the role of kinship and kinship systems on households and on the daily lives of women in areas where development work is done.

The annexes to this dissertation provide 1) the WE-MEASR tool developed by CARE and utilized to collect the data analyzed for this project; 2) the distributions of responses in the project sample to the 27 women's empowerment sub-scales in the WE MEASR tool; 3) the ANOVA models testing association between the women's empowerment sub-scales and post-marital residence, which drove the selection of models for the present analysis; 4) additional details on the model selection process, including interaction terms, for each of the 17 models completed for this dissertation; and 5) side-by-side comparison of the final models, including correlation coefficients or pseudo-r² and significance levels for each of the independent variables associated with outcome.

Chapter 2: Key features of matriliny

Distribution and history

Matrilineal societies, or societies that could once have been characterized as matrilineal, have been identified in North America (Hopi; Navajo; Iroquois; Tlingit), Central America (Bribri); South America (South Asia (Khasi; Maliku; Garo), East Asia (Mosuo; Nakhi), South-East Asia (Karen); Sub-Saharan Africa (Chewa; Tonga), West Africa (Tuareg); and North Africa (Nubians). These are just some examples, suggesting that matrilineal societies have existed, and persisted, usually alongside and among patrilineal societies, in every part of the world.

Support for the view that matrilineality could represent the earliest human form of kinship has vacillated over the years. In Knight's history of the concept of "matrilineal priority" (in *Early Human Kinship: From Sex to Social Reproduction* 2008), he describes how matrilineal priority was first promoted, notably by Morgan and, later, Engels, as the original form of human kinship. They argued that the mother-child dyad was the most fundamental relationship, while the parents-as-mates relationship was secondary. Engels characterized this after Bachofen's "*mutterrecht*" (1973) as "motherright", suggesting that children would most naturally belong to their mother (and by extension, her kin or clan) (Engels 1884). Both Morgan (1997) and Engels (1884) attributed the ultimate rise of patrilineality to the development of property, and, by extension, the potential for inequality, and agreed that the development of a goods-based economy led directly to husbands using their status and strength to usurp power and compel women to join groups of their devising, thereby disrupting a mother's claim on her children. Both further agreed that this shift entailed the social and institutional

disempowerment of women. Engels phrased it emphatically as follows: "The overthrow of mother right was *the world-historic defeat of the female sex*. The man seized the reins in the house also, the woman was degraded, enthralled, the slave of the man's lust, a mere instrument for breeding children." (Engels 1891, quoted in Knight 2008). It was Engels, however, who extended the concept of mother-right (and matrilineality) as a distinct stage in cultural development to include the practice of communism.

Ultimately, social anthropologists began to reject matrilineal priority, led primarily by Malinowski, Radcliffe-Brown, and Boas. Boas used the Kwakiutl Indians as an example of a patrilineal group that developed matrilineal traits (Boas 1920), although the strength of his evidence has since been questioned (Knight 2008). Knight argues further that some part of the backlash against matrilineal priority originated in the fact that Engels had taken up the cause, and thereby politicized it. Knight characterizes the social anthropologists' rejection of the idea as part of an inevitable backlash against the influence of Marx and Engels on the discipline. More recently, however, attention has returned to the possibility that matrilineality could have been adaptive under the pervasive conditions of early human evolution. Such arguments continue to focus on the biological primacy of the mother-child dyad, but build additionally on Hawkes' grandmother hypothesis (Hawkes, K. et al. 1998) and other evolutionary explanations, which will be explored further below.

Given the number and variety of cultures practicing full or vestigial matrilineality, there is predictably a great deal of variation in its forms. Robin Fox (1984), in an effort to classify its forms, reduced matrilineal systems to three basic structural types:

"1. That based on the mother-daughter-sister roles and matrilocal residence. Here the burden of control and continuity is to some extent shifted onto the women, and in societies with this basis it is usually the case that women have higher prestige and influence than in the others.

- 2. That based on the brother-sister-nephew roles, with avunculocal residence preferred, or, failing this, some means whereby the mother's brother can control his nephews. In this type the status of women is usually lower, as control and continuity are monopolized by men.
- 3. That based on the full constellation of consanguine matrilineal roles: mother-daughter, brother-sister, mother's-brother-sister's son. Here control and continuity are primarily in the hands of men, but the status of the women need not be low it will perhaps be intermediate." (page 112).

Although these classifications do capture the basic forms (with variants) of matrilineal kinship ties observed, Fox extends his argument to include hypotheses predicting the relative empowerment of women entailed by each system. However, it is not clear that these hypotheses are grounded in empirical observation, rather than underlying theories about the relationship between the patterns of kinship ties he characterized and actual control of resources based on such ties.

The "Matrilineal puzzle"

Matrilineality, given its divergence from the systems prevalent among Western powers whose accounts of culture underlie dominant narratives, directly contradicts established notions about 'logical' systems of descent and inheritance. Matrilineality has been considered so untenable that an entire polemic rose up around the idea of the

"matrilineal puzzle". The "matrilineal puzzle" was first articulated by Richards (Radcliffe-Brown, Forde, and International African Institute 1987) as follows:

"The problem in all such matrilineal societies is similar. It is the difficulty of combining recognition of descent through the woman with the rule of exogamous marriage. Descent is reckoned through the mother, but by the rule of exogamy a woman who has to produce children for her matrikin must marry a man from another group. If she leaves her own group to join that of her husband her matrikin have to contrive in some way or other to keep control of the children, who are legally identified with them. The brothers must divide authority with the husband who is living elsewhere. If, on the other hand, the woman remains with her parents and her husband joins her there, she and her children remain under the control of her family, but her brothers are lost to the group since they marry brides elsewhere and they are separated from the village where they have rights of succession.

"There is the further difficulty that in most societies, authority over a household, or a group of households, is usually in the hands of men, not women, as are also the most important political offices. Thus any form of uxori-local marriage means that an individual of the dominant sex is, initially at any rate, in a position of subjection in his spouse's village, and this is a situation which he tends to find irksome and tries to escape from." (page 246).

Fox (1984) summarizes the conflict as disagreement between uncle and father over the discipline and future of children. The solutions offered by Richards are as follows:

"There are, of course, a number of solutions to the matrilineal puzzle. The first of these may be described as the matriarchal solution, in that property, and particularly houses and lands, pass through the woman as well as the line of descent. The eldest brother usually acts as manager of the estate. This is achieved either by the institution of the visiting husband or by that of the visiting brother." (Richards, in Radcliffe-Brown et al.).

Here Richards cites the Nayar who live with brothers, and are visited at night by husbands, or the Menangkabau, who also featured visiting husbands who lived in households run by their sisters, and the Hopi, in which women live together, and whose husbands manage their lands while their brothers manage their households and civic life. Richards believes this solution is only possible in large settlements that accord easy accessibility to visiting men, whether brothers or husbands. She further allowed for the possibility of what she called matriarchy as part of this solution, defined as property being inherited through the maternal line.

The second solution groups brothers together, while their sisters are sent out for marriage, and the children of such marriages are repatriated (rematriated?) at puberty, as among the Trobriand islanders. As Richards explains it, this solution to the matrilineal puzzle consolidates power among the men of a lineage, by reconciling exogamous marriage with matrilineality.

The third solution is that of the walking marriage, often characterized by uxorilocal residence like that practiced by the Chewa. Richards considers this type of marriage practice to be unstable. She writes (Radcliffe-Brown, Forde, and International African Institute 1987) that:

"[t]he conflicts of interest in these societies is probably the most extreme, since all the men of a community cannot at the same time act as mother's brothers with authority over their own local descent group and also as husbands living in their own wives' villages, as the rule of uxori-local marriage demands. Amongst the Cewa and Yao it seems that the majority of marriages are uxori-local but that marriages are easily broken. A man who cannot stand the situation in his wife's village leaves and goes elsewhere. This might in fact be described as the solution of the detachable husband." (page 247).

Some men are generally able to circumvent the rules that create the most compromise between their matrilineages and their families. Men may inherit headman positions, or achieve wealth or consequence through other means, or may acquire the resources needed to support polygamous marriage, in which case one or more wife will live with him. In several of the matrilineal groups in southern Africa, men could acquire as wives women who were purchased through the slave trade or who had been disenfranchised due to a lack of male relatives (Phiri 1983); in these cases, men had no need to compromise control of either their natal or their marital family.

The central yet unarticulated tenet of Richard's explication of the "matrilineal puzzle", though it goes unarticulated, is the assumption that the compromises to be expected of women are not to be expected of the "dominant sex". Her argument furthermore assumes that the kind of compromise or subservience required to keep matrilineal systems operating smoothly is fundamentally antagonistic to the masculinity of participants. Indeed, if there were no conception of dominance, matriliny would be no more puzzling than patriliny.

Poewe (1979) notes that the "puzzle" is conceptually rooted in the principle of universal male control of productive resources—matriliny is assumed to be conflicting for men in a way that patriliny is not assumed to be conflicting for women, based on control of resources and the nature of shared investment. Poewe (1978) argues that matriliny "minimizes individual male control of power and resources" (page 115), but suggests that as a system it is not unsustainable because of the position in which it places men with respect to productive and reproductive control; rather, it is sustainable specifically in situations of unrestricted access to or abundance of resources that circumvent a need for a cohesive economic unit rooted in the nuclear household. This is based on the idea of the filial labor force. Where control of a collective "personnel" is critical for a man's economic interest, matriliny is unfavorable, as a man can control only the reproduction of his wives and not of his sisters. She argues, based on her observations in Luapula, that given the existence of abundant and diverse resources, women will play a part in the diversification of labor-investment opportunities.

Indeed, the idea that split marital versus natal loyalties should be paradoxical for men, but not for women, is fundamental to considerations that matriliny (but not patriliny) is puzzling. In contrast to this line of thinking, which focuses on the trade-offs demanded of men in matrilineal versus patrilineal systems, Flinn (1986) argued that in any kind of unilineal descent system, the specific rules of contribution and exchange serve to build ties between clans and thereby mitigate conflict.

Watson-Franke (1992) takes the view that matrilineal societies, by virtue of their focus on the biological primacy of motherhood, intrinsically institutionalize a greater respect for women, but that this emic view within matrilineal ideologies is lost when viewed

through the Western lens, through which the perceived conflict inherent to matrilineality is intractable. She quotes Alice Schlegel:

"This paper explores some of the major methodological problems associated with the study of the history of the family in Africa. It sets out to explore the problem of the unit of analysis, concluding that the historian must be careful to distinguish between idealized family forms and the reality of family structures. Using both historical and contemporary examples from southern Malawi the paper explores this problem further by analysing the role of the matrilineage visa-vis the household over time. Both oral and written sources specifically concerned with the history of the family tend to emphasize the formal structure of kinship relations and it is difficult to know how these relate to the facts of social and economic organization. Even using present-day evidence it is difficult to integrate cultural perceptions of kinship and family relations with realities - in particular with the economic realities, which may change much faster than cultural norms. In the final section of the paper it is suggested that the nearest we can get to a knowledge of the history of the family, avoiding the problems of ideology and the drawbacks of structural and evolutionary models, is to approach the subject 'sideways'. By studying other institutions and relationships which impinge on family structures, we may get closer to defining the boundaries of these structures. This approach is illustrated using the example of chinjira - a non-kin-based relationship between women which exists in parts of southern Malawi. A study of chinjira indirectly demonstrates both the strength and the limits of kinship relations. "What may be a puzzle to the Western ethnographer is simply a fact of social organization to the native, no more and no less puzzling than any other fact of organization.' Interestingly enough, no anthropologist ever

encountered a "Patrilineal Puzzle" expressing a woman's conflict between her lineage and her children.'" (page 476).

In fact, Watson-Franke questions the underlying assumption of male dominance, taking both feminist and non-feminist writers to task for the assumption. To analyze this from an ethnographic perspective she outlines four specific assumptions underlying the matrilineal puzzle for further interrogation:

- "1) Women are always controlled by men;
- 2) Male roles are structurally central in all social systems;
- 3) The roles of father and husband are the most important social roles of men, these being transferred in matrilineal systems to the maternal uncle and brother, who take over the paternal and partnership functions; and
- 4) Men's control of women's sexual and reproductive potential is universal, the implication being that the tension potentially inherent in Western spousal relationships is equally present in matrilineal cross-sex sibling relationships." (pages 476-477).

To question these assumptions, and their implications for concepts and socialization of masculinity among men in matrilineal societies, she works from ethnographic sources as well as the life histories of men, to obtain the more emic perspective, particularly on the role of fathering, which is central to the "puzzle" itself. She cites examples from the Trobriand Islanders and the Navajo to illustrate a dichotomy between the mother's brother—the male role generally assumed to be analogous to patrilineal fathers—and the birth father. In these examples, the mother's brother is a disciplinarian, while the father's role is that of nurturer, while the children are young.

Watson-Franke and her colleague (Watson-Franke, Maria-Barbara 1992) cite the differing reproduction beliefs in matrilineal societies as reflecting a distinction between creation and nurturance, using examples from the Guajiro, the Uduk, and the Trobriand Islanders. In all three cases, the idea of conception is distanced from the influence of the father; instead, his role is to contribute to the nurturing of the child, but ultimately, creation belongs to the mother, and therefore the child belongs to her clan. Watson-Franke points out that these fathers often obey restrictions on sex and infidelity, seen as potentially damaging to the development of the child (as in the Hopi case) and that the bond is derived from emotional care, expectations of nurturance, and obligation to the support of the child, rather than through what she characterizes as the converse (patrilineal) notions of creation, ownership, and control.

Bolyanatz (1995) argues strongly against Watson-Franke's interpretation of the evidence, maintaining instead that conflicts between marital and natal affiliations are part of human experience, and that in practice, people are able to negotiate seemingly conflicting social rules. For this reason, apparent conflicts in any unilineal descent system will be mitigated through social and political means. He questions the assertion that there is less gender-based violence in matrilineal societies. Indeed, ethnographic evidence on women's relative empowerment is difficult to interpret, particularly because matrilineal societies vary so much amongst themselves in structures, rules for property control and inheritance, and gender norms surrounding sex and violence. Watson-Franke's examples of disapproval of rape among the Guarijo and the Vanatinai are countered by Bolyanatz's examples from the Sursurunga of men who sometimes beat their wives or sisters. Indeed, Watson-Franke herself quotes a Guarijo on the subject of men who beat their mothers, which the source attributed to retribution for severe discipline when the men themselves were children.

Lovett (1997) argues of the Lakeside Tonga that matrilineal descent provided the means for women's power:

"The relationship between a man and his new mother-in-law clearly was not one between social equals, for such women exercised a considerable degree of power over their daughters' husbands. Not only did they have access to and profit from these men's labor, but, because they ultimately could refuse to allow their sons-in-law to leave with their families for their own villages, women also had the capability to mould [sic] male behavior.² As such, it seems certain that young men treated their mothers-in-law with deference and respect, clearly indicating their subordinate status within that relationship." (page 174).

In this system, in which bride service was the norm, mothers of married women could choose to grant permission to their sons-in-law to move their families to their own villages. Such permission was granted by the matrilineage, and the description of the development of this practice does not clarify what roles the women in these marriages themselves might play in determining whether or not they were to be moved. From the description of the practice available to us now, it seems as though the women did not have a formal, decisive role in their own living situation, rather that it was arranged between the son-in-law and the matrilineage power-holders.

This situation—in which a woman who has daughters, and can therefore command the value of male labor—is not entirely dissimilar to the corollary practice in some versions

of patrilineality in which women who have sons, and can therefore command the labor (and children) of daughters-in-law, gain power in their later years. In either case, the power obtainable by women is firstly contingent on their role as mothers specifically, rather than being accorded *de facto*, or even being based on their role as household head or landowner, and secondly, obtainable only after having first gone through a period of subordination to older women, the experience of which is no guarantee of ultimately inheriting a comparable kind of power, because it is contingent upon giving birth to and raising the kinds of children who will allow their power to fully vest. It is arguable that status, defined in this sense, is not only not a reflection of empowerment, but could act to limit it (Kabeer 1999), particularly because obtaining this status is linked to an "achievement" over which women have little control, and also because status is further linked the gender of the children they bear, when those who obtain it exert this status, they serve to reinforce the intergenerational transmission of gender inequality. Men in matrilineal communities also have access to power primarily vis-à-vis their relationships within and outside of the matrilineage, but the difference is that their power is inherent to their membership. Men are subordinate in some ways to their mothers-in-law, particularly while young; but the same men have full standing within their own lineages, as brothers and sons, even while young. Women do not have any standing within their marital lineages, and their standing within their natal lineages appears to frequently be contingent on their ability to command the labor of sons-in-law.

In sum, when considered from a theoretical perspective, there is no real consensus on whether matrilineality inherently empowers women, or conversely, inherently disadvantages men relative to patrilineal systems. The only safe conclusion to draw is

that, as Bolyanatz suggests, kinship systems—however they are structured—present individuals with conflicts that must be resolved. If this is true, then individuals living within these systems find ways to adapt the rules to suit their needs, suggesting that idealized forms for kinship rules as elaborated by ethnographers do not necessarily reflect how they are lived in a pragmatic sense. If this is the case, then the hypothesis that matrilineality is empowering for women, by focusing on maternal roles, must be questioned—even if the systems elevate women's roles relative to patrilineal systems, this elevation may not transcend the level of the symbolic. This supports the hypothesis outlined at the beginning of this dissertation, that matrilineality itself may not be predicted to relate to common patterns in gender roles or equality. Rather, the practical ways in which a given kinship system organizes marriages and households may serve as a basis for more equitable gender roles. In other words, matrilineal societies can exist in which women's self-determination is still subsumed to power held by individual men, as reified within the rules of descent and inheritance; that the power is held by uncles or brothers rather than by husbands or fathers-in-law does not alter the relative imbalance of power between men and women in their respective roles within the lineage. That said, matrilineal societies could be more likely to foster conditions that promote women's well-being. Living among their own kin rather than in-laws could be of benefit to women, particularly in terms of accessing lineage resources. Understanding whether a particular form of matrilineal practice may empower women requires inventorying the practices that are associated with that particular cultural formulation of matrilineality, and hypothesizing with respects to these mechanisms how they may contribute to gender equality and to women's well-being.

Kinship as adaptation

Although the social anthropologists may have been short-sighted in their rejection of matrilineality as an early form of human kinship, they were correct in challenging the notion of kinship as a progression of forms. Indeed, the considerable variation in kinship systems—including transitions in practice consequent to migrations of people, as described in further detail in Chapter 3—reinforces the idea of kinship as a system in flux, although they continued to reify idealized forms, rather than fully encompassing the flexible nature of practice. If kinship is viewed through the lens of adaptiveness, then changing ecological conditions, and furthermore direct political pressure to change, have the power to shape its practice.

The use of evolutionary theory to explain cultural patterns shed a new perspective on studies of kinship. Although this line of interrogation was not entirely dissimilar to the question of what circumstances matrilineality might or might not make sense for specific individuals. Hamilton's original formulation of kin investment theory (W. D. Hamilton 1964) added a new dimension to the study of kinship systems within variable ecological contexts. Adaptation in this context refers to the ways in which the cultural frameworks for kinship shape how individuals invest in one another and make maximum usage of resources, ultimately resulting in greater individual fitness; the assumption of this line of inquiry is that underlying variability in kinship systems should result from adaptation of cultures to sets of ecological constraints.

If kinships systems are, at base, a framework for sharing resources and labor cooperation, then they are also inherently adaptive to conditions relating to production and reproduction. A behavioral-ecological framework has been applied both to the question of why human social structures are universally patriarchal, but also how the

"puzzling" exception of matrilineality fits with evolutionary explanations of gender inequality. Barbara Smuts (Smuts 1995) argues cogently for a synthesis of feminist and evolutionary theory, maintaining that:

"[f]eminist theory and evolutionary theory are concerned with many of the same basic issues. Feminist theory focuses on issues of power: who has it, how they get it, how it is used, and what are its consequences. Evolutionary biology, as applied to social behavior, focuses on precisely these same issues (Gowaty 1992). Feminist analysis also focuses on sexuality and reproduction; in fact, many prominent feminist theorists argue that control of female sexuality lies at the heart of patriarchy (Lerner 1986; MacKinnon 1987). Evolutionary theory also focuses on sexuality and reproduction (e.g., Darwin 1871; Trivers 1972) and places these issues at the heart of its analysis. Thus, both evolutionary theory and feminist theory focus on power and sex." (page 2).

Smuts argues that male sexual coercion has a long evolutionary history among humans and our primate relatives, situating it in the context of male competition for mating opportunities. She also cites species in which females are able to resist coercion, citing female bonding as a correlate of resistance to coercion, focusing specifically on female kin coalitions in species including rhesus macaques and vervet monkeys. The political power of female coalitions to control what Smut's calls "king-making" adds a social dimension to the power of females in such troops to physically resist. This power is generated along kinship lines and depends on groups of related females remaining intact over the life-course. Of course, Sarah Blaffer Hrdy has pointed out (2009) that the variation in social forms in primates provides evidence supporting a primate origin for nearly any social configuration, including the purported primacy of both male and female dominance. That kinship coalitions contribute to female power relations in

monkeys does not allow us to infer female dominance in humans, considering copious evidence to the contrary. But it can help to shed light on how access to female kin shapes women's well-being; the Grandmother Hypothesis (1998) is just one elaboration of this theme.

Whether the relative disempowerment of women compared with men is completely universal (Ortner and Whitehead, 1981, Bandarage 1984) or merely nearly universal in the world's cultures today, the deep origins of such inequality is less clear. In either case, the kinship and residence patterns orchestrate how women can access family resources and female kin. If the patterns observed in non-human primates hold true for humans, then one could expect greater relative empowerment for women in circumstances where women have greater access to their female kin, through matrilocal practices. If matrilocal residence in humans mirrors social organization among female kin-groups in primates, then the parallel of male violence would not be exempted from the human systems. Rather, matrilocality among human women would provide a mechanism for women to resist male violence or usurpment of the means of production.

Smuts (1992) provides preliminary reviews of the cross-cultural literature on female bonding and male aggression. She proposes three alternative hypotheses:

"Hypothesis 1: Male aggression toward women is more common where female alliances are weak." (page 13).

"Hypothesis 2: Wife beating is more common when women lack support from female kin." (page 14).

"Hypothesis 3: Male aggression toward women is more common when male alliances are particularly important and well-developed." (page 15).

Hypothesis 1 was supported to some degree, though the review was only a preliminary one. Her review provided little support for hypothesis 2; although in some matrilocal groups, wife beating was indeed rare, this seemed to be modified significantly by local social norms regarding the acceptability of wife-beating. Evaluation of hypothesis 3 seemed to suggest that where male alliances were of particular importance, men were less likely to intervene on behalf of a female relative in cases of aggression or conflict with her husband or in-laws; presumably, the risk to their place within the men's networks imposed by such intervention was not worthwhile.

Indeed, even with respect to gender-based violence alone, the ethnographic evidence of association between matrilocality and reduced violence against women is ambiguous. Moreover, although sexual coercion, male aggression, and gender-based violence, and the ability to defend oneself from through physical or social means, are highly relevant indicators of gender inequality both in terms of the behavioral ecological framework and in terms of human rights consequences for women, it is only one dimension of a more holistic view of gender equality and of the processes of empowerment for women in development contexts.

In spite of the fact that men in matrilineal systems are considered to have no economic incentive to invest in their own offspring, behavioral ecologists (Leonetti 2008; Cronk, Lee 1991) have argued that matrilineal kinship systems provide a framework for adaptive cooperative exchange that may loosely reflect biological interests. This view suggests that where men have greater certainty of biological relatedness to their sisters' children than to their wives' (i.e. high paternity uncertainty), matrilineality could be a more adaptive form of kin investment (Greene 1978). Cronk (1991) even cites a deep history for this argument, in the form of an 11^{th} century writing regarding the Ghanaian

monarchy, which was said to be passed matrilineally because of the paternity certainty of a king for his sisters' sons. Holden and colleagues (2003) offer as an alternative that matrilineality may actually be a form of investment in daughters that can exist even when paternity uncertainty is not high, if the value of heritable property to sons is marginal compared to its value to daughters, as in horticultural societies. Mattison finds support for this hypothesis with respect to land inheritance but not for wealth among the Mosuo of Southwest China.

Sear and Mace (2008) have argued for the significance of matrilineal systems in orchestrating maternal grandmother support, which has been shown to improve outcomes for children. Holden and Mace (2003) further argue an ecological role, building on Aberle's (1961) argument that matrilineality is associated with horticultural practice by testing empirically whether introduction of cattle preceded shifts to matrilineality cross-culturally across sub-Saharan Africa, concluding a causal relationship. They argue (in Lee, 1999) that the sub-Saharan horticulturalist dependence on female labor was the basis for matrilineal descent. Most arguments with respect to foragers have focused on the importance of male hunting coalitions (Marlowe 2004). Ember evaluated residence patterns among foragers early on (1975), concluding that forager residence is usually virilocal. Marlowe retested this conclusion using the Standard Cross-Cultural Survey, and determined that foragers were multilocal but frequently followed a pattern of living uxorilocally in the early part of a marriage (often in conjunction with bride service) and virilocally in the later part of a marriage (Marlowe 2004).

Poewe (1979) argues the challenges of matriliny in Zambia based on the "contradiction between generalized exchange (or matrilateral distribution) and productive

individualism." (page 331). She presents matriliny as a form of African cooperativism in opposition to capitalist enterprise, which she considers incompatible because the self-interested Ego has little advantage in the system of "matrilateral distributive justice"; this argument, however, makes intuitive sense only when applied to the perspective of a male Ego, inherently resting on the assumption of primary control by men.

Under most matrilineal systems in Sub-Saharan Africa, land was owned by lineages, with customary rights allocated to lineage members by chiefs; patterns of inheritance have changed dramatically with land reforms emphasizing individual ownership, discussed at greater length in the next chapter. But while women in matrilineal societies may not have had an advantage in terms of land rights, they did generally have cultivation rights in land own by their lineages, and had discretion over the productive output of their labor (see for example Vaughan, 1985). While men might find little advantage in this system, women might indeed benefit from it, compared to one in which they own neither the land nor its output, but are required to provide labor nonetheless.

Another assumption underlying her argument is that the marriage unit is the most naturally efficient for production, and that family structures in which nuclear marital units are less stable are less competitive in an enterprise-oriented economy. Indeed, she describes the development of parallel economies in Luapula (in which men operate within the fisheries value-chain, while women work with cassava and the sale or lease of cassava lands, along with the brewing of beer) as evidence of the conflict or at least misalignment of interest between sexes engendered by matrilineal systems.

Further arguments about the challenges for men of having to balance responsibility to both their natal and marital families reinforce the view that matrilineality is an unstable condition, and therefore acutely responsive to changing economic conditions. This idea goes all the way back to Morgan, who argued that the development of private property would inevitably lead to the decline of matrilineality (Morgan 1997). Although the literature offers examples of resilient matrilineal practices, including the persistence of matrilineal systems among a Muslim population in Mozambique described by Bonate (2006), several studies do confirm changes to or even the displacement of matrilineal systems since their characterization by early ethnographers. See for example Jeffrey (1990) on matriliny in Kerala; Apter's description (2012) of displacement among a community of Congolese refugees in Zambia, resulting in a system of trade that acted to undermine matrilineal exchange systems; and Bolyanatz's description (1995) of colonial changes to inheritance law among the Polynesian Sursurunga which transformed the society from strong uxorilocality to a mixed virilocal pattern of residence and an altered relationship between the filial and descendant aspects of matrilineality practiced there.

However, in the case of Karala and the Sursurunga, the changes to matrilineal systems are attributable to changes in inheritance laws mandating parents to leave property to their children. In other cases, for example Malawi, a transition to single-family households migrating to urban settings and the dissolution of more extended family networks has affected how families practice inheritance (Mtika and Victor 2002).

That matrilineal men should, in cases of changing economies, adopt a system of providing materially as much or more for their children as for their sisters' children aligns to some extent with the conception of matriliny as unstable. However, even in the above examples, it is relatively common that some features of matrilineality are retained even while others become impractical for governing inheritances. An alternative explanation for the observable shifts away from matrilineality since the nineteenth century

could lie in the fact that nearly everywhere matrilineality was practiced, colonial powers undermined its practice, as well as the social structures in which matrilineality might make sense. Chapter 3 will explore a specific example of this in depth with respect to the Chewa.

As with women's empowerment, there is no clear consensus as to what circumstances favor matrilineality. There is no clear consensus on whether matrilineality represents a primal form, whether it is adaptive for food production (or under what systems), or whether it is fundamentally unstable. Partly, this uncertainty may be because even where there are common patterns in matrilineal cultures, such as in the Matrilineal Belt, there is still too much variation in specific practices such as land rights and post-marital residence associated with matrilineality to draw meaningful conclusions about matrilineal versus patrilineal systems. Moreover, there is confusion in the ethnographic record, based both on changing approaches to the descriptions of cultural practice and on the fact that during the most heated period of ethnographic description, matrilineal systems were under pressure from multiple sources to change. Moreover, kinship systems are not often practiced with complete fidelity to the idealized norms captured by social anthropologists at one point in the history of an ethnic group; first, norms as they are explained by informants may not represent practice, and second, kinship systems exist in a state of flux. Perhaps an empirical description of Chewa households as they actually practiced lineage and inheritance in the 1930s would fail to align completely with the standards that emerged from ethnographies in which people were asked to explain "what Chewa do" or "what Chewa should do". Idealized norms themselves often contain internal contradictions that make their realization impossible; in reality, members of a culture make pragmatic choices about which systems to adopt and which tropes to employ. Comparing modern descriptions that account for messy, pragmatic

practices with the idealized ethnographies of the past cannot paint a very meaningful portrait of change.

That challenge, however, is primarily a function of changing methodologies, and it does not pre-empt the more fundamental observation that cultural practices themselves are also constantly changing, as they likely have been since the first chroniclers put pen to paper in order to capture the practice of matrilineality. In Chapter 4, I will explore sources of change in the past century to Chewa practices in greater detail.

Marital versus natal residence

If the assumptions of behavioral ecology are correct that females in groups of kin are likely to be more socially powerful than females where no such opportunities for solidarity exist, and if this can be extended to the conditions of women with or without opportunities to group with their female relatives through mechanisms that are culturally sanctioned and with long-standing institutionalized histories within their communities, then the element of natal residence could be posited as a mechanism by which matriliny could be predicted to correlate with greater empowerment. The applicability of the lessons from primates relates to a very limited potential set of domains of equality and empowerment for women, however.

Data on matrilineal and matrilocal systems suggest that there is no guarantee that cultural norms will dictate greater power for decision-making or influence within a matrilineal household, clan or community by women. In either system a woman is attached to the productive resources owned either by a brother, uncle, father or husband, or by her lineage as a whole. However, a woman and her children will always benefit from her own contributions to resources to which she has access through matrilineal

channels, whereas her investments may be much more labile in a patrilineal system, in which she invests in resources owned by her husband's family but to which she may lose access upon widowhood or divorce. In sum, although women may individually benefit more from longer term security ensured by a matrilineal system, there is no obvious advantage to women in terms of control of economic and productive resources from living in a matrilineal system.

The benefits of remaining with her natal family are not limited to a woman's access to land. Living with oppressive mothers-in-law is one of the examples of how cultural *doxa* (Bourdieu 1993) can mediate internalized inequalities offered by Kabeer (1999). The role of mothers-in-law has often been examined in terms of their influence on fertility and other reproductive health-care decision-making. Sear and colleagues (Sear et al. 2002), in attempting to show in The Gambia that kin proximity increased fertility by providing women with help in child-rearing, found instead that proximity to kin had no effect, while proximity to mothers-in-law was significantly positively associated with fertility. The authors interpret this finding primarily in the light of mother-in-law assistance with child-rearing, but mention a potential secondary influence of pressure to have children.

A number of studies of mothers-in-law focus on reproductive health-related issues, such as who decides where women give birth (White et al. 2013), whether they are attended for ante-natal care (Simkhada et al. 2010), and when to have children and how many to have (Masood Kadir et al. 2003); but these are also issues critical to conceptions of autonomy, and such studies sometimes also include direct measures of autonomy (Bloom 1988) and well-being, including psychosocial well-being (Chandran et al. 2002; Green et al. 2006). White and colleagues (White et al. 2013) found in rural Mali that

mothers-in-law with greater agreement with traditional practices were associated with less timely post-natal care in women who had recently given birth, while mothers-in-law who had more positive attitudes toward health-centers were associated with greater access to timely post-natal care and with health-facility delivery. In the same study, women with greater self-efficacy were more likely to delivery in a facility and have access to timely post-natal care; and women whose mothers-in-law perceived the women as efficacious were more likely to have at least four pre-natal visits. Vera-Sanso (1999) complicates the narrative of mother-in-law dominance in a case study in Chennai, from which she concludes that mothers-in-law may expect the clear power disparity in their roles early in marriage to shift as older mothers-in-law become more dependent, again suggesting that women's power within the household shifts over the life-course and is determined in large measure by her familial roles.

The anthropological literature offers some compelling case-studies of married women living in households dominated by mothers-in-law. For example, Ruth Behar's *Translated Woman* (2003) delves deep into the story of one Mexican woman's difficulties with her husband and mother-in-law, and how that imbalance of power within the household intersects with social inequalities. João Biehl's *Vita* (Biehl and Eskerod 2013) describes the political power in-laws are capable of exerting in patrilineal contexts, going even so far as to politically dehumanize the lead subject of the ethnography, Catarina. That said, such a system does not necessarily disempower women across their life histories; rather, it disempowers young and newly-married women, but allows them to gain power and influence within their families and communities as they bear more children (particularly sons) and become mothers-in-law themselves. Indeed, the surest path to power and influence for women in such systems is to become the mother-in-law. In a matrilineal system, presumably, women bear

comparable influence by being stewards of their brothers' heirs, even while their brothers may live at some distance or in a different household. The consequences of this for women in matrilineal systems have not been clearly investigated.

Cooperativeness in matrilineality

The collective nature of property allocation within matrilineages has led some researchers to hypothesize that matrilineality might promote cooperativeness. Andersen and colleagues (2008) provide some preliminary experimental evidence from a publicgood model of game theory (an approach that gives multiple players the chance to enter a personal exchange for a greater percentage of return, or a group exchange for a lesser but group-wide percentage of return) to compare matrilineal Indian Khasi with nearby Assam communities. Their results lend support to the idea that matrilineal societies entailed a greater willingness to contribute to a public good and reduced incidence of free-ridership. The effect appeared to be due largely to actions of men in either system. Though the authors remain agnostic about the cause of this difference, pending further research, one can speculate that men in the matrilineal Khasi community expect that they will benefit from mutual willingness to contribute to the public good over personal good. Indeed, a relationship between cooperation and female bonding is supported in the behavioral-ecological framework; as Smuts (1992) admonishes, "Note that all of these ways in which female [non-human primates] resist or prevent male coercion involve supportive social relationships--sometimes with other females, sometimes with males, and sometimes with both."

Matrilineality and social well-being

The central question of this dissertation is whether matrilineality itself empowers women—and if so, how does it do so? Answering this question requires problematizing the view of matrilineality as inherently empowering by which so much ethnographic interpretation of such systems has been colored. It further requires interrogating sources—both early and more recent—that presume empowerment of matrilineality precisely because such systems differ so greatly from the forms of cognatic or patrilineal descent, and frequently, primogeniture that have dominated cultural practice within the parallel hegemonic powers of academia and colonization. As Lovett (1997) puts it,

"Matriliny's implications for the augmented socio-political status and economic autonomy of women as sisters and mothers vis-à-vis that of men as husbands and fathers constituted an even more unsettling 'problem' [than the division of a man's loyalties between his own matrilineage and that of his wife]. Matriliny, in short, posed a fundamental challenge to scholarly assumptions about the way in which gender relations within human societies should properly be ordered." (page 172).

That matrilineality should be deemed "puzzling" because of the unique challenges it might create for men provides a predicate for the assumption that because men in such systems do not enjoy complete power over their immediate nuclear families [wives and children], that women—specifically mothers—necessarily enjoy an equal portion of that power, as ceded by men. Indeed, it is equally possible that in such systems, men cede power to one another; some forms of matrilineality emphasize these relationships, such as a husband ceding power over his wife and children to her brothers or mother's brothers. In fact, some interpretations of matrilineal forms that seek to resolve the "puzzle" it poses, emphasize the power and role of alternative male

relationships to women, in order to comfortably resolve the (perceived) immutability of male dominance.

One weakness of attempts to characterize matrilineality as empowering is that they do not define what standard would be required of a given social grouping in order to allow its women to be described as "empowered" or "not-empowered". Certainly this has not often been approached empirically, but even qualitative and ethnographic explorations of gender and matrilineality rarely spell out what kinds of power, or equality, or autonomy, the systems are expected to confer if they are empowering to women. Largely it appears that the implicit definition includes household autonomy and sanctioned political leadership as dual pillars of the kind of empowerment that a matrilineal system might be expected to confer. But there is danger of tautological argument in favor of an association between matrilineality and empowerment when forms of empowerment not explicitly provided for by lineage systems are excluded from consideration, such as personal autonomy, bodily integrity, and gender attitudes (including endorsement of violence and control).

These alternative views inform the primary hypothesis of this dissertation—that power does not accrue to women as an inherent function of tracing lineage through mothers, and matrilineality is not mutually incompatible with attitudes about gender that limit female power, autonomy, and choice, nor with social mores that inhibit women's rights, including endorsement of gender-based violence and fertility decision-making and expectations that deny reproductive choice and physical autonomy. That said, if matrilineality is in fact adaptive under certain kinds of circumstances, in particular where economies rely on women's labor, then perhaps it is these conditions themselves that have the potential to promote greater gender equality. That is, if, for example, horticultural societies that rely on women's labor simultaneously lend themselves to matrilineality and to greater household independence for women, then perhaps matrilineality

would appear to be empowering for women. For that reason, the analysis here will examine self-report of lineage membership alongside a number of cultural characteristics that have been associated with the Chewa. To inform this analysis, the next chapter will examine ethnographies among the Chewa and neighboring matrilineal tribes to inform the selection of practices that may promote women's empowerment.

Chapter 3: The relationship between women's autonomy and empowerment and gender norms in Southern Africa

Introduction

Situating the confluence of matrilineality and female power in the present may or may not allow us to draw conclusions regarding where that nexus may have been plotted at specific points in the past—that is, although the present study will provide one empirical example, which may shed light on the relationship between matrilineal/matrilocal structures (including their economic, productive, and formalized nominal forms) and female power, the example is unlikely to map neatly onto matrilineal systems of the past, nor speak to other distinctly different cultural forms of matrilineality. This limitation does not, however, preclude identifying critical determinants in the present example which may be instructive for understanding the arc of gender relations and power through time as a function of such formalized social structures.

Moreover, the present undertaking, far better than conjecture about a reified lineage structure that may never have exemplified pragmatic realities, can help reveal some of the underlying architecture of relations in which women consciously or unconsciously operate, within which productive and cooperative roles determine how they accept, reject, or internalize gender roles and expectations. This undertaking requires, in addition to an understanding of both the ritualized and productive aspects of a matrilineal practice in constant flux, a thorough understanding of the nature of gender and the meaning of gender traditions (and their history of creation, reification, and

reproduction) for women in contemporary society. While in Chapter 3 I sought to contextualize manifestations of matrilineality over time, and how they were shaped by political, ecological, and cultural influences, in the present chapter, I will describe multiple perspectives on the construction of gender over time in Malawi, as well as other regions in former Rhodesia, through the lens of matrilineality.

Pre-colonial gender traditions

The history of gender relations, cultural attitudes, and policies in Malawi is, as in many former colonial societies, one of competing narratives. One narrative describes a society of "backward" traditions (2004) that are harmful and disempowering to women, but which progress has helped to alleviate and which current policy seeks to address. This narrative has met with backlash against the inauthenticity and irrelevance of imposed gender ideals that controvert "traditional" values regarding women, as in Mwale (2002). Another narrative describes a more gender-equitable pre-colonial past, since which colonial and contemporary political forces have colluded to recast gender and the role of women, followed by economic transformation that has engendered shifts in household productive patterns and divisions of labor, to the disadvantage of women in contemporary former Rhodesia (Brantley 1997; Lovett 1997; Phiri 1983). A different narrative describes a pre-colonial past in which prior social norms were already under specific pressures to change in response to influences from incursive patrilineal groups, given matrilineality's presumed inherent instability, alongside vulnerabilities created by concurrent environmental challenges (for example, Read 1956).

To some degree, it is impossible to be certain of exactly what gender roles and relationships in the area currently defined as Malawi might have looked like before Livingstone's Zambezi expeditions, and the quick succession of missionaries who

followed in his wake. Early descriptions from this time exist, though they tend to present observations through the lens of the self-evident dominance of men and the primacy of the nuclear household. Mandala (1990), for example, quotes missionary Horace Waller, in 1861-2, as describing women's power in the Shire Highlands as, "The fair sex have their own way a great deal." (page 25). A more nuanced observation comes from Rowley:

"The position of the woman with the Manganja...was in no way inferior to that of the man...men and women worked together in the fields, and the special occupations of the women were thought to be no more degrading that [sic] the specialities of our women are to our own women at home. The men seemed to have much kindly affection for the women: such a thing as ill-usage on the part of a husband towards his wife I did not once hear of. Frequently, as I shall have to illustrate, the position of the women seemed superior to that of the man."

(Mandala 1990, page 25).

Mandala compiles similar observations from across former Rhodesia, too numerous to catalogue here, painting a picture both of women's political and religious influence and of British colonial astonishment at it. Because our understanding of the social roles of men and women in political life come almost exclusively from these kinds of accounts, it is impossible to ignore the degree to which such descriptions have been filtered through an interpretive lens neither sensitive to, nor approving of, local gender forms that empowered women beyond what European men of the era were accustomed to.

Nevertheless, such descriptions from the time, even those deriving from external, usually hegemonic, forces, cannot be entirely dismissed. There is little else to draw upon for understanding gender roles as they might have looked pre-colonially other than these

early accounts, because as soon as colonial rule was established, it began to exert policies with significant influence on the household and gender roles.

However, the deeper historicity of female power, even within the context of the long history of matrilineality in this area, is not certain. Vaughan (1983), for example, argues that the clans associated with matrilineal groups in Malawi took on an unprecedented importance in the 19th century precisely because the rapid changes in that time engendered a cultural nostalgia for past forms. She characterizes a period of high immigration in the latter 19th century in terms of its associated shifts in clan organization and membership, which also likely affected ethnic groups differently depending on whether they were migrating in, or being migrated into.

As one example, she notes that oral traditions of migrations of Malawian ethnic groups from the sixteenth through the nineteenth centuries invariably spoke of male clan leaders moving into an area, while only in the nineteenth century were migrations discussed in terms of movements of women—"ancestresses" in this case, rather than clan leaders. Vaughan posits that the practice of naming female ancestors in this period among the Yao was a product of the long trade-related absences of Yao men, resulting in groups of related women choosing to move into new territories, in particular to avoid the potential threat of being abducted for the East Africa slave trade. But one can imagine some other explanations for this pattern; if smaller movements are not recalled through collective memory for as long as larger migrations, then the movements of smaller groups of women may be recalled only for the 19th century because they were more recent.

Alternatively, it may be that women gained power within their matrilineages during this period through some process other than male migration, but which resulted in greater autonomy of movement within their own and neighboring territories. Because of the nature of the evidence, it cannot be altogether concluded that movements of women were not taking place before the 19th century, but in any event they are not recalled through oral tradition in the same way that large migrations orchestrated by men are recalled. If we take these traditions as providing, not data on the things that occurred, but rather cultural perspectives on them, then this absence of recognition of female movement in the record (or, possibly but not definitively, the absence of female clan leadership) are potentially indicative of limits to the acknowledgement of female power in the matrilineal groups under question.

Moreover, although matrilineality was widespread in Sub-Saharan Africa prior to colonization, it existed as a minority form, surrounded by the more dominant patrilineal forms, and groups practicing matrilineality were subject long before the rapid shifts brought by colonization to the pressures of cultural adaptation in response to the movement of patrilineal groups in and out of their territories during pre-colonial times. Specific histories are unique to individual ethnic groups, but examples abound of scholars citing patrilineal influence over matrilineal groups as a result of 19th century migrations of, variously, Ngoni (1956), Kololo (Phiri 1983), or Zimba, Chikunda or Phodzo (Davison 1993) patrilineal groups, some more militant than others. In the case of the Kololo, there is documentation (Mandala 1990) that Kololo invaders actively replaced women they found in leadership roles with male authorities of their choosing. Mandala argues further that a massive drought concurrent to these invasions weakened female leadership by decreasing their productive output and making them more vulnerable to being usurped. Read (1936; 1938) was not ambiguous about her view that

the Ngoni were culturally superior to the Chewa, and that their political organization and social institutions (including patrilineality) made their military and political dominance of matrilineal lands and the infiltration of Ngoni customs all but inevitable. This narrative, contested forcefully by Brantley (1997), relies on the questionable endorsement of Ngoni values as being more valorous than Chewa values. She cites the "...Ngoni code of ethics, differing radically from the code of the neighboring tribes, with its insistence on truth, chastity, and personal discipline..." (Read 1936, page 462) as being one of the institutions distinctive of Ngoni.

Migrations of patrilineal groups were not the only factor in the 19th century thought to weaken matrilineal groups. Crehan (1997) cites the advent of ivory and slave trades and the associated commoditization of goods available in rural modern-day Zambia. She argues that before extensive trade, most goods were produced locally and required little exchange. After trading began in the continent, the influx of guns, cotton, and other goods disrupted the pre-existing networks of exchange and sharing by introducing goods that could not be produced locally and that could only be purchased in a monetized way. Phiri (1983) also discusses the impacts of the slave trade that predated British rule; in particular, the practice by lineage headmen of acquiring slave wives, who did not need to be married uxorilocally, nor provided with bride-service. He reports that even up until the early 20th century,

"Chewa elders still spoke nostalgically about it. They maintained that women who had been captured in war or purchased from slave caravans made better wives than those married under regular matrilineal custom. They were the property of the husband, tended to abide with him permanently, and did their utmost to secure his favour." (page 265).

Lovett (1997) describes in detail a development among the Tonga presumed to have entered practice only during the latter half of the 19th century. Prior to this time, Lovett suggests, matrilineality was strictly practiced, with uxorilocal residence, and associated bride-service. After this shift, a man was able to petition his wife's family to move his wife and children to his own matrilineage's village. This was considered a "privilege rather than a right" (page 174) and was subject to the permission of his in-laws, contingent in part on how fully they felt he had completed his bride-service, and only after a certain number of children had been born. Lovett describes the shift from brideservice to bride-wealth as a consequence of Ngoni influence; a series of raids in the late nineteenth century resulted in Tonga children being seized, and later returned, as well as many Ngoni who fled their ruler in order to set up permanent residence in Tonga communities. Both circumstances resulted in marriages between Ngoni men and Tonga women, as well as a familiarity with bride-wealth among younger Tonga. Ultimately, according to this narrative, many young men found bride-wealth preferable to the subordination entailed by bride-service. Lovett argues that because practices such as the bride-service formed a significant source of female power in the matrilineal system, the shift to bride-wealth ultimately destabilized the practice of matrilocal or uxorilocal residence among the Tonga. This narrative is challenged by its presumption that men will invariable prefer bride-wealth to bride-service when any shift in cultural practice makes it an option, and the tacit assumption underlying it that men ultimately and universally desire control over their nuclear families over any other form of power within a lineage, and that the wishes of newly married men held sufficient dominance over the preferences of whole lineages as to shift practice rapidly over the course of only one or two generations. Vaughan accounts for this by the development of a cash economy and long-distance labor market consequent to the establishment of mining interest and new colonial taxes requiring wage-labor to pay, and suggests that by the 1950s the shift in the

domestic economy and division of labor was fully cemented, with the majority of the workload in cultivation accruing to women, given the dearth of local male labor. In sum, Vaughan's account of patrilineal influence on matrilineal practice of the Tonga may not be attributable to the superiority of patrilineal customs, but rather to economic shifts that coincided with the migration into Lakeside Tonga territory.

Nonetheless, there were several examples of patrilineal groups moving into matrilineal territory in Malawi during the latter half of the 19th century. Phiri (1983) describes the impact of Chikunda and Swahili invaders on matrilineal practice in Malawi, but notes that in the case of the Ngoni, it appears that they adopted many Chewa customs, including aspects of family structure. Apparently, where Ngoni and Chewa co-existed, their cultural practices must have tended to blend. Some Chewa adopted bride-wealth in place of bride-service (Brantley 1997), while some Ngoni adopted uxorilocal marriage. Phiri, however, is careful to suggest that the "Chewa renaissance" was possibly enabled by the reduction of Ngoni military power under colonial rule.

In sum, it appears that the period during and just prior to colonization marked a series of changes that were likely to have begun patterns of change among tribes in the matrilineal belt, most prominently due to population migrations of patrilineal groups. However, it is by no means clear that the influx of a patrilineal group inevitably triggers a shift from matrilineal practices. In the case of the Chewa, it seems that while the Ngoni in some parts of Malawi where they took up residence did spark some changes in practice, the Ngoni likewise adopted traditionally matrilineal traits. This conclusion is largely supported by the findings of the present study, as will be discussed in Chapters 6 and 7, whereby few differences are detectable between those identifying as Ngoni and those identifying as Chewa in terms of matrilineal affiliation and associated practices.

Colonial influence on gender relations

Howsoever matrilineal systems were subject to a state of flux and adaptation prior to colonization, there is no doubt that the arrival, first, of missionaries, and later of British rule, sharply accelerated the state of change. This is not to insist that no imposition of patrilineal norms was possible from neighboring—and invading—tribes; it is impossible to know, for example, what impact Ngoni influx alone might have had, under conditions in which colonization did not take place or took place only much later. As it was, it is clear that the British accelerated any shift from matrilineal patterns that was already underway (organically or otherwise) as a result of the arrival of the Ngoni. This influence was exerted directly through specific policies that affected how land rights were conferred and shifted local traditional power from a system that had been locally more welcoming to women in positions of authority to one in which the government dealt preferentially with male authorities, as throughout the empire (Geiger, Musisi, and Allman 2002), and therefore explicitly redefined women's social power, and indirectly through policies such as the hut tax and its associated effect on the labor market, which had profound social consequences (Davison 1993). Davison (1993) writes additionally about the processes that shifted the agricultural practices in Southern Malawi. She argues that although uxorilocal, matrilineal communities previously had practiced banja (collective, family production), such practices were undermined by a series of influences that increased women's agricultural workload and decreased their autonomy and control of resources, resulting in the circumstances observable today in which agricultural burden can fall disproportionately on women with limited claim on assistance.

Phiri (1983) notes that early evangelizing attempts by missionaries were hampered by fears among the Chewa that missionaries represented a threat to their traditions, and the fact that missionaries disapproved of several key practices and rituals which most Chewa

were not willing to discard. These missionaries also sought, early on, to supplant the role of Nyau men's groups in educating boys. More fundamentally, missions emphasized the nuclear family and its paternal head as the appropriate family structure for disciplining children, which contrasted starkly with avunculate discipline of matrilineal children. If women's security rested in part on uxorilocal and matrilineal practices, then the focused pressure of mission influence would undermine women's mechanisms for autonomy and protection, while providing no alternatives.

If trade and commoditization had been forcing the Chewa into a cash economy prior to colonial rule, then the imposition of the hut-tax permanently cemented the cash economy, and fostered the need for a labor market where none before had existed (Gann and Duignan 1975). The hut-tax was introduced in parts of Malawi in 1893, and increased in 1901, with preferential rates for those working for Europeans (Baker 1975). The purpose was specifically to impede the self-sufficiency of African villages by creating a need for cash income, and thereby to impel Africans to work for plantations and mines and in the service economy (Neil-Tomlinson 1977). By forcing husbands, rather than matrikin, to pay for wives, the laws explicitly undermined matrilineage responsibility for women and created tensions between husbands and their wives' lineages.

The hut-tax also spawned networks of labor migration from among the Chewa and Ngoni. The hut tax itself reified neolocal and virilocal post-marital residence in its very language—Kaarhus reports that the 1903 ordinance defined "family" as including a husband, wife, and children, which provided little flexibility in forms by which kin related in other ways could take economic responsibility for one another. Margaret Read (1956) concluded that labor migration undermined matrilineal practice and uxorilocality by rendering bride-service impractical; men owed their earnings to their own lineages,

however, so they could not compensate their in-laws for the failure to provide them with labor. Increasingly, men sought ways to limit their obligations to their wives and children alone.

Indeed, land policy under British rule fell very quickly to institutionalizing a preference for male ownership of land. Davidson argues that by allocating land tenure to men instead of to women, early missionaries began a process of usurping women's customary rights in the names of men, and according them to men. Pauline Peters (1997) describes missionaries allocating land as a reward for men and women who elected to be married in a Christian sense, but unlike collective matriline holdings, these were individual holdings that presumed the husband as the head of the household. She reports, however, that while this practice marked a dramatic shift in both land rights and gender roles, it did not take traction, possibly because the mission itself failed. Peters suggests a more transformative role of a shift to an estate/tenant plan for large-scale farming, under which estate owners fostered neolocal family units, and allocated land to male-headed households.

Chanock (1989) describes how the process by which colonial policy undermined customs beneficial to women, in terms both of land rights and of family law, as a consequence of the development of a pluralist legal system in Malawi (and throughout sub-Saharan Africa). He speaks cogently about the role that anthropologists played in the process by which customary law was established, in ways that disadvantaged women:

"English anthropologists brought to Africa a confused intellectual background about the nature of law in their own society, one which was compounded by their functionalist models of social control (Chanock,1983; Hamnett, 1977). Thus, in spite of their acute and detailed reporting of social conflict at all levels of African

societies, they were unable to fit their observations into a coherent framework which took account of conflict about norms. Norms tended to be portrayed by them more as expressions of group values than as representing the interests of parts of groups, focussed [sic] into normative statements precisely because they were partial interests. In the historical context of the development of opposition to colonialism this framework of understanding suited both white and African intellectuals." (page 75, emphasis mine).

As Chanock notes, the importance of this distinction is that modern customary law is "a body of norms with less flexibility, less variation, and greater reach and force than custom" (page 75). In other words, if the colonial authorities attended more to the rights claimed as customary by men, or by those benefiting more from patrilineal practices than matrilineal ones in the blended systems that emerged after Ngoni in-migration, these were likely to have gained primacy over rights that women might have cause to claim as customary. As one example of the co-construction of a false narrative between colonial authorities and men, Chanock (1978) describes divorce law as it was enforced in newly established courts. He describes the courts as being inundated with women seeking divorce, many of whom were slave wives. As the courts granted divorces to the majority of women claimants, a backlash among men sparked the emergence of a nostalgia for the pre-colonial period, "in which women had been submissive, divorce rare, and adultery heavily punished" (page 87). This conformed with colonial perspectives on womanhood, and together, they reimagined customary law as reifying roles within the household that have formerly been far less clearly delineated.

Kaarhus (2010) provides a case-study in this process as applied to land rights. In spite of these influences that tended to favor virilocal and neolocal residence, by the mid-20th-

century, uxorilocal residence was still the norm in at least some areas. She cites a report from a conference on land tenure that portrays matrilineal customs as moribund in communal ownership, under which men had no impetus to invest in agriculture. She describes the colonial office hedging at attempts from authorities in London to establish policies of land title and registration. By the time such policies were adopted, however, Malawi had established independence. The Lilongwe Land Development Programme sought to establish familial land territories, including issuing title to representatives of the family, but under the rules of the program, men could not be listed as having an interest in both their marital and their natal family land collectives. In 2006, Kaarhus conducted field research with women in a community near Lilongwe, examining patterns of inheritance as they were affected by the land reform policies, concluding that individualized land ownership in some cases favored virilocal residence, while in others, it required parents to favor a small number of children (usually women) to inherit plots. Customs that would have allowed women to marry virilocally but maintain a claim for herself or her daughters in the land of the matriline had become constrained, not just by the individualized ownership, but because of growing population pressure on available land that threatens to shrink holdings to sizes too small to accommodate the needs of all claimants. In studies of smallholders in Zomba over the course of the 1980s and 1990s, Peters (2006) evaluates the effects first of structural adjustment programs, and later of liberalization policies in the post-Banda era as contributing to growing social disparities in rural Malawi, with differential between the top and bottom income quartiles in her sample growing from three times in 1986-7 to 11 times in 1997. While policy is at the heart of her analysis, she attribute much of this growing inequality to the constraints imposed by scarce land.

From the observations described above, both contemporary and from the colonial era, it is clear that since the late 19th century, Malawi was been the subject of experimentation in taxation and land policy that has predominantly favored patrilineal pattern, and while these experiments have disrupted social patterns of land ownership in some areas, many matrilineal communities have displayed resilience in the maintenance of several key aspects of matrilineal practice. Furthermore, contemporary customary law must be understood in context as representing the effects of colonial interpretation and the competing interests of factions within a society already in flux from population migrations and the slave trade.

Early anthropology of matriliny in Malawi

In Malawi, it is impossible to extricate the ethnographers of the British school of the 10th century from the context of British colonial leadership. Lynette Schumaker (1996) provides an in-depth account of the inter-connectedness between colonial administrators and academic observers of the early to mid-20th century in Ngoni territory, with the purpose of examining the limitations on the field methods employed by academe during this time. Far from being independent endeavors, the colonial administration championed, assisted, supported, and even outright recruited academic anthropologists to engage in field observation among the British colonies, including what was then called Rhodesia, for field observation. The objective, for the colonial administration, was to utilize findings to facilitate the social change desired by the Crown in the colony.

Schumaker (1996) provides a case study of the Rhodes-Livingstone Institute as one prominent example of this practice. The establishment of the first full-scale research facility for ethnography in northern Rhodesia in 1937 (Crehan 1997b) provided the grist

for dozens of Manchester-school anthropologists. It was also founded by Hubert Young, the colonial governor of Northern Rhodesia, funded first by mining interests, and later by the Colonial Social Science Research Council—not an indictment, by itself; public scholarship cannot exist without being funded. However, the Institute reported to a board of trustees representing government, mining interests, and white settlers in the area. Schumaker describes how early directors of the institute were from Africa, or from the civil service before that, and how the new methods proposed by the Institute (under the influence of the structural-functionalists) frequently aligned with the techniques used by the colonial civil service itself.

However, the government's main interest in the findings of the institute was to understand how best to foster "development" along an evolutionary continuum that matched their views of local tribes as "backward". Although Institute anthropologists' work often either directly or indirectly controverted such views, the ultimate authority over their work existed within its board. The government set and enforced rules for who could enter the civil service (from which research assistants were drawn), favoring people of "British descent" within the colony. African research assistants were tightly controlled. The government, through the board, further exerted control of which anthropologists remained in their field sites and which did not—examples included the early ouster of Paul Kirchoff and even its first director, Godfrey Wilson, because of their political beliefs and under the direct influence of mining interests (Crehan 1997b). In other words, the ways in which the British social anthropologists of the RLI could study and portray their research subjects were censored directly by the government, or self-censored, and who was accorded the authority to provide the accounts was also tightly controlled.

Colonial censorship was not the only mechanism by which these early ethnographers could provide a distorted account of social systems among those they observed. Early anthropologists inherited a great deal from their colonial service counterparts, including both observations and methodologies. Early on, anthropologists were also primarily men, although several prominent women also provided primary ethnography in Malawi, including Audrey Richards and Margaret Read; however, research assistants (both the British civil servants and the African research assistants) were primarily male. It is wellestablished that the gender of a researcher influences the responses of interviewees, particularly when the subject matter pertains to issues related to gender and gendered social roles (Huddy et al. 1997), but this effect must be magnified when the translator, serving as the proxy for the researcher, is from the same culture (and possibly the same community) as the informants. This is not to argue that such accounts were necessarily inaccurate, even in the time in which they were written, but that their accuracy cannot be assumed free of the kinds of biases created by the gender and the political associations of the researchers. They cannot be interpreted except as male observations of a system already heavily influenced to support male interests, even, in cases, directly against longstanding traditions of matrilineal ownership of land.

One strain that runs through many ethnographic accounts of matrilineal societies in sub-Saharan Africa is that they mostly observe, in some sense, a tradition of women's subordination to men, despite the cultural practice of matrilineality. Though more recent scholars stress the empowerment that matrilineal systems could be expected to provide for women, accounts of the early British school frequently include a description of the male roles that govern women. This theme continues in contemporary accounts as well; for example, Kate Crehan (1997a) writes about gender roles in Kaonde matrilineality:

"In all my time in North-Western Province, whenever the subject of the relationship between women and men came up both women and men would stress that women must show respect (mushingi) to men. Subordination to men was a reality in which women were immersed from the moment of their birth. Not that this made women cowed victims; they were very conscious of the range of claims they had on their husbands and male matrikin and would insist on these in no uncertain terms. But these very claims, particularly those from wives that husbands should also show them proper respect—by providing them with the "clothes" that were their due, for instance—depended, as with the claims of other banyike (subordinates) in this kinship-based hierarchy, on their reciprocal willingness to show respect to husbands and kinsmen. I have never in any of my fieldwork trips heard any woman question the basic assumption that men have authority over women. In the case of husband and wife this authority included the legitimacy, in certain circumstances, of a husband beating his wife. At the same time women would continually accuse particular men, especially husbands, of abusing their authority in specific instances: a husband had shamed his wife by beating her in public, he had used unreasonable force, he had beaten her while she had a child on her back, and so on." (page 220).

The provenance of this characterization appears to draw from her own field observations and from the 1958 depiction of the Kaonde by the missionary J.L Wright. Crehan is careful to stress that these observations relate to "Kaonde ideology", and she further observes that although male matrikin had authority over women, the authority they exercised was qualitatively different, and that women had social claim on the protection of their matrikin against "unreasonable treatment" by their husbands, though what was considered unreasonable by local standards is less clear.

Kings Phiri (1983), a Malawian historian and scholar of Chewa social norms, draws heavily on the authority of social anthropologist J.P. Bruwer (1955), who worked in the area in the 1940s and 1950s, in describing a woman's relationship with her male relatives:

"Furthermore, as a consequence of the wife's dependence on her male kinsmen, the system accords a greater role than other family systems to the wife's brother or children's maternal uncle. The wife's brother becomes guardian (*nkhoswe*) to his sister and her offspring, and the sustainer of their social, economic and legal interests. He is, as Bruwer put it, 'their guardian, helper and defender in all matters social and juridical '. A woman without a *nkhoswe* is virtually a slave and therefore extremely unfortunate. She stands in need of a male kinsman to protect her, to arrange her marriage, and to represent her in her dealings with outsiders." (page 259, emphasis mine).

Yet Phiri goes on to write that women have "greater social or symbolic respect [than men], as reproducers of the lineage" (page 259). These concepts are not easily reconciled—that women can have greater social respect than men, and yet a woman without male guardianship can exemplify the state of having no personal autonomy whatsoever, however hyperbolically (although female slaves at the time were women without *nkhoswe*, and were married virilocally, belonging to lineage of whichever head had acquired her; lineage heads had the power to keep them or assign them as wives).

It is possible that the depiction is an accurate one, which correctly reflects the relationships between women and their male kin at the time when Bruwer was conducting his fieldwork, but that the current situation has resulted from multiple

outside influences on matrilineal practice acting to limit women's power compared with a historic past beyond the reach of our observation, through the processes of migration and colonization described above. Certainly, other ethnographers (Mandala 1990; Peters 1997; Richards in Radcliffe-Brown et al. 1987) have confirmed the importance of women in religious and political life among the Chewa and other matrilineal groups in the region. Other interpretations are possible, of course. One interpretation is that Bruwer and his male Chewa informants distorted the actual reliance of women on their male matrilineal kin, influenced by their own compounding biases. A second interpretation is that the description captures an idealized view of how the kinships relationships should operate, according to local social rules, but that the actual practice differs from this depiction. A fourth, of course, is that the description is simply accurate, in practice as well as theory, and that it does not differ markedly from how things have long been done among the Chewa. Bruwer's 1955 account alone is not really sufficient to answer the question of which interpretation most closely mirrors the reality of Chewa practice at the time, though this chapter seeks to provide context for the question.

Phiri himself questions the more hyperbolic accounts of the disadvantage to men of uxorilocal marriage: "These views stretch the negative implications of uxorilocality to their logical limits, but can hardly stand as an accurate representation of what actually happened in practice" (page 261), challenging claims that uxorilocality would ultimately impede economic progress in a community. He argues, instead, that men utilized other traditional structures, outside kinship, to reinforce their own power through solidarity with other men, in particular through the Chewa *Nyau* secret societies for men, or else through cross-cousin marriage, or simply marrying within their own neighborhoods.

Audrey Richards (in Radcliffe-Brown et al. 1987) provided detailed accounts of the Chewa through her numerous years of field work across sub-Saharan Africa from 1930 to 1957. Her account includes recognition of many contextual and historical factors that shaped the way that Chewa matrilineality was practiced. For example, she reported that land was scarcer in then-Nyasaland, leading to villages becoming permanent settlements (in contrast to other systems observed in the matrilineal belt that were characterized by villages that relocated ever few years), increasing the value of land and the opportunity to amass heritable valuables. When, exactly, the villages "became" permanently settled is not addressed, but it seems to have been at some point prior to colonization. Richards notes that by the time she was conducting her fieldwork, Chewa clan names were inherited patrilineally, as a result of the "influence of the Ngoni." Descent, however, was matrilineal.

In Chewa marriages of the time, bride service was required for a year or so, or until children were born. Several scholars link women's empowerment to bride service (Lovett 1997), as described previously, because bride service does not need to be repaid if the wife decides to dissolve the marriage. In the case of bride-wealth, however, frequently a woman who would like to leave her marriage would have to prevail upon her kin to repay what they had received from the husband. But Richards notes that the "degree of incorporation of the son-in-law is never so great as amongst the Bemba apparently. Mitchell says that unsuitable husbands are dismissed with compensation and sent away. He adds that the husbands of the women of a village are often away visiting and are definitely not reckoned as members of the community." (in Radcliffe-Brown, et al. 1987, page 233).

Richards (Radcliffe-Brown et al., 1987) recounts Chewa views of social roles of men: "The Cewa talk of the father as a stranger. 'He is as a beggar; he has simply followed his wife.' At divorce he leaves his wife's village with his hoe, his axe, and his sleeping-mat and has no right to any of the children of the marriage." (page 233). This is rather a disparaging view of the role of fathers. It does not seem creditable that young husbands and fathers, married uxorilocally, were so completely reviled by those they lived among. Perhaps this mechanism of demeaning their role was the view of a particularly disgruntled informant, or perhaps this kind of discourse helped to limit the power of a man in such a position relative to his wife's male matrikin. On the status of women, she notes of Yao women (in the same volume) that they functioned as heads of households, with whole villages operating under lineages comprised of mother and daughters, or of sisters and their children, because men were often absent during the year. As noted previously, the impact of labor migration during this time could account for the variety in household compositions observed by ethnographers over time.

Among the Chewa, by contrast, she describes women as being under the control of their eldest brother. This lineage head generally lived with his wife during his younger years, but would return to live with his lineage later in life. According to this account, among the Chewa, the act of disciplining children belonged to the mother's brother rather than the father. Maternal uncles also had the responsibility of paying fees and fines for their sisters and their children, representing them in public disputes, settling familial disputes, and obtaining medical care as needed. However, some researchers have explicitly questioned the presumption of male authority among matrilines (for example (Kaarhus 2010; Peters 1997; Brantley 1997; Poewe 1978 and Richards herself) as being the result of both biased observers and the fact that they were observing matrilineal societies that had been subject to colonial policies that had the effect of disrupting

women's prior role in the household. In other words, these scholars suggest that it is difficult to know whether male dominance truly was a key feature of pre-19th century matrilineal practice, but we cannot safely assume that it was.

Contemporary gender policy in Malawi

The ethnographic work of the RLI was still in full swing when Malawi became a fully independent state in 1964. Although colonial rule was ended, its influence on policy and social life was by then indelible. Hastings Banda had already been elected as Prime Minister of Nyasaland, and preceded to rule for more than 30 years. Banda maintained tight control of social practices, seeking to establish a national culture (Forster 1994). Although he was seen as instituting women-friendly policies, he also enforced gendered social mores, including a dress code (Gilman, Lisa 2004). Lisa Gilman further provides an example of how the long-standing regime manipulated conceptions of feminine tradition to maintain political control. Her focus is on political dancing, in which, throughout his regime, Banda held large rallies for the Malawi Congress Party, in which membership was mandatory, and at women were required to dance and sing in order to demonstrate political support. Gilman argues that this specific form of performance was created by Banda to signify unifying tradition, and has been used as a political tool since the emergence of the multiparty system. Although the practice of dancing is not among the Malawian traditions associated with matrilineality, this particular example is instructive in that it shows how conceptions of traditionality have been shaped by political forces since the beginning of independence.

Segal (1993) goes further, contending that the national mythologies created by Banda were effectively a symbolic version of Chewa matrilineal structures, with Banda as Chief,

and in which women had symbolic importance but not real political influence or autonomy. Segal contends that Banda's early education and long residence in the United States and Britain, along with his affiliation with the Church of Scotland, shaped his view of the cultural institutions he reified while in power in the interests of creating shared national identity. Banda represented himself as the *nkhoswe* of all the women of Malawi, thereby creating a gendered and familial national metaphor. In spite of the fact that Banda emphasized Chewa culture and its associated matrilineal traditions, his interpretation of it appears to have been largely symbolic, in that women's roles were narrowed and tightly controlled (as illustrated by Segal with Banda's exhortations to attend to the home).

Current gendered policy in Malawi is, like gender policy across much of Africa, aligned to global programs orchestrated by bilateral organizations and the powers that influence them. Following 1995's Fourth World Conference on Women, Malawi joined in on a wide international consensus to institute sweeping gender policies and embarked on a nation-wide effort to address gender-based violence (GBV). National policies enacted during this period include the Malawi National Platform for Action (1997); the National Gender Policy (2000), and the National Strategy on Combatting Gender Based Violence (2002).

In a progress report prepared by then-Minister for Gender, Child Welfare, and Community Services (now President) Joyce Banda in 2004, she criticized progress toward implementation of the national policies at the district and local levels. These policies sought to enact legal restrictions on behaviors that were seen as damaging to women. Implementers (2004) cited a fundamental challenge under Malawi law, as a typically African pluralist system, in which household affairs, including marriage,

divorce, and inheritance, were left to the jurisdiction of customary law, quite apart from state oversight (Tamale 2008). This conflict illustrates the complete reversal in the views of outside observers of Malawian tradition. Traditionality, in this framework, is seen as being inherently disadvantageous to women; the report states in direct terms that the community sees gender equality as antithetical to traditional values: "At community level, there is misconception about gender and advancement of women.

Gender has been viewed by women, men, girls and boys as a means to disturb the social fabric of Malawian Society" (page 56). Yet it is difficult to parse whether this view of traditional values results from the many ways in which those values have been shaped by outside forces in the last century.

Even now, perspectives on several aspects of cultural practice see traditional practice as unequitable, and in need of giving way to modern norms. For example, the agricultural responsibilities of smallholder women in Africa are often seen as a source of inequality at worst; and a potential opportunity for development intervention at their more optimistic (International Labour Office 1994)—but the degree of disempowerment entailed by the division of labor itself is far from inherent. If a woman owns productive resources in her own right, and has control of earnings from them, then those resources can be empowering, even if they require physical labor to be profitable. The inequality entailed by women working fields is a function, not necessarily of the disproportionate labor required of them, but of the lack of control over the resources resulting from their labor.

Women's rights under customary versus colonial law have been a subject of considerable analysis by development practitioners, particularly within the frame of human rights law. In fact, the tension between modern law versus customary law regarding land tenure rights has been a subject of tension for women's groups as some countries attempt to

return to more localized distribution of land rights (Kevane and Gray 2008). Some have argued that customary laws were broadly conducive to women's rights as landholders and that a return to pluralistic legal systems does not endanger efforts to empower women (Whitehead and Tsikata 2003). Clearly, however, customary systems differed widely in terms of whether women had *de jure* or *de facto* rights to control of land and its outputs (Kevane and Gray 2008).

As difficult as it is to accurately identify what traditional cultural practices in Malawi prior to the eighteenth century might have been like, and although the influence on such traditions from population movements, colonial occupation, and industrialization are difficult to parse, at least one clear lesson is that traditional gender norms and the extent of household or community power available to women have been subject to influence from a variety of sources. Additionally, our perspective on how empowered women were likely to have been is limited to the interpretation of cultural practice from external interlocutors, or on retrospective analysis based on potentially flawed assumptions.

Nonetheless, it appears that prior to the colonial era, women in Malawi were relatively more empowered than they have been at any time since then. This throws into question the very common view of African traditionality that presupposes subjugation of women.

Several traditional practices in Malawi have been cited as disempowering to women, particularly those pertaining to potentially unwanted but socially mandated sexual intercourse, with husbands and partners or others. Packer (2002) provides a whole volume of examples from sub-Saharan Africa; female genital mutilation, vaginal incision, food taboos in pregnancy, adolescent childbirth, vaginal incisions during pregnancy, "virgin slaves", and home birthing practices are invoked in just the first page text without reference to geographic context, prevalence, historicity, or even cultural (as opposed to

religious or colonial or structural) origin. In this volume, as in many other analyses of the subject, the purpose behind the identification of these practices is the drive to understand potential cultural risk factors for HIV/AIDS. Indeed, research on potential risk of cultural practices for HIV/AIDS proliferated wildly during the 1990s (Parker 2001; Dworkin and Ehrhardt 2007; Malungo 2001; Higgins et al. 2010). Researchers may presume the risk from these practices, but often do not measure their prevalence. One exception, the study by Malungo, found that 81 percent of widows and widowers surveyed in Zambia had never been sexually cleansed, indicating that although the practice certainly exist, it can by no means be assumed as universal. Although Malungo concluded that knowledge of HIV was the cause of a reduction in the practice, it is not clear how prevalent it was in the past, considering that 69 percent of widows over the age of 55 at the time the study was conducted in 1998 had not been cleansed, even though they were more likely to have been widowed prior to the HIV/AIDS education campaigns of the 1990s. Understanding these risks in the contemporary context has been critical to efforts to protect women's reproductive health; yet the assumption that all these practices have deep origins throughout Africans cultures serves to further the questionable duality of traditional (e.g., bad for women) and modern (good for women).

Banda (2004) cites a long list of practices that she sees as enabling and excusing of sexual violence in Malawi. Several practices allow the exchange of rights to sexual intercourse with a woman between her husband and another man, "chimwamaye", or with a "hyena" or other stand-in. Some practices pertain to early sexual experiences—"kuhaha" betrothals and "removing dust" practices to initiate sexual intercourse to girls or boys. Others affect widows, in which a widowed woman is inherited by a relative of her deceased spouse, or "death cleansing" that requires her to have intercourse with another man. "Kutenga mwana" affects women who have given birth, and are expected

to have sexual intercourse at three months post-partum with either their husband or a "hyena" stand-in.

Taken together, documentation of such cultural practices has been used in political and academic discourse to define a tradition of commodified sexual trade of women, in which women are denied the right to mediate consent. Indeed, such practices follow a more general pattern of limited sexual autonomy for African women, relative to other freedoms, such as mobility. Packard (2002) locates the source of physical threat to women directly in culture and tradition. However, Tamale (2008), arguing from a human-rights perspective, offers the counterpoint that "...culture is unbounded and is in constant flux with new traditions, customs and experiences constantly emerging. The potential that culture holds for emancipating women in Africa is often buried in the avalanche of literature...devote[d] to the 'barbaric' cultural practices" (page 51). She argues that what is currently understood as tradition in Africa was constructed in collaboration between colonial authorities and powerful patriarchs, and that feminist approaches to law that pit culture against rights—ensconcing the view that cultures are inherently contradictory to women's rights—are fundamentally wrong. Further, she argues that in demanding that African women deny culture as a prerequisite to obtaining rights, this approach is likely to fail and effectively robs women of their "right to culture". This right is explicitly provided for in the Maputo Protocol, which stipulates that "Women shall have the right to live in a positive cultural context and to participate at all levels in the determination of cultural practices." (African Commission on Human and People's Rights 2003, page 16). Tamale (2008) recognizes the risks of a perspective among development actors that sees the wholesale disempowerment of African women as a foregone conclusion, a pervasive and unchanging state, and a consequence of deep tradition. Not only does such a view devalue the culture and traditions of the

beneficiaries at whom development efforts are aimed, they can backfire if the approach alienates women by failing to respect or recognize the importance of culture and tradition in their lives. The pragmatic pitfalls of this brand of essentialism are also critical for development actors to countenance, in that they can lead to erroneous assumptions about the nature of cultural traditions and missed opportunities to recognize potential for empowerment within, rather than outside of culture, as Tamale suggest.

An entirely different perspective comes from Mwale (2002) whose commitment to the historicity of African gender roles in their current form leads him to reject Western feminism as ill-suited to African women. His argument begins with an explanation for the emergence of African "womanists"—a movement among women who felt that feminism was too Western, and who wanted therefore an ideology that would preserve the pursuit of self-determination, but would simultaneously honor characteristics they felt were central to the values of African womanhood, in particular the central role of mothering. He goes on to critique the "false universalism" of Western feminism, writing:

"Feminism is not in dialogue with its context, past and present, and therefore cannot be used to forge emendations to any society, which cries for transformation of social relations. Feminism is engaged in a monologue, which mistakes its own ventriloquism for effectiveness since it is falsely generalising and insufficiently attentive to historical and cultural diversity" (page 131).

He concludes that concepts of power do not accurately define the currency of interpersonal life in an African household, and that questions germane to Western feminists' challenge to the status quo pertaining to work-life and the domestic sphere have less relevance to the average African woman. His argument here rests on the idea

that African women are not motivated by a desire to take jobs from men (as Western women are, according to his reading), because men and women alike struggle to find work, but that the sexual division of labor is ameliorated for an individual woman because she can create a workforce of dependents and/or domestic workers to offset her responsibilities.

Although this argument is flawed in its subtext (that African women do not need feminism, because they do not share in the concerns of what he considers a myopic Western feminist movement), the author, himself a Malawian, raises an interesting point in seating gender, as a relational construct, within the larger sphere of the household and extended family, rather than presupposing the marital relationship as the one most critical to a definition of what "empowerment" might look like in the African context. However, although he does suggest that many African societies may have a more matriarchal (or at least less patriarchal) past, he overlooks the role of colonization in reshaping those more traditional social structures—although he acknowledges that marriage among the middle class in Malawi much more closely resembles Western nuclear-household marriage dynamics, he argues that the majority of households do not bear this resemblance. On the contrary, the findings of the present analysis (and others) suggest that in at least some areas, nuclear configurations are widespread. In other words, the gap in Mwale's analysis may be in his determination that Western structures have no relevance for African women. However, the influences on Malawian culture over the previous two centuries, as described earlier, seem to be influence pre-existing gender norms and household forms toward more Western-aligned models. The point here is less to debate his central question of whether feminism is relevant for African women, and more to reflect on his view of gender roles in Africa—he is participating in a

narrative of current African gender roles as fully authentic to ancient African culture, slow to change.

Indeed, the question of authenticity, and of who is legitimated to determine authenticity, is central to the argument made throughout this chapter, that "traditional" gender roles have not been static at any point during which they have been catalogued and described by observers, whether Western or otherwise. In the early descriptions of the late nineteenth century, matrilineal traditions were described as promoting equitability. Following this, during the period of ethnographic proliferation, anthropologists questioned whether matrilineality promoted female power, or simply organized an alternative configuration of male power. However, this shift occurred during a period when other forces were acting to rapidly change the social features of life most relevant to women's social power and well-being, leading others to question whether the assumption that matrilineality did not empower women could be relied upon. Ultimately, during independence, national-level forces created an artificial narrative of traditionality that prescribed specific roles for women. Finally, in the last few decades, development actors have directed the debate, and seem to be working from an uncontested assumption that traditional views are unfavorable for women. Each of these views is open to legitimate contestation, given the potential biases of their views with respect to women's experiences. Though this greatly confuses the conclusions we may draw about how empowered Malawian women have been in the past, perhaps it does suggest that conceptions of women's roles are and have been greatly contested, and that much of what has been written about them has not been from the perspective of the women being written about.

Chapter 4: Measuring women's empowerment

Introduction

In 1975, the first United Nation's world conference on the status of women was convened in Mexico City, launching the United Nation's "Decade for Women." The objectives that emerged from this conference—gender equality and the elimination of gender discrimination; the integration and participation of women in development; and an increased contribution by women in the strengthening of world peace—set the stage for nearly thirty years of global gender-related development programming (Judith P. Zinsser 2002). A decade later, at the UN's third world conference on women, a strategy was developed to assess women's role in development, resulting in the first global survey on this topic, in 1986.

By the time of the fourth conference in 1995 in Beijing, the world of development practice had undergone a sea-change in the areas of assessment and evaluation—bilateral agencies, by the 1990s, largely had shifted their focus from structural stabilization to promoting economic growth and reducing poverty; this came with a shift in how the effectiveness of development efforts was assessed across a broad range of interventions (Pitman et al. 2005). The 1990s saw a move toward systematic, global assessment of a variety of development indicators, culminating in the Millennium Development Goals (Manning 2009). The shift toward comprehensive monitoring of international health and development objectives demanded frameworks for assessing women's empowerment, gender equity, and gender parity in health and economic

outcomes. To this end, the Demographic and Health Surveys (www.dhsprogram.com), for example, added sections specific to women's empowerment, gender-based violence, and other country-specific aspects of women's well-being. These new frameworks for assessment of gender have raised criticism, even while providing the first comprehensive global picture of the status and well-being of women, and the role that women play in economic development and in health in diverse settings (Sweetman and Oxfam GB 2005). They have also raised challenging questions about the nature of empowerment and how it is realized and experienced by women in a variety of cultural and economic contexts (Kabeer et al. 2003). Below, I explore some of the existing perspectives on women's empowerment, and how it is measured and assessed.

What is empowerment?

Women's empowerment versus gender equity

Both "women's empowerment" and "gender equity" or "gender parity" are found in the literature on gender and development; though the concepts are used somewhat interchangeably, in semantic terms, one refers to a dynamic process (the process of becoming empowered) while the other refers to a static state (the existence of equity between the genders under law or policy, in the case of gender equity, or the existence of equality between the sexes in resources, participation, and well-being, in the case of gender parity). While gender equity and gender parity are both potential objectives of efforts to empower women, they offer only a fairly distal means to assess success in such efforts. Gender equity/parity can be assessed only in the aggregate, and they can be assessed only in a relative way, which may mask other social inequalities that affect men as well as women. These concepts may measure progress on balancing gender roles, but they illuminate only a narrow stretch of what gender-related well-being may mean for

women in different contexts, and the variety of determinants of variation in that wellbeing.

When development efforts, in particular, focus on achieving gender parity in outcomes such as access to resources in the short term, they potentially can worsen outcomes for women over the long term, if they ignore social and cultural contextual factors. One particularly stark example of this is the Grameen Bank micro-lending model pioneered in Bangladesh (Rahman 1999; Faraizi, McAllister, and Rahman 2011; Goetz and Gupta 1996; Khan 2005). The model was simple; that financing was unavailable to the world's poorest people, and that it can allow people to invest and develop income-generating activities that will help lift them out of poverty; that women who borrow money are more likely than men to repay it. Grameen's founder, famously, won a Nobel Peace Prize for his contributions. However, thirty years after its founding, the capacity of the Grameen model to empower women is open to question.

Recently, several scholars have critiqued the early evaluations that suggested success (Rahman 1999; Faraizi, McAllister, and Rahman 2011; Goetz and Gupta 1996). Goetz and Gupta argue that because the lending model does not address social and domestic dynamics, women's credit may fall under the control of male relatives, leaving women with the full burden of repayment. Faraizi and others (2011) argue that raising income alone neither empirically (nor expectably) raises women's status when no effort is made to address gender roles. Khan (2005) argues that in Bangladesh, not only are increasing labor market participation and access to resources not guaranteed to raise the status of women in absence of parallel efforts to change cultural norms, but that these can increase the risk of sexual violence. She argues that as women's mobility has increased, social norms providing few protections against rape and little recourse for women

against rape has resulted in an increase of such forms of violence as development efforts aimed to give women opportunities outside the home have succeeded. However, Kabeer (1999) points to the findings of Hashemi and colleagues (1996) that Grameen and BRAC programs both increased women's empowerment, suggesting that the contradictory conclusions about credit programs have more to do with the way measurement is approaches than with the programs themselves.

The concept of empowerment, unlike the rubric of parity, situates women within dynamic social and domestic systems, and seeks to understand how these contexts may influence their well-being and subjective sense of power (Kabeer 2005; Narayan-Parker 2005). Gender equity can be seen as one way of assessing empowerment processes applied to specific spheres (gender equity in political representation, gender equity in wages earned, etc.) but is less tractable a concept at the broader level, as will be addressed below in some of the macro-level frameworks.

Multiple approaches have been taken to measure gender equity and women's empowerment, at both the national and the individual levels. Concepts of women's empowerment, in particular, are often conflated with concepts of gender equity, and indeed many metrics of women's empowerment include a variety of gender parity indicators. Whereas gender parity on dimensions such as wages, work in the home, or political representation subjects itself readily to assessment, documenting parity in a single outcome does not unpack the dynamic, relational aspect of empowerment. The challenge to all of these assessments is the need to account for the complexity of women's lived (subjective) experiences while also accounting for objective measures of progress toward women's empowerment within social, cultural, and institutional structures. Balancing the subjective with the objective meanings of empowerment is the

central challenge both to conceptualizations of what empowerment is, as well as to how to represent (and thus measure) it.

Further to this is the critical need to situate women's subjective experiences within cultural context. Any accounting of social norms regarding processes like decision-making within the household needs to consider cultural differences in around things like shared resources and reproduction are made. In particular the extended family and community authorities may exert influence over individuals in ways that may seem disempowering to individual women by giving primacy to more collective processes. To this end, concepts of empowerment must capture not only an individual's independent control, but also how and whether they are able to influence the dynamic social processes relevant to their own well-being. Subjective assessments of not just self-efficacy but collective efficacy (women's belief in their efficacy when working together with other women) can capture whether women believe they have such influence, though more objective assessments of social influence are harder to gather.

National-level indices

The frameworks for measuring women's empowerment or gender equity/parity at the national level provide indices for comparison across a limited number of metrics that can yield a single score capable of capturing a measure of gender equity for a whole nation. Although such metrics are limited in scope, they have nonetheless provided the impetus for how women's empowerment has been conceptualized across the development world, and provide the basic frameworks by which development actors have assessed gender equity.

In 1995, as part of that year's Human Development Report, the United Nation's Development Program (UNDP) unveiled two new measures to evaluate gender equity: the Gender-related Development Index (GDI) and the Gender Equity Measure (GEM). In a loose sense, the GDI was developed to index gender parity, while the GEM was designed to reflect gender equity.

The GDI is considered a gender-sensitive extension of the Human Development Index (HDI). The HDI itself was developed by Amartya Sen and Mahbub ul Haq for the first Human Development Report, in 1990. The HDI concatenates life expectancy, education, and standard of living (employing an updated method since 2010 that replaces the former education measures of literacy and enrollment with years of schooling completed, and the former standard of living measure, GDP, with the Gross National Income, GNI, which adjusts for purchasing power parity). The GDI applies a penalty to the existing HDI score for gender disparity in the measures utilized in calculating the HDI. Therefore, the most meaningful way to interpret GDI is by looking at the difference between a nation's GDI and its HDI.

The GEM is calculated yearly as a companion, rather than alternative, to the GDI. The components of the GEM include the proportion of seats held by women in national parliaments, the percentage of women in economic decision-making positions, and the share of income earned by women relative to men. Also introduced (experimentally) in 2010, the Gender Inequality Index (GII) is a new measure developed by the UNDP to replace GEM and GDI. This measure includes three dimensions. Unique among gender development indicators, the GII includes reproductive health measures, specifically the maternal mortality rate (MMR) and the adolescent fertility rate (AFR). The second

dimension, empowerment, comprises political participation, proxied by representation in parliament, and education, specifically access to secondary education or above. The third dimension is labor market participation (though it does not adjust for income equality).

Critiques of national-level indicators

Geske Dijkstra (2006) argues that the Gender Development Index and the Gender Equality Measure are both insufficient because they measure gender according to absolute metrics of well-being rather than relative inequality between sexes. She argues that macro-level indicators must account for relative inequality to be effective as a tool for assessing progress toward women's empowerment. The GEM assesses male and female empowerment, along with per capita income, but Geske Dijkstra argues that because it averages these two experiences (rather than considering them in relation to one another), it fails to capture gender equitability adequately. Hirway and Mahadevia (1996) criticized the GDI for focusing too much on income as a proxy for well-being. They also suggest that although the index is calculated at the aggregate level, it is constructed from individual-level variables that fail to reflect structural factors that affect women's well-being. They proposed an alternative index for use in the Indian context that included variables such as rape and unnatural death.

Bardhan and Klasen (1999) also concluded that the GDI over-emphasizes income, while the GEM focuses on political participation, and both fail to account for gender gaps in education and mortality. The new GII may address some of these concerns, but it has acquired critics in its short life, as well. Klasen and Schüler (2011), for example, argue that the GII inappropriately mixes measures of empowerment with measures of well-being. Other criticism appear to be methodological rather than conceptual. For

example, Klasen and Schüler further argue that the index, by mixing absolute with relative measures in the same index, defies interpretability.

Cueva Beteta (2006) also offers a critique of the GEM, suggesting that its three indicators (proportion of seats held by women in national parliament; women in economic decision-making positions, and women's share of income) biases the assessment of empowerment toward well-off women, but has limited relevance to the most marginalized women. She draws on domains identified by Charmes and Wieringa (2003) through the application of their Women's Empowerment Matrix. The matrix identifies six domains at six levels, for 36 dimensions. The domains include the physical, the socio-cultural, the religious, the political, the legal, and the economic. The levels include the individual, household, community, state, region, and global levels. This matrix can be used to identify the gaps in existing frameworks or measurement tools. They further identify body and sexuality issues and legal, cultural, and religious issues as being missing from the GEM. Cueva Beteta argues that incorporating these issues into a national index such as the GEM would be difficult, given the lack of high-quality data; instead, she recommends including household-level indicators as encompassing physical and relational aspects of empowerment, as well as the addition of a "Gender Empowerment Enabling Environment" indicator to address legal and cultural issues.

Geske Dijkstra (2006) cites the following domains resulting from a Hague workshop (which she does not name): gender identity, autonomy of the body, autonomy within the household, political power, access to social resources (education and health), access to material resources (land and credit), access to employment and income (including the

distribution of unpaid work), and time use (leisure and sleep). However, she notes the limitations of these domains at the national level.

Social choice theory

Through his elaboration of social choice theory, Amartya Sen (1986) pioneered a framework focusing on rights and agency in assessing economic individual utilities. The influence of this approach was far-reaching, in that it considered social advantage as a factor in individual utility. More pertinent to the question at hand here, this vision of utility drawing from multiple personal and contextual factors required ways to assess and measure these factors. His conception of positive freedom compared to negative freedom can be seen in various incarnations of rights-based approaches to women's empowerment. Martha Nussbaum (Nussbaum 2001), for example, expanded Sen's "capability approach" specifically with respect to the role of women in global development. Nussbaum argues strongly against relativist refutations of a rights-based capabilities approach for women in the developing world. Starting with Sen's formative idea that what people are capable of doing in a given context is better able to capture quality of life than a report of satisfaction or of resources, Nussbaum expands this into an articulation of thresholds founded in human rights principles by which governments might be held accountable to progress. In other words, her elaboration of the capabilities approach was developed not just for comparative purposes, but specifically to assess progress toward explicit, rights-based development goals.

Kabeer (1999) moved away from what she calls instrumentalist views of empowerment/equity toward characterizing a framework for power that focuses on expanding women's ability to exercise choice (relative to men's) in three domains: resources; agency; and achievements. "Resources", which she frames as "pre-

conditions", include, not just material, but human and social resources. "Agency", framed as a "process", includes decision-making and negotiation. "Achievements", defined here as "outcomes", include a variety well-being outcomes, such as survival and infant survival. She uses the example of access to land to illustrate the limitations of measuring access to resources as a proxy for control; in two neighboring communities in India, one community recognizes women's rights to land, and the other does not. In both communities, women are entitled by legislation to inherit land. While women in the former community typically cede their rights to their brothers, such that women in neither community are likely to inherit land, the traditional principle of the right to the land entitles them to later claims on reciprocity from their brothers. Thus, neither entirely de jure nor entirely de facto conceptions of access or control entirely reflect the potentiating environment in which a woman lives with respect to the various resources that might be critical to her well-being. She problematizes measurement of household decision-making, the primary proxy for assessing "agency", by considering household decisions within the context of household gender roles. Kabeer argues that if women are accorded decisions within a certain realm of the household based on their roles as caretakers and housekeepers, while men are apportioned a different set of decisions based on household headship, then a score on a scale that enumerates decisions on an undifferentiated list of household challenges cannot illuminate much about power. Finally, Kabeer argues that measuring achievements as proxies for empowerment rests on the understanding that if women have choice then they will make positive decisions for themselves and for their families, and that this will be reflected in health and other kinds of outcomes. However, these kinds of outcomes are frequently confounded by resources and other environmental factors that may or may not be related to a woman's relative empowerment, or at least are related in ways that complicate measurement. Here she uses the example of infant survival, suggesting that this outcome does not

directly reflect whether a woman was empowered enough to keep her children healthy, when child health is affected by numerous other factors, including things also affecting women's empowerment, such as in-law residence, education, and work. Her conclusion, ultimately, is that the three domains are indivisible from a methodological and a conceptual standpoint. In this piece, Kabeer does not propose solutions to the methodological challenges she describes, but rather calls for a contextualized approach to understanding empowerment with respect to assessing interventions, and to comprehend within development activities an understanding of what women in the local context *desire* to be and do as a predicate for any analysis of their capabilities.

Sarah Mosedale (2005) further adapted this framework for the purpose of assessing women's empowerment. She argued that Kabeer's framework, while conceptually sound, was insufficiently far-reaching—that efforts to measure women's empowerment should not be limited to expanding women's ability to choose, within an existing status quo, but rather to expand the realm of options and opportunities for women. She advocated participatory methods for empowerment interventions focusing on power relations: power over; power within; power with; and social norms. Mosedale emphasizes agency within her conception of empowerment: "Secondly, empowerment cannot be bestowed by a third party. Rather those who would become empowered must claim it.

Development agencies cannot therefore empower women—the most they can achieve is to facilitate women empowering themselves. They may be able to create conditions favourable to empowerment but they cannot make it happen." (2005, page 244). If empowerment is, as Mosedale suggests, an inherently relativistic construct, in which power cannot be considered as an absolute state but can only be viewed relatively and dynamically, as compared to another's power or to a previous state of power, then

according to her paradigm empowerment is the intervention designed to achieve equity. The application of this construct has significant implications for approaches to assessment, in terms of measuring some aspects as process indicators and others as outcome indicators. Mosedale problematizes the view of "empowerment" as a state rather than a process, and questions the focus of interventions and measurement of empowerment at the individual level, rather than collective efforts that she argues characterize nascent and self-motivated empowerment movements. Kabeer likewise emphasized social change as a critical structural element in conceptualizing empowerment (1999). Solidarity movements are certainly one critical way in which women seek to exercise greater control, autonomy, and influence. For this reason, assessments of collective efficacy are one way of approaching a static measure of a relational construct.

CARE's frameworks

CARE's framework for women's empowerment, in its broadest sense, focuses on structure, agency, and relations. To be empowered, a woman must feel empowered—she must have a sense of confidence in her own agency, a domain analogous to concepts of self-efficacy and locus of control, and that agency must in some way be realizable In addition, the relationships within which her experience is situated and on which she is dependent must be equitable and supportive. Finally, the institutional environment must be accessible to her, representative, and facilitative. Capturing all these levels in a single instrument represents obvious challenges.

To address this, CARE has adopted a holistic approach to programming designed to empower women (2010). CARE (Wu 2009) has adapted Mosedale's (2005) power framework, conceiving of personal power (*power within* and *power to* in their

framework) and interpersonal power (*power with* and *power over*). CARE situates these ways of being empowered within a framework for the areas of intervention that are required in order for women to be empowered in these ways, and thereby achieve their full human rights; these areas are *agency*, *structure*, and *relations* (CARE n.d.). In this framework, intervention in one area to the exclusion of the others will have incomplete impact. Within each of these areas, CARE has developed a list of sub-dimensions for interventions aimed at rights-realization. Some examples of agency include self-image, knowledge, and bodily autonomy, while structures include features of politics, law, markets, and culture. Relations include negotiation and changing relationships. The full list of sub-dimensions can be found in Wu (2009)

The Women's Empowerment Multi-dimensional Evaluation of Agency, Social Capital, and Relations

CARE's women's empowerment framework served as the basis for the development of a tool to use in assessing the impact of women's empowerment programming. Dr. Christine Galavotti and Christina Wegs developed the Women's Empowerment Multi-dimensional Evaluation of Agency, Social capital, and Relations (WE-MEASR), which draws on but adapts the sub-dimensions of agency-structure-relations framework. The CARE team validated the original survey (Appendix 1) in Malawi. As part of this process, CARE assembled a team comprising CARE USA SRMH team staff, CARE Malawi program and evaluation staff, and an experienced consultant with experience conducting large-scale surveys in Malawi. After a preliminary translation, the team convened in Lilongwe and reviewed the survey for external validity, adjusting the questions and translations as needed. The team then conducted a cognitive test in the field to ensure that respondents understood the questions as intended. Once the survey was finalized, it was administered to 641 married women in two different districts in Malawi. Women

were sampled randomly from a limited number of census tracts within each district. The internal validation was conducted on the results of this sample of 641 women. The team used factor analysis to finalize the item selection and scale construction.

The evaluation comprises three women's empowerment domains: agency, social capital, and relations, with several dimensions within each of the domains. Each subscale is presented individually below, with an explanation of scale content and selection, including items that were removed for failing to meet factor loading criteria.

Table 4.1. List of sub-scales in each WE-MEASR domain		
Agency	Social Capital	Relations
Tolerance of intimate partner violence	Control of personal assets or resources	Participation in household decision-making
Belief in women's right to refuse sex	Contribution to household resources	Interspousal communication
Male dominance	Social cohesion	Female mobility
Belief in women's health rights	Community support when pregnant and bleeding	
Self-efficacy to use family planning	Community support if beaten by husband	
Self-efficacy to refuse sex	Community support if having difficulty breastfeeding	
Self-efficacy to go to the health facility	Community support when there is no food	
Self-efficacy to attend community meetings	Collective efficacy	
Self-efficacy to speak out at community meetings	Participation in community groups	
Self-efficacy to eat a variety of foods	Help from community groups	
Self-efficacy to breastfeed exclusively for 6 months	Help from community members	
Self-efficacy to get help with child care	Participation in collective action	

Agency

The domain of "agency" has two sub-domains: one for gender attitudes and beliefs, and one for self-efficacy.

Gender attitudes and beliefs

Table 4.	2. Scales and items of the gender attitudes and beliefs sub-domain
Toleran	ce of intimate partner violence (Cronbach's α=.70)
Q4001	Is he justified in hitting his wife if she goes out without telling him?
Q4002	Is he justified in hitting his wife if she neglects their children?
Q4003	Is he justified in hitting his wife if she argues with him?
Q4004	Is he justified in hitting his wife if she refuses to have sex with him?
Q4005	Is he justified in hitting his wife if she did not cook the food properly?
Belief in	woman's right to refuse sex (Cronbach's α=.59)
	First, is a woman justified in refusing to have sex with her husband if she knows
Q4006	he has a sexually transmitted disease?
	Is a woman justified in refusing to have sex with her husband if she knows he has
Q4007	sex with other women?
	Is a woman justified in refusing to have sex with her husband if she has recently
Q4008	given birth?
Male do	minance (Cronbach's α=.70)
Q4010	It is the mother's responsibility to take care of the children
Q4012	A man should have the final say about decisions in his home
Q4013	A man is the one who decides when to have sex with his wife
	A woman should tolerate being beaten by her husband to keep her family
Q4015	together
Q4017	Only when a woman has a child is she a real woman
Q4021	If a woman wants to avoid being pregnant it is her responsibility alone
Q4023	It's better to have more sons than daughters in a family
Belief in women's health rights (Cronbach's α=.71)	
Q4025	A woman can go to the health facility without her husband's permission
Q4026	A woman can use family planning without her husband's permission

Two additional scales, not listed above, were dropped based on not meeting the minimum factor loading criteria. The eliminated "Gender equitable attitudes" subscale consisted of the following questions: Q4014 ("Women have the same rights as men to

work and study outside of their home"); Q4018 ("A couple should decide together how many children to have"); Q4019 ("A woman can suggest o her husband that they use condoms"); Q4020 (Men should help with the household duties"); and Q4022 ("It is just as important for a girl to go to school as it is for a boy to go to school").

The eliminated "Social gender norms" scale consisted of the following: "For each question I'd like you to tell me whether most people in your community strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree": Q4027 ("Women have the same rights as men to work and study outside of their home"); Q4028 ("A man is the one who decides when to have sex with his wife"); Q4029 ("A man should have the final say about decisions in his home"); Q4030 (A woman can choose her own friends, even if her husband disapproves of them); Q4031 ("It is just as important for a girl to go to school as it is for a boy to go to school"; Q4032 ("Men should help with the household duties"); and Q4033 ("When there is not enough food in the house, the men should eat first").

<u>Tolerance of intimate partner violence:</u>

The "Tolerance of intimate partner violence" sub-scale consists of five questions inquiring, for a variety of situations, whether a respondent thinks a man is justified in hitting his wife. This scale was taken from the Malawi DHS survey (NSO and ICF Macro 2011, question 828).

Belief in women's right to refuse sex:

This scale, which reflects bodily integrity and self-determination, was expanded from the Malawi DHS survey (NSO and ICF Macro 2011, questions 951-956). From the scale designed for this survey, the original question Q4009 was removed (Is a woman justified in refusing to have sex with her husband if she is tired or not in the mood?"). This

question asked about two unique constructs (if she is tired, or if she is not in the mood) which may have compromised responses. For future surveys, the survey authors recommend two separate sub-scales to differentiate normative situations in which a woman feels comfortable refusing sex, to a more universal sense of bodily integrity (i.e., right to refuse sex in even non-normative situations).

Male dominance:

This scale was adapted from the Gender Equitable Men scale developed by Pulerwitz and Barker (2008); Q4021 was modified from "It is a woman's responsibility to avoid getting pregnant", as the question is framed when asked of men, to "If a woman wants to avoid getting pregnant, it is her responsibility alone". This adjustment was made based on experiences asking women the original form of the question in CARE's C-Change project in Zambia. This project promoted family planning use, and in the final evaluation, it was unclear whether women answered in the affirmative because they felt disempowered to get help from their partners in avoiding pregnancy, or whether it was because they felt empowered to take control of their own fertility. It was felt that the change made for this evaluation removed this ambiguity. Q4023 was an original addition by CARE. This subset of question represents only a sub-set of the questions in the original GEM, focusing on the topics relevant to woman's beliefs and attitudes and to the conception of agency of interest to CARE in this evaluation. Three questions included in the validation but dropped for not meeting the factor loading criteria were Q4011, "A woman can choose her own friends, even if her husband disapproves of them"; Q4016, "A woman who carries condoms with her is an "easy woman"; and Q4024, "When there is not enough food in the house, the men should eat first."

Belief in women's health rights:

The two questions comprising this scale were developed originally by CARE and validated and met the factor loading criteria.

Self-efficacy

The self-efficacy scales, developed by the CARE USA SRMH team specifically for the WE-MEASR tool, cover a series of nine situations, and inquire how sure women are that they could take certain actions relating to the situation, if they wanted to. The situations include family planning, refusing sex, going to the health facility, attending community meetings, speaking out at community meetings, eating a variety of foods, exclusively breastfeeding, getting help with child care, and enlisting husband's participation in household chores. The questions are designed to advance in difficulty; the prediction was that for a given respondent, there would be a threshold beyond which she did not feel sure she could take an action. As an example, a woman might feel sure that she can broach family planning with her husband, and she may feel sure that she can use family planning, but not without his approval.

Table 4.	Table 4.3. Scales and items of the self-efficacy sub-domain	
Family p	Family planning (Cronbach's α=.60)	
	How sure are you that you could bring up the topic of family planning with your	
Q5001	husband?	
Q5002	Tell your husband that you wanted to use family planning?	
Q5003	Use family planning?	
Q5004	Use family planning, even if your husband did not want to?	
Refuse s	Refuse sex (Cronbach's α=.78)	
	How sure are you that you could refuse to have sex with your husband when you	
Q5005	don't want to have sex but he does?	
Q5006	If you were feeling tired?	
Q5008	If he gets angry with you if you don't have sex?	
Q5009	If he threatens to hurt you if you won't have sex?	
Q5010	If he threatens to have sex with other women if you don't have sex with him?	
Go to the health facility (Cronbach's α =.70)		

05044	Harry and the state of the stat
Q5011	How sure are you that you could go to the health facility if you wanted to go?
Q5012	If you were worried that the staff would treat you badly?
Q5013	If your husband objected to your going?
Q5014	If you feel you have some work to do at home?
Q5015	If your family thought you were neglecting your household duties?
Attend	community meetings (Cronbach's α=.72)
Q5016	How sure are you that you could attend a community meeting?
Q5017	If your family did not encourage you to go?
Q5018	If your family did not want you to go?
Q5019	If your family would not help with your household duties so that you could attend?
Speak o	ut at community meetings (Cronbach's α=.74)
Q5020	How sure are you that you could express your opinion at a community meeting?
Q5021	If some people did not agree with that opinion?
Q5022	If most people did not agree with that opinion?
Eat a va	riety of foods (Cronbach's α=.71)
	When you are pregnant and breastfeeding, how sure are you that you could eat a
	variety of foods, even if there was not enough food for everyone in the
Q5024	household?
05025	If there is only enough for you or your husband (just enough for one of you, but
Q5025	not both of you)
Breastre	eed exclusively for six months (Cronbach's α=.86) If you wanted to give only breastmilk to your baby for the first six months of life,
Q5026	how sure are you that you could do this?
Q5027	If you don't have the encouragement of your family?
Q5028	If your family tries to give the baby water or other liquids?
Q5029	If your family does not help with the household duties?
Get help	with child care (Cronbach's α=.67)
	How sure are you that you could ask an adult in your household to watch the
Q5030	children?
Q5031	When you want to rest because you are sick?
Q5032	When you need to go to the health facility?
Q5033	When you want to go visit a friend or family member?
Get hus	band participation in household chores (Cronbach's α=.80)
	How sure are you that you could ask your husband to do some of the household
Q5034	duties?
Q5035	If you want his help and he isn't doing anything else at the time?
Q5036	If you want to go to an important community meeting?
Q5037	If you want to go visit a friend or family member?

Social capital

Social capital includes several domains documenting a woman's access to resources, her integration within her community, and her access to social support in times of crisis and to take collective action. It also includes her access to assistance from community members and groups.

Control of personal assets

Women's control over personal assets was assessed separately from household socioeconomic status. The measures below index a woman's financial independence.

Table 4.	Table 4.4. Scales and items of the control of personal assets sub-domain	
Control	Control of personal assets or resources	
Q2004	Aside from you household chores and work, did you do any work outside the home in the past 12 months for which you received money?	
Q2005	Aside from you household chores and work, did you do any work outside the home in the past 12 months for which you were paid in goods?	
Q2006	Do you have any cash savings of your own, including in a VSLA group?	
Q2008	Do you have any land that is owned by you alone?	
Q2009	Do you own any assets that could help you generate income?	
Contrib	Contribution to household resources	
	What proportion of your household expenses are met from the money you earn.	
	Would you say, your money is used to pay for all or most, some, or none of the	
Q2010	household expenses?	

Women on average had two sources of financial independent; mostly commonly, these were agricultural land and an income-generating asset of some kind. The latter could include animals, or tools to allow value-addition to crops or animal products. As sources of income, agricultural land can be less fungible than opportunities that provide more liquid resources, such as work for goods or pay. Agricultural land and animals both require a certain kind of labor to produce income from, and in Malawi this entails a gendered division of labor. In these cases, a woman's post-marital residence will

influence what labor resources are available to her. Livestock, for example, are seen as a form of "savings" and can produce income for a woman, but tending to livestock is typically the work of men, particularly of boys. A woman with sons can earn more money from large livestock than a woman without. A woman who owns smaller livestock, such as poultry or small animals, can tend to them herself. VSLAs are slightly different, in that they are not necessarily set up to provide a return on every woman's investment (to grow her income), but rather as a safe vehicle for saving money. Having savings certainly offers a form of security for a woman, and the potential to invest.

Social cohesion

Social cohesion examines a respondent's integration into her community. Q9001to Q9003 were adapted from the Young Lives Project working paper 31 (2006), along with an additional question that was dropped from the scale (Q9004, "I think that the majority of people in this community would try to take advantage of me if they got the chance.") The team suspects this has to do with the fact that Q9004 was the only question with a negative valence and plan to test an alternative version in future evaluations. The remaining items were adapted from Lippmann's social cohesion scale (2010) developed for use in testing social interventions with sex workers.

Table 4.5.	Items of the social cohesion sub-scale	
Social cohe	Social cohesion (Cronbach's α=.80)	
Q9001	The majority of people in this community can be trusted	
Q9002	The majority of people in this community generally get along with each other	
Q9003	I feel that I am really a part of this community	
Q9005	I can rely on people in my community if I need to borrow money	
	I can rely on people in my community to help deal with a violent or difficult family	
Q9007	member	
Q9008	I can rely on people in my community to help me if I have difficulty breastfeeding	
	I can rely on people in my community to help me if I can't provide my child with	
Q9009	enough healthy food	
Q9010	I can rely on people in my community to help take care of my children/household if	

	I need to go to the doctor or hospital
	I can rely on people in my community to help take care of my children/household if
Q9011	I need to go outside the home to work
Q9012	The people in my community are an integrated group

Community support in times of crisis

These subscales, developed by Pronyk and colleagues (2006), measure community support in times of crisis; each of which details a specific hypothetical scenario and then asks women about the kinds of support they might receive in the case that they experienced the scenario. These scenarios include situations in which a woman is pregnant and bleeding severely, when she has been beaten severely by her husband, when she has had difficulty breastfeeding, and when she does not have enough food to eat (the scenarios involving breastfeeding and not having enough food were developed by CARE to follow a similar format). The scenarios reflect barriers to women achieving health rights, including those critical to newborn health, and autonomy, and proxy security and independence.

Table 4.6. Scales and items of the community support in times of crisis sub-domain		
When pregnant and bleeding (Cronbach's α=.80)		
	Imagine for a moment that you are 8 months pregnant and you have started	
	bleeding heavily. How sure are you that there is someone in your community,	
Q10001	apart from you immediate family, who you could go to for advice?	
Q10002	Who could take you to the hospital?	
Q10003	Who would help care for your children or household while you are away?	
Q10004	Who would loan you money for transport?	
If beaten by husband (Cronbach's α=.80)		
	If your husband has beaten you severely, how sure are you that there is	
	someone in your community, other than your immediate family, who you	
Q10005	could talk to about your problem?	
Q10006	Who you could go to for advice?	
Q10007	Who would loan you money if you needed it?	
Q10008	Who would shelter you if you needed it?	
Q10009	Who would take you to the hospital?	

Difficulty	Difficulty breastfeeding (Cronbach's α=.84)	
	You want to breastfeed but you are having trouble (your baby is fussy and does not seem to be feeding well, or you are also worried you might not have enough milk). How sure are you that there is someone in your community	
Q10010	who you could go to for advice?	
Q10011	Who would support you and encourage you to breastfeed?	
Q10012	Who would show you some strategies to help you breastfeed?	
	Who would help you prevent others from giving your baby water or other	
Q10013	liquids?	
No food (No food (Cronbach's α=.76)	
Q10014	Try to imagine that you have not had any food to feed your children for two days. How sure are you that there is someone in your community who you could ask for advice?	
Q10015	Who would connect you with available child feeding program?	
Q10016	Who would help feed your family by giving food?	
Q10017	Who would lend you money to buy food?	

Collective efficacy

CARE USA's SRMH team designed the collective efficacy to test respondents' confidence that they would be able to effect change when working in solidarity with other women in their communities. This scale proxies structural elements of empowerment, including the power dynamics within the community that enable women to assert rights and entitlements.

Table 4.7	Table 4.7. Items of the collective efficacy sub-scale	
Collective	e efficacy (Cronbach's α=.76)	
	Now I am going to ask you some questions about how the women in your	
	community help each other and work together to improve their lives. How sure	
	are you that the women in your community could prevent each other from	
Q11001	being beaten or injured by family members?	
Q11002	Improve how women are treated at the health facility?	
Q11003	Obtain government services and entitlements?	
Q11004	Improve the health and well-being of women and children in the community?	

Participation in community and help from community

Three different questions queried access to help from specific community members and groups. These questions were adapted from the Young Lives Project (2006), with modifications to the response list in accordance with Lippman et al. (2010). The questions provided lists of the kinds of groups and community members who might provide help, and allowed participants to volunteer them with the prompt "anyone else?"

Table 4.8. Scales and items of the community participation sub-domain			
Participati	Participation in community groups (Cronbach's α =.59)		
	Could you tell me whether in the last 12 months, you have been an active		
Q11005	member in any of the following groups?		
Help from	Help from community groups (Cronbach's α=.60)		
	In the past 12 months have you received help from any of the following groups		
Q11006	in your community		
Help from community members (Cronbach's α=.60)			
	In the past 12 months have you received help from any of the following people		
	in your community? Help could include emotional support, economic assistance,		
Q11007	or help to learn or do things?		

Participation in collective action

Participation in collective action was developed by the Young Lives Project (2006) indexes a woman's political participation and political organization within the community.

Table 4.9. Items of the participation in collective action sub-scale		
Participat	Participation in collective action (Cronbach's α=.59)	
	Have you joined together with other people in your community to address a	
Q11008	problem or common issue?	
	Has your community carried out or organized activities with people from	
Q11009	another community?	
Q11010	Have you spoken out in public about a problem that affects someone else?	
	Have you talked with local authorities or governmental organizations about	
Q11011	problems in the community?	
Q11012	Have you attended a demonstration about a problem in your community?	

Relations

Participation in household decision-making

Participation in household decisions was measured using the scale below. The scale is comprised of 15 items, some (Q6001 to Q6008) adapted from the Malawi DHS survey (NSO and ICF Macro 2011, questions 820 through 826 of the women's survey); some (Q6013 to Q6018) adapted from Pronyk (2006); and the remainder developed by CARE as part of a number of project evaluations. Each item was scored as either 1 or 2. Respondents who reported that someone in the household other than her made the decision were scored as a 1 (inequitable response) whereas if a respondent reported that either she made the decision alone, or else she and her husband made the decision together, this was scored as a 2 (equitable response). There were three exceptions to this; questions Q6013, Q6014, and Q6015 were scored such that if a woman reported that she alone made the decision, the item was scored as a 2; if she reported that she and her husband made the decision together or that anyone else in the household other than herself made the decision, the item was scored as a 1. The rationale was that these items represented issues of personal freedom or personal expression, apart from shared household issues or obligations, and that only full independence in these decision represents empowerment.

Table 4.10. Items of the participation in household decision-making sub-scale		
Participation in household decision-making		
Q6001	First, would you tell me which member of your household usually makes decisions about your health care?	
Q6002	Making large household purchases?	
Q6003	Making household purchases for daily needs?	
Q6004	When you will visit family/relatives/friends?	
Q6005	When your whole household will visit family/relatives/friends?	
Q6009	How to use the money that you bring into the household?	
Q6010	How to use the money your husband brings into the household?	

Q6011	When your family will sell a large asset (like a cow)?
Q6012	When your family will sell a small asset (like a chicken)?
Q6013	What you can wear?
Q6014	Who you can spend time with?
Q6015	How you spend your time?
Q6016	Whether you can work to earn money?
Q6017	When you and your husband have sex?
Q6018	Whether you and your husband use family planning?

Interspousal communication

Interspousal communication signals healthy relationships, but it also proxies whether, when, and how a woman a woman can express her thoughts, feelings, and opinions within her household. This subscale was developed by CARE as part of an unrelated project evaluation, and adapted for use in WE-MEASR.

Table 4.11. Items of the interspousal communication sub-scale		
Interspousal communication (Cronbach's α=.77)		
	How often do you and your husband discuss things that happened during the	
Q7001	day?	
Q7002	How often do you and your husband discuss your worries or feelings?	
	How often do you and your husband discuss what to spend household money	
Q7003	on?	
Q7004	How often do you and your husband discuss when to have children?	
Q7005	How often do you and your husband discuss whether to use family planning?	

Female mobility

Female mobility indicates a woman's autonomy to decide where she can go within or outside of the community, as well as her safe access to spaces within and outside the community. This subscale was developed by Hashemi and colleagues (1996) and adapted for use in WE-MEASR.

Table 4.12. Items of the female mobility sub-scale

Female mobility (Cronbach's α=.59)		
	Are you permitted to go to the market to buy or sell things on your own, only if	
Q8001	someone accompanies you, or not at all?	
	Are you permitted to go fetch water on your own, only if someone accompanies	
Q8002	you, or not at all?	
	Are you permitted to go to training courses, including adult literacy classes, on	
Q8003	your own, only if someone accompanies you, or not at all?	
	Are you permitted to go to the health facility on your own, only if someone	
Q8004	accompanies you, or not at all?	
	Are you permitted to go to a community meeting on you own, only if someone	
Q8005	accompanies you, or not at all?	
	Are you permitted to go to homes of close-by friends on your own, only if	
Q8006	someone accompanies you, or not at all?	
	Are you permitted to go outside the village on your own, only if someone	
Q8007	accompanies you, or not at all?	
	Are you permitted to go to church or mosque on your own, only if someone	
Q8008	accompanies you, or not at all?	

Women reported a near universal ability to move within the community without being accompanied. These majorities were slightly less strong (though still resounding) in the case of going outside the village or going to training courses.

Chapter 5: Context of women's empowerment outcomes and autonomy in rural Malawi

As illustrated in Chapters 2 and 3, the social, cultural, and structural factors hypothesized to affect women's empowerment outcomes have been changing over time, in particular the factors that shape women's economic opportunities, constraints, and capabilities. The ethnographic record provides some context for changes occurring up until Malawian independence, but systematic quantitative data during that period are slim. It was not until the institution of the Demographic and Health Surveys that something like a social epidemiology of women's well-being could be done. The first DHS was completed in Malawi by the National Statistics Office (NSO) with ICF Macro (formerly Macro International) in 1992 (publication date 1994), with follow up surveys in 2000 (publication date 2001), 2004 (publication date 2004), and 2010 (publication date 2011). This provides a nearly twenty-year time span over which to evaluate whether women's economic and social lives have changed. Moreover, the findings of the most recent survey provide a context against which to compare the results of the WE-MEASR. In the chapter below, I present existing data from the DHS in Malawi, including economic, education, and empowerment indicators. This includes, where possible, an evaluation of change over time, though not all indicators appear in all incarnations of the survey.

Economic independence

Economic independence is a critical element in a woman's ability to secure her rights, to provide for her children, and to ensure independence from partners or family members in the event of mistreatment or gender-based violence. Economic independence can

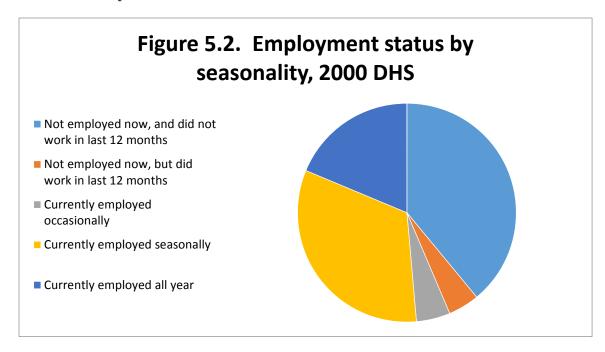
include employment opportunities, employment equality, safe and equitable working conditions, and access to assets to generate income.

Employment and form of earnings

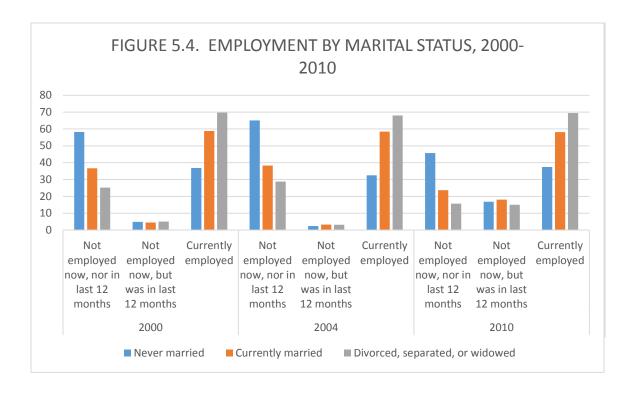
Women's employment did not change greatly between 2000 and 2004, but a shift between 2004 and 2010 occurred in which women were not employed at the time of the survey, but had been in the last 12 months. Although the proportion of women reporting they were currently working did not change much between 2000 and 2010, the proportion of women reporting that they were not then employed, nor had they been in the last 12 months, dropped from 39% in 2000 to 27% in 2010, while the proportion of women who were not then employed but had been in the last 12 months increased from 4.6% in 2000 to 17.4% in 2010.

Only the 2000 survey reported information on whether women reporting being currently employed were then employed occasionally, seasonally, or year-round, but the change in

employment status between 2004 and 2010 could potentially be explained by the seasonal nature of much of the work done by women, or indeed by a change in women's own definition of what constitutes "work". It is possible that women who formerly did not consider seasonal agriculture to be labor, began to consider it such between the 2004 and 2010 surveys.

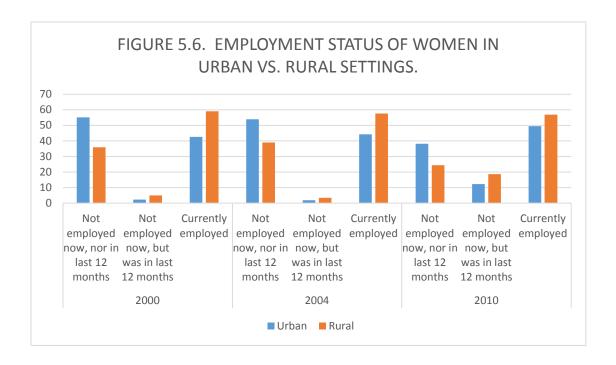


Employment status of women relative to that of men also shifted between 2004 and 2010. In 2004, roughly the same proportion of men and women were currently employed at the time of the survey. While the number of women who had not worked in 12 months halved by 2010, the number of women who were currently employed stayed the same at around 55%, and the number of men who were currently employed jumped from 56% to 82%. If this indicates a growing number of opportunities for employment in Malawi, it is clear that the opportunities are not equally available to both men and women.

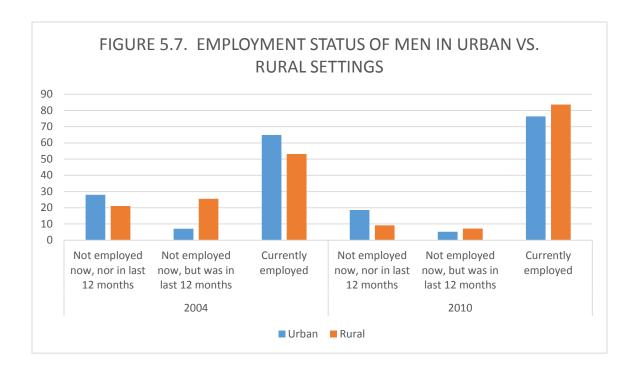


Employment by marital status suggests some changes taking place between the 2000 and 2010 DHS surveys. In all years, women who had never married were least likely to be employed and most likely not to have worked in the last 12 months, while divorced, widowed, or separated women were most likely to work, and least likely not to have worked in the last 12 months. The proportion of women who were not currently employed, but had been in the last 12 months, was roughly equal irrespective of marital status in each year, though the overall total jumped from 2004 to 2010.

In all years, women in rural areas were more likely to be currently working, while women in urban areas were more likely to report neither working nor having worked in the last 12 months. Other than the increase in women not employed at the time of the survey but employed in the last 12 months (and decrease in women not having been employed at all in the last 12 months), as already noted, there was little change in the pattern of rural versus urban employment for women.

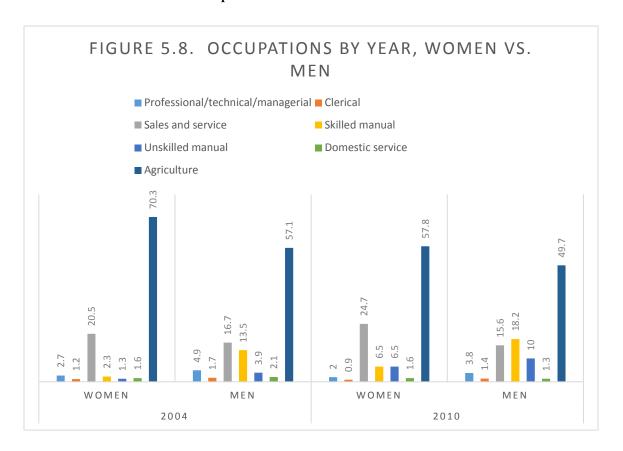


For men, however, the pattern of urban versus rural employment does seem to have shifted from 2004 to 2010 (data not available for 2000). The proportion of men who were currently employed jumped for all categories from 2004 to 2010; however, in 2004, a larger proportion of urban men were employed, while by 2010, a larger proportion of rural men were employed at the time of the survey. This could suggest an increasing number of opportunities for consistent employment in rural areas, which are selectively available to men. You might just say that men's side of this story is the major missing piece here, and limits both understanding of women's empowerment and the factors that affect it. Clearly, the world has changed a lot for men, too, and this may be reflected in household composition/husband presence or absence.



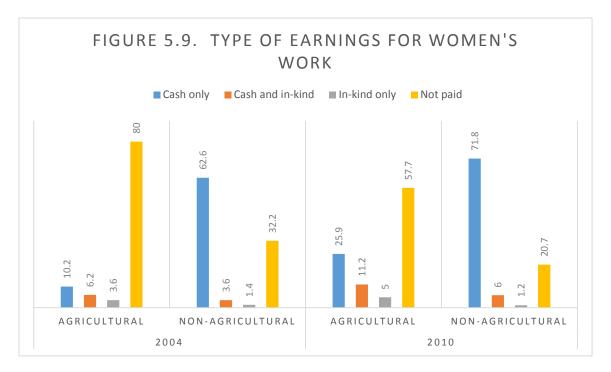
When occupations for men versus women are compared between 2004 and 2010, the proportion working in agriculture decreases for both men and women as well. The proportion of women working in professional and clerical roles decreased slightly, as it did for men, fewer of whom also worked in sales and service in 2010 than in 2004, while the proportion of women working in sales and service increased. A higher proportion of both men and women were working in both skilled and unskilled manual labor in 2010 than in 2004, which may account for the decrease in agricultural work.

One particular challenge for women historically has been that women frequently earn no income or compensation for the work that they do. Earning some kind of income, whether cash or in-kind, but particularly cash, can be critical to economic independence. While a woman could conceivably provide for her family's food needs through agricultural work, even without pay, the rural economy increasingly requires cash or assets to trade in order to pursue healthcare or education, either for herself or her family, or a reliance on those who can provide.



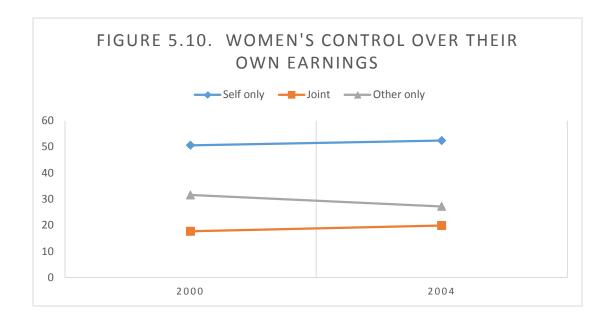
Between 2004 and 2010, the proportion of women working for no pay declined, both in agricultural and non-agricultural sectors. The total proportion of women working for no compensation in 2004 was 65.8%, but by 2010 it had dropped to 42.3%. The increase is observed primarily in women paid for with cash only, which increased from 25.7% to 45.1% from 2004 to 2010. In the 2000 DHS, earnings data were presented somewhat differently; in that survey, women were reported as working for cash (including both

women who worked for cash alone, and women who worked for some combination of cash and in-kind pay), or for working for no cash (including women who worked for no pay or for pay in-kind). Defined this way, 40.9% of women worked for cash, and 59.1% of women did not. In the 2010 survey, the proportion of women working either for cash or for cash plus in-kind pay was 54.1%, representing an increase of 13.2 percentage points.

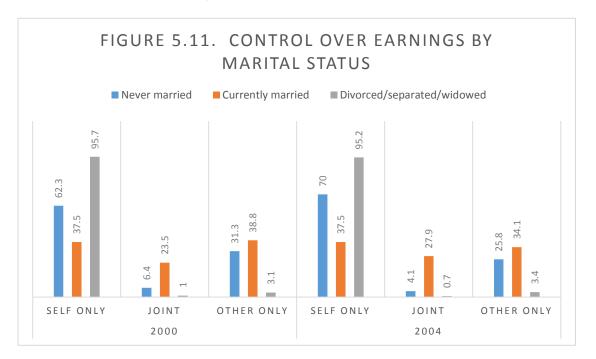


Control over earnings

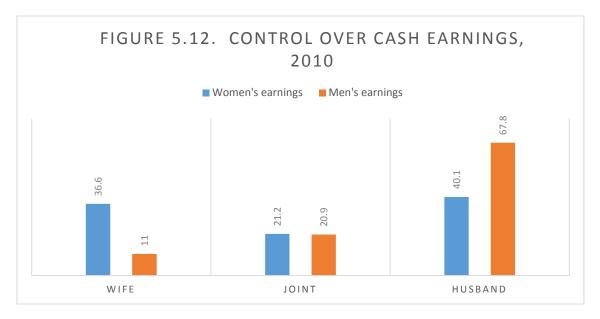
As one indicator of financial autonomy, women were asked in the DHS who controls the money they themselves earn. In 2000 and 2004, responses were coded according to whether a woman controls the cash she earns herself, she controls it jointly with someone else, or someone else controls it. The proportion of women who did not control their own earnings declined over this period, though not substantially.



Marriage status had a considerable impact on whether women had control over their own earnings; divorced, widowed, or separated women had the most control, while married women had the least, overall.



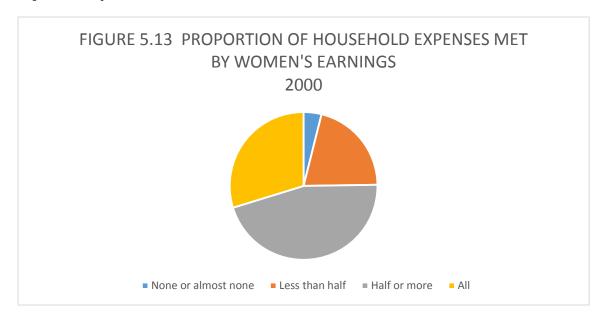
The 2010 DHS examined earnings only among married women, and reported whether married women controlled their earnings themselves or jointly with their husbands, or whether their husbands controlled their earnings, and further examined what influence women had over the earnings of their husbands. Because of this shift, a direct comparison between prior years' DHS findings is not possible. However, the data for 2010 suggest that women have limited control over how cash earnings are to be spent.

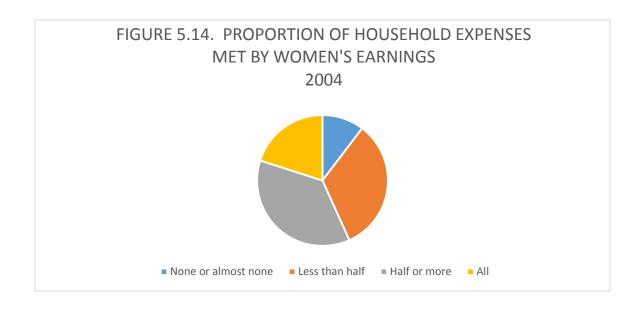


When disaggregated by relative earnings (how much women earn relative to their husbands), the highest proportion (63.3%) of women controlling their own earnings were those whose husband's did not earn any cash earnings, and women who earned more than their husbands were more likely to control their own earnings (46.7%) than their husbands were (29.6%). Women who earned the same as their husbands were most likely to control earnings jointly (44.6%).

When asked what proportion of their household's expenses was met by the money they themselves earned, the majority (56.5%) of women responded that they met all or half or more of the expenses, in the 2004 DHS. However, this proportion is considerably

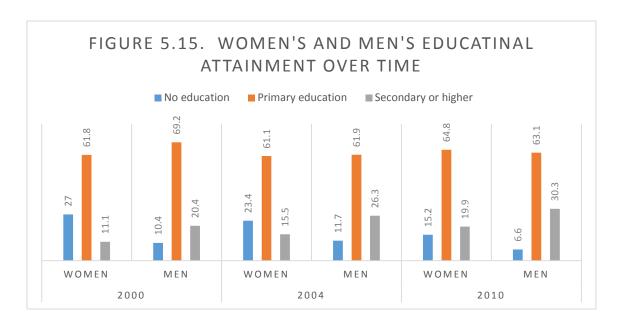
smaller than the 75.1% of women who met all or half or more of their household expenses in 2000. This metric is more difficult to interpret than some other indicators of empowerment. While contributing to a household's expenses could be seen as empowering for a woman, particularly in terms of her own perception of the importance of her earnings to the household, and as a means to gain greater decision-making over household expenditures, it is also possible for a woman to be disproportionately responsible for everyday household expenses. Bearing an inequitable burden for household or child-related expenses could be misconstrued as empowering for women in this circumstance. Moreover, this indicator is likely to be affected by employment patterns and the availability (and equity of availability) of opportunities for cash earnings. During the period reported here, men's employment opportunities shifted sectors and increased, as described above, suggesting a greater capacity to contribute to expenses in the household. This could have implications for women, whose legitimacy to claim rights to decision-making in the household is to some degree moderated by the expenses they meet.





Education

Education serves as a resource for women, and is associated with positive outcomes in a variety of areas, from increased breastfeeding to reduced risk of HIV, including outcomes within their children and families (UNICEF 2003). Indeed, eliminating gender gaps in access to primary and secondary education is one of the critical Millennium Development Goals designed to empower women (Target 3A: "Eliminate"



gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015") (World Health Organization Department of Gender and Women's Health 2003). Women's educational attainment has risen slightly since 2000, with most of the gain observed in the period from 2004 to 2010, although the gains for women have not equaled the gains made by men over the same period, particularly in the proportion of men gaining some secondary education. The proportion of both women and men receiving no education has fallen over the period 2000 to 2010.

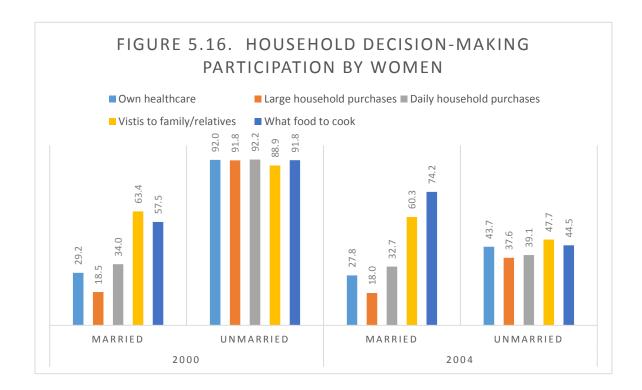
Gender attitudes and beliefs

Since its inception, the DHS has added several indicators of women's empowerment and gender attitudes and beliefs, including women's participation in household decision-making, tolerance of intimate-partner violence, and the right to refuse sex.

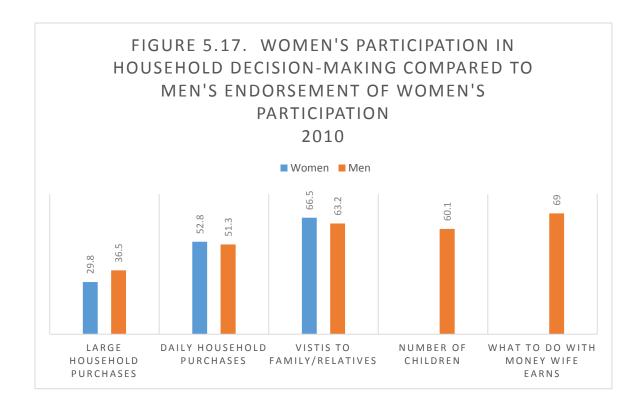
Household decision-making

In all three DHS surveys since 2000, the survey examined women's participation in decisions relating to their own healthcare, large household purchases, daily household purchases, visits to family and relatives, what food to cook, and how many children to have. However, contributions to these decisions are disaggregated differently in each of the reports, making comparison over time difficult. However, when comparing the proportion of women who said they made the decision alone or jointly with their husband or someone else, the proportion of married women participating in the decision does not vary much from year to year, but the proportion of unmarried women doing so appears to have declined sharply. This could be a methodological issue; the proportion of unmarried women reporting that they made the decision alone did not change more than four percentage points between the years, but the proportion who reported making a decision jointly with someone else declined from a range of 49% to 60% in 2000 across

the decisions below, to a range of 3% to 7% in 2004. This may have to do with the way the meaning of joint decision-making was framed, but the 2004 report does not provide an explanation of the shift.



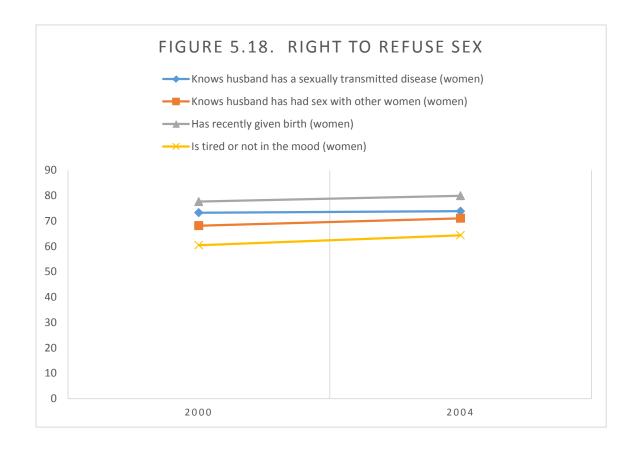
In 2010, the DHS also asked men whether they though women should play a role in decision-making (alone or jointly).

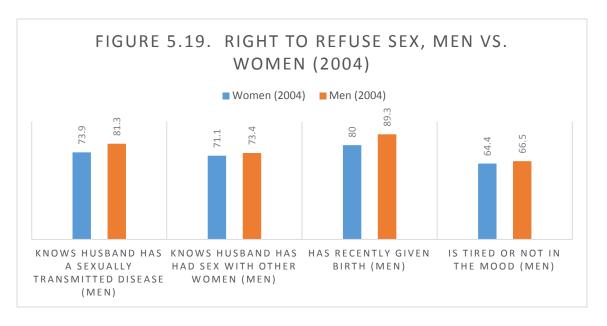


Right to refuse sex

Bodily integrity and the right to refuse sexual intercourse is a critical component of a rights-based framework for women's empowerment. Overall, a majority of women agreed that a woman has a right to refuse sex in the given scenarios, and this proportion changed little (though consistently) between 2000 and 2004.

In 2004, men were also asked whether they agreed that a woman had a right to refuse sex under the given scenarios. Although a consistently greater proportion of men than of women agreed that a woman does have a right to refuse sex in each scenario, the differences were not substantial.





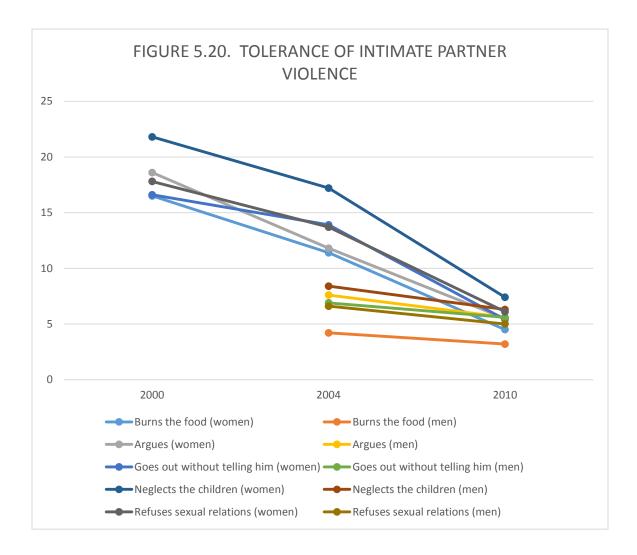
Experience of violence

Among the most critical elements of empowerment, indeed of the realization of human rights, is the right to bodily integrity and self-determination. At the most basic level, physical and sexual violence directly controvert this right. For this reason, the risk and the experience of violence are critical facets of a woman's relative empowerment. Moreover, social tolerance of violence, particularly in specific contexts such as families and marital unions, contributes significantly to the structural patterns of risk a woman must navigate (Vandello and Cohen 2003).

Tolerance of intimate-partner violence

Tolerance of intimate partner violence measures the proportion of respondents who agree that a man is justified in beating his wife under a variety of circumstances. The 2000 DHS asked only women whether they agreed with the statements justifying intimate partner violence, but 2004 and 2010 DHS surveys both included men as well, allowing a more direct comparison.

Tolerance of intimate partner violence among women has dropped dramatically since the first administration of this domain in 2000, falling by around two-thirds (or more) on every question. Men's tolerance of intimate partner violence was already lower than women's in the first year men were asked these questions, 2004, in which around half as many men as women endorsed men's justification to beat their wives under the specific circumstances. By 2010, men's and women's answers had converged to low tolerance, with, on average, 5.8% of women and 5.1% of men agreeing that men were justified in beating their wives in each of the scenarios.



This decline coincides with the vigorous public campaign to reduce gender-based violence in Malawi (described in Chapter 3).

Physical violence

In the 2010 DHS, 28.2% of women aged 15-49 reported having ever having experienced physical violence since age 15, while 13.9% report experiencing physical violence often (3.7%) or sometimes (10.2%). This marked little change since 2004, in which 28.1% of respondents reported having ever experienced physical violence since age 15, 15.4% of them in the past 12 months.

In 2010, among women who had ever been married, 77.7% of those reporting physical violence reported that it was committed by a current or former husband/partner, while 16.3% reported that it was committed by a parent or sibling. In-laws were reported by only 1.4% as committing physical violence. The 2004 DHS provides less data on the perpetrator of physical violence but 77% of women cited a current or former husband or partner, marking effectively no change.

Risk of having experienced physical violence fell slightly for women who were not employed for cash, but rose for those employed for cash. Risk of having experienced physical violence was highest for women who were employed for cash, and lowest for women who were not employed.



Sexual violence

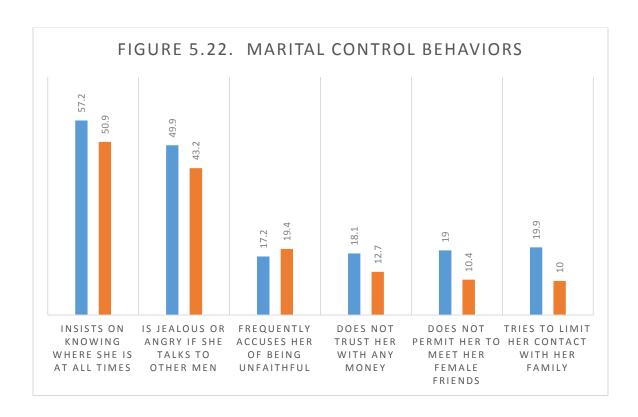
On average, 25.3% of women in 2010 had experienced sexual violence. Factors that increased women's risk of experiencing sexual violence included: being divorced, separated, or widowed (38.4% compared to 26.0% of those married and living together and 13.7% of those never married); living in a rural area (25.9% compared to 22.9% of urban residents); completing primary or secondary school (26.4% and 26.3% respectively, compared with 20.6% of those without education); and being employed. Women who were employed but not for cash had greater risk (25.5%) than those not employed at all (20.5%), while women employed for cash had the highest risk (28.3%).

Of women who reported experiencing sexual violence, 62.0% reported that it was perpetrated by a current or former husband or boyfriend. Only 1% reported that it was perpetrated by a grandfather, father, or stepfather, while 3% reported that it was perpetrated by another relative. In-laws were reported in 0.3% of cases. Other kinds of acquaintances, including personal or family friends, teachers, or employers were indicated by a total of 3.2% women, while 25.1% did not respond.

Taken together, these figures form a picture of risk that is shaped primarily by a woman's post-marital residence. Both physical and sexual violence were most likely to be perpetrated by partners. The fact that divorced, separated or widowed women were most likely to have ever experienced sexual violence could indicate that women in that situation are more vulnerable, though it could also be the case that women who experience sexual violence in their unions are more likely to seek separation or divorce.

Control in marital unions

The 2004 and 2010 DHS also measured controlling behaviors within the context of marital unions among women currently or previously married. In general these behaviors declined from 2004 to 2010, in particular limiting contact with friends and family. The overall risk of experiences three or more of these behaviors was 30% in 2004 and 21.8% in 2010, while the proportion of women who reported none of these behaviors rose from 20% to 36.5%.



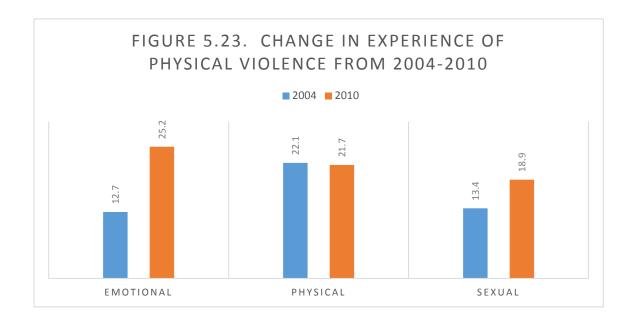
Intimate Partner Violence

When asked specifically about forms of violence from a husband or partner, 21.7% of ever-married respondents in 2010 reported ever having experienced physical violence from their partner (14.7% experiencing it often or sometimes in the last 12 months). The

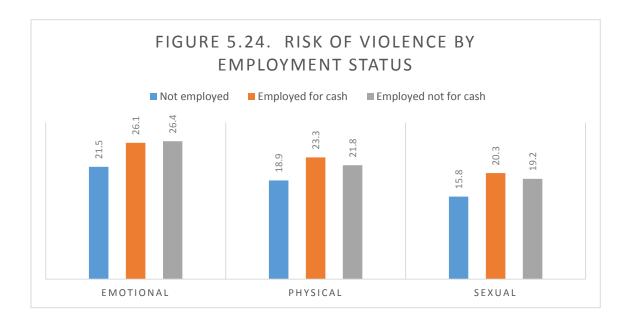
most common form was slapping. In 2004, 22.1% of women reported having experienced physical violence from their husband or partner.

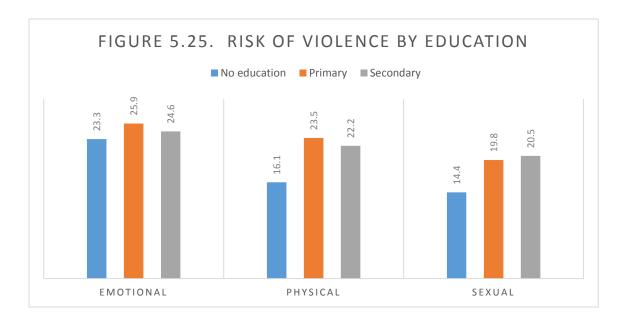
Of ever-married respondents, 18.9% in 2010 reported ever having experienced sexual violence from a husband or partner (13.4% often or sometimes in the last 12 months), of which the most common form was physically forcing her to have sexual intercourse with him even when she did not want to. In 2004, 13.4% of respondents reported having experienced sexual violence from a husband or partner.

Of ever-married respondents, 25.2% in 2010 reported ever experiencing emotional violence (21.2% often or sometimes within the last 12 months), of which the most common form was insulting her or making her feel bad about herself. In 2004, 12.7% of women had experienced emotional violence



Having primary or secondary education increased risk of all three forms of violence, as did being employed for cash and not for cash.





Summary

The patterns of risk of experiencing violence for women in Malawi hew closely to the household, in which violence is most likely to be perpetrated by a partner or a family

member. Although tolerance of intimate partner violence has dropped dramatically in the last 15 years, the levels of intimate-partner violence have been slower to change.

In addition, activities that are empowering for women or contribute to their economic independence tended to be associated with an increased risk of violence. Considered in light of the fact that the most common controlling behaviors by partners were of the kind which tend to limit a woman's access to the world outside her household, or are reactive against a woman who is accessing the world outside her household, such as needing to know where she was at all times, or becoming jealous if she talked with other men, it is possible that the greater risk of violence experienced by women who are employed outside the home is related to these fears by women's partners. In his Lancet review, Jewkes (2002) reports that although the relationship between status and violence is consistent at the highest status levels for women (whereby women with the highest levels of empowerment, education, or employment experience less violence), the relationship between status and intimate partner violence at lower status levels tends to be complex. However, he noted that disparities in status can be associated with violence where cultural models for manhood are difficult to attain for the lower status men.

Although the scale of the increase in risk of violence for educated and employed women is not great, it is consistent, and it must be considered in development programs aimed at empowering women must be careful not to increase their beneficiaries' risk for intimate partner violence, as Koenig and colleagues found in some villages in Bangladesh (2003). Clearly, the increase in risk should not discourage programming meant to educated and empower women. Engaging men and boys in empowering women and fostering intra-household and community-level dialog are both ways of potentially

mitigating risk. Both such efforts are served by an understanding of the cultural and social factors behind this observed pattern.

Chapter 6: Results of women's empowerment survey

The Sexual, Reproductive and Maternal Health team at CARE prioritizes addressing gender inequality to achieve improvements in girls' and women's health, and to help women realize their full rights (CARE 2013a). CARE has developed a theory of change that is founded in CARE's Agency-Structure-Relations framework for women's empowerment (Wu 2009). In order to test the efficacy of interventions designed to address gender inequality in the domains of health, CARE developed a survey to measure women's empowerment across of a variety of domains of agency, social capital, and relations. The Women's Empowerment Multidimensional Evaluation for Agency, Social Capital, and Relations (WE-MEASR) adapts women's empowerment outcomes from a variety of existing tools, including the Gender Equitable Men scale (Pulerwitz and Barker 2008), the Demographic and Health Surveys (NSO and ICF Macro 2011), scales developed by Pronyk and colleagues (2006), and the Short Adapted Social Capital Assessment Tool (SASCAT) developed by the Young Lives Project (2006). Dr. Christine Galavotti and Christina Wegs at CARE developed additional original sub-scales, including self-efficacy and collective efficacy.

CARE USA and CARE Malawi field tested the WE-MEASR tool in two districts of Malawi, from May 2012 to July 2012. In May 2012, the CARE team, including CARE USA (Christina Wegs and myself) and CARE Malawi, conducted cognitive testing of the survey, adapting some questions to local contexts and ensuring correct translations of all items into Chichewa. The team also included contractors, who implemented the data

collection phase of the survey. This team had previously worked with the Malawi DHS in 2010 (NSO and ICF Macro 2011) as well as the Strategic Impact Inquiry for CARE's women's empowerment work in Malawi. Before data collection, the team reviewed the survey question by question to check the consistency and accuracy of the translations, and to identify any questions that might need to be more thoroughly tested in the cognitive testing process in the field. The cognitive testing in the field was conducted with several women in a rural area near but not in the field site in Lilongwe district, and it prioritized questions that were not part of a previously validated tool or which had raised concerns during the preliminary review. In order to validate the WE-MEASR tool, a field test was conducted with a random sample of 641 married women aged 18 to 49 in Lilongwe and Ntcheu Districts. Women were included even if their husbands lived elsewhere most or all of the time. The team selected a small number of census tracts in each of Lilongwe and Ntcheu districts; these tracts were all in rural parts of their districts and are not broadly representative of the districts as a whole. Women were selected randomly from villages according to a population-weighted sampling frame. Selection was completed by radiating at random from a center-point within the village and inquiring at houses along the line at intervals and repeating until the predetermined number of respondents for the village had been sampled.

As discussed in chapter 3, whether matrilineality should empower women or not is a contested question, and it is contested in large part because of differing perspectives on what the ethnographic record really captures. This dataset offered the possibility of testing the question empirically. I propose a hypothesis that focuses on the structural aspects of matrilineality. Of primary interest to me is the practice of matrilocality; I hypothesize that living among natal kin instead of marital kin has predictable benefits for women. There are additional social practices in matrilineality that favored women's

access to farmland and the products of their own labor. In the analyses that follow, I'll be focusing on household residence and composition, and on access to resources in addition to matrilineality in explaining women's empowerment outcomes across the subscales of the WE MEASR survey.

In order to test the associations between aspects of matrilineality and women's empowerment outcomes, I ran a regression model for each of 17 of the women's empowerment sub-scales. The process for model selection will be described in more detail in Chapter 7. Each of the 17 models was tested beginning with the same set of independent variables in the initial model. Independent variables were selected that are hypothesized to be associated with some aspect of matrilineality, as were demographic and social variables hypothesized to be associated with women's empowerment, such as education and age. Model selection for each regression was done using a backward stepwise approach. In this chapter I provide descriptive statistics for each of the variables included in the full models, and explore associations among them. I also provide descriptive statistics for each of the women's empowerment subscales.

The following independent variables were included in each model. This set of variables was chosen to test various features relating to matrilineality and associated practices among the Chewa. First, ethnicity (and by association, district) reflects presumed historical lineage practice. The Lilongwe district sample is predominantly Chewa, matrilineal by tradition, while Ntcheu district is predominantly Ngoni, a patrilineal group that first migrated into the area in the mid-to-late 19th century. Household composition reflects which kinds of kin women are living with, and we've also included whether her husband stays full-time in the household, and whether the household is

male- or female-headed. Models also include variables related to assets, as well as demographic control variables such as religion, number of children, age and so on. Model specification was done by first running the full model above, and then using backward stepwise elimination, removing variables with the least impact on the adjusted r-square or pseudo r-square at each step. Once the final main effects were selected, each pair of variables was tested independently for interaction in predicting the outcome variable. Interaction terms that were found to be significant were added to the model in a forward stepwise fashion, and those that were significant in the fully specified model were retained.

This chapter will examine matrilineality and kin residence—including natal and marital kin, as well as husband residence—as determinants of women's autonomy and empowerment outcomes. The central hypothesis of this thesis is as follows:

Matrilocality (living among her own kin) will be empowering to a woman in those dimensions of empowerment that entail community support, social cohesion, and collective action. If matrilineality is empowering to women, the mechanism is likely to be the associated practice of matrilocality, rather than the lineage practices themselves. Dimensions of women's empowerment such as social norms regarding gender, bodily integrity, and right to self-determination, are not likely to be associated with a broad practices such as matrilocality or matrilineality but they may be associated with structural or else idiosyncratic factors. In other words, cultural norms regarding women's roles and rights, both in the household and in the community, are not predicted to be dependent on post-marital residence. However, post-marital residence may well influence practical autonomy based on a number of factors.

The first question of interest is whether self-identified matrilineality empowers women in an empirical sense. An ancillary question, more difficult to determine with the data available to this study, is the extent to which self-identified matrilineality corresponds with practice of matrilineality. As described in Chapter 3, forms of matrilineality have been highly variable, and even in the current context (among the Chewa of Malawi) modern practice of matrilineality looks much different from matrilineality as it was once practiced. Indeed, the actual practice of kinship systems even during the advent of their primary enumeration and description 60 years ago, may have been very different from the idealized forms represented in ethnographies. The proportion of households opting to adopt matrilineality on a nominal basis, rather than practicing all its associated tenets, may have accelerated over the course of modernization, and certainly is difficult to discern through the question "Is your house matrilineal or patrilineal?" We will not attempt to answer this question outright, but it is clear that if matrilineality is indeed associated with outcomes, the meaning of that association will be more difficult to parse.

More germane to our central hypothesis is the question of whether women in matrilineal households are more likely to reside among stronger kinship networks than women who live in patrilineal households, and whether that results in greater empowerment outcomes on social cohesion, social capital, and social participation domains. Because in matrilineal systems in Sub-Saharan Africa, women's assets tend to be controlled by their brothers rather than their husbands, we will test the hypothesis as to whether women in matrilineal households have superior outcomes in the domains of gender norms, gender communication, household decision-making, and self-efficacy, with the prediction that they do not.

The effect of kinship residence in households will be analyzed as well, including residence with any of a woman's own relatives. Because there is a mixture of both kinds of households in each district, and each district is nearly ethnically homogenous, we will also examine the effect of living in communities dominated by other lineal patterns. We will examine interaction between district/ethnicity and lineality as well.

Independent variables

Matrilineality

There was no significant difference between the districts in the proportion of respondents reporting living in a matrilineal household.

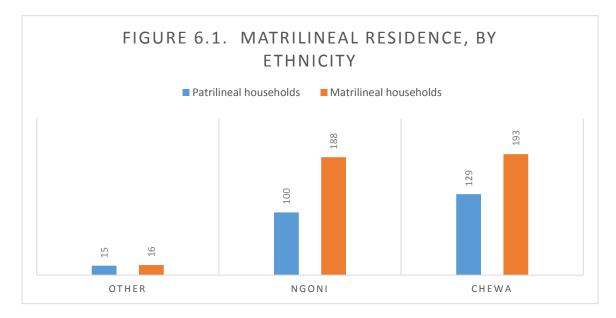
Table 6.1. Matrilineal households by district

	Patrilineal household	Matrilineal household	Total	
Lilongwe	124 (38.51%)	198 (61.49%)		322
Ntcheu	120 (37.62%)	199 (62.38%)		319
Total	244	397		641

There was also no significant difference between ethnic groups in the proportion of respondents reporting living in matrilineal households, with around 65.28% of Ngoni reporting living in matrilineal households, and 59.94% of Chewa; 51.61% of respondents who claimed some other ethnicity reported living in a matrilineal household. This finding calls into question the local meaning of the construct of lineage. Tradition would have predicted a much lower proportion of Ngoni households claiming matrilineal residence, and certainly a difference between the two primary ethnic groups.

In the cognitive testing and early field testing phases of the development of this instrument, both field staff in Malawi and the consultant group who administered the survey agreed that the local understanding of matrilineality would be fully clear to

participants. The unexpected finding here could be an indication of a shift in the adoption of inheritance practices in general, or of an overall dilution in the significance of inheritance by clan as both legal and economic shifts have come to favor direct inheritance within nuclear families (Kaarhus 2010).



Matrilocality and post-marital residence

The literature on matrilineality considers the corresponding matrilocality one of its more salient features for women's experiences. To some extent, it appears that residence patterns in the two districts have become somewhat disconnected with the concept of "matrilineality" captured by self-report (which may refer more to clan or lineage membership than residence or inheritance. For this reason, a variable was constructed to reflect kin residence of respondents. This variable was derived from a set of questions asking whether any of a group of types of relatives resided in the household. These are as follows:

Table 6.2. Distribution of family members across households

Household member	Number of women	Percent	
Father	4		1%
Mother	29		5%

Husband	553	86%
Children	623	97%
Brother	25	4%
Sister	23	4%
Mother-in-law	12	2%
Father-in-law	2	0%
Other relative	73	11%
Other non-relative	4	1%

For constructing this variable, other relatives and non-relatives were excluded from consideration. Neolocal families were coded as those that included a husband (with or without children), but excluded any other close relatives of the husband or the wife (parents of either, or siblings of the respondent); 495 households (77%) were coded as "nuclear". Matrilocal households were those that may include a husband or children, as well as any direct relative of the respondent (mother, father, brother, or sister); 58 households (9%) were coded as matrilocal. Patrilocal households were those that may include a husband or children, as well as either the mother-in-law or the father-in-law; 9 households (1%) were initially coded as patrilocal. Households that did not include any first-degree relative of the respondent other than children (i.e., no husband, parent, sibling, or parent-in-law) were coded as "autolocal"; 76 households (12%) were coded as autolocal". It should be noted here that although this variable is intended to proxy postmarital residence, it is based on household structure, and is therefore limited with respect to the larger community. In other words, some of the households that are coded as "neolocal" could actually be matrilocal, in an ethnographic sense, if the respondent is living in the community of her birth, among her maternal kin. However, although the structure of the question entails limitations, the purpose of this variable is to approximate the cultural practice of post-marital residence, and uses that terminology, for the sake of simplicity, to code households.

Table 6.3 below shows the distribution of types of relatives across the households as coded for post-marital residence.

Table 6.3. Distribution of household members across household types

Household type	Matrilocal	Patrilocal	Neolocal	Autolocal	Other
Father	4 (7%)	n/a	n/a	n/a	0 (0%)
Mother	28 (48%)	n/a	n/a	n/a	1 (33%)
Husband	47 (81%)	8 (89%)	495 (100%)	n/a	3 (100%)
Children	57 (98%)	8 (89%)	480 (97%)	75 (99%)	3 (100%)
Brother	24 (41%)	n/a	n/a	n/a	1 (33%)
Sister	21 (36%)	n/a	n/a	n/a	2 (67%)
Mother-in-law	n/a	9 (100%)	n/a	n/a	3 (100%)
Father-in-law	n/a	2 (22%)	n/a	n/a	0 (0%)
Other relative	6 (10%)	2 (22%)	61 (12%)	4 (5%)	0 (0%)
Other non- relative	0 (0%)	0 (0%)	3 (1%)	0 (0%)	1 (33%)
Total number of households	58	9	495	76	3
Percentage of sample	9%	1%	77%	12%	0%

In addition, there were three households that included relatives of both the respondent and her husband. These were characterized as follows:

Table 6.4. Characterization of unique household cases

Case	Fath.	Moth.	Husb.	Chld.	Broth.	Sist.	MIL	FIL	O.R.	O.NR.
406		•	X	X	Χ		x			X
457		Х	X	X		Χ	X			
582			Х	Х		Χ	Χ			

These households are difficult to code from a qualitative assessment alone, since all include mothers-in-law and husbands in addition to the focal woman's kin. All of these households were Chewa. Case 406 reported her household as being matrilineal, while 457 and 582 reported being patrilineal. In all three, the respondent reported that the husband was currently staying in the household. In spite of this challenge, it is expedient to combine these households with the "patrilocal" households. In cases 406 and 582, the most senior member of the household is the husband's relative. In case 457, it is unclear

whether the respondent's mother or mother-in-law would be considered most senior, but that household reports being patrilineal.

The number of patrilocal households in the sample is quite small, which will necessarily limit conclusions that can be drawn about the nature of mother-in-law influence or patrilocal residence. The small number of households that include husbands' extended family is a surprising finding in and of itself, considering the historical patrilineality of Ngoni people. However, it may be explored further in only a very limited way, considering the small sample size. Equally surprising is the very large proportion of households that are characterized by a nuclear structure. Some of these households do include residents that fall into the "other relative" category, some of whom may be brother or sister to the focal women's husbands, given the way the category responses were designed. Because the hypotheses presented here are predicated on the value of kin residence for women's empowerment (as compared to households without kin support or with influence from relations-in-law), there will be merit in comparing nuclear families in the sample with matrilocal ones. The general hypothesis underlying these comparisons is that women will be potentially more empowered, particularly in the relations domain, where they reside with maternal relatives, though not necessarily in gender attitudes and beliefs.

A further set of hypotheses regarding the relative empowerment of women living without immediate family can potentially be tested from this sample. Women who live without any immediate family member may have greater individual liberty within the household; for example, household decision-making is likely to be greater for women in these kinds of households. Indeed, only 4 of the 76 households with no immediate family included another relative or non-relative. In spite of likely intra-household freedoms for these

respondents, literature (Kennedy and Peters 1992) suggests that female-headed households may be more likely to be marginalized or vulnerable, but that this depends on woman's marriage status and on her legal status within the household (O'laughlin 1998). It is possible that no-immediate-family status will interact with socio-economic status of the respondent. Women who run their households independently and who are well-educated or relatively well-off are hypothesized to be more empowered in terms of agency and social capital, though potentially less empowered in terms of relations (given that their family resources are less extensive), while women who run their households independently but are relatively poor or poorly educated are hypothesized to be less empowered, in terms of relations and social capital. There is a significant association between self-report of matrilineality or patrilineality, and this measure of kinship residence.

Table 6.5. Post-marital residency by matrilineality

	Patrilineal	Matrilineal	Total
Patrilocal*	5 (42%)	7 (58%)	12 (100%)
Neolocal	180 (36%)	315 (64%)	495 (100%)
Autolocal	43 (57%)	33 (43%)	76 (100%)
Matrilocal	16 (28%)	42 (72%)	58 (100%)
Total	244 (38%)	397 (62%)	641 (100%)
Test Statistic	Value	Df	p-Value
Pearson Chi-Square	14.425	3	0.002
*Including househo	olds with both hu	usband's and foca	l woman's kin

While the nuclear families drove the sample mean, being such a large proportion of the study households, the matrilocal households were more likely than average to consider themselves matrilineal, while the households without extended families were more likely to consider themselves patrilineal.

Table 6.6. Post-marital residence by household headship

			_
Male-	Female-	Total	

	Headed	headed	
Patrilocal*	12 (100%)	0 (0%)	12 (100%)
Neolocal	484 (98%)	11 (2%)	495 (100%)
Autolocal	70 (92%)	6 (8%)	76 (100%)
Matrilocal	56 (97%)	2 (3%)	58 (100%)
Total	622 (97%)	19 (3%)	641 (100%)

Nearly all the women reported that their household was male-headed. A slightly higher proportion of women living with no extended family reported living in a female-headed household, but the proportion was still very small. This is a much smaller proportion of female-headedness than predicted by the DHS (29.5%, in 2010); however, unmarried women were excluded from the current sample. It is likely that even when husbands do not reside full-time at home, a woman may call her household "male-headed" because she is married. By definition, women with no extended family are those without husband, in-laws, parents, or siblings in their households. Of these 76 households, only 4 reported living with another relative, while none reported living with another non-relative. Because these categories (who lives in the household) are exhaustive, it appears that these women truly are heading their households, in spite of the low rate of self-report. This opens to question the meaning of the local conceptions of male- and femaleheaded households in these communities.

Table 6.7. Post-marital residence by husband presence

	Husband does not stay with me	Husband stays with me	Total
Patrilocal*	1 (8%)	11 (92%)	12 (100%)
Neolocal	33 (7%)	462 (93%)	495 (100%)
Autolocal	33 (43%)	43 (57%)	76 (100%)
Matrilocal	13 (22%)	45 (78%)	58 (100%)
Total	80 (12%)	561 (88%)	641 (100%)
Test Statistic	Value	Df	p-Value
Pearson Chi-Square	87.355	3	.000

Because it is fairly common for husbands to migrate for work or otherwise live away from home for all or part of the year, women were asked whether their husbands were staying with them at the time of the questionnaire. Post-marital residence was significantly associated with whether husbands were resident; both the households with no extended family and the matrilocal households were disproportionately likely to report their husbands living away, though this was still a minority of both groups. Of the 76 households omitting their husbands from the list of people currently living in the household, 43% said that he did not currently stay with them (as would be expected); however, 57% reported that their husbands were currently staying with them. This could indicate husbands who live most of the year away but were currently visiting at the time of the questionnaire, but without further exploration, the nature of these households and husband residence cannot be certain.

Post-marital residence was more strongly associated with district than with ethnicity, though both were significant (the latter could not be tested with chi-square because of small cell sizes, but the symmetric uncertainty coefficient p-value was .001); district is strongly conflated with ethnic group, however. The associations represented do not necessarily conform to expectations from traditional systems. Most of the patrilocal households are Chewa and in Lilongwe, even though Chewa are historically matrilineal while Ngoni are historically patrilineal. Matrilocal households are also proportionally more likely to be Chewa and in Lilongwe. Households with no extended family are more likely to be Ngoni and in Ntcheu district. Considering the differences between the districts in asset ownership, it is possible that post-marital residence patterns are responding to socioeconomic factors as well as historical ones. This will be explored in further modeling.

Table 6.8. Post-marital residence by district

	Lilongwe	Ntcheu	Total
Patrilocal*	10 (83%)	2 (17%)	12 (100%)
Neolocal	265 (54%)	230 (46%)	495 (100%)
Autolocal	13 (17%)	63 (83%)	76 (100%)
Matrilocal	34(59%)	24 (41%)	58 (100%)
Total	322 (50%)	319 (50%)	641 (100%)
Test Statistic	Value	p-Value	df
Pearson Chi-Square	42.414	.000	3

Table 6.9. Post-marital residence by ethnicity

	Other	Chewa	Ngoni	Total
Patrilocal*	0 (0%)	9 (75%)	3 (25%)	12 (100%)
Neolocal	22 (4%)	264 (53%)	209 (42%)	495 (100%)
Autolocal	5 (7%)	16 (21%)	55 (72%)	76 (100%)
Matrilocal	4 (7%)	33 (57%)	21 (36%)	58 (100%)
Total	31 (5%)	322 (50%)	288 (45%)	641 (100%)

Husband presence

As described above, the majority of respondents reported that their husbands were currently staying with them (561, or 87.5%). Husband presence differed significantly by district, with husbands in Ntcheu more likely to be reported as not staying with the respondent.

Table 6.10. Husband presence by district

	Ntcheu	Lilongwe	Total
Husband does not stay with her	60 (75%)	20 (25%)	80 (100%)
Husband stays with her	259 (46%)	302 (54%)	561 (100%)
Total	319 (50%)	322 (50%)	641 (100%)
Test Statistic	Value	p-Value	df
Pearson Chi-Square	23.28	.000	2

Likewise, husbands of Ngoni respondents were significantly more likely to be reported as not staying with the respondent.

Table 6.11. Husband presence by ethnicity

	Other	Chewa	Ngoni	Total
Husband does not stay with her	3 (3.8%)	21 (26.3%)	56 (70%)	80 (100%)
Husband stays with her	28 (5.0%)	301 (53.7%)	232 (41.4%)	561 (100%)
Total	31 (4.8%)	322 (50.2%)	288 (44.9%)	641 (100%)
Test Statistic	Value	p-Value	df	
Pearson Chi-Square	23.477	.000	2	

Chose husband

Whether a woman chose her husband herself was predicted to be associated with her relative empowerment, but also a potential confounder of ethnicity or religion. The majority of respondents reported having chosen their own husband; only 8 (1.25%) reported that they did not choose their own husbands. Of these, 7 were from Ntcheu district (Pearson $chi^2(1)=4.500$; p=0.034). However, having chosen her own husband was not significantly associated with either matrilineality or post-marital residence.

<u>Age</u>

The mean age of all respondents was 30.21 years, with a range from 18 to 49 (the limits defined by the study). The mean age of their husbands was 35.94 years, with a range from 19 to 68.

Given that the age limits were defined for the respondents of the study, but not for their husbands, it is impossible to interpret the difference in the range of ages; however, the difference in ages between individual respondents and their husbands is still of interest. The majority of respondents (84.82%) were within 10 years of their husbands, and there

was no significant difference between matrilineal and patrilineal houses in the proportion of respondents ten or more years younger than their husbands. There was no significant difference between the two districts in the mean ages of respondents. Both age and husband's age, though utilized as continuous variables in linear regressions, were categorized for use in logistic regressions, as follows:

Table 6.12. Categorized age of husbands and respondents

		<i>y</i> ,	•		
Age	Freq.	Percent	Husband's age	Freq.	Percent
18-24	180	28.08	19-30	217	34.01
25-34	284	44.31	31-40	257	40.28
35-44	132	20.59	41-50	117	18.34
45-49	45	7.02	51-68	47	7.37

Female-headship

The majority of households were listed as being headed men (622, or 97%). This differs from the national averages from the Malawi 2010 DHS, which found a rate of 20.7% female headship in urban areas, and 29.5% in rural areas.

Table 6.13. Post-marital residence by household headship

	•		•
	Male- headed	Female- headed	Total
Patrilocal*	12 (100%)	0 (0.0%)	12 (100%)
Neolocal	484 (97.8%)	11 (2.2%)	495 (100%)
Autolocal	70 (92.1%)	6 (7.9%)	76 (100%)
Matrilocal	56 (96.6%)	2 (3.4%)	58 (100%)
Total	622 (97.0%)	19 (3.0%)	641 (100%)
Test Statistic	Value	p-Value	df
Pearson Chi-Square	7.78	.051	3

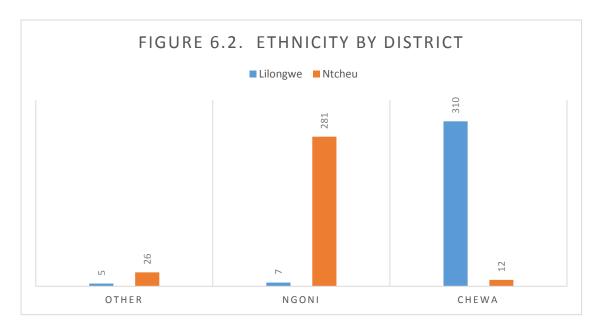
Female headship was not associated with matrilineality, but it was marginally associated with post-marital residence, with the greatest proportion among those households without husbands or other relatives. Predictably, there was a strong association between female-headedness and whether a respondent said her husband was staying with her right now.

Table 6.14. Husband presence by household headship

	Male-	Female-	Total
	headed	headed	
Husband does not stay with her	70 (11.3%)	10 (52.6%)	80 (12.5%)
Husband does stay with her	552 (88.7%)	9 (47.4%)	561 (87.5%)
Total	622 (97.0%)	19 (3.0%)	641 (100%)
Pearson	chi ² (1) =	28.8987	p = 0.000

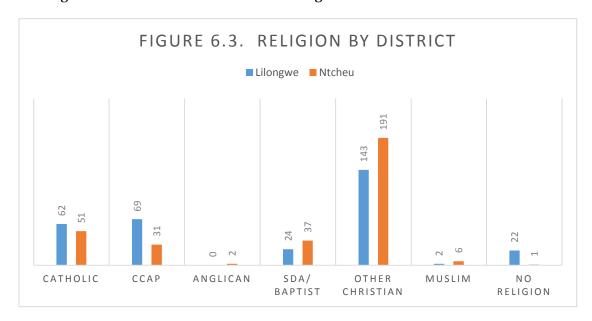
Ethnicity

Each district had a strong ethnic majority; of the 322 respondents from Lilongwe, 310 (96.27%) self-reported as Chewa, while of the 319 respondents in Ntcheu, 281 (88.09%) self-reported as Ngoni. The other ethnicities represented included Tumbuka, Yao, Mang'anja, Lomwe, and Tonga.



Religion

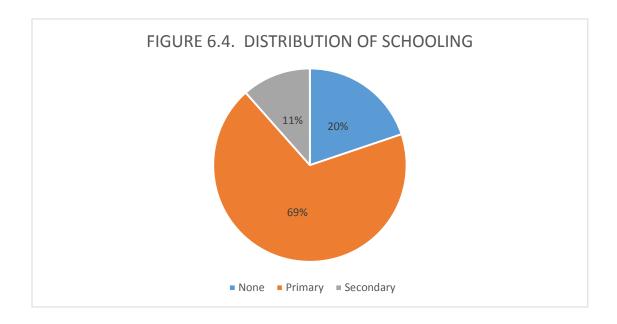
There were no observable differences between the districts in representation by religion. Of 640 total respondents, 95.2% reported that they practiced some kind of Christianity (though mostly categorized as "other"). This reflects a lower proportion of Muslims in this sample than the national average of 13%, and a higher proportion of those claiming no religious affiliation than the national average of 0.8%.



For the purpose of analysis, some of these categories were collapsed. Those claiming "no religion" were taken as the reference group, with additional categories of "Catholic", "CCAP", and "other". The Catholic Church and CCAP are kept as separate categories because they are active in providing community support and it is predicted that access to help from community members and groups will be associated with religious affiliation. Unfortunately, the strong majority of respondents fall into the ambiguous category of "other Christian".

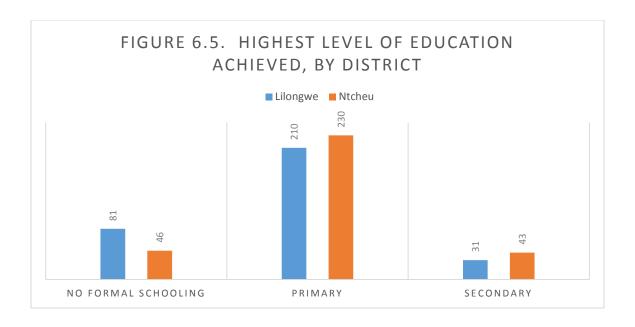
Education

The majority of respondents had completed primary schooling, but not secondary.



Level of education differed significantly between the districts (p=.002). This was driven primarily by the proportion of women who had never attended school; 25.16% in Lilongwe, and 14.42% in Ntcheu. Only 9.63% of Lilongwe respondents had attended secondary school, while 13.48% of Ntcheu respondents had.

It should be noted that these percentages exceed the national averages observed in the 201 DHS, which estimated a maximum age-stratified primary completion rate of 14%, and a maximum age-stratified secondary completion rate of 8.7%. Unlike the present survey, the DHS separates respondents with some primary education from those who had completed, and likewise for secondary. The current survey does not do so, but it is possible that respondents with only some primary education responded that it was the highest level of education they had completed.

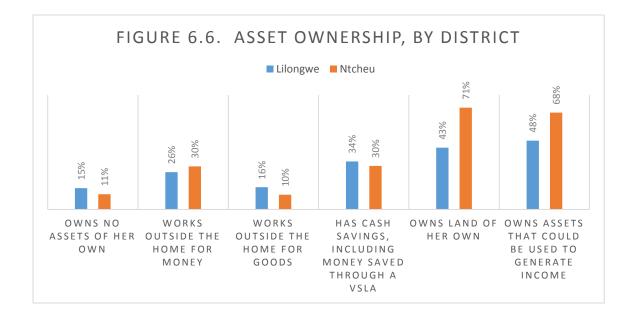


<u>SES</u>

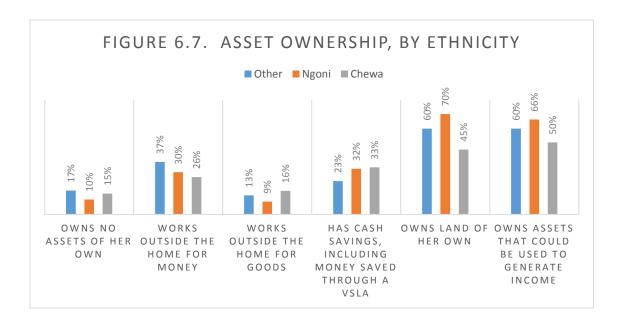
A scale reflecting respondent's control of personal assets was constructed using the following questions: whether a woman worked outside the home for money; worked outside the home for goods; had cash savings of her own (including those held through a Village Savings and Loan Association, or VSLA); owned land of her own; or owned assets that could be used to generate income. The maximum score for this scale was 5. The degree of personal asset ownership differed significantly by district (Kruskal Wallace, p = .000); Women in Lilongwe had fewer assets, on average, than respondents in Ntcheu. The difference appeared to be driven strongly by possession of land, and of incomegenerating assets.

Table 6.15. Personal asset ownership by district

	0	1	2	3	4	5	Total
Lilongwe	48	93	114	55	10	2	322
Ntcheu	34	55	123	69	29	9	319
Total	82	148	237	124	39	11	641



Personal asset ownership is significantly associated with ethnicity as well (Kruskal Wallace, p=.001), as expected given the ethnic distribution across districts. It is unclear whether asset ownership in higher among the Ngoni because of cultural factors, or whether it is higher in Ntcheu because of the resources of the district.



In addition to control of personal assets, household-level possession of goods was assessed and broken into quintiles, as follows:

Table 6.16. Distribution of household wealth

Household wealth	Freq.	Percent
0 to 3	208	32.45
4	125	19.5
5	105	16.38
6	93	14.51
7 to 11	110	17.16

Two additional measures of household resources were included in the full models: agricultural landholdings, and livestock. These are included independently, rather than as part of an aggregate measure of household wealth, because both landholdings and livestock present household work needs with a gendered division of labor with potential associated costs. Agricultural landholdings were converted to acres. In linear regressions, acreage was included as a continuous variable, with a range from 0 to 35 acres and a mean of 1.87. In logistic regressions, acreage was converted to a categorical variable as follows:

Table 6.17. Agricultural landholdings by range

Freq.	Percent
67	10.45
220	34.32
199	31.05
73	11.39
35	5.46
47	7.33
	67 220 199 73 35

The proportion of households that reported owning no land was similar to the national average for rural households (as measured in the DHS) of 12.6%. However, it did differ significantly between the districts (p=.001) but the difference seemed to be driven by a larger portion of women in Lilongwe with land, but less than one acre of it, and a larger

proportion of women in Ntcheu with between 1 and 2 acres of land. The proportions of women with no land, or with larger acreages were similar between the districts.

Livestock was coded as follows:

Table 6.18. Livestock ownership

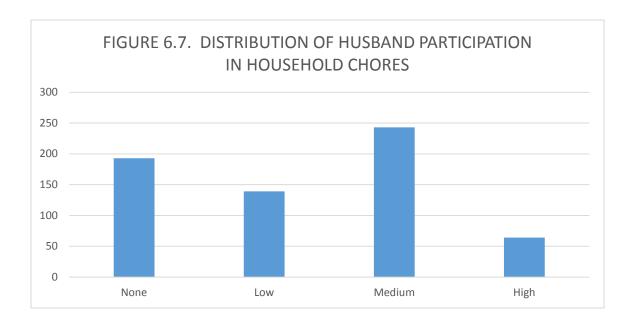
	Freq.	Percent
No livestock	112	17.47
Small livestock but not large	182	28.39
Large livestock but not small	60	9.36
Both large and small livestock	287	44.77

More households in this survey reported owning livestock than in the DHS, which combines large and small livestock. In that survey, 33.6% of rural households did not own livestock by their definition. Neither livestock nor agriculture was significantly associated with either matrilineality or post-marital residence.

Husband participation

Husband's participation in household chores was assessed with three questions, in the form: "In the past week, did your husband: help with the cooking? Help with looking after the children? Help with the household chores? Never, Almost never, Sometimes, or Often?"

These three questions were summed to a score with a range from three to 12, and then categorized. A score of three indicated that a respondent had indicated "never" across all three questions; these respondents were scored as having no help from their husbands. Respondents with a score of four to six were scored as having low help from husbands, those with a score from seven to nine were scored as having medium help from husbands, and those with a score of 10 to 12 were scored as having high help from husbands.



Husband participation was associated (p=.04) with both matrilineality and post-marital residence, with matrilineal households more likely to report no or low husband help, and household with maternal relatives or without extended family much more likely to report no or low husband help, and neolocal households much more likely to report medium or high husband help.

Childbirth history

Both the number of living children and the number of children who died before the age of 1 year were included as independent variables in the final models. The number of children was categorized as follows:

Table 6.19. Number of children

	Freq.	Percent
1 to 2	223	35.51
3 to 4	240	38.22
5 or more	165	26.27

The number of children who had died before age one were categorized as follows:

Table 6.20. Number of children who died before age one

	Freq.	Percent
0 to 1		15.76
2 to 4		58.03
5 or more	168	26.21

Women's empowerment domains

The (WE-MEASR) evaluation, described in greater detail in Chapter 4, comprises three women's empowerment domains: agency, social capital, and relations, with several subdomains and sub-scales. In total, the tool includes 27 separate subscales. All sub-scales were coded such that the highest possible score represents the most empowered possible score. The results for all subscales are provided below. See Appendix 3 for responses to question within each sub-scale.

Agency

The domain of "agency" has two sub-domains: Gender Attitudes and Beliefs, and Self-efficacy.

Gender attitudes and beliefs

Gender Attitudes and Beliefs include tolerance of intimate partner violence, belief in women's right to refuse sex, acceptance of male dominance, and belief in women's health rights.

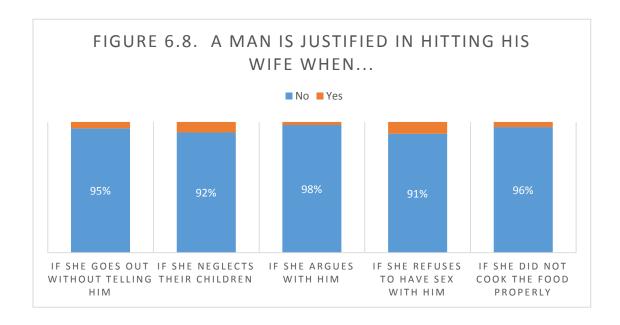
Table 6.21. Gender attitudes and beliefs subscales

	Items	N	Alpha	Min	Mean	Max	SD
Tolerance of intimate partner violence	5	641	0.70	0.00	0.28	5.00	0.77
Right to refuse sex	3	641	0.59	0.00	2.131	3	.985
Acceptance of male	7	641	0.70	7.00	24.20	35.00	5.88

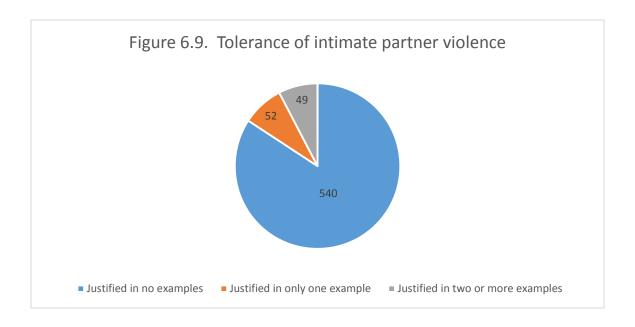
dominance							
Health rights	2	641	0.71	2.00	5.82	10.00	2.74

Tolerance of intimate partner violence:

The "Tolerance of intimate partner violence" sub-scale consists of five questions inquiring for a variety of situations whether a respondent thinks a man is justified in hitting his wife. Response options are "yes" and "no", resulting in a scale from 0 to 5. The scale is inverted, such that a score of 0 represents complete tolerance of intimate partner violence, while a score of 5 represents complete intolerance of intimate partner violence.



Of 641 respondents, 540 felt that in none of the five examples was it justified for a man to beat his wife (84.24% of respondents). The responses did not vary greatly across items; for each item, over 90% of respondents felt it was not justified for a man to beat his wife in the given examples. This reflects an almost universal rejection of social justification for intimate-partner violence among respondents.



Right to refuse sex:

The scale "Right to Refuse Sex" is a cumulative variable with a possible range from 0 to 3. Women were asked to respond yes or no to questions regarding whether it was acceptable for a woman to refuse sex in a variety of different circumstances (if he has a sexually transmitted disease, if she knows he has sex with other women, and if she has recently given birth). The mean score on this scale was 2.131.

Acceptance of male dominance:

The scale "gender equitable attitudes" comprises responses on a five-point Likert scale. The minimum possible score is 7, and the maximum is 35. A majority of women disagreed or strongly disagreed with most of the inequitable statements in the sub-scale. Only in two of the cases did a majority of women respond in the affirmative: whether a woman should tolerate intimate partner violence to keep the family together did a majority (56.9%) and whether it is better to have more sons than daughters in a family

(52.4%). The former, in particular, is interesting in contrast to the very low proportions of women assenting that intimate partner violence is justified. However, feeling that such violence is unjustified does not preclude a woman from determining that it should be tolerated.

Health rights:

The scale measuring health rights is the cumulative score of two questions with responses on a five-point Likert scale, asking how much women agree with the statements "A woman can go to the health clinic by herself without asking her husband's permission" and "A woman can use family planning without asking her husband's permission." Responses to both questions were bimodal, indicating that women were generally split in their agreement of the statements, but in general few were undecided.

Self-efficacy

This sub-domain comprises nine sub-scales, each representing women's self-efficacy in a particular circumstance relating to health, rights, bodily integrity, or participation.

Responses for all questions are on a Likert scale from 1 to 5, framed as "Not at all sure" to "Completely sure" to accord with the structure of the questions in these sub-scales, each of which begins with, "How sure are you that you could..."

Table 6.22. Self-efficacy sub-scales

	Items	N	Alpha	Min	Mean	Max	SD
Family planning	4	640	0.60	4.00	17.21	20.00	2.93
Refuse sex	5	641	0.78	5.00	13.82	25.00	5.87
Go to the health facility	5	641	0.70	5.00	21.37	25.00	3.75
Attend community meetings	7	641	0.74	4.00	15.16	20.00	3.86
Speak out at community meanings	3	641	0.74	3.00	10.05	15.00	3.64
Nutrition/variety of foods	2	641	0.71	2.00	7.31	10.00	2.48
Breastfeeding	4	641	0.86	4.00	17.41	20.00	3.66
Child care	4	641	0.67	4.00	17.32	20.00	2.96

Husband participation 4 641 0.80 4.00 15.03 20.00 4.34 in household chores

Self-efficacy to use family planning

The large majority of women (94.9%) felt somewhat or completely sure they could broach the topic of family planning with their husbands, as well as express an interest in using family planning (93.3%) and use it. A smaller majority (63.5%) felt sure or completely sure that they could use family planning even if their husband's did not want them to.

Self-efficacy to refuse sex

The results did not differ much across specific situations in which a woman might refuse to have sex. In general, women were more like to feel completely or somewhat unsure that they could refuse to have sex.

Self-efficacy to go to the health facility

The questions pertaining to the self-efficacy to go to the health facility examined a variety of potential barriers. The large majority of women felt somewhat or very sure that they could go to the health facility under all the circumstances presented. The one deterrent that women seemed more ambivalent about was the situation in which they would be treated badly at the health facility; even in this case, the majority of women still felt sure or completely sure that they could go even under this circumstance, but the proportion was smaller relative to the other circumstances in which more women felt they could go to the health facility.

Self-efficacy to attend community meetings

Most women were sure or completely sure that they could attend a community meeting. Self-efficacy decreased as barriers escalated, as predicted, but remained high across most of the potential barriers.

Self-efficacy to speak out at community meetings

Self-efficacy to speak out at a community meeting was less consistent. Smaller majorities of women were sure or completely sure that they could speak out at a community meeting. The proportion fell sharply with the proportion of people hypothetically disagreeing with them.

Self-efficacy to feed a variety of foods

Self-efficacy to eat a variety of food deals specifically with whether women's food needs are deprioritized in the family or not. A majority of women felt sure or completely sure they could get enough to eat, especially when they are pregnant or breastfeeding.

Self-efficacy to breastfeed

Self-efficacy to breastfeed deals in particular with a woman's confidence that she can maintain control of what her infant eats, as well as her confidence that she will get the support she needs to breastfeed exclusively. Studies have found that early introduction of food to infants' diets is fairly common, and that older women in the household are frequently responsible (Kerr, Berti, and Chirwa 2007; Bezner Kerr et al. 2008). Grandmothers may introduce herbal teas, and both grandmothers and mothers introduce porridge. However, in this sample, a strong majority of women felt sure or completely sure that they could exclusively breastfeed under each of the conditions queried. Of these conditions, a lack of help with household duties was most likely to reduce women's confidence that they could breastfeed exclusively.

Self-efficacy to get assistance with child-care

Strong majorities of women felt sure or completely sure that they could get help with child-care under a variety of circumstances. They were least confident in the case of visiting friends and family, but even in this case, few women were unsure they could get help with child-care.

Self-efficacy to get husband to participate in chores

Women were slightly less sure that they could get help from their husbands with household chores, but still generally confident that they could, with a mean score of 15.03 on a scale from 4 to 20.

Social capital

Social capital includes several domains documenting a woman's access to resources, her integration within her community, and her access to social support in times of crisis and to take collective action. It also includes her access to assistance from community members and groups.

Access to and control over productive resources

Women's control over personal assets was assessed separately from household socioeconomic status. The measures below index a woman's financial independence. Women on average had two sources of financial independent; mostly commonly, these were agricultural land and an income-generating asset of some kind. The latter could include animals, or tools to allow value-addition to crops or animal products.

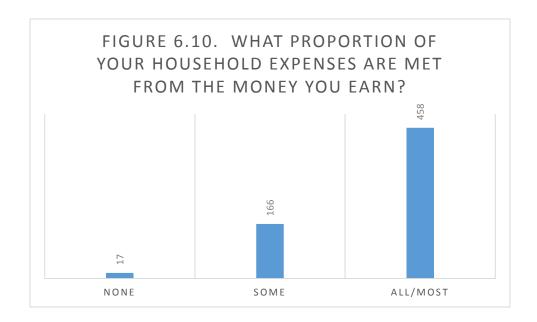
As sources of income, agricultural land can be less fungible than opportunities that provide more liquid resources, such as work for goods or pay. Agricultural land and animals both require a certain kind of labor to produce income from, and in Malawi this

entails a gendered division of labor. In these cases, a woman's post-marital residence will influence what labor resources are available to her. Livestock, for example, are seen as a form of "savings" and can produce income for a woman, but tending to livestock is typically the work of men, particularly of boys. A woman with sons can earn more money from large livestock than a woman without. A woman who owns smaller livestock, such as poultry or small animals, can tend to them herself. VSLAs are slightly different, in that they are not necessarily set up to provide a return on every woman's investment (to grow her income), but rather as a safe vehicle for saving money. Having savings certainly offers a form of security for a woman, and the potential to invest.

Table 6.23. Access to and control of productive resources sub-scales

	Items	N	Alpha	Min	Mean	Max	SD
Ownership of household	5	641	n/a	0.00	1.88	5.00	1.15
assets/resources							

Somewhat surprisingly, the majority of women reported that all or most of the household expenses are met from the money they earn. Because women are responsible for household expenses, it means that they occupy a critical position within the household. It also means that they bear the greatest burden for expenses related to childcare.



Social cohesion

Social cohesion examines a respondent's integration into her community. The scale has a range from 10 to 50, based on ten items with Likert responses from

Table 6.24. Social cohesion sub-scale

	Items	N	Alpha	Min	Mean	Max	SD
Social cohesion	10	641	0.80	10.00	36.32	50.00	7.68

Community support in times of crisis

Table 6.25. Community support in times of crisis sub-scales

	Items	N	Alpha	Min	Mean	Max	SD
When pregnant and bleeding	4	641	0.80	4.00	15.03	20.00	4.48
If beaten by husband	5	641	0.80	5.00	19.72	25.00	4.75
Difficulty breastfeeding	4	641	0.84	4.00	14.63	20.00	4.79
No food	4	641	0.76	4.00	13.52	20.00	4.50

Community support if pregnant and bleeding

The strong majority of women were somewhat or completely sure that they would have support in all of the situations described relative to being pregnant and bleeding, even for the more difficult or costly support of taking her to the hospital or lending her money. The situation explained here is a serious medical problem, so it is unclear whether respondents would have the same response to less acute medical needs.

Community support if her husband has been her

Again, the majority of respondents felt sure or completely sure that they would have support in the even that their husband had beaten them severely. The least certain form of aid was whether someone would shelter them, but even in this case 68.3% of respondents said that there was someone in their community they could go to for shelter.

Community support if she has difficulty breastfeeding

Women were very sure that they could go to someone in their community for assistance or advice if they were having difficulty with breastfeeding.

Community support when there is not enough food

A strong majority of women felt somewhat or completely sure that they would have community support when they didn't have enough food, though the majorities were weaker than for other kinds of hypothetical support. Fewer women were sure about being connected with child feeding programs than about other kinds of support, at around 50.1% (compared to 40.1% who were somewhat unsure or not at all sure).

Collective efficacy

Table 6.25. Collective efficacy sub-scale

	Items	N	Alpha	Min	Mean	Max	SD
Collective efficacy	4	641	0.76	4.00	14.93	20.00	4.07

A strong majority of women were somewhat or completely sure that women in their community could achieve the improvements listed.

Participation in community and help from community

Table 6.26. Participation in community and help from community sub-scales

•		•	•	•			
	Items	N	Alpha	Min	Mean	Max	SD
Participation in community groups	1	641	n/a	0.00	1.62	7.00	1.45
Help from community groups	1	641	n/a	0.00	0.97	6.00	1.27
Help from community members	1	641	n/a	0.00	2.59	7.00	1.79

A majority of women reported being active in a church or religious group, while a portion of women reported being active in an agricultural collective (21.4%), a credit group or VSLA (29.5%), or a women's group (27.1%). For other kinds of groups, only a small proportion reported being active in them. Smaller proportions of women reported receiving help from the different kinds of community groups than reported actively participating them, but the types of groups they received assistance from aligned with those they were participating in. Majorities of women received help from family, friends, and neighbors, while minorities reported receiving help from community, church, or political leaders, and very few from people from community organizations.

Participation in collective action

Table 6.27. Participation in collective action sub-scale

	Items	N	Alpha	Min	Mean	Max	SD
Participation in	5	641	0.59	0.00	1.79	5.00	1.32
collective action							

While majorities of respondents reported having joined with the community or with people from other communities to address a problem or seek action, but minorities reported speaking out about a problem affecting someone else, talking with local authorities about problems in the community, or attending a demonstration.

Relations

Table 6.27. Relations sub-scales

	Items	N	Alpha	Min	Mean	Max	SD
Participation in household decision- making	15	641	0.79	15	24.047	30	3.553
Interspousal communication	5	641	0.77	5	17.886	25	4.555
Female mobility	8	641	0.59	13	23.504	24	1.275

Participation in household decision-making

There was variation across the kinds of household decisions in terms of whether women did or did not have a role in making the decision. A majority of women helped to make decisions about whether they would work, how they can use their money, and disposition of small assets and daily purchases, as well as regarding social visits. About half of women helped make decisions about their healthcare. Minorities of women reported having an influence on decisions about when she would have sex with her husband, making large household purchases, and disposition of large assets. Majorities of women had full autonomy in what to wear, who to spend time with, and how to spend to time, without. In general, women have decision-making power over smaller and quotidian household matters, and regarding choices for themselves, while having less influence in larger economic matters within the household. An obvious exception to this pattern is the decision about when to have sex.

Interspousal communication

Communication between spouses was in general good, with majorities of women reporting that they discuss all items often, sometimes, or always. A minority of women reported never or seldom discussing all items. This minority was larger, however, for discussing the related issues of when to have to have children and whether to use family planning. The latter was significantly associated with both current use of family planning (p=.027) and ever-use of family planning (p=.000)—women who were not using family planning and women who had never used family planning were more likely to report never having discussed it with their husbands.

Female mobility

Women reported a near universal ability to move within the community without being accompanied. These majorities were slightly less strong (though still resounding) in the case of going outside the village or going to training courses.

Associations between matrilocality and women's empowerment outcomes

To test for associations between the primary independent variable of interest, post-marital residence, and the primary dependent variable of interest, the WE subscales, a series of ANOVA tests were run, followed by pairwise comparisons between the major household types. Subscales that are significantly associated with household type were used as the basis for building multivariate models including potential confounders and covariates, as well as interactions. Of the 28 subscales testing different dimensions of women's empowerment, 17 of them were significantly associated with household type.

Subscales not significantly associated with post-marital residence include intolerance of intimate partner violence and female mobility, which displayed very little variation in

outcome, participation in community groups, right to refuse sex, control of personal assets, contribution to the household, self-efficacy to attend community meetings or speak out at them, self-efficacy to refuse sex, social cohesion, and interspousal communication. As will be seen in the next chapter, although women living without extended family reported higher means on the majority of these scales, controlling for other factors moderates the associations considerably.

Summary

In general, the results here reflect women who have strong community support integration, and strong self-efficacy, with influence in their homes and the means for relative economic independence, with potential for autonomy. However, it also reflects mixed attitudes and beliefs about gender, with curtailed physical autonomy, in terms both of health rights and decision-making, and in terms of the right to refuse sex. Moreover, there was potentially important variation across respondents in most of the domains, although a small number of them reflect nearly universal agreement in belief and practice (such as the widespread rejection of justification of intimate partner violence, and clear ability of women to access spaces in their community and to exercise autonomy in their movement).

Women in the project areas seem to resemble other areas of Malawi in terms of demographic factors. Some key differences related to post-marital residence were observed, likely because the current sample excludes women who were not married at the time of the survey. This likely explains the lower prevalence of female-headed households in the sample, for example.

Preliminary analyses

Preliminary analyses revealed some surprising findings. First, the proportion of households that followed a neolocal structure was surprising for rural Malawi. Even in these rural districts, a significant number of respondents indicated that only her husband and her children (and in a small number of cases, some other relatives or non-relatives as well) lived in the household with her. Without follow-up investigation, it is impossible to fully contextualize this finding. For example, women could be living in autonomous households within larger homesteads comprising relatives of either the husband, the respondent, or both, and these factors cannot be examined from the given data. Further, many women did not include their husbands in the list of people living within their household, and further did not include any other relatives. Some of these relatives reported that their husbands were currently staying with them at the time of the study. These households are assumed to be ones in which the husbands are primarily working elsewhere, which is a relatively common phenomenon in rural Malawi, and one with long historical roots (especially in matrilineal household, as described by Audrey Richards (in Radcliffe-Brown et al. 1987).

Chapter 7: Association between matrilineal residence/community and women's empowerment across the domains

Of the 27 sub-scales assessing women's empowerment, 17 differed significantly by household type in ANOVA models including Tukey's paired comparisons (see Annex X). These sub-scales were selected for further multivariate regression to examine relationships among a host of independent variables. For each scale, a regression was selected to correspond with the distribution of responses; regressions selected include linear, logistic, and ordered logistic regressions. Additional independent variables were selected as: those that reflect additional facets of household residence and the respondent's relationship with her husband and family; those that reflect the socioeconomic status of the woman and of her household; demographic characteristics; and number of living children.

Overall, the full model for each women's empowerment sub-scale includes the following: whether the household is matrilineal or patrilineal; post-marital residence; whether her husband currently stays at home; whether she chose her husband herself or someone else chose for her; ethnicity; district; religion; age; husband's age; education level; household ownership of agricultural land; household ownership of livestock; personal assets; and number of living children; and whether she has had a child die in the first year of life. Model selection was done using a backwards step-wise process, removing at each step the variable that had the least impact on the adjusted r² or pseudo r² value.

This was repeated until only significant variables remained, or else the removal of the final variable or variables had a large impact on the adjusted r^2 or pseudo r^2 .

Among these variables, interaction was tested independently, pairwise, for significant prediction of the dependent variable. Significant interaction terms were tested with the full model; those that remained significant were retained. According to circumstances, interaction terms were adjusted (centered, or included as simple product terms) in response to issues such as multi-collinearity of interactions with main effects and small cell sizes of dummy variables. For more details on selection of regressions, selection of cut-points, and model specification, see Annex X.

Results:

Gender Attitudes and Behaviors: Rejection of male dominance

Based on its distribution, linear regression was selected for the subscale "Rejection of male dominance". Matrilocality was negatively associated with rejection of male dominance relative to neolocality. Having a husband staying at home was also negatively associated. Education at both levels was negatively associated with rejection of male dominance beliefs. Among the challenges in this model was significant interaction between district and ethnicity, which correlate strongly, district and the possession of household goods, and interaction between education and post-marital residence. When district is included independently, it is significant at the p<.05 level, but its significance disappears when the interaction terms are included. This is one of the few models in which ethnicity is retained alongside district. Women in wealthier households were less likely to reject belief in male dominance. Altogether, the model explained considerable variation in rejection of male dominance, with an adjusted r-squared of .172.

Table 7.1. Model results, rejection of male dominance

Prob>F 0.000 95% LCL (ref) -3.636 (ref) -5.152 -6.340	R-squared 0.200 95% UCL (ref) 1.295 (ref) 9.878 0.785 -1.697	Adj. R-squared 0.172 P (ref) 0.352 (ref) 0.537 0.126 0.003
95% LCL (ref) -3.636 (ref) -5.152 -6.340	95% UCL (ref) 1.295 (ref) 9.878 0.785	(ref) 0.352 (ref) 0.537 0.126
(ref) -3.636 (ref) -5.152 -6.340	(ref) 1.295 (ref) 9.878 0.785	(ref) 0.352 (ref) 0.537 0.126
-3.636 (ref) -5.152 -6.340	1.295 (ref) 9.878 0.785	0.352 (ref) 0.537 0.126
-3.636 (ref) -5.152 -6.340	1.295 (ref) 9.878 0.785	0.352 (ref) 0.537 0.126
-3.636 (ref) -5.152 -6.340	1.295 (ref) 9.878 0.785	0.352 (ref) 0.537 0.126
-5.152 -6.340	9.878 0.785	0.537 0.126
-5.152 -6.340	9.878 0.785	0.537 0.126
-6.340	0.785	0.126
0.420	-1.697	0.003
-8.429		
(ref)	(ref)	(ref)
-4.961	0.151	0.065
(ref)	(ref)	(ref)
-3.558	-0.601	0.006
(ref)	(ref)	(ref)
-3.360	-0.851	0.001
-7.097	-3.170	0.000
	(ref)	(ref)
(ref)	8.725	0.000
(ref) 2.531	9.178	0.001
	0.878	0.057
2.531		0.006
	2.433	2.433 9.178

Household goods***
Items in red are negative
associations
*p<.05

**p<.01
***p<.001

-0.370	-0.578	-0.161	0.001

Gender Attitudes and Beliefs: Health Rights

Logistic regression was selected to model a binarized transformation of the subscale "health rights", resulting in the model below. There was significant interaction between religion and post-marital residence, and between livestock and post-marital residence. When this interaction was controlled for, the main effect of religion was no longer significant. In general, this model only weakly predicted attitudes about health rights. Controlling for other factors, living in an autolocal household was positively associated with belief in women's health rights. Among women of all post-marital residence types, having a husband who was staying with her at the time was also positively associated with outcomes. Having a helpful husband was also associated with belief in women's health rights. The reason for this associated is less clear, although it may be that reduced labor burden enhances a belief in the right to take the time to go to the facility. Postmarital residence interacted with religion, which may have to do with the question regarding freedom to use family planning.

Household socio-economic markers were clearly associated with health rights, suggesting that economic autonomy may be related to autonomy in health decision-making. Having livestock was associated with health rights, in what appeared to be a dose effect, although only the categories including small livestock were significant. One explanation for the significance of small livestock is that although they are less valuable

than large livestock, women reported less control over decisions relating to large assets such as large livestock. Small animals, on the other hand, such as chickens, are generally the domain of women, and represent a source of financial security and of incomegeneration for women. Household goods were associated, but only at the level of the second quintile. This may reflect a threshold effect in household wealth. Finally, having had children die before the age of one was associated with belief in women's health rights; it is possible that women with greater exposure to the health system as a result of complicated births or having ill children, they may develop more familiarity with the health system.

Table 7.2. Model results for belief in women's health rights

	Log likelihood	N	Prob > chi2	Pseudo R2
	-388.861	639.000	0.000	0.069
	OR	95% LCL	95% UCL	Р
Post-marital residence				
Neolocal	(ref)	(ref)	(ref)	(ref)
Patrilocal	2.115	0.531	8.419	0.288
Autolocal*	4.045	0.999	16.372	0.050
Matrilocal	6.090	0.838	44.278	0.074
Husband residence				
Husband does not stay with her	(ref)	(ref)	(ref)	(ref)
Husband stays with her*	2.071	1.130	3.794	0.018
Religion				
No religion	(ref)	(ref)	(ref)	(ref)
Catholic	0.576	0.219	1.518	0.265
CCAP	0.409	0.152	1.103	0.077
Other	0.703	0.285	1.734	0.445
Livestock				
No livestock	(ref)	(ref)	(ref)	(ref)

Small livestock only*	1.870	1.056	3.312	0.032
Large livestock only	1.997	0.950	4.198	0.068
Both small and large livestock*	2.176	1.182	4.004	0.012
Husband's participation				
None	(ref)	(ref)	(ref)	(ref)
Low	0.703	0.431	1.147	0.158
Medium*	0.635	0.412	0.979	0.040
High***	0.365	0.181	0.736	0.005
Children who have died before				
age 1				
0 to 1	(ref)	(ref)	(ref)	(ref)
2 to 4**	1.990	1.176	3.366	0.010
5 or more**	2.154	1.198	3.872	0.010
Household goods (quintile)				
1	(ref)	(ref)	(ref)	(ref)
2*	1.675	1.028	2.729	0.038
3	1.014	0.594	1.730	0.960
4	1.389	0.807	2.390	0.235
5	1.115	0.648	1.919	0.693
Personal assets				
0	(ref)	(ref)	(ref)	(ref)
1	1.281	0.706	2.324	0.415
2	0.734	0.414	1.303	0.291
3	1.415	0.761	2.630	0.272
4	1.367	0.593	3.153	0.463
5	0.456	0.088	2.372	0.351
Items in red are negative				
associations				
*p<.05				
**p<.01				
***p<.001				

Self-efficacy to go to the health facility

Self-efficacy to go to the health facility could index both access to the clinic, which would include distance, affordability, and respectful care, as well as agency, which might related to support from family to go, or cultural sanction for women seeking care.

Logistic regression was selected for a binarized transformation of self-efficacy to go to the clinic, in which the majority (71.6%) with relatively high self-efficacy (range from 21 to 25, with a mean of 23.3) were separated from the minority (28.4%) with much more constrained self-efficacy (range from 5 to 20, with a mean of 16.6).

District was strongly associated with self-efficacy to go to the facility; in Ntcheu, 78.7% of respondents had high self-efficacy to go to the clinic, compared with 64.6% of respondents in Lilongwe. Indeed, there was a strong association between district and having been to the clinic seeking care within the last 12 months. In Ntcheu, 81.8% of respondents had been to a clinic, while 64.0% of respondents in Lilongwe had. Distance from the clinic, as reported by respondents, was actually greater in Ntcheu district, at a mean distance of 5.8 km, than in Lilongwe, at a distance of 5.1 km (p=.0215). Residents of Lilongwe were also more likely to report that they had been treated "very well" at the clinic at their last visit (p=.000). Yet, there was no difference between the districts in the measure of health rights (assenting that a woman can go to the clinic without permission). Having ruled out some of these potential mediators of agency and access, it is unclear what may be causing this difference. There may be a practical or religious barrier to care that is not reflected in the current data set.

Post-marital residence was strongly associated with the self-efficacy to go to a health facility, with matrilocal households and autolocal households were significantly more likely than neolocal households to have a high self-efficacy to go to the health facility.

Conversely, matrilineal households were less likely than patrilineal ones to have self-efficacy to go to the health-facility. Having a husband staying with her also resulted in a negative self-efficacy to go to the health-facility. Personal assets and agricultural land were both significant in the model, but the results were a bit ambiguous. With respect to personal assets, having one, two, or three resulted in greater self-efficacy to the facility (only one and two were significant) but the effect became negative, though non-significant, at four and five. Because these assets are things including work for income, land of her own, or the means to earn an income, they are also things that require labor to maintain and earn a profit from. It could well be that in this case, the optimal number of assets is not necessarily the most possible according to this measure. Agricultural land was only significant at the level of above 4 acres for the household, though at that level it was strongly positively associated with self-efficacy to go to the facility.

Having high husband participation was also significantly associated with self-efficacy to go to the health facility. In so far as a woman's ability to travel is constrained by her household responsibilities, then having a husband willing to take on responsibilities around the house may free a woman to take the time to go to the facility. Also, having a large number of children who had died before age one was strongly associated; it may well be that having a large number of child deaths induced more time at the clinic, which in turn instilled a high self-efficacy to go.

Livestock was included although it was not significant because its removal had a large effect on the model. Having chosen her husband herself was significant in the model without interaction, but after controlling for strong interaction with her husband staying with her, it was no longer significant. Because the number of women who did not choose

their husbands themselves was very low, small cell sizes are in some cases problematic and make interpretation difficult, especially when interaction is involved.

In sum, the factors that seemed most likely to promote high-self-efficacy to go to the health facility were related primarily to the household and its structure. District was also strongly associated, although the reason is less clear and may have to do with a factor relating to the health system at the district level that was not illuminated with the current survey.

Table 7.3. Self-efficacy to go to health facility

	Log likelihood	N	Prob > chi2	Pseudo R2
	-327.959	639.000	0.000	0.139
	OR	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)
Lilongwe***	0.408	0.265	0.627	0.000
Post-marital residence				
Neolocal household	(ref)	(ref)	(ref)	(ref)
Patrilocal	1.502	0.384	5.870	0.558
Autolocal***	4.829	1.993	11.701	0.000
Matrilocal**	2.637	1.292	5.383	0.008
Lineality				
Patrilineal	(ref)	(ref)	(ref)	(ref)
Matrilineal**	0.531	0.350	0.805	0.003
Husband residence				
Husband does not stay with her	(ref)	(ref)	(ref)	(ref)
Husband stays with her	0.402	0.065	2.496	0.328
Livestock				
No livestock	(ref)	(ref)	(ref)	(ref)

Small livestock only	0.615	0.338	1.117	0.111
Large livestock only	0.521	0.241	1.126	0.097
Both small and large livestock	0.876	0.489	1.572	0.658
Personal assets				
0	(ref)	(ref)	(ref)	(ref)
1*	2.189	1.161	4.130	0.016
2*	2.125	1.168	3.865	0.014
3	1.588	0.822	3.068	0.169
4	0.688	0.281	1.684	0.412
5	0.727	0.178	2.969	0.657
Agricultural land (in acres)				
0	(ref)	(ref)	(ref)	(ref)
> 0 & <=1	1.363	0.710	2.617	0.352
>1 & <=2	1.572	0.802	3.083	0.188
>2 & <=3	0.935	0.423	2.067	0.868
>3 & <=4	1.859	0.656	5.272	0.244
>4*	4.011	1.374	11.711	0.011
Husband's participation				
None	(ref)	(ref)	(ref)	(ref)
Low	0.879	0.523	1.479	0.627
Medium	1.603	0.988	2.600	0.056
High*	2.511	1.145	5.507	0.022
G				
Children who have died before				
age 1				
0 to 1	(ref)	(ref)	(ref)	(ref)
2 to 4	1.677	0.997	2.821	0.051
5 or more*	1.948	1.055	3.597	0.033
Chose husband herself				
Did not choose husband	(ref)	(ref)	(ref)	(ref)
Chose husband herself	2.485	0.401	15.416	0.328
Chose hassana hersen	21103	01101	231120	0.020
Items in red are negative				
Items in red are negative associations				
*p<.05				
**p<.01				
***p<.001				
P				

Self-efficacy to eat a variety of foods

Self-efficacy to eat a variety of foods when pregnant or breastfeeding indexes the agency a woman has to ensure proper nutrition for her child, as well as the extent to which others in the household prioritize nutrition while pregnant and breastfeeding. In addition to being a critical marker of maternal and child health, this measure is important to understanding whether a woman feels able to provide for the health of her children. In order to model it logistically, this sub-scale was transformed into a binary variable, with the majority of those who had scored between 6 and 10 coded as having high self-efficacy to eat a variety of foods, and those with a score of between two and five coded as having a low self-efficacy to eat a variety of foods, and modeled logistically.

Self-efficacy to eat a variety of foods was associated with district; residents in Lilongwe were less likely to have a high self-efficacy to eat a variety of foods. Having a husband staying with her reduced her self-efficacy to eat a variety of foods while pregnant and breastfeeding, although high husband participation was associated with higher self-efficacy. The former could be explained by the fact that a husband might compete with a woman over food available in the home, while a husband who is home but helps with the housework may free a woman's time to prepare a variety of food. Education was associated with lower self-efficacy to eat a variety of foods, as was having more agricultural land, while having personal assets (greater than three—binarized in this case because of cell sizes of 0 in the categorized form) was associated with higher self-efficacy. These results are somewhat more difficult to explain. Agricultural resources should promote having a variety of foods available in the household. However, in some cases a larger plot may indicate a monocrop or crop for sale such as maize or cotton, which

would not contribute directly to the food resources of the household, but rather cash resources belonging to the household over which the respondent may not have control. Personal assets, on the other hand, are defined as belonging to the respondent and potentially contributing to her own income. Having five or more children was associated with lower self-efficacy, presumably because food resources would be divided among more people.

Table 7.4. Self-efficacy to eat a variety of food

	Log likelihood	N	Prob > chi2	Pseudo R2
	-245.557	625.000	0.000	0.208
	OR	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)
Lilongwe***	0.157	0.090	0.273	0.000
Husband residence				
Husband does not stay with her	(ref)	(ref)	(ref)	(ref)
Husband stays with her*	0.391	0.158	0.964	0.041
Education				
No education	(ref)	(ref)	(ref)	(ref)
Primary	0.867	0.492	1.528	0.622
Secondary**	0.317	0.132	0.760	0.010
Husband's age				
19-30	(ref)	(ref)	(ref)	(ref)
31-40	1.334	0.680	2.617	0.401
41-50	2.246	0.939	5.371	0.069
51-68	2.085	0.572	7.600	0.265
Personal assets				
<=3	(ref)	(ref)	(ref)	(ref)
>3*	2.068	1.135	3.768	0.018
Number of children				

0	(ref)	(ref)	(ref)	(ref)
1 to 2	(161)	(161)	(161)	(161)
	0.655	0.314	1.367	0.260
3 to 4				
5 or more*	0.393	0.173	0.893	0.026
Agricultural land (in acres)				
0	(ref)	(ref)	(ref)	(ref)
> 0 & <=1*	0.279	0.097	0.799	0.017
>1 & <=2	0.339	0.114	1.007	0.052
>2 & <=3*	0.290	0.086	0.978	0.046
>3 & <=4	0.431	0.100	1.854	0.258
>4	0.323	0.085	1.227	0.097
Husband's participation				
None	(ref)	(ref)	(ref)	(ref)
Low	1.156	0.651	2.056	0.620
Medium***	2.616	1.468	4.663	0.001
High**	4.157	1.625	10.635	0.003
Items in red are negative				
associations				
*p<.05				
**p<.01				
***p<.001				

Self-efficacy to get help with childcare

Self-efficacy to get help with childcare was associated with household goods, although only at one quintile level, while the other quintiles were mixed. It was also associated with personal assets. Because personal assets include work and assets used to generate income that require labor, it is likely that women who have such assets are spending more time working away from the home and in situations in which they may need to rely on others for childcare. Husband participation, which includes help with childcare, is also associated with self-efficacy to get help with childcare. Autolocality and having

chosen her husband herself were nearly significant, at p<.10. In the case of post-marital residence, one would predict that having relatives in the household (whether marital or natal) would increase the possibility of having an adult to help with childcare.

Table 7.5. Self-efficacy to get help with childcare

R2	Table 7.5. Self-efficacy to get field		N	Prob >	Pseudo	
-278.050 639.000 0.000 0.099			IN			
OR		iikciiiioou		CITIZ	112	
OR		279.050	620,000	0.000	0.000	
Neolocal		-276.030	039.000	0.000	0.099	
Neolocal		OB	050/101	0.50/	D	
Post-marital residence (ref) 0.80		UK	95% LCL		r	
Neolocal (ref) (Post-marital residence			002		
Patrilocal 1.662 0.301 9.168 0.560 Autolocal 1.990 0.922 4.297 0.080 Matrilocal 1.160 0.573 2.350 0.680 Chose husband Did not choose husband herself (ref)		(ref)	(ref)	(ref)	(ref)	
Autolocal Matrilocal 1.990 0.922 4.297 0.080 1.160 0.573 2.350 0.680 Chose husband Did not choose husband herself Chose husband herself Chose husband herself (ref) (ref) (ref) (ref) 1.459 0.769 2.767 0.247 2** 2.521 1.350 4.709 0.004 3 1.788 0.896 3.569 0.099 4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** Household goods (quintile) 1 (ref) (ref) (ref) (ref) (ref) 2 (ref) (ref) (ref) (ref) 1.738 0.908						
Chose husband Uref) (ref) (ref) <th colspa<="" td=""><td></td><td></td><td></td><td></td><td></td></th>	<td></td> <td></td> <td></td> <td></td> <td></td>					
Chose husband Did not choose husband herself (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.076 0.0247 0.0247 0.0247 0.004 0.004 0.004 0.004 0.004 0.009 0.099 0.099 0.099 0.099 0.099 0.099 0.099 0.098 0.086 0.086 0.086 0.015 0.086 0.015 0.086 0.004 0.001 0.008 0.004 0.008 0.004 0.000 0.004 0.000 0.004 0.000 0.004 0.004 0.000 0.004 0.004 0.000 0.004 0.004 0.000 0.004 0.004 0.000 0.004						
Did not choose husband herself (ref) (ref) (ref) (ref) Chose husband herself 3.787 0.872 16.453 0.076 Personal assets 0 (ref) (ref) (ref) (ref) (ref) 1 1.459 0.769 2.767 0.247 2** 2.521 1.350 4.709 0.004 3 1.788 0.896 3.569 0.099 4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) (ref) 0.966 0.537 1.738 0.908			0.070		0.000	
Did not choose husband herself (ref) (ref) (ref) (ref) Chose husband herself 3.787 0.872 16.453 0.076 Personal assets 0 (ref) (ref) (ref) (ref) (ref) 1 1.459 0.769 2.767 0.247 2** 2.521 1.350 4.709 0.004 3 1.788 0.896 3.569 0.099 4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) (ref) 0.966 0.537 1.738 0.908	Chose husband					
Chose husband herself 3.787 0.872 16.453 0.076 Personal assets 0 (ref) (ref) (ref) (ref) 1 1.459 0.769 2.767 0.247 2** 2.521 1.350 4.709 0.004 3 1.788 0.896 3.569 0.099 4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) (ref) 0.966 0.537 1.738 0.908		(ref)	(ref)	(ref)	(ref)	
Personal assets 0	Chose husband herself					
0 (ref) (ref) (ref) (ref) 1 1.459 0.769 2.767 0.247 2** 2.521 1.350 4.709 0.004 3 1.788 0.896 3.569 0.099 4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908						
1 1.459 0.769 2.767 0.247 2** 2.521 1.350 4.709 0.004 3 1.788 0.896 3.569 0.099 4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908	Personal assets					
1 1.459 0.769 2.767 0.247 2** 2.521 1.350 4.709 0.004 3 1.788 0.896 3.569 0.099 4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908	0	(ref)	(ref)	(ref)	(ref)	
3 1.788 0.896 3.569 0.099 4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908	1		. ,			
4* 12.864 1.644 100.630 0.015 5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908	2**	2.521	1.350	4.709	0.004	
5 1.412 0.266 7.502 0.686 Husband's participation None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908	3	1.788	0.896	3.569	0.099	
Husband's participation None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908	4*	12.864	1.644	100.630	0.015	
None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908	5	1.412	0.266	7.502	0.686	
None (ref) (ref) (ref) (ref) Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908						
Low* 1.779 1.036 3.054 0.037 Medium*** 3.544 2.091 6.004 0.000 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) 2 (ref) 0.966 0.537 1.738 0.908	Husband's participation					
Medium*** 3.544 2.091 6.004 0.000 High** 3.887 1.545 9.783 0.004 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908	None	(ref)	(ref)	(ref)	(ref)	
High** 3.887 1.545 9.783 0.004 Household goods (quintile) (ref) (ref) (ref) (ref) 0.966 0.537 1.738 0.908	Low*	1.779	1.036	3.054	0.037	
Household goods (quintile) 1	Medium***	3.544	2.091	6.004	0.000	
Household goods (quintile) 1	High**	3.887	1.545	9.783	0.004	
1 (ref) (ref) (ref) (ref) 2 0.966 0.537 1.738 0.908						
0.966 0.537 1.738 0.908	Household goods (quintile)					
	1	(ref)	(ref)	(ref)	(ref)	
3* 240 1046 4796 0038	2	0.966	0.537	1.738	0.908	
2.2-0 1.0-0750 0.056	3*	2.240	1.046	4.796	0.038	

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Items in red are negative associations

*p<.05

**p<.01

***p<.001

1.141	0.588	2.213	0.697
0.860	0.470	1.575	0.625

Self-efficacy to breastfeed exclusively

Self-efficacy to breastfeed signals control over baby-feeding practices, in particular, to prevent potentially harmful traditional practices such as early supplemental feeding or early administration of non-sanitary liquids. In many cases these practices are recommended by older female relatives. The ability to controvert the advice of older female relatives is a significant marker of empowerment within the household.

Self-efficacy to exclusively breastfeed was associated strongly with autolocality; women in autolocal households had much greater odds of having high self-efficacy to breastfeed exclusively than women in neolocal households. This may be that women who are living without adult relatives simply have fewer people around to interfere with baby-feeding practices. Having a husband who stays home with her was also associated with higher self-efficacy to breastfeed exclusively. Education was associated with self-efficacy to breastfeed, as was the number of children a woman had, both of which would translate to greater knowledge and experience. Personal assets were associated with lower self-efficacy to breastfeed, potentially because the labor involved might necessitate earlier supplemental foods, while household goods quintile was positively associated, but only at the level of the fourth quintile. Livestock was associated with self-efficacy in the original model, but the main effect disappeared after controlling for interaction with

wealth quintile. Matrilineality was also associated with self-efficacy to breastfeed, but the main effect disappeared after controlling for interaction with education.

Table 7.6. Self-efficacy to breastfeed exclusively

	Log likelihood	N	Prob > chi2	Pseudo R2
	-371.043	626.000	0.000	0.135
	OR	95% LCL	95% UCL	Р
Post-marital residence				
Neolocal	(ref)	(ref)	(ref)	(ref)
Patrilocal	0.328	0.063	1.710	0.186
Autolocal***	4.750	2.460	9.169	0.000
Matrilocal	1.656	0.886	3.096	0.114
Lineality				
Patrilineal	(ref)	(ref)	(ref)	(ref)
Matrilineal	1.838	0.798	4.232	0.153
Husband residence				
Husband does not stay with her	(ref)	(ref)	(ref)	(ref)
Husband stays with her***	4.217	2.149	8.275	0.000
Education				
No education	(ref)	(ref)	(ref)	(ref)
Primary**	2.724	1.269	5.847	0.010
Secondary	2.395	0.740	7.757	0.145
Livestock				
No livestock	(ref)	(ref)	(ref)	(ref)
Small livestock only	0.832	0.358	1.936	0.670
Large livestock only	1.598	0.524	4.878	0.410
Both small and large livestock	0.783	0.346	1.772	0.557
Personal assets				
0	(ref)	(ref)	(ref)	(ref)
1	0.813	0.443	1.493	0.505
2	0.920	0.519	1.631	0.775
_	0.520	0.020		
3	0.668	0.354	1.261	0.213

5	1.025	0.269	3.900	0.971
Niverbay of abilduay				
Number of children				
0	(ref)	(ref)	(ref)	(ref)
1 to 2				
3 to 4	1.259	0.822	1.929	0.290
5 or more***	2.739	1.658	4.525	0.000
Household goods (quintile)				
1	(ref)	(ref)	(ref)	(ref)
2	2.580	0.939	7.084	0.066
3	0.651	0.163	2.599	0.543
4**	8.071	1.632	39.916	0.010
5	3.529	0.462	26.985	0.224
Items in red are negative				
associations				
*p<.05				
**p<.01				
***p<.001				
•				

Self-efficacy to get husband participation

Self-efficacy to get husbands to participate in household chores was significantly associated with district, with greater odds of high-self efficacy to get husband's participation in Lilongwe district. They were also higher in autolocal households, and significantly lower in matrilocal households. Even though autolocal households did not include husbands in full-time residence, they reported higher odds of getting help from their husbands than households with other compositions. The questions did not have a contingency for those whose husbands were living or staying elsewhere, so women in this situation had to answer hypothetically or else based on the times when their husbands are staying with them. Matrilocal households, on the other hand, had much lower self-efficacy to get husband's participation. This may be because other relatives were present to assist with household tasks. Agricultural land over four acres was also associated with

self-efficacy to get husband's participation, as was being in at least the second quintile of household goods. Most significantly associated with self-efficacy to get husbands to participate was husband's actual participation.

Table 7.7. Self-efficacy to get husband's participation

-246.13 639.00 0.00 0.19		Log likelihood	N	Prob > chi2	Pseudo R2
District Ntcheu (ref) (ref)		-246.13	639.00	0.00	0.19
Ntcheu Lilongwe*** (ref) (ref) (ref) (ref) Lilongwe*** 4.90 2.82 8.53 0.00 Post-marital residence Neolocal (ref) (ref) (ref) (ref) Patrilocal 1.55 0.38 6.41 0.54 Autolocal** 4.11 1.53 11.03 0.01 Matrilocal** 0.06 0.01 0.50 0.01 Agricultural land (in acres) 0 (ref) (ref) (ref) (ref) (ref) > 0 & <=1 2.01 0.85 4.76 0.11 > 1 & <=2 1.75 0.73 4.20 0.21 > 2 & <=3 1.94 0.69 5.45 0.21 > 3 & <=4 1.68 0.43 6.59 0.46 > 4* 3.52 1.21 10.25 0.02 Husband's participation None (ref) (ref) (ref) (ref) (ref) Low 1.78 0.84 3.76 0.13 Medium*** 1.78 0.84 3.76 0.13 Medium*** 3.14 1.56 6.35 0.00 High*** 5.22 2.13 12.78 0.00 Household goods (quintile) 1 (ref) (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3**		OR	95% LCL		Р
Lilongwe*** 4.90 2.82 8.53 0.00 Post-marital residence Neolocal Patrilocal Autolocal** 4.11 1.53 11.03 0.01 Matrilocal** 0.06 0.01 0.50 0.01 Agricultural land (in acres) (ref)					
Post-marital residence Neolocal (ref) (ref) (ref) (ref) Patrilocal 1.55 0.38 6.41 0.54 Autolocal** 4.11 1.53 11.03 0.01 Matrilocal** 0.06 0.01 0.50 0.01 Agricultural land (in acres) 0 (ref) (ref) (ref) (ref) (ref) > 0 & <=1 2.01 0.85 4.76 0.11 > 1 & <=2 1.75 0.73 4.20 0.21 > 2 & <=3 1.94 0.69 5.45 0.21 > 3 & <=4 1.68 0.43 6.59 0.46 > 4* 3.52 1.21 10.25 0.02 Husband's participation None (ref) (ref) (ref) (ref) (ref) Low 1.78 0.84 3.76 0.13 Medium*** 3.14 1.56 6.35 0.00 High*** 5.22 2.13 12.78 0.00 Household goods (quintile) 1 (ref) (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3** 1.20 4.63 0.01					
Neolocal (ref) (ref) (ref) (ref) (ref)	Lilongwe***	4.90	2.82	8.53	0.00
Patrilocal Autolocal** Autolocal** Autolocal** 0.06 0.01 0.50 0.01 Agricultural land (in acres) (ref) (ref) (ref) (ref) (ref) > 0 & <=1 > 1.75 0.73 4.20 0.21 > 2 & <=3 1.94 0.69 5.45 0.21 > 3 & <=4 1.68 0.43 6.59 0.46 > 4* 1.78 0.84 3.52 1.21 10.25 1.78 0.00 Husband's participation None (ref) (ref) (ref) (ref) (ref) Low 1.78 0.84 3.76 0.13 Medium*** 3.14 1.56 6.35 0.00 High*** 1 (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref)	Post-marital residence				
Autolocal** Matrilocal** 0.06 0.01 0.50 0.01 Agricultural land (in acres) (ref) (ref) (ref) (ref) (ref) > 0 & <=1 > 1.75 0.73 4.20 0.21 > 2 & <=3 > 3 & <=4 > 4.11 1.53 11.03 0.01 Agricultural land (in acres) (ref) (ref) (ref) (ref) > 1.75 0.73 4.20 0.21 2.24 2.35 1.94 0.69 5.45 0.21 2.02 1.68 0.43 6.59 0.46 3.52 1.21 10.25 0.02 Agricultural land (in acres) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) 1.78 0.84 3.76 0.13 Medium*** 3.14 1.56 6.35 0.00 Household goods (quintile) 1 (ref) (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3**	Neolocal	(ref)	(ref)	(ref)	(ref)
Agricultural land (in acres) 0 (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) (ref) 0.11 (ref) 0.21 0.25 0.21 0.22 0.22 0.21 0.25 0.02 <td< td=""><td>Patrilocal</td><td>1.55</td><td>0.38</td><td>6.41</td><td>0.54</td></td<>	Patrilocal	1.55	0.38	6.41	0.54
Agricultural land (in acres) 0	Autolocal**	4.11	1.53	11.03	0.01
0 (ref) (ref) (ref) (ref) > 0 & <=1	Matrilocal**	0.06	0.01	0.50	0.01
> 0 & <=1	Agricultural land (in acres)				
1.75 0.73 4.20 0.21	0	(ref)	(ref)	(ref)	(ref)
1.94 0.69 5.45 0.21 >3 & <=4 1.68 0.43 6.59 0.46 >4* 3.52 1.21 10.25 0.02 Husband's participation	> 0 & <=1	2.01	0.85	4.76	0.11
1.68	>1 & <=2	1.75	0.73	4.20	0.21
>4* 3.52 1.21 10.25 0.02 Husband's participation None (ref) (ref) (ref) (ref) Low 1.78 0.84 3.76 0.13 Medium*** 3.14 1.56 6.35 0.00 High*** 5.22 2.13 12.78 0.00 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3**	>2 & <=3	1.94	0.69	5.45	0.21
Husband's participation None (ref) (ref) (ref) (ref) Low 1.78 0.84 3.76 0.13 Medium*** 3.14 1.56 6.35 0.00 High*** 5.22 2.13 12.78 0.00 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3** 2.35 1.20 4.63 0.01	>3 & <=4	1.68	0.43	6.59	0.46
None (ref) (ref) (ref) (ref) (ref) Low 1.78 0.84 3.76 0.13 Medium*** 3.14 1.56 6.35 0.00 High*** 5.22 2.13 12.78 0.00 Household goods (quintile) (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3** 2.35 1.20 4.63 0.01	>4*	3.52	1.21	10.25	0.02
None (ref) (ref) (ref) (ref) (ref) Low 1.78 0.84 3.76 0.13 Medium*** 3.14 1.56 6.35 0.00 High*** 5.22 2.13 12.78 0.00 Household goods (quintile) (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3** 2.35 1.20 4.63 0.01	Husband's participation				
Medium*** 3.14 1.56 6.35 0.00 High*** 5.22 2.13 12.78 0.00 Household goods (quintile) 1 (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3** 2.35 1.20 4.63 0.01	None	(ref)	(ref)	(ref)	(ref)
High*** 5.22 2.13 12.78 0.00 Household goods (quintile) (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3** 2.35 1.20 4.63 0.01	Low	1.78	0.84	3.76	0.13
High*** 5.22 2.13 12.78 0.00 Household goods (quintile) 1	Medium***	3.14	1.56	6.35	0.00
1 (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3** 2.35 1.20 4.63 0.01	High***	5.22	2.13	12.78	0.00
1 (ref) (ref) (ref) (ref) 2* 2.12 1.12 4.00 0.02 3** 2.35 1.20 4.63 0.01	Household goods (quintile)				
2* 2.12 1.12 4.00 0.02 3** 2.35 1.20 4.63 0.01		(ref)	(ref)	(ref)	(ref)
3** 2.35 1.20 4.63 0.01	2*				
	3**				
	4	1.39	0.66	2.93	0.38

5	1.58	0.76	3.28	0.22
Items in red are negative				
associations				
*p<.05				
*p<.05 **p<.01 ***p<.001				
***p<.001				

Community support while pregnant and bleeding

Community support in times of crisis indexes a woman's independence and resilience. In this case, women were asked whether they'd have support if they were 8 months pregnant and began to bleed heavily. This subscale reflects a woman's ability to protect her health, and whether her community prioritizes her health. The support includes not just help and advice, which generally comes from other women in the community, but assistance with getting to the health center as well, which might include transportation or money lent to cover costs.

Autolocality was associated with high community support while pregnant and bleeding, while matrilocality was associated with low community support while pregnant and bleeding. The questions in this scale specifically asked whether there was someone outside their immediate families who could provide assistance. Women who have relatives within their households may not require as much assistance from other members of the community as women in neolocal households, while women with neither relatives nor husbands in their households likely require more support from sources outside their families. Furthermore, it is possible that women without support in their households have had to test their sources of support in the community, and have therefore built greater confidence in them or relationships with reciprocal assistance.

Advancing age was associated with low community support while pregnant and bleeding, though only significant at the age range of 35-44. Having one to four personal assets was significantly associated with high community support while pregnant and bleeding, and five personal assets was associated with high community support (but not significantly). Finally, any level of husband participation above the reference category of "none" was associated with high community support while pregnant and bleeding. While the subscale specifically inquires about support provided by people outside the immediate family, having assistance with household obligations could greatly improve a woman's sense that she could safely leave for the clinic.

Table 7.8. Community support while pregnant and bleeding

	Log likelihood	N	Prob > chi2	Pseudo R2
	-402.117	639.000	0.000	0.074
	OR	95% LCL	95% UCL	Р
Post-marital residence				
Neolocal household	(ref)	(ref)	(ref)	(ref)
Patrilocal	0.387	0.109	1.368	0.141
Autolocal*	1.955	1.116	3.426	0.019
Matrilocal*	0.483	0.266	0.876	0.017
Chose husband				
Did not choose husband herself	(ref)	(ref)	(ref)	(ref)
Chose husband herself	0.132	0.015	1.169	0.069
Education				
No education	(ref)	(ref)	(ref)	(ref)
Primary	0.704	0.453	1.095	0.120
Secondary	0.924	0.480	1.780	0.813
Age				
18-24	(ref)	(ref)	(ref)	(ref)
25-34	0.826	0.546	1.248	0.363
35-44**	0.515	0.313	0.845	0.009

45-59	0.656	0.322	1.338	0.246
Personal assets				
0	(ref)	(ref)	(ref)	(ref)
1*	1.979	1.097	3.571	0.023
2**	2.384	1.373	4.140	0.002
3*	1.971	1.076	3.610	0.028
4*	2.774	1.188	6.479	0.018
5	2.835	0.732	10.984	0.131
Husband's participation				
None	(ref)	(ref)	(ref)	(ref)
Low*	1.643	1.029	2.622	0.037
Medium***	2.520	1.664	3.816	0.000
High*	2.095	1.130	3.884	0.019
Items in red are negative				
associations				
*p<.05				
**p<.01				
***p<.001				
•				

Community support after being beaten by husband

Having support, including advice, financial assistance, or shelter, in the event of severe intimate-partner violence indexes first, a woman's potential to get out of immediate danger, and second, the willingness of community members to involve themselves in the circumstances of severe of severe intimate-partner violence. This subscale emphasizes that the incident of violence under question is hypothetical. This survey did not inquire about women's actual experiences with gender-based violence. If the rates of gender-based violence among this sample are comparable to their peers in Malawi, then around a quarter of women here may actually have experienced intimate-partner violence. This survey does not provide the data needed to examine how the actual experience of this kind of violence relates to a woman's hypothetical responses. One prediction would be

that a woman who is less likely to actually experience intimate partner violence may be more likely to respond with a high level of hypothetical community support.

Community support after being severely beaten was highly significantly associated with district, with women in Lilongwe reporting low community support. Autolocality was significantly associated high community support after being beaten, while matrilocality was non-significant. This could also be a result of women in homes with neither relatives nor husbands building sources of support outside their families. It is also possible that women whose husbands do not live with them respond differently to this hypothetical than women who do live with husbands and husbands alone.

All categories of older husbands lowered the odds of community support compared with the youngest category, and this effect was highly significant for the age ranges of 31 to 40 and 41 to 50. It could be that older men are more likely to have higher status in the community (and therefore discourage assistance to their wives in the case of an episode of violence). Alternatively, this could reflect the downward trend in gender-based violence in Malawi as a whole. Husband's participation was associated with high community support. This effect may be mediated by the (unknown) relationship between experience of IPV and attribution of community support. This does not appear to reflect confounding between husband's age and a husband's participation in the household, which are not significantly associated.

Personal assets were negatively associated with community support in the case of intimate partner violence; though the effect was only significant at one level, the direction of association was consistent. The reason for this is unclear, though it may reflect that a woman with more means for financial independence would have a harder

time accessing support (which in this subscale includes means of support that are explicitly or implicitly financial, such as lending her money or giving her shelter).

Conversely, household agricultural land was associated with high community support in the case of intimate-partner violence. The direction of the association was consistent across all levels, significant at two levels, and the effect was greatest at the highest level of land ownership (more than four acres). This finding is slightly more difficult to parse. One potential issue here is that the question regarding agricultural land does not clarify whether the land owned by the household is personally owned by the respondent or by her husband. The scale of personal assets does include one question regarding whether the respondent has land that is owned by her alone. When the household agricultural holdings are compared between women who responded that they did not own land and those who responded that they do, the relationship was significant (p==.005). At levels above one acre, women were more likely to report having land of their own, suggesting that some potential confounding for this particular item, even though the rest of the overall personal assets scale appears to be negatively associated with community support in the case of intimate-partner violence.

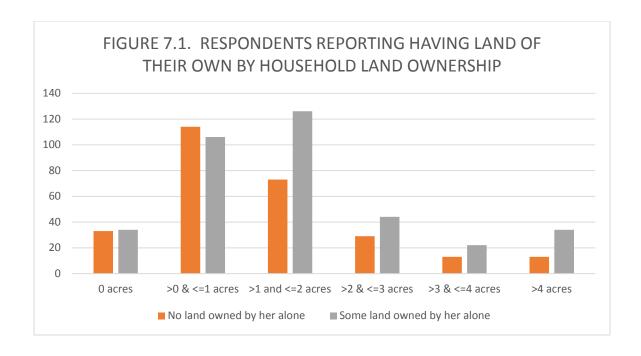


Table 7.9. Community support after being beaten

	Log likelihood	N	Prob > chi2	Pseudo R2
	-364.947	636.000	0.000	0.125
	OR	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)
Lilongwe***	0.465	0.316	0.684	0.000
Post-marital residence				
Neolocal	(ref)	(ref)	(ref)	(ref)
Patrilocal	0.731	0.194	2.754	0.643
Autolocal*	2.181	1.084	4.385	0.029
Matrilocal	0.638	0.343	1.188	0.157
Husband's age				
19-30	(ref)	(ref)	(ref)	(ref)
31-40**	0.523	0.342	0.800	0.003
41-50**	0.426	0.250	0.726	0.002
51-68	0.682	0.324	1.435	0.313
Personal assets				

-	1			
0	(ref)	(ref)	(ref)	(ref)
1	0.642	0.271	1.518	0.313
2	0.445	0.127	1.556	0.205
3*	0.165	0.029	0.945	0.043
4	0.100	0.009	1.067	0.057
5	0.040	0.002	1.024	0.052
Agricultural land (in acres)				
0	(ref)	(ref)	(ref)	(ref)
> 0 &	1.503	0.808	2.794	0.198
>1 & <=2**	2.691	1.417	5.112	0.002
>2 & <=3	1.913	0.898	4.075	0.093
>3 & <=4	1.869	0.741	4.718	0.185
>4**	3.884	1.522	9.909	0.005
Husband's participation				
None	(ref)	(ref)	(ref)	(ref)
Low	1.408	0.860	2.303	0.173
Medium***	2.716	1.725	4.277	0.000
High**	3.113	1.537	6.306	0.002
Items in red are negative				
associations				
*p<.05				
**p<.01				
***p<.001				
•				

Community support for difficulty breastfeeding

Community support when a woman is having difficulty breastfeeding presents a critical circumstance for child health and for a woman to realize exclusive breastfeeding for as long as she would like to, with help and without interference, which is more likely to come from older women in the community, especially relatives (Kerr, Berti, and Chirwa 2007; Bezner Kerr et al. 2008). This subscale includes items such as having someone to go to for advice, support, or strategies, or to help prevent others from feeding other liquids to the baby. Community support when having difficulty breastfeeding was

analyzed as a logistic regression, based on its distribution, with a cut-point at a score of 16 (out of 20). Community support when having difficulty breastfeeding was strongly associated with district. Living in a matrilocal household was negatively associated with community support during difficulty breastfeeding. Although no variable was included in the model that represented whether the relatives women lived with where female or male, or whether they were older, it is possible that women living with female relatives have the support they need within the home. Even if they do not have the support they need within the home, it may be that they feel other women in the community will be less supportive, knowing that they already have a resource for advice.

District was also associated with community support during difficulty breastfeeding. Women in Lilongwe had lower odds of community support than women in Ntcheu. Age was negatively associated with community support, which may have to do with the fact that difficulty breastfeeding is less relevant for older and more experienced women. Moreover, younger women may feel more comfortable seeking advice or support in breastfeeding. On the other hand, husband's age was positively associated with community support. Personal assets were a consistent and strong predictor of community support during difficulty breastfeeding. In fact, personal assets predicted several social capital outcomes, suggesting that personal resources can help women to establish social resources.

Table 7.10. Community support difficult breastfeeding

	Log likelihood	N	Prob > chi2	Pseudo R2
	-372.233	636.000	0.000	0.1409
	OR	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)

Lilongwe***	0.400	0.275	0.583	0.000
Post-marital residence				
Neolocal	(ref)	(ref)	(ref)	(ref)
Patrilocal	0.800	0.215	2.977	0.740
Autolocal	1.590	0.861	2.936	0.138
Matrilocal*	0.490	0.261	0.921	0.027
Education				
No education	(ref)	(ref)	(ref)	(ref)
Primary*	0.568	0.349	0.924	0.023
Secondary	0.757	0.364	1.574	0.457
Age				
18-24	(ref)	(ref)	(ref)	(ref)
25-34*	0.432	0.200	0.930	0.032
35-44*	0.253	0.089	0.717	0.010
45-59*	0.225	0.053	0.961	0.044
Husband's age				
(19-30)	(ref)	(ref)	(ref)	(ref)
(31-40)*	1.708	1.009	2.891	0.046
(41-50)	2.082	0.952	4.556	0.066
(51-68)	2.196	0.721	6.692	0.166
Personal assets				
0	(ref)	(ref)	(ref)	(ref)
1*	1.875	1.010	3.484	0.047
2***	2.669	1.495	4.767	0.001
3*	2.123	1.111	4.057	0.023
4**	4.166	1.605	10.813	0.003
5	2.874	0.652	12.667	0.163
Husband's				
participation	(rof)	(ref)	(rof)	(rof)
None	(ref)	• •	(ref)	(ref)
Low* Medium***	1.643	1.000	2.701	0.050
	2.498	1.606	3.886	0.000
High**	2.429	1.260	4.683	0.008
Household assile				
Household goods (quintile)				
	(rof)	(rof)	(rof)	(rof)
1	(ref)	(ref)	(ref)	(ref)

2	0.583	0.252	1.348	0.207
3*	0.348	0.123	0.985	0.047
4	1.359	0.410	4.502	0.616
5	0.595	0.180	1.967	0.394
Items in red are				
negative associations				
*p<.05				
**p<.01				
*p<.05 **p<.01 ***p<.001				

Community support when there is no food

Community support in times when there is no food was modeled using logistic regression, with a cut-point between 8 and 9 out of a range of from 4 to 20. Matrilocality was significantly associated with low community support when there is not enough food. This again could be because women living with their own relatives do have or are seen within their communities as having support within their own households, and therefore would not need it outside their immediate families. This kind of community support was associated with district, whereby women in Lilongwe were less likely to have community support than their peers in Ntcheu. The more children women had, the less likely they were to feel strong community support. Personal assets also predicted higher community support when there is no food.

Table 7.11. Community support when there is no food

	Log likelihood	N	Prob > chi2	Pseudo R2
	-253.230	628	0.000	0.1167
	OR	95% LCL	95% UCL	Р
Post-marital residence				
Neolocal	(ref)	(ref)	(ref)	(ref)
Patrilocal	0.608737	0.148052	2.502902	0.491

Autolocal	1.508075	0.634182	3.586178	0.353
Matrilocal***	0.303225	0.156205	0.58862	0
Lineality				
Patrilineal	(ref)	(ref)	(ref)	(ref)
Matrilineal*	1.755496	1.106954	2.784005	0.017
Personal assets				
0	(ref)	(ref)	(ref)	(ref)
1	1.575435	0.801179	3.09793	0.188
2**	2.373234	1.233704	4.565309	0.01
3	1.930844	0.924206	4.033905	0.08
4	3.077139	0.782372	12.10267	0.108
5	2.426009	0.272296	21.61445	0.427
Husband's				
participation				
None	(ref)	(ref)	(ref)	(ref)
Low	2.394994	0.611871	9.374512	0.21
Medium	1.05416	0.447823	2.481458	0.904
High	1.178531	0.292087	4.755212	0.817
Children				
0	(ref)	(ref)	(ref)	(ref)
1 to 2	•			•
3 to 4	0.684676	0.400236	1.17126	0.167
5 or more*	0.55009	0.306998	0.985672	0.045
Items in red are				
negative associations				
*p<.05				
p<.01 *p<.001				

Collective efficacy

Collective efficacy represented women's confidence that they could work together with women in their community to achieve specific objectives. Women in autolocal households were significantly more likely than women in neolocal households to have a strong sense of collective efficacy. As with other social capital domains, it is possible that

women who do not have social resources within their homes have built stronger networks for support within their communities. This was one of the few empowerment outcomes in which women in Lilongwe were more likely to have positive collective efficacy. Husband's participation was also a strong positive predictor of high collective efficacy. This could be that having a partner in household work frees women to participate more within the community.

Table 7.12. Collective efficacy

	Log likelihood	N	Prob > chi2	Pseudo R2
	-235.505	625.000	0.000	0.098
	OR	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)
Lilongwe***	4.283	2.312	7.933	0.000
Post-marital residence				
Neolocal	(ref)	(ref)	(ref)	(ref)
Patrilocal		•		
Autolocal***	4.616	1.982	10.749	0.000
Matrilocal	2.716	0.699	10.555	0.149
Husband's age				
19-30	(ref)	(ref)	(ref)	(ref)
31-40*	0.551	0.311	0.975	0.041
41-50	1.378	0.754	2.518	0.297
51-68	1.096	0.451	2.663	0.839
Husband's participation				
None	(ref)	(ref)	(ref)	(ref)
Low	1.606	0.796	3.240	0.186
Medium*	2.037	1.101	3.766	0.023
High*	2.597	1.176	5.736	0.018
Items in red are negative associations				
associations				

*p<.05	
**p<.01	
***p<.001	

Help from community groups

Help from community groups is a simple count of the number of different kinds of groups a respondent had received help from. This subscale does not assess the quantity of help received, nor the number of groups of each kind from whom a woman received help; rather it is a measure of the diversity of sources of help women have access to in a given community. The responses to this scale reflect both the availability of these groups where the respondent lives, as well as the respondent's individual access to their assistance, but it makes it difficult to distinguish between them. Because this scale measures actual help received, responses may also reflect relative need for assistance.

Help could have been received either by the woman herself, or it could have been received by the household as a whole or some other household member. As described in Chapter 6, help was most likely to have come from agricultural groups, VSLAs, or women's groups, or from church groups. Help from community groups was binarized into respondents who had received help from no community groups, and those who had received help from one or more community groups.

Household residence was strongly associated with help from community groups.

Compared with neolocal households, women in patrilocal households had much higher odds of having received assistance, while women in autolocal households had much lower odds, and women in matrilocal households did not differ from neolocal households. However, having a husband staying with her was associated with lower

odds of having received assistance. High husband participation, on the other hand, was associated with higher odds of having received help. As with other social capital domains, it is possible that husbands who free women from some household labor make it possible for them to participate more in the community and in the collectives and women's groups that are most likely to provide support. Having primary education and having any number of personal assets resulted in higher odds of having received assistance. Agricultural land was also associated with higher odds of having received help, while household good had an ambiguous relationship, with successive quintiles being significant but in opposite directions. District was strongly associated with help from community groups; women in Lilongwe had much lower odds of having received help from a community group. This may reflect the number or variety of community groups available to help available in Lilongwe.

These relationships may be difficult to interpret partly because the definition of kinds of help used in the survey was very inclusive. The question itself stipulates that "Help could include emotional support, economic assistance, or help to learn or do things." Given the kinds of community groups most often listed, it is possible that two very different kinds of help are reflected in the responses to this subscale. On one hand, women who are not well off or live without as much support within their households may receive direct financial assistance. On the other hand, women who are actively engaged in agricultural groups (such as value-addition cooperatives or other kinds of cooperatives) or who are involved in a VSLA may be participating in these groups as a way to further income generation and develop their knowledge and skills. Indeed, women with better education, or with existing networks in the community or prior experience with community groups, may have better capacity to access available resources. In this way, it

is possible that a "positive" score on this scale includes both the most vulnerable women in greatest need of assistance, and the most self-reliant women, who are proactive in engaging with community groups for training and other kinds of support.

Disentangling these kinds of support within this sub-scale is a challenge, but overall it seems that women with the most assets and resources (include income-generating assets, education, and land) are availing themselves of assistance in managing those resources.

Table 7.13. Help from community groups

	Log likelihood	N	Prob>chi2	Pseudo R2
	-336.499	639.000	0.000	0.240
	OR	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)
Lilongwe***	0.122	0.035	0.430	0.001
Post-martial				
residence				
Neolocal household	(ref)	(ref)	(ref)	(ref)
Patrilocal**	6.888	1.624	29.220	0.009
Autolocal***	0.197	0.103	0.376	0.000
Matrilocal	1.204	0.614	2.362	0.589
Husband residence				
Husband does not	(ref)	(ref)	(ref)	(ref)
stay with her				
Husband stays with	0.365	0.182	0.730	0.004
her**				
Edwartian				
Education			, a	
No education	(ref)	(ref)	(ref)	(ref)
Primary***	2.619	1.579	4.343	0.000
Secondary	1.890	0.894	3.995	0.096
Ethnicity				

Other ethnicity	(ref)	(ref)	(ref)	(ref)
Chewa	2.578	0.718	9.247	0.146
Ngoni	1.748	0.716	4.269	0.220
Ü				
Personal assets				
0	(ref)	(ref)	(ref)	(ref)
1	1.786	0.891	3.584	0.102
2***	4.582	2.392	8.778	0.000
3***	5.567	2.713	11.426	0.000
4***	15.777	5.263	47.296	0.000
5***	50.713	5.420	474.486	0.001
Agricultural land (in acres)				
0	(ref)	(ref)	(ref)	(ref)
> 0 & <=1	1.033	0.517	2.061	0.928
>1 & <=2	1.473	0.730	2.970	0.280
>2 & <=3	1.769	0.781	4.007	0.172
>3 & <=4**	4.167	1.398	12.418	0.010
>4	1.050	0.417	2.647	0.917
Husband's				
participation				
None	(ref)	(ref)	(ref)	(ref)
•	(ref) 0.856	(ref) 0.493	(ref) 1.489	(ref) 0.583
None				
None Low	0.856	0.493	1.489	0.583
None Low Medium	0.856 0.909	0.493 0.555	1.489 1.490	0.583 0.706
None Low Medium High* Household goods	0.856 0.909	0.493 0.555	1.489 1.490	0.583 0.706
None Low Medium High* Household goods (quintile)	0.856 0.909 2.251	0.493 0.555 1.092	1.489 1.490 4.640	0.583 0.706 0.028
None Low Medium High* Household goods (quintile)	0.856 0.909 2.251 (ref)	0.493 0.555 1.092 (ref)	1.489 1.490 4.640 (ref)	0.583 0.706 0.028 (ref)
None Low Medium High* Household goods (quintile) 1	0.856 0.909 2.251 (ref) 0.690	0.493 0.555 1.092 (ref) 0.311	1.489 1.490 4.640 (ref) 1.527	0.583 0.706 0.028 (ref) 0.360
None Low Medium High* Household goods (quintile)	0.856 0.909 2.251 (ref) 0.690 0.504	0.493 0.555 1.092 (ref) 0.311 0.228	1.489 1.490 4.640 (ref) 1.527 1.113	0.583 0.706 0.028 (ref) 0.360 0.090
None Low Medium High* Household goods (quintile) 1 2 3	0.856 0.909 2.251 (ref) 0.690 0.504 0.419	0.493 0.555 1.092 (ref) 0.311 0.228 0.182	1.489 1.490 4.640 (ref) 1.527 1.113 0.961	0.583 0.706 0.028 (ref) 0.360 0.090 .04
None Low Medium High* Household goods (quintile) 1 2 3 4*	0.856 0.909 2.251 (ref) 0.690 0.504	0.493 0.555 1.092 (ref) 0.311 0.228	1.489 1.490 4.640 (ref) 1.527 1.113	0.583 0.706 0.028 (ref) 0.360 0.090
None Low Medium High* Household goods (quintile) 1 2 3 4* 5*	0.856 0.909 2.251 (ref) 0.690 0.504 0.419	0.493 0.555 1.092 (ref) 0.311 0.228 0.182	1.489 1.490 4.640 (ref) 1.527 1.113 0.961	0.583 0.706 0.028 (ref) 0.360 0.090 .04
None Low Medium High* Household goods (quintile) 1 2 3 4* 5*	0.856 0.909 2.251 (ref) 0.690 0.504 0.419	0.493 0.555 1.092 (ref) 0.311 0.228 0.182	1.489 1.490 4.640 (ref) 1.527 1.113 0.961	0.583 0.706 0.028 (ref) 0.360 0.090 .04
None Low Medium High* Household goods (quintile) 1 2 3 4* 5*	0.856 0.909 2.251 (ref) 0.690 0.504 0.419	0.493 0.555 1.092 (ref) 0.311 0.228 0.182	1.489 1.490 4.640 (ref) 1.527 1.113 0.961	0.583 0.706 0.028 (ref) 0.360 0.090 .04
None Low Medium High* Household goods (quintile) 1 2 3 4* 5* Items in red are negative	0.856 0.909 2.251 (ref) 0.690 0.504 0.419	0.493 0.555 1.092 (ref) 0.311 0.228 0.182	1.489 1.490 4.640 (ref) 1.527 1.113 0.961	0.583 0.706 0.028 (ref) 0.360 0.090 .04
None Low Medium High* Household goods (quintile) 1 2 3 4* 5* Items in red are negative associations	0.856 0.909 2.251 (ref) 0.690 0.504 0.419	0.493 0.555 1.092 (ref) 0.311 0.228 0.182	1.489 1.490 4.640 (ref) 1.527 1.113 0.961	0.583 0.706 0.028 (ref) 0.360 0.090 .04
None Low Medium High* Household goods (quintile) 1 2 3 4* 5* Items in red are negative associations *p<.05	0.856 0.909 2.251 (ref) 0.690 0.504 0.419	0.493 0.555 1.092 (ref) 0.311 0.228 0.182	1.489 1.490 4.640 (ref) 1.527 1.113 0.961	0.583 0.706 0.028 (ref) 0.360 0.090 .04

Social Capital: Help from Community Members

Help from community members measured a count of the number of kinds of community members women received assistance from (including family, neighbors, friends who are not neighbors, community leaders, church leaders, political officials, or people from community organizations). It is more accurately a reflection of the diversity of sources of help available to the respondent, than it is a measure of the amount or type of help received, which could include emotional support, economic assistance, or help to learn or do things. Based on its distribution, this subscale was modeled as a linear regression.

Women living in autolocal households received help from significantly fewer kinds of community members than women in neolocal households. Considering that they also received less help from community groups, it is interesting that these women also had the highest confidence in the community support they might receive in a time of crisis. However, it cannot be discerned whether or not these women required support. However, it is possible that women's perception of likely community support is related more to their circumstances than to an accurate assessment of the support really available to them. Age was negatively associated with the number of community members women received help from; it makes sense that younger women might require more assistance, especially in learning to do things, than older women. Having personal assets, help from husbands, and household goods were all positively associated with the number of kinds of community members women received assistance from. However, the direction of the causal relationship cannot be determined. If this assistance included inkind help, such as agricultural or value-addition labor, the women with assets that require labor may have required additional help (and may have provided help as well through reciprocal social arrangements, an element of the dynamic of social cohesion that was not measured). These kinds of arrangements are formalized by agricultural

collectives and by VSLAs. Husband assistance with household chores could play into this dynamic as well, in that a woman with greater freedom to spend time on incomegenerating activities may receive greater support with those activities from her peers. In sum, having more time, resources or other forms of support to offer may be associated with receiving more support.

Table 7.14. Help from community members

	F(12, 626)	Prob>F	R-squared	Adj. R- squared
	11.270	0.000	0.178	0.162
	Coef.	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)
Lilongwe	0.454	-0.156	1.063	0.144
Post-marital residence				
Neolocal household	(ref)	(ref)	(ref)	(ref)
Patrilocal	-1.378	-3.671	0.916	0.239
Autolocal**	-0.615	-1.076	-0.153	0.009
Matrilocal	0.301	-0.401	1.003	0.400
Age*	-0.017	-0.034	-0.001	0.041
Personal assets***	0.374	0.259	0.488	0.000
Husband's help**	0.203	0.073	0.333	0.002
	0.454		0.004	
Household goods***	0.151	0.067	0.234	0.000
Items in red are negative associations				
*p<.05				
**p<.01				
***p<.001				
þ 1.001				

Collective action

Collective action assessed whether women had worked together with other women in their communities to achieve a specific objective, including organized activities and acting in solidarity with the needs or causes of others. This was a simple score across the five questions in the subscale, and was modeled with linear regression. Participation in collective action can reflect a number of dimensions of political participation and working in solidarity, including having the personal desire and agency to participate, having the support of the household, husband, or relatives to participate, having community support of participation, and having active groups of others, or institutions, in which to participate. The score here does not provide the information that would be required to parse these distinctions.

Relative to women in neolocal households, women in all of the other household types participated in less collective action, significantly so in the case of both patrilocal and autolocal households. If relief from household obligations is among the things that allows women the freedom to participate, then women who do not have sources of such support in their households might be constrained in their capacity to participate.

Collective action was significantly associated with district; women in Lilongwe participated in less collective action, than their counterparts. Catholics were more likely than their peers to participate in collective action, as were Chewa. This was the only subscale with which religion and ethnicity were both associated; indeed, by themselves, ethnicity and religion were significantly associated with only a small number of subscales. Women with secondary education were more likely to have participated. Both the husband's age, and the woman's personal assets were positively associated with collective action. This suggests that women who have greater personal resources of their

own are more likely to participate, but it also suggests that the institutional environment in which they live is critical to supporting collective action.

Table 7.15. Collective action

Table 7.15. Collective action				
	F(16, 619)	Prob>F	R-squared	Adj. R- squared
	4.870	0.000	0.112	0.089
	Coef.	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)
Lilongwe*	-0.591	-1.126	-0.057	0.030
Post-marital residence				
Neolocal household	(ref)	(ref)	(ref)	(ref)
Patrilocal*	-1.005	-1.769	-0.241	0.010
Autolocal*	-0.345	-0.663	-0.026	0.034
Matrilocal	-0.289	-0.640	0.062	0.107
Household headship				
Male-headed household	(ref)	(ref)	(ref)	(ref)
Female-headed household	0.566	-0.032	1.163	0.064
Religion				
No religion	(ref)	(ref)	(ref)	(ref)
Catholic*	0.620	0.037	1.202	0.037
CCAP	0.401	-0.187	0.989	0.181
Other	0.407	-0.145	0.959	0.148
Education				
No education	(ref)	(ref)	(ref)	(ref)
Primary	-0.031	-0.292	0.229	0.814
Secondary*	0.505	0.118	0.892	0.011
Ethnicity				
Other ethnicity	(ref)	(ref)	(ref)	(ref)
Chewa**	0.964	0.331	1.596	0.003
Ngoni	0.193	-0.285	0.671	0.427

Husband's age***	0.021	0.009	0.032	0.000
Personal assets***	0.159	0.070	0.247	0.000
Husband's help	0.083	-0.018	0.184	0.105
Items in red are negative				
associations				
*p<.05				
p<.01 *p<.001				
***p<.001				

Social Capital—Social Cohesion

Social cohesion assessed the degree to which women reported that they could trust or rely on the people in their communities, and how integrated into their communities they felt. It is measured with a score on a scale from 10 to 50, and was modeled using linear regression. Post-marital residence was associated with social cohesion; women in matrilocal households reported lower levels of social cohesion than women in neolocal households. This is in accord with most of the other social capital sub-scales, although in this case the scale does not distinguish between a perception of social cohesion or real social cohesion. District was strongly associated with the outcome as well, with women in Lilongwe reporting lower social cohesion. It could be that the district-level factors affecting other sub-scales are manifested in poorer social cohesion for reasons unrelated to matrilineality. Education was negatively associated with social cohesion, significant at the level of primary school completion. Finally, the number of children who died before age 1 was positively associated with social cohesion; in this case, a feeling of social cohesion may relate to experience of receiving social support.

Women's resources, other than education, were not strongly associated with reported social cohesion, suggesting that community factors are more significant. Indeed, district, which was significantly associated with many of the empowerment domains, seemed to be the most critical factor in determining whether women felt strong social cohesion or not. In particular, district was also associated with a woman's reports of interacting with community members and group, and with confidence in receiving support from the community in times of crisis.

Table 7.16. Social cohesion

	F(12, 615)	Prob>F	R-squared	Adj. R- squared
	8.110	0.000	0.137	0.120
	Coef.	95% LCL	95% UCL	Р
District				
Ntcheu	(ref)	(ref)	(ref)	(ref)
Lilongwe***	-5.264	-7.191	-3.337	0.000
_				
Post-marital residence				
Neolocal household	(ref)	(ref)	(ref)	(ref)
Patrilocal	-2.147	-6.533	2.239	0.337
Autolocal	0.639	-1.195	2.474	0.494
Matrilocal*	-2.087	-4.091	-0.084	0.041
Education				
No education	(ref)	(ref)	(ref)	(ref)
Primary*	-2.759	-5.157	-0.361	0.024
Secondary	-0.019	-3.664	3.626	0.992
Number of children	-1.615	-3.434	0.204	0.082
Husband's help	0.014	-1.604	1.633	0.986
Number of children who have died before age one*	0.801	0.013	1.588	0.046

tems in red are negative associations	
*p<.05	
**p<.01	
***p<.001	

Household Decision-Making

Household decision-making reflects the degree to which a woman is involved in decisions around her home, including both decisions that are more quotidian, and those that are more critical to household economic goals and well-being. A score was developed that summed responses across a variety of household situations. In most cases, if a woman responded that she made the decision or that she and her husband made the decision together, the response was counted as positive (in a small number of cases, a response was only counted as positive if a woman replied that she makes the decision on her own, such as the decision about what to wear, as described in more detail in Chapter 6).

This score was modeled using linear regression. This was one of the few subscales that did not differ by district. Women in matrilocal households and in households with neither husband nor relatives had higher scores than women in neolocal households. In the case of the latter, there are few other adults who could possibly make the decisions, so it is clear why women in those households would have high decision-making scores. Living with her own relatives also seems to confer greater decision-making authority.

Unsurprisingly, women who lived in self-reported female-headed households had much higher scores than their counterparts. In fact, this was the only sub-scale with which female-headedness was significantly associated. Unexpectedly, having a husband who

stayed with her was associated with higher scores on decision-making. One explanation for this is that the decision-making scale is scored such that most items are scored as positive if a woman answers either that she makes the decision herself or that she and her husband make the decision together. However, when women's husbands are away, the women are not necessarily heads of their households. In households with other relatives present, it may be that husband and wife make decisions together while he is present, but that someone else makes the decisions while he is away. If this is the case, then women whose decision-making power is mediated through their husbands may not be as empowered as the scale would reflect. On the other hand, it could be that women whose husbands are present are more aware of the shared nature of the decision-making processes within the home than women whose husbands are away. Considering how common labor migration is for poor families in the global south, the implications of husband absence/presence for the interpretation of this scale should be re-evaluated.

Women's attributes and resources, including age, education (at the secondary level), and personal assets were all positively associated with household decision-making, as would be expected. Husband's participation, on the other hand, was negatively associated with a woman's contribution to household decision-making. It could be that when husbands contribute more within the household, their leverage over household decision-making increases.

In summary, post-marital residence was critical to household decision-making, but the impact of specific aspects of post-marital residence was unique in predicting this subscale. The presence and participation of husbands had opposite effects to what might reasonably be predicted. The impact of women's personal resources was more straightforward than in other sub-scales.

Table 7.17. Household decision-making

	F(11, 627)	Prob>F	R-squared	Adj. R- squared
	7.240	0.000	0.113	0.097
	Coef.	95% LCL	95% UCL	Р
Post-marital residence				
Neolocal household	(ref)	(ref)	(ref)	(ref)
Patrilocal	0.731	-1.225	2.687	0.463
Autolocal**	1.300	0.423	2.177	0.004
Matrilocal*	0.995	0.053	1.936	0.038
Household headship				
Male-headed household	(ref)	(ref)	(ref)	(ref)
Female-headed household***	3.206	1.618	4.794	0.000
Husband residence				
Husband does not stay with her	(ref)	(ref)	(ref)	(ref)
Husband stays with her***	3.851	2.012	5.690	0.000
Education				
No education	(ref)	(ref)	(ref)	(ref)
Primary	0.568	-0.129	1.264	0.110
Secondary***	2.648	1.619	3.677	0.000
Age**	0.049	0.014	0.084	0.006
Personal assets**	1.284	0.448	2.120	0.003
Husband's help**	-0.398	-0.675	-0.121	0.005

Chapter 8: Conclusion

In this chapter, I will review the fundamental hypotheses explored through this analysis, the methodology, and the results, and I will summarize recommendations for future research. In addition, I will review the applicability of these findings for global health and development actors.

Introduction

The central question of this thesis is whether the social structure of matrilineality is associated with greater empowerment for the women who live in such systems. If so, is matrilineality more likely to practiced where social and gender norms favor more equitable attitudes toward women? Or are features of matrilineality conducive to traditional practices that favor autonomy for women? This section summarizes the theory behind studies of matrilineality, as well as the unique history of matrilineality among the Chewa of Malawi, among whom (along with the Ngoni of a neighboring district) the data for this dissertation were collected.

The literature on kinship systems has addressed this question since Louis Henry Morgan, who asserted that matrilineal systems marked the most ancient form of kinship practiced by humans (Knight 2008). His influential argument was taken up by Engels in forming his theory of the "mother-right"—the indivisible human dyad between and child and mother, ultimately corrupted by the development of movable capital, which allowed the development of patriarchal systems. Whether because of empirical observation of realities in the field, or to distance themselves from the socialist movement, early ethnographers came to disavow the "priority" of matrilineality in human history. In fact,

some scholars came to claim that matrilineality was inherently puzzling, because it asked men to split their loyalties between a marital family and a natal family. When viewed through the lens of other frameworks, however, patrilineality is equally (or rather more) puzzling. Some have suggested that matrilineality is adaptive for

Feminist scholars addressing the question have pointed out that the very idea of that matrilineality is "puzzling" rests on the sub-text of male dominance: that it is illogical for men to submit to compromising their position of control within both their natal and their marital families, because they are dominant. This argument tends to overlook the position of women, or their capacity to influence social structures depending on their interests. Presumably, women also experience conflict when asked to split loyalties between natal and marital families. In many cases, however, patrilineality asks greater sacrifice from women than matrilineality does of men. Patrilineal systems, for example, frequently break the mother-child dyad; not universally, but in many systems, children remain the property of the paternal clan. A woman who chooses to leave a marriage must also choose to leave her children, and if she does so, she may not retain any claim on a relationship with them. In matrilineal systems, marriages may break, but in general a father retains his role (albeit a role that may be of different character in systems where maternal male kin may play a stronger role in the lives of children).

Moreover, men in matrilineal societies may have less influence over their wives and children than men in patrilineal societies, but they maintain a position of authority within their own matrilineages. Women in matrilineal systems may enjoy relative autonomy; but even if they are still subject to the authority of male relatives, there may be advantages to living with kin rather than in-laws that are often entirely sacrificed at marriage by women in patrilineal societies. A woman may lose ties entirely in a

patrilineal system, or else her family will lose their right to make claims on her behalf, depending on the system.

The above examples are far from universal, and provide only a high-level generalization of the differences between matrilineal and patrilineal systems; however, overall, it appears that patrilineal marriage is more difficult for women than matrilineal marriage is for men. Matrilineal systems are nonetheless the clear minority, in spite of being found in virtually every region of the world. Some have argued that neither system is inherently beneficial or costly to either sex, but that all systems require individuals to negotiate how they live out higher-level prescriptions for their relationships (Bolyanatz 1995). This may be true of the majority of systems, but that does not preclude the existence of some systems that vastly disadvantage women through marriage practice. This raises the following questions, which this dissertation has attempted to answer: Is matrilineality inherently empowering for women (or, conversely, is patrilineality less empowering for women in a general sense? Or only in cases where marriage practices impose particular and culture-specific constraints on women)? If matrilineality is empowering in a causal way, is in more empowering in some senses than others? And what are the salient features of matrilineality that provide an environment conducive to female autonomy? The answers to these questions depend considerably on how empowerment is operationalized.

The debates on gender and equality in cultural systems have focused on abstract conceptions of masculine versus feminine dominance and status and their implications for individual expressions of power (Ortner 1989; Rosaldo 1974; Bandarage 1984; Ortner and Whitehead 1981; Poewe 1978; Poewe, Karla O. 1979; Watson-Franke 1992). The meaning to women of familial and community integration, negotiations, and

relationships has been somewhat more neglected. The WE MEASR tool offers a unique opportunity, because of its structure, to examine women's empowerment in multiple dimensions at the individual, structural, and relational levels, and how aspects of kinship and household composition interact with these dimensions of empowerment.

Because of the great variability in the manifestations of kinship systems, these questions cannot be addressed in a global way by the present analysis. Rather, this dissertation has examined one case study, empirically comparing neighboring ethnic groups in two districts of Malawi, one of which (the Chewa) is historically matrilineal, while the other (the Ngoni) is historically patrilineal. Existing literature on matrilineality in Malawi, confirmed by the findings of this analysis, suggests that the nature and practical import of lineage membership in Malawi has shifted since early ethnographic descriptions (Peters 2002; Peters 2006; Chanock, Martin L. 1989; Brantley 1997; Phiri 1983). Much of this history is described in Chapter 3, with particular attention to the specific matrilineal practices hypothesized here to be conducive to women's autonomy. Indeed, attribution of matrilineality proved challenging in the present analysis. The reasons for this as discussed in Chapter 6 will be summarized below, along with the adjustments that were made to the analysis plan to adapt to this challenge.

Among the forces that have shaped Chewa practice of matrilineality are: the influx of Ngoni beginning in the nineteenth century; the imposition of Christian mores about marriage that came with missionaries in the late nineteenth century; the structural effects on household and family life that followed colonial British mandates such as the hut tax and land ownership and inheritance law; shifts in gender politics under the rule of Banda during early independence; and the effects of the modern cash economy and labor market on patterns of residence and marriage. Each of these was considered in

turn in terms of the likely effects on the hypotheses outlined below, as well as the underlying characteristics of matrilineality that may have continued salience even in the absence of a modern analog in lineage membership to the suit of characteristics subsumed under Chewa kinship practices up until the early- to mid-20th century.

Hypotheses

Based on the general theory outlined above, it was hypothesized that matrilineality itself (considering its various forms) is not necessarily expected to be associated with women's empowerment or autonomy; that is, the fact of having lineage affiliation through a maternal line rather than a paternal line (or a neutral or combinatorial line) should not, on its own, have direct relevance for gender roles or the social, political, or economic structures that empower women. Rather, there are features common to matrilineal groups (though not universal) that were predicted to be conducive to greater autonomy for women.

Such features described among the Chewa by Richards (Radcliffe-Brown et al. 1987) include: matrilocality; bride service (as opposed to bride wealth or dowry); more limited emphasis on marriage or the nuclear family unit (i.e., "walking marriages" and the flexibility for marriage partners to dissolve a marriage without penalty); and ownership of land and control of productive resources and outputs by women. The present analysis examined both the presence of these features among the Chewa (and among the Ngoni) today, as well as their association with women's empowerment outcomes across a variety of domains. Matrilocality in particular was predicted to be associated with women's relative empowerment; the primary basis for this prediction was that women living among their own kin should have access to greater resources, particularly social resources, than women who live with marital relatives.

In order to answer the question of whether matrilineality is associated with women's empowerment, I have laid out the following basic hypotheses with respect to the domains of the WE-MEASR tool. Fundamentally, I have hypothesized that if matrilineality is associated with women's empowerment, it would be primarily through post-marriage residence and through access to land. For the agency domains, which refer to aspects of social norms about gender, I predicted that neither matrilineality nor matrilocality would be associated with empowerment. For the social capital and relations domains, I predicted that living among kin would be associated with better outcomes, but that if matrilineality was associated with better empowerment outcomes, it would be only insofar as it was associated with matrilocality. Importantly, it was not hypothesized that gender norms in particular were likely to vary according to matrilineality or matrilocality; attitudes about women and a preference for male dominance were not expected to change based on the kinship structures. Rather, the association between kinship and women's empowerment was predicted to be mainly a function of the structural opportunities afforded to a woman by the features of matrilineality.

Methodology

This secondary analysis utilized data from a field validation in Malawi of a new tool to assess women's empowerment across three main domains written by Dr. Christine Galavotti and Christina Wegs of CARE USA. These domains, in accordance with CARE's theory of change with respect to women's empowerment, are agency, relations, and social capital. "Agency" includes attitudes and norms relating to male dominance, tolerance of intimate partner violence, and the right to bodily autonomy (the right to seek health care, and the right to refuse sex). "Relations" includes several sub-scales

examining respondents' sense of self-efficacy to achieve several behaviors considered critical to general autonomy: to assess self-efficacy to achieve bodily autonomy, these sub-scales include self-efficacy to refuse sex, go to the health facility, or use family planning. To assess self-efficacy to participate politically, these sub-scales include going to community meetings, and speaking out at community meetings. Women's self-efficacy to care for themselves and their children was assessed through self-efficacy to eat an adequate diet, self-efficacy to breast-feed, and self-efficacy to get assistance with childcare if the need it. Finally, self-efficacy to get their husbands to participate in household chores was also assessed. "Social capitol" includes the independent access to or control over a variety of income-generating resources, social cohesion and collective efficacy, as well as community support in the context of various potential crises (experiencing maternal hemorrhaging, having been beaten severely, having difficulty with breast-feeding, or experiencing a severe food shortage). It also included measures of participation with and help from different kinds of community groups or actors.

The analysis conducted for this dissertation examined a variety of determinants of women's empowerment outcomes across these domains, including matrilineality and features of matrilineality as it has been described among the Chewa, as well as other variables predicted to be related to women's empowerment and autonomy, such as education, age and husband's age, ethnicity, religion, and birth history. The survey itself was conducted among 641 women total from Ntcheu and Lilongwe districts. Surveys were administered in Chichewa by a team of local enumerators supervised by a consulting group experienced in administering large-scale surveys, including Malawi's most recent DHS. Women were sampled randomly by geographic unit, weighted by population. Only married women aged 18 to 49 were included; if more than one eligible woman was available per household, the respondent was selected randomly.

Analyses were conducted in STATA. First, descriptive statistics were analyzed and provided for the key project variables. Second, preliminary associations were tested among independent variables (primarily chi-squares), and between the primary independent variables of interest and the outcome variables (ANOVAS with pairwise comparisons). Finally, the sub-scales that were positively associated with independent variables of interest were further tested with multivariate models. These were either linear or logistic regression, depending on the distribution of the outcome variable. All began with the same base model (though some variables were modified to suit the regression type selected), using backward step-wise elimination to determine the variables in the final model, followed by pairwise independent testing for interaction among the reduced set of variables and forward stepwise addition to the full model, resulting in the final models including interaction.

Results

The results of the initial descriptive analyses revealed some surprises. First, as the primary variable of interest as defined at the outset of this analysis, matrilineality proved particularly challenging. Matrilineality was predicted to be related to both ethnicity (with Chewa being majority matrilineal and Ngoni majority patrilineal) and districts (which were both nearly ethnically homogenous). Instead, slightly more than 60 percent of both districts called their households matrilineal; variance by ethnicity was non-significant with 65 percent of Ngoni reporting matrilineality; 60% of Chewa; and 52% of other ethnicities. Given this finding, the conclusion was drawn that attribution of matrilineality in these districts in the present was unlikely to match what it might have been historically.

To further explore the meaning that matrilineality might have with respect to other characteristics traditionally associated with its practice among the Chewa, it was tested for association with several. Matrilocality was assessed by analyzing a question asking women who lived in their household with them. Women who reported no residing first-degree relatives other than their husband, but who did report residing with their husbands, were coded as living in a "neolocal" household. Women who lived with any first-degree relative of hers (possibly, but not necessarily including also her husband) but no first-degree relative-in-law were coded as living in "matrilocal" households. Women who lived with first-degree relatives-in-law (possibly, but not necessarily, including also her husband) were coded as living in "patrilocal" households. A fourth category of household emerged unexpectedly—these were households that included no first-degree relative and no husband. These were coded as "autolocal". Three households did not fit these categories because they included first-degree relatives of both husband and wife. For reasons described in Chapter 6, these were included in the "patrilocal" category.

The great majority of these households were neolocal, at 77%; only 9% were matrilocal, 12% included neither husband nor first degree relative, and 1% were patrilocal. In spite of the fact that neolocal households were the clear norm in the sample, enough variation existed to continue testing the associations between post-marital residence and outcome variables. Furthermore, lineality was significantly associated with post-marital residence; majorities of neolocal households, matrilocal households, and, interestingly, patrilocal households all considered themselves matrilineal. Only among the households without extended family were a majority patrilineal, and this majority, at 57%, was not pronounced.

A very small proportion of households considered themselves female-headed (a much smaller proportion than for Malawi as a whole; since this sample is comprised of married women, only, it is likely that marriage by definition results in a response of "maleheaded"). However, when women were asked whether their husbands were currently staying with them at the time of the survey, a larger percentage (12 percent in total) answered in the negative. Moreover, this response did not entirely align with whether women recorded their husbands among those living in the household with them. However, this response was associated significantly with post-marital residence; although majorities of all household types reported husbands staying with them, the majorities were very high for all household types except those who did not record the husband or the extended family as living with them, of which 57% reported their husband staying with them at the time of the survey. Together, these responses point to relatively fluid residence patterns. However, without further additional testing, the precise patterns at play and their causes can only be guessed at. That said, husbands staying elsewhere part-time is consistent with an older tradition of walking-marriage and with men leaving their households part-time for wage work. Either way, the proportion of households reporting husbands away were a clear minority, and neither husband residence nor household headship were associated significantly with matrilineality.

Unlike matrilineality, post-marital residence was significantly associated with both district and ethnicity; but rather than conforming with historical expectations, both patrilocal and matrilocal households were more common in Lilongwe and among the Chewa; neolocal households were only slightly more likely to be in Lilongwe and among the Chewa; and households without extended family were much more likely to be among the Ngoni and in Ntcheu. Post-marital residence was also associated with female headship, although this was a matter of degree; the largest proportion of households

calling themselves female-headed were among the households without extended family, at 8 percent. Some differences also emerged between the districts, which may have been why district was more likely to predict empowerment outcomes than ethnicity; these included education and control of personal assets.

Based on the above, it was determined that post-marital residence was a more salient element of women's practical lives; although matrilineal affiliation does not appear to be limited to solely symbolic meaning, the practical consequences for women of matrilineal affiliation are much harder to parse and it does not seem to align to historical expectations. Post-marital residence, on the other hand, more closely proxied the kin dynamics that featured prominently in the original hypotheses.

The women's empowerment domains were validated (independently from this analysis) to determine the final scales included here. This validation does not include thresholds to be used for diagnostic or any other purposes; rather, they are designed to be used as independent predictors of other outcomes, for which the recommended transformation is a scale mean. For the purposes of this analysis, however, scales were first evaluated as sums. Each of the 27 sub-scales was tested for association with post-marital residence using ANOVA; the results of these tests appear in Annex X. Of these, the 17 that were positively associated with post-marital residence were modeled using linear or logistic regression. These were most likely to be self-efficacy variables and community-related variables (collective efficacy, community support, help from and participation in community groups); in addition gender equitable beliefs, household decision-making, and health rights were included in the group of sub-scales tested. Model selection is detailed in Annex X, and the results of all models are shown side by side for comparison in Annex X.

Tables 8.1 and 8.2 provide a summary of some of the key independent variable significantly associated with the sub-scales. Table 8.1 includes variables related matrilineality and some of the key features associated with it. Table 8.2 includes variables related to different kinds of resources and support hypothesized to be associated with women's empowerment. Please see Appendix 5 for detailed side-by-side comparisons of model results, with odds ratios.

Table 8.1. Summary of selected household variables significantly associated with women's empowerment sub-scales

	Matri- lineality	Post- marital residence	Husband residence	Ethnicity	District
Agency					
Gender-equitable attitudes		X	Х		
Health rights		Х	Х		
Self-efficacy					
To go to health facility	X	х			Х
To eat a variety of foods			Х		Х
To breastfeed		Х	Х		
To get help with childcare					
To get help from husband		х			Х
Social capital					
Social cohesion					
Collective efficacy		Х			Х
Collective action		х		Х	Х
Community support					
When pregnant and		Х			
Bleeding When beaten by husband		X			X
When having difficulty		X			X
Breastfeeding		^			^
When there's nothing to		Х			Х
Eat					
Help from community		X			
members					

Help from community groups	х	Х	Х
Relations			
Household decision-making	X	Х	

The fact that post-marital residence was associated with many of the outcomes should not come as a surprise, considering that the models were selected on the basis of ANOVA tests of association. However, the lack of association between matrilineality and the outcomes and the general absence of interaction between matrilineality and post-marital residence supports the hypothesis that matrilineality should not be associated with outcomes. However, features of matrilineality, such as post-marriage residence, might be associated with outcomes, in particular with respect to social capital and relations domains. Matrilocality was hypothesized to be associated with greater social capital and better relations than neolocality or patrilocality, but not to be associated with greater agency.

In terms of agency, matrilocality was positively associated only with self-efficacy to go to the health facility; it was negatively associated with self-efficacy to get husband's participation. This would seem to support the original hypothesis with respect to agency. However, matrilocality was negatively associated with a number of the social capital outcomes, including three of the four sub-scales measuring community support in times of crisis, as well as social cohesion. This finding fails to support the original hypothesis. This may be due to the definitions of household and community defined in the survey. Because the community support questions specifically exclude immediate families, it is possible that women whose relatives live with them do not require community support outside of their own households, and this leads them to respond negatively, or possibly to build fewer supportive relationships outside their households.

In terms of relations, however, matrilocality was associated with better outcomes on the scale from household decision-making (the one "relations" sub-domain that was included that was included).

More surprising were the associations between autolocality and numerous outcomes. Autolocality was positively associated with several agency domains, including belief in women's health rights, self-efficacy to go to the health facility, self-efficacy to breastfeed, and self-efficacy to get husband's participation. Autolocal women were more likely to confidence in the community support they would receive if they had a serious complication during pregnancy and if they had been beaten by their husbands. They were more likely to believe in their capacity to achieve outcomes working together with women in their community. Autolocal women may have invested more in building relationships with others in their communities, hence their generally positive perceptions of social cohesion. However, they were less likely to actually receive help from community members, or to have participated in collective action. This could be because of time constraints resulting from having fewer sources of help within their households. Autolocal women were, unsurprisingly, more likely to participate in decision-making within the home.

Husband presence in the household was associated with agency domains, both positively and negatively, but not with any social capital domains, with the exception of help from community groups. Women with present husbands were more likely to believe in health rights, and with the self-efficacy to exclusively breastfeed, but negatively associated with the self-efficacy to eat a variety of foods. Women whose husbands were present participated more in household decision-making. This result seems counter-intuitive, however, women whose husbands are absent can still direct decisions-making through

communication by cell-phone. Women whose husbands do not stay in the house fulltime are not necessarily therefore heads of their household.

District and ethnicity were strongly associated with one another, so the decision was made to utilize backward step-wise regression and allow either ethnicity or district to fall out of the models when they met the criteria. In nearly every model, district was significantly associated with the outcome, while ethnicity was dropped (the only exception being collective action, which was predicted by both district and ethnicity). This suggests the strong influence of district-level factors, which are likely to be structural in nature. Because sampling was not designed to be representative of the districts as a whole, but rather were drawn from a small number of census tracts. Therefore, the structural differences could be operating at a localized level. These are likely to include the activities of development agencies working in the area; any differences in the delivery of VSLAs or other women's groups could affect the results of the present survey, and the project did not collect information on what programs might have been underway under the leadership of other agencies in the project area.

Table 8.2. Summary of sele women's empowerment su		urces varia	bles signifi	cantly asso	ciated w	vith
	Educa- tion	House- hold wealth	Personal assets	Husband partici- pation	Land	Live- stock
Agency						
Gender-equitable attitudes	Х	Х				
Health rights		Х		Х		Х
Self-efficacy						
To go to health facility			Х	Х	х	
To eat a variety of foods	Х		Х		х	
To breastfeed	Х	Х				
To get help with childcare		Х	Х	Х		
To get help from husband		Х		Х	Х	

0 1 1 11 1					
Social capital					
Social cohesion					
Collective efficacy				Х	
Collective action	X		Х		
Community support					
When pregnant and			Х	Х	
bleeding					
When beaten by husband			Х	Х	Х
When having difficulty			Х		
breastfeeding					
When there's nothing to			Х		
eat					
Help from community			Х	Х	
members					
Help from community	X	Х	Х	Х	Χ
groups					
Relations					
Household decision-making	Х		Х	Χ	

In addition to household structure, the resources to which women had access were critical in predicting outcomes across all empowerment domains. Education was strongly negatively associated with rejection of male dominance. It was negatively associated with self-efficacy to eat a variety of foods and positively associated with self-efficacy to breastfeed exclusively. It was not associated with most of the sub-scales measuring perception of social capital (collective efficacy and community support in times of crisis; the exception was social cohesion, which was slightly negatively predicted by education, at the primary level) but it was positively associated with sub-scales measuring active social participation, such as getting help from community groups and participation in collective action. Both of these sub-scales also differed by district, which appears to be a confounder for education (district and education are significantly associated, Pearson's chi²(2)=12.5, p=.002). It seems like that there are factors operating at the level of the census areas involved in the survey that differentiate the

ones in Ntcheu from the ones in Lilongwe. These factors may not be detectable at the district level, because the samples represent only a limited number of census areas. These census areas were chosen as having no CARE interventions operating within them at the time of the survey, but they could have on-going development initiatives from other NGOs.

Two measures of overall resources were included. One was a standard DHS-based measure of household wealth. The other was a measure of resources over which women themselves had control, including wage-work, savings, land, and assets to generate income. The former was negatively associated with rejection of male dominance, but positively associated with other agency sub-scales, including belief in health rights, selfefficacy to get help with child-care, self-efficacy to exclusively breastfeed, and selfefficacy to get husbands participation. Household wealth was not associated with social capital domains, with the exception of help from community groups; the causality in this association could be in either direction—wealth contributes to participation, or participation contributes to wealth. Wealth was also not associated with the relations sub-scale. Personal assets, on the other hand, were positively associated with most of the sub-scales, but the direction of the relationship differed. In some cases a clear threshold effect was observed. For example, self-efficacy to go to the health facility was positively predicted by having one or two assets, but negatively (though not significantly) by having four or five. Assets were positively associated with self-efficacy to eat a variety of food at the level of three or more, but negatively associated with the ability to breastfeed exclusively, and positively associated with self-efficacy to get help with child-care. This could be explained by the fact the assets measured are frequently of the type that require inputs of labor and time to maintain and make profitable. For women with a certain number of assets, it could be that the labor required to maintain them entails a trade-off

in terms of being able to provide direct care for their children or finding time to go to the health-facility. Assets were also associated with community support in times of crisis, with the exception of the situation of having been beaten by her husband, which was actually negatively predicted by assets. Help from community groups was strongly predicted by assets, but considering that many of the assets are of the kind that could come from a community group, the association is not surprising. The same association was observed in the case of collective action and help from community members.

Finally, having more assets as positively associated with participation in household decision-making, where household wealth did not; in other words, women's personal control over assets appears to have affected their influence at the household level in a way that household affluence did not.

Land positively predicted a handful of outcomes, including self-efficacy to go to the health facility, community support after being beaten, as well as help from community groups. The latter case could be related to the activity of agricultural collectives.

Davison (1993) describes how family, or *banja*, farming has (or has not) given way to agricultural collective farming; where collectives do gain traction, they could provide for labor exchange networks that are unavailable to women who do not participate. Land also negatively predicted self-efficacy to eat a variety of foods; the magnitude of the relationship was consistent across levels of the variable, and significant at two levels, relative to women with no land. However, women with no land may be more likely to earn cash income, which could actually be associated with a more diverse diet. Nearly all women in the sample (98.8%) lived in households that owned some land, but of the women who did own land, 72% owned less than two acres. Smaller plots may allow only enough land to grow staple grain for the household for the year, and not sufficient acreage to diversity or surplus to sell for cash. Women with the highest level of land

were significantly more likely to feel confident in getting help from their husbands. The data here cannot elucidate whether this is because owning a large plot of land provides women with leverage, or because couples with land have increased labor needs that require cooperation. Livestock, which can provide a source of emergency capital, was associated with belief in health rights, but not with any other outcomes. Although the magnitude of effect relative to owning no livestock was similar across all levels of livestock ownership, it was significant at only two: small livestock alone, or both large and small livestock, indicating that small livestock ownership is more important for women than large. This may be because women traditionally have rights over small livestock, while men traditionally have rights over large, or it may be because large livestock can be more costly to maintain and tend. Belief in health rights was also predicted by household goods, but not by personal assets or land. It is unclear why this particular outcome was predicted specifically by livestock; it is also unclear why livestock, which has been traditionally viewed as a source of stored wealth, was not associated with any other outcomes. It is possible that the cash economy has supplanted the role of livestock-as-wealth, and livestock now represent solely a means for individual food security, rather than barter, but this is speculation.

Husband's helpfulness was associated with a number of outcomes, but both positively and negatively. Helpful husbands predicted self-efficacy to go to the health facility, self-efficacy to get help with childcare, and unsurprisingly, self-efficacy to get husband's participation. However, it negatively predicted belief in health rights. Helpful husbands predicted community support while pregnant or after having been beaten by her husband, as well as collective efficacy, help from community groups, and help from community members. It negatively predicted participation in household decision-making. It seems that helpful husbands are critical in relieving women of some of the

labor burdens that keep them from participating more in their communities and from investing in economic opportunities, but that help may come with a tradeoff in personal autonomy. The causality of the associations between husband help and women's empowerment is also unclear. It is possible that women with more self-efficacy choose more helpful husbands, for example.

Summary of results

The majority of the scales (predictably, based on how they were selected) were associated with post-marital residence; however, findings were inconsistent with the original hypotheses in terms of which household type was more strongly associated with a positive score in the different domains. Matrilocal households had lower scores relative to neolocal households on several of the sub-scales involving community support, but were better off on household decision-making. The original hypotheses were based on the suggestion that living with natal kin would be beneficial for women's social capital, but the opposite was true. It is unclear whether this is because women who have relatives in close proximity need less community support, or whether it is because they are less likely to form reciprocal relationships outside the household. In either case, the domain of social capital generally neglected to assess some of the ways that live-in relatives might be important in empowering women, in particular in terms of providing assistance with household work. Women in autolocal households had better outcomes in all three domains, and negative ones in only two of the sub-scales: collective action, and help from community groups. Women who live without other adults seem to enjoy a fair degree of autonomy, in spite of being married and potentially having husbands sometimes present. They may also be more pro-active in building systems of support for themselves than women who have relatives living with them. Finally, it is also possible that households who diverge from the neolocal pattern do so because of some

unmeasured factor that is also affecting empowerment. For example, household with additional relatives living in them could be those that do not have the resources to keep an independent household.

Lineality was significantly associated with only one outcome; self-efficacy to go to the health facility, in which matrilineal women had low self-efficacy relative to patrilineal women. Household headship was not significant in any of the models, except for household decision-making, in which women living in female-headed households not surprising had higher scores than women in male-headed households. Husband presence was more consequential; women with husbands staying with them were more likely to have the self-efficacy to go to a health facility and to breastfeed, and interestingly, to make household decisions, but less likely to have the self-efficacy to eat a variety of food or to get help from community groups, and they had worse attitudes about gender. It is possible that men, when present, actively enforce gender norms relating to male dominance. It is unclear why men might constrain women's access to help from community groups, unless the presence of their husbands reduces their perceived need compared with women whose husbands are away.

Religion and ethnicity were not significant in most of the models. Religion, while variable among denominations, was largely Christian. Ethnicity and district were highly collinear, and in most models, district was more significantly associated with the outcomes, while ethnicity fell out. It is quite likely that geographic factors are benefitting women in Ntcheu relative to those in Lilongwe; because the samples were taken from a limited number of census areas, it is difficult to know what kinds of programming NGOs might be doing in the census areas in Lilongwe versus those in Ntcheu, but it is quite possible that such programming could affect these results. CARE attempted to limit the

impact of differences in development interventions between the sampling areas, but because of the number and range of development actors in Malawi, it is difficult to have a complete understanding of how many actors there may be working in a given area.

Education was actually negative associated with self-efficacy to eat a variety of food at the secondary level. The reasons for this are unclear, although it could be that district is again confounding the association, given that district is associated with education and also negatively predicts self-efficacy to eat a variety of foods. Education also negatively predicted rejection of male dominance with a dose response in magnitude, and significant at both levels. The reasons for this are not entirely clear, but it may be because secondary schools comprise a majority of male students, and frequently entail being away from home, particularly in more rural areas. The 2010 DHS did not provide information on school composition, but it showed that overall, men were twice as likely to complete secondary school as women were. Education was positively associated with self-efficacy to breastfeed and help from community groups, for which the threshold for benefit appeared to be at the primary level, and with household decision-making and collective action, for which the threshold for benefit was at the secondary level. This may have to do with the curricula and nature of primary versus secondary school.

Resources were significantly associated with numerous outcomes, including personal assets, household goods, agricultural land, and livestock. Household goods were associated with health rights and with the self-efficacy subscales for childcare, breastfeeding, and husband's participation (but not for going to the health facility or eating a variety of foods). The threshold for benefit for these ranged from as low as the second quintile to the fourth quintile. Help from community groups was significantly

associated with goods, but only at the fifth wealth quintile. Household goods were negatively associated with gender equitable attitudes.

Personal assets were positively associated with the majority of outcomes, and in some cases very strongly. The women mostly likely to have gotten help from community groups were also the most likely to have assets of their own; the causal direction, however, cannot be determined. There were negatively associated with two outcomes; self-efficacy to breastfeed, and community support after being beaten. Livestock ownership was associated with only one outcome; belief in health rights. Agricultural land was associated with a few of the self-efficacy and community support domains. It was negatively associated with self-efficacy to eat a variety of food, but this was not related to the size of the plot. Land ownership is nearly ubiquitous, and plots are mostly very small, so it seems that the 1.3% of the sample that does not own land may differ from land-owning women in some way, perhaps by working for cash income.

One variable that was significant across the majority of models was how often, in general, women reported their husbands in helping with household tasks. Husband's participation was positively associated with many self-efficacy and community-related outcomes; but it was negatively associated with belief in health rights and with household decision-making. Age and husband's age were both associated with some of the outcomes; the effect was negative in all cases—older women were less empowered than younger women, and women wither older husbands were less empowered than those with younger husbands (these, of course, also covary; however, often large age gaps between husbands and wives preclude the assumption that all older husbands have older wives.

These findings, taken together, suggest that husband presence, residence, and helpfulness are more important than lineality or other aspects of household composition that were predicted to affect women's empowerment. In some cases, husbands' absence appears to enhance women's empowerment outcomes; but husbands who are helpful also appear to predict women's ability to achieve security, but potentially with a trade-off in autonomy.

Women's control over resources and assets appears, in this example, to be just as significant. Women were traditionally responsible for agricultural labor, but they also owned the land and controlled the productive output of their work. In the present survey, 71 percent of respondents reported contributing all of the income in their households themselves; 26 percent contributed some and only 3% contributed none. In retrospect, this could have proven to be an important proxy for household control of resources, had it been included among the list of model variables.

Limitations and Future Recommendations

Because this project was based on secondary usage of data from a project designed for another purpose, there are some significant limitations to the current tool and the generalizability of the findings. Below I will outline some of these limitations and their impact on the interpretability of the present findings, and will make some suggestions for future evaluations that might seek to further investigate the question of kinship and family structure on women's empowerment.

Several of the questions that formed the central determinants of women's empowerment in the present study are asked routinely in many kinds of household surveys used in development, including the standard DHS surveys. The main suite of questions included

in the base models here (before backwards stepwise model reduction) included the following:

"Who lives in this household with you?"

"Is this household matrilineal or patrilineal?"

"Is this household female-headed or male-headed?"

"Does your husband stay with you?"

Together, these questions hint at a variety of post-marital residence pattern. The first question was utilized to define post-marital residence dividing households into neolocal, matrilocal, and patrilocal houses; a fourth, unanticipated, category also emerged, which included women who had not listed any relatives (other than children) as living in their households. This categorization presented some challenges. First, the response categories favored reporting of living with a relative of the wife's over a relative of the husband's. The response categories list respondent's mother and father separately, as well as respondent's mother-in-law or father-in-law. But they further list the respondent's brother or sister separately, whereas they do not list her husband's siblings. Because the categories "other relative" or "other non-relative" were also available, it is possible that some husband's siblings were counted in one or another of these categories, reducing the identification of households in which women live with their husband's kin.

Another challenge to the interpretation of this question is the potential errors in enumeration. Two different ways of asking the question could result in two very different responses, and the categorization above relies fairly heavily on enumerators listing each response category and recording an explicit response for each. If, instead, an

enumerator simply read the question, then marked any category volunteered as a response by the respondent, then the categorizations could indeed be incomplete.

Because the survey data were collected by a team of several enumerators, it is impossible to confirm that the question was read fully consistently across surveys.

There are, however, several reasons to believe that the data were collected appropriately to their interpretation here. Firstly, this question is a standard DHS question, with specific instructions regarding how it should be read. The current survey team received the same training; in addition, the team of enumerators were part of a consultancy group that was responsible for the recent DHS in Malawi; therefore, the team had very recent experience with this question and how it should be asked in the field.

That said, an interesting pattern emerged in responses. Because only married women were selected for the current survey, all of the respondents had a husband living either with them or elsewhere. Yet, several women omitted even their husbands from their responses to this question. Indeed, considering local traditions in the area, the truly surprising finding was not that some women reported not residing with their husbands; the large proportion of neolocal households in the project area is rather more surprising. The DHS assesses household composition by age and gender, but not by relationships within the household, so it is difficult to evaluate whether the results in this sample align with the national patterns, or whether there has been change over time. The International Conference on Population and Development estimates that it 2010, 59% of households in Malawi were nuclear (International Conference on Population and Development Beyond 2014 2012). The proportion in the present sample, at 77%, is much higher. This could be a result of how households are defined, or it could represent a geographic difference (although the proportion did not differ by district in the present

sample). It could be useful to conduct analysis of composition of raw DHS data using a coding scheme similar to that applied here, and to determine whether there are geographic or temporal patterns in the composition of households, as households are defined by the DHS. The DHS for Malawi defines the household as follows: "a person or a group of persons, related or unrelated, who live together in the same dwelling unit, who make common provisions for food and regularly take their food from the same pot or share the same grain store (*nkhokwe*), or who pool their income for the purpose of purchasing food" (NSO and ORC Macro 2004, page 9). The dwelling unit could be a single sleeping hut, or it could include more than one hut from the same compound. Nonetheless, even though data on the question are incomplete, it is still critical to understand the nature of these households, particularly given that the women in them further reported no first-degree relative or in-law in the household. There could be a number of explanations for this. First, is the possibility that some men live in the area, but do not reside in the same household as their wives.

Matrilocal tradition in the area, as described in Chapter 3, could account for this pattern of what was previously characterized as a "walking marriage". Husbands routinely resided primarily with their own matrikin, and traveled to their wives' villages to spend some days with their wives and children. Thus, they were permanent residents of their matrilocal households, and part-time residents of their wives' households. This does not necessarily explain why these women are living on their own rather than with their relatives. Two likely possibilities emerge: that women's brothers are living in neolocal households with their own wives, rather than with their matrikin as would have been practiced under matrilocality; that women are, in fact, living near their kind, but eating from an independent store of food.

Another possibility accounted for by local labor practices is that husbands omitted from the list of household residents are working some part of the year in another area (potentially even another country). The question, "Does your husband stay with you right now?" is included specifically to understand the question of husband residence. Interestingly, around half of the women who did not report their husbands as residents of their households, and who did not live with other first-degree relatives, did report their husbands staying with them at the time of the survey. This was a smaller proportion than in any other group, but still a substantial presence of non-resident spouses. Husbands were not universally present in households defined as matrilocal or patrilocal, either; in 19% of matrilocal households, and 11% of patrilocal households, women did not report their husband living there.

Further, the current question regarding household residence is constrained by an essentially economic condition (who eats out of the same pot, or store of grain); this is a fairly constrained way to represent access, mutual assistance, and proximity. A woman may live within close proximity and easy access to her relatives without actually being defined as being in a household with them. Characterizing a woman as living "matrilocally" is really incomplete without understanding how her kin relationships may permeate her larger community. This is particularly true of the households characterized as neolocal.

The present findings would be much strengthened by having a more detailed or more easily interpreted understanding of the interplay of residence patterns, particularly involving husbands. A future survey designed to understand the role of household residence patterns in women's lives should include several additional questions to the ones posed in the present survey. First, such a survey should include in its published

form explicit instructions and definition of the question pertaining to who lives in the household, to eliminate concerns about inconsistency in reporting across surveys or surveyors. Second, such a survey should query, in addition to whether a husband stays with her or not, several additional questions pertaining to husband residence. For example, questions could include: whether he lives nearby, within an easy day's visit, or far away; how many months out of the year he stays with her; to what degree they share resources when he stays with her, etc. A firmer understanding of husband's residence would confirm the status of a woman who is married but running her household some, most, or all of the year, and allow the refinement of post-marital residence categories. Finally, the survey should include instructions for women whose husbands do not live with them, in particular the scale relating to household decision-making. It would be useful to understand whether respondents identify themselves as heads of household, or co-household heads, or only head of household when their husbands are away (or someone else is), to better know how to interpret the results of the decision-making subscale.

Part and parcel of the question of husband residence is the question regarding whether a household is female-headed or male-headed. This is of particular consideration for development actors, as female-headed households are widely accepted as being distinctly vulnerable. In Malawi, some 25% of households consider themselves female-headed, but the majority of them are single, divorced, or widowed. The present sample targets only currently married women; in spite of the fact that 12% of women reported living with no first-degree relatives and no husband, only 3% of the total sample reported living in a female-headed household. Female-headed households are generally framed as being particularly and inherently vulnerable, and they are generally assumed to be households headed by unmarried women. The present findings should lead us to question both

assumptions. Very few of the autolocal households in the present sample identified as female-headed, but they may have a composition and de facto headship that is effectively female-headed. There could be value in understanding how women decide who to attribute headship to, or even to provide response categories that allow women to identify shared household-headship.

As discussed in Chapter 4, historical forces including the influx of Ngoni in formerly Chewa areas, the hut tax, the adoption of Christianity fairly broadly throughout the country, and shifts in the labor force may have worked together to promote the adoption of a more neolocal household structure. With the development of such households, it is possible that the patterns of relatedness within communities also changed. While understanding the kin relationships with the defined economic realm of the household as presented here is of great value in both understanding the variation in women's empowerment outcomes today, and in projecting back on the features of matrilineality that may have empowered women living within those systems, the fact is that women living with their own relatives, their husband's relatives, or without their husband, are each quite small minorities. On the other hand, neolocal households are the vastly predominant household type in the present sample.

For this reason, it would be of great value to have a series of questions that could illuminate in more detail the kin relationships of women outside her household. The key features of interest are proximity, access, and relationship. Proximity could be assessed by asking how close a variety of specific relatives (and in-laws) live to her, and how often she interacts with them. Access could be proxied by whether she can reach them if she wants to (because they live nearby; by phone or text; by foot to a near village; only by

going a distance of a day or more; or not getting to see them, for example), and/or in what kinds of scenarios she could reach them or ask them for help. Relationship could include questions regarding communication, as well as the kinds of help and emotional supports they provide each other. Having this detailed information on a woman's support in her community, and how it relates to kinship, would be of great interest in understanding the determinants of empowerment for women and the role of social support and solidarity. It would also be of use for designing interventions that seek to target households, household members, community groups, and social networks.

Although this study set out to examine the relationship between matrilineality and women's empowerment, findings on this point were thin. Much ground has been covered on the changing character, meaning, and import of kinship patterns in Malawi (Phiri 1983; Peters 2002; Peters 2006). It would be erroneous to conclude that the lack of relationship in the present study between the response to the question, "Is this household matrilineal or patrilineal" and women's empowerment outcomes is in any way indicative of an overall lack of association between matrilineality and women's empowerment in general or cross-culturally.

The present study was constructed around the hypothesis that matrilineality was not, in fact, inherently empowering or more likely to result in cultural mores that advantage femininity. Rather, the hypotheses underlying this investigation at the outset focused on salient features of matrilineality that could be predicted to empower women. The primary feature of matrilineality predicted to empower women was matrilocality; that living with kin would be better for women than living with in-laws. The findings here support the importance of household structure, but also support the importance of the

ability to own land, livestock, and other productive resources, and to control by law and tradition the productive outputs of those resources and of labor.

The present findings permit few definitive conclusions about the salience of contemporary constructions of matrilineality for women's lived experience. However, considering the evidence that these features of matrilineality were indeed practiced by the Chewa in the past, the present findings are suggestive that these features of matrilineality (at least as it was practiced among the Chewa) were supportive of empowerment for women. Any generalizability to other matrilineal societies would depend on the extent to which they also share such features. The present study has not conducted a cross-cultural analysis of the proportion of matrilineal societies historically (or currently) sharing this suite of characteristics or any part of it.

It is possible that the question of lineality could be framed so as to arrive at a more meaningful picture of whether a woman is living in a family with a given set of practices. One possible elaboration would be to add questions about a number of other historically matrilineal practices, such as inheritance practices. Another would be to inquire as to her family's past lineage practices. However, it is far more likely, given the evidence on the whole, that the traditional constructions of lineage have shifted with respect to their relationships with cultural traditions and practices. Concerted qualitative data in the project area would have been more useful than any additions to the quantitative survey in addressing this particular issue; however, it was not feasible to do for the present survey.

One further, serious, limitation of the present study is that the sample was restricted to currently married women. For the study's original purpose, validating the women's

empowerment scales of the WE MEASR survey, it made sense to limit variation in marriage in order to validate the constructs themselves. Because many of the scales ask specific questions regarding relationships within the household and communication and task-sharing between husbands and wives, it was determined that trying to devise skip patterns to account for women for whom questions about husbands were not applicable would complicate the ability to test the constructs (given the inevitability of either incomplete or segregated scales for unmarried women in that case).

Thus, although the rationale was methodologically sound for the study's purpose, it does limit the generalizability of the present findings. It is impossible to comment here on the lives of divorced, widowed, or never-married women; on their relative empowerment or the determinants thereof, or whether these households are in fact more vulnerable; nor on the meaning and role of household structure in the lives of women without the sanctioned social role of "wife". Given the focus on female-headed households in development as highly marginalized and vulnerable households, the present findings are suggestive of an alternative scenario, in which women own their own productive resources and control their output; if this is true when they are married, and they are still contributing the majority of support within their households, then women owning their own land and supporting their households but who are unmarried may not be as vulnerable in this project area as would be otherwise suspected. On the other hand, it is also possible that marriage itself provides de facto protections for a woman, either socially or financially, beyond the household production of food. This is one reason why, perhaps, women whose husbands do not live with them have more positive outcomes on a number of measures. It may be that they enjoy the benefits of protections (or remittances) in addition to greater overall autonomy. However, without more detailed

questions on husbands' residence and income, along with comparisons with unmarried women, these possibilities must remain hypothetical.

The present analysis would have been able to provide a more nuanced picture of how husband residence versus presence (who women say lives with them, versus whether husbands are staying there at the time of the survey) with the addition of a handful of questions providing more information on how husband presence impacts women's lives. Even a brief ethnographic inquiry greatly would enrich this analysis. Even knowing what proportion of the year husbands typically reside in the home with them would provide a proxy for the magnitude of husband influence. During cognitive interviewing, it became clear that husbands can continue to exert influence in their households through communications technology, even when they are not resident in the household. One woman reported that her husband didn't stay with her, and so when she responded to household decision-making questions that her husband made the decisions, the interviewer queried her on the point. She responded that although her husband lived in South Africa nine months out of the year, he was able to make decisions by cell phone. Future incarnations of the surveys should inquire how long husbands usually live away from the home, and should test questions pertaining to how often women consult their husbands by phone on household decisions or matters, and how often husbands provide direction from abroad.

Applicability of findings for global health and development interventions

The findings from the present analysis have the potential to contribute to how interventions to empower women are designed and implemented. First, it may be that, at least in Malawi, matrilineality is not a particularly salient factor for women's empowerment outcomes. On the

other hand, the present findings suggest very clearly that whom women live with matters. It appears that women living with their own kin may not actually be empowered within their communities, but rather may be more isolated from their communities. The reasons for this are not clear from the current dataset, but it may be because women living with their kin turn more to the members of their household for assistance than to those outside it. It may also be that some factors we did not identify in this survey that cause women to live with their relatives (or their relatives to live with them) are also related to women's empowerment. Women who were married but whose husbands and relatives were not staying within their households had positive empowerment outcomes in numerous sub-scales across the three domains. These households largely did not self-identify as female-headed, but women living in them lived for the most part without other adults, and seemed to have both autonomy and social support. It may be worth questioning whether the simple categories of "female-headed" or "male-headed" can actually capture the salient features of household power for women's well-being. Even when we know that a household is female-headed, it is not clear whether respondents were themselves the head of household in question. Asking women directly whether they are heads, co-heads, or not heads of theirs households could add an additional dimension to our understanding of household dynamics with respect to labor and decision-making.

That said, the current survey was able to assess the impact of women's household composition patterns due to limitations in the way that a household is defined by development agencies conducting assessments in sub-Saharan Africa. As discussed above, the definition of household as "sharing food" provides a narrow view of what residence, help and sharing may actually look like for women in rural Malawi and elsewhere in rural parts of sub-Saharan Africa. Firstly, the sharing of food stores, while certainly affected by cultural expectations and obligations, is also an indicator that is likely to shift as labor markets, agricultural markets, and sources of income shift. By this definition, a woman could be living in a sleeping hut in a compound where her sisters,

mother, brothers, or uncles sleep in huts contiguous to hers or within the same compound, but not be considered to share a "household" because they keep their own grain stores independently. However, as the ethnographic discussion in previous chapters should make clear, sharing a grain store is not necessarily the most salient feature of household residence, in terms of power, meaning or even economics and labor sharing. However, although the indicator provided for by the present survey data was limited, it was still significantly associated with women's empowerment outcomes; given, this, perhaps a more informative way of evaluating who women live among would have yielded even better predictors of relative empowerment. The present survey takes great care to situation women's empowerment within the communities women inhabit and the access they have to social resources. Therefore the analysis of these outcomes could have been much richer with a clearer understanding of who women share their compounds with. While it is true that many surveys are too limited for a full enumeration of who is living in the communities where women live, a few additional questions to surveys such as the WE-MEASR or the DHS could add significant value. Asking women whether they live in the same village where they were born could capture in a simple question a great deal of information about the depth and continuity of a woman's social resources. Moreover, the definition of household currently used by the DHS should be reconsidered. Focused ethnographic work could be a powerful tool in understanding how women themselves think of their households and economic partnerships. Although economic cooperation is certainly a critical element of what a household unit is, it is not the only kind of support that is critical for a woman's security. Labor and childcare are also clearly limiting factors, and the definition of household that focuses on economic relationships does not capture these kinds of social exchange and support.

Another conclusion from this analysis is that empowering women economically affects other areas of their lives. Although economic empowerment has been shown to be a limited way of assessing women's empowerment (Kabeer 1999), as it ignores issues of agency, autonomy, and

control, economic empowerment can be an instrument for achieving other sources of security. However, it is clear from the findings here that the nature of women's economic lives is complex and entails a number of tradeoffs. In these areas, economic interventions must take care not to put women at risk. In some cases, findings suggested that while having a lot of assets could provide certain opportunities for women, they could also limit their access to health facilities and ability to provide direct care for their children. Interventions meant to empower women economically should be cognizant of the labor demands entailed by the assets to which women gain access.

Finally, the results here show quite clearly that husbands are critical to the empowerment of married women. The findings here suggest that husbands do not play a primary role in limiting their wives' participation and access. Husband presence was negatively associated only with rejection of male dominance, self-efficacy to eat a variety of foods, and help from community groups. Endorsement of social norms sanctioning husband dominance is potentially harmful and deserves attention. However, husband helpfulness was a stronger predictor of outcomes than husband presence. Husbands' impact was far greater with respect to how helpful they were in the household. Addressing social norms that give men primacy is a laudable undertaking and one with demonstrable benefits for women, but it may be that labor demands are the more critical bottleneck for women in rural Malawi. Interventions targeting husbands to be more helpful could have significant benefits for women; the WE-MEASR tool would allow for the clear evaluation of the benefits of such an intervention in improving women's and children's health in addition to women's empowerment.

Findings in ethnographic context

The patterns suggested by the present analysis have value in themselves for future approaches to measurement and for interventions designed and delivered by agencies such as CARE, as

described in the previous question. However, situating them within the ethnographic history of the Chewa and the Ngoni enriches both the interpretation of the results and the approach to intervention. Further, considering how cultural patterns in both kinship and residence have been shifting, focused ethnography could greatly enhance the effectiveness of interventions to empower women, particularly those that target social norms, relationships within the household, and community participation. Many of the challenges with interpreting the findings of the present study could be clarified by triangulating with ethnographic investigation, in particular the intersections between individual ownership of property and community relationships of sharing and cooperating.

The findings here pertaining to post-marital residence did not support the hypothesis that matrilocality would be empowering for women, at least not according to the definition of empowerment represented in this survey. However, the design of the survey does not allow us to differentiate women with relatives in their household from women with relatives in their compounds or communities, so the findings do not allow us to reject the hypothesis that living among, if not necessarily with, natal kin have benefits for women. On the other hand, the findings may lead to a new hypothesis—that living with older relatives may inhibit women in specific ways, in particular in developing relationships with members of their communities. This suggests that we should reconsider the possibility that women living with their own kin are perhaps subject to domination from a different source than in other kinds of households, but are still subject to domination, relative to women living in their own households (either themselves with their children alone, or with their husbands).

Organizations such as CARE have long understood the value of working with communities as part of their interventions to empower women. In their report on the Strategic Impact Inquiry for Women's Empowerment process titled "Strong Women, Strong Communities:" (CARE 2010)

CARE provides several examples of programming designed specifically to raise women's standing, status, and rights within the community, and to work with and through community structures to empower women, such as the *Nijera* program in Bangladesh, which cultivated leadership in men and women to solve community-identified problems; the VSLA programs that CARE implements in 26 countries (CARE 2013b), which provide not only a means for safe savings and financial literacy training, but also promote women's solidarity with their villages on issues directly related to investment in one another; and rights-based approaches to community health mobilization like the *Bal Bachau* project in Nepal. Since the report was published, CARE has continued to develop holistic, community-led approaches. These form a core framework for the SRMH team's programming at CARE USA.

This approach is an effective one that seeks long-lasting, durable progress on addressing harmful community attitudes, strengthening relationships within communities, and explicitly addressing issues of power. And while inherent to community-based programming is the type of contextual analysis that can elucidate the challenges, relationships, and social norms within a community that may be disempower women, these approaches do not, and perhaps cannot fully account for historical processes of change that have contributed to the context as it is observed today.

However, an understanding of the larger social processes, both cultural and historical, that resulted in the situation observable in the present can lead to very different conclusions about the nature of social norms and cultural practices. The present analysis offers no conclusions as to whether matrilineality today empowers women, but it does shed some light on what specific kinds of cultural practices may contribute to more empowered women and to stronger community structures, at least insofar as the latter are proxied by the social capital sub-scales of the WE-MEASR tool. It cannot be by accident that many of domains—ownership of land and control of household economy, independent ownership of assets, husbands who contribute labor to land owned or controlled by their wives—are ones that also have a root in the cultural practices of the

past. These practices may have become increasingly heterogeneous over time; but even in the face of great structural pressure to change, some of these practices tenaciously have remained common. If empowerment can rooted in and linked to long-standing cultural traditions—if tradition and empowerment are, as Tamale (2008) suggests, not antithetical to one another—then these practices provide the potential for new ways of approaching empowerment and the emic logic that development actors could employ in framing their interventions. The history provided here does not support the assumption made widely and almost unquestioningly in the development community that social norms observed today are long-standing traditions; they may well be. But they may also be the result of structural violence, colonial pressures, and radical economic shifts. Development agents cannot, and likely need not, conduct the kind of in-depth ethnographic work that cultural anthropologists do, but they can learn from it and deploy it more strategically in measurement, interpretation of outcomes, and program planning. Strengthening women's connections to their communities and to their social worlds is critical. Strengthening their connections to the empowering traditions of their cultures is possible. The findings of this study suggest that empowerment benefits of that connection may be more structural than symbolic, whereby the vestiges of empowering traditions of the past hang on in some form in spite of social change. Belonging to a matrilineal home does not seem to empower Malawian women; but the tradition of owning and cultivating land, that still continues today, might well. There may be room for "culture" in the women's empowerment framework, and not just as the object of interventions to change. What that alternative framework might look like—one in which culture is situated as a source of empowerment—is beyond the scope of this dissertation, but based on this work, it is very likely to be seated within women's homes and communities.

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Annex 1: Women's Empowerment— Multi-dimensional Evaluation of Agency, Social Capital, and Relations (WE-MEASR) Survey Tool

SECTION 1. BACKGROUND & DEMOGRAPHIC CHARACTERISTICS INTERVIEWER SAYS: "I am going to start by asking you some questions about you and your household"

Ndiyamba kukufuansani zokhudzana ndi pakhomo panu pano

NO.	QUESTIONS AND FILTERS	CODING CATEGO	SKIP TO	
	TIME INTERVIEW STARTED	HOURS	HOURS	
		MINUTES		
	What is your age?	AGE (IN YEARS)		IF
	Kodi muli ndi zanga zingati?	DON'T KNOW MONTH	98	<18 OR>49 YEARS END SURVEY
	What is your religion?	CATHOLIC	1	
	Mumapemphera mpingo wanji?	CCAP	2	
	((DO NOT READ LIST)	ANGLICAN	3	
	(ONLY ONE ANSWER POSSIBLE)	SEVENTH DAY		
	(CIRCLE RESPONSE)	ADVENTIST/BAPTIST	4	
		OTHER CHRISTIAN	5	
	[RELIGION]	MUSLIM	6	
		NO RELIGION	7	
		OTHER	8	
		(SPECIFY)		
	What is your ethnicity?	CHEWA	1	
	Kodi ndinu a mtundu wanji?	TUMBUKA	2	
	(DO NOT READ LIST)	LOMWE	3	
	(ONLY ONE ANSWER POSSIBLE)	TONGA	4	
	(CIRCLE RESPONSE)	YAO	5	
	[ETHNICITY]	SENA	6	
		NKHONDE	7	
		NGONI	8	
		MANG'ANJA	9	
		NYANJA	10	
		OTHER	_96	
		(SPECIFY)		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	What is your current marital status?		→ 1010
	Kodi muli pa banja?	SINGLE/NEVER MARRIED 1	
	(DO NOT READ LIST)	MARRIED / COHABITING 2	
	(ONLY ONE ANSWER POSSIBLE)	DIVORCED 3	1006
	(CIRCLE RESPONSE)	SEPARATED 4	
	[MARRIAGE]	WIDOWED 5	
	Is this a female or male-headed household?	FEMALE-HEADED 1	
	Kodi mutu wa banja pakhomo panu ndinu kapena	MALE-HEADED 2	
	kapena amuna anu?		
	Is this a matrilineal or patrilineal household?	MATRILINEAL HOUSEHOLD 1	
	Kodi muli kuchitengwa kapena chikamwini?	PATRILINEAL HOUSEHOLD 0	
	3 to 2,000 t		
	Does your husband stay with you right now?	YES 1	
	Kodi panopa mumakhala ndi amuna anu?	NO 2	
	How old is your husband?	AGE (IN YEARS)	
	Kodi amuna anu ali ndi zaka zingati?		
	(WRITE ANSWER IN SPACE)	DON'T KNOW MONTH 98	
	[HUSBAND AGE]		
	When you were married for the first time, did you	CHOSE MYSELF 1	
	choose your husband, or did someone else	SOMEONE ELSE CHOSE 2	
	choose him for you?	DON'T KNOW 8	
	Mmene munkakwatiwa poyamba, mwamuna		
	munasankha nokha kapena wina		
	anakusankhirani?		
	(CIRCLE RESPONSE)		
	[CHOOSE]		
	Have you ever attended school?	YES 1	
	Kodi munapitako ku sukulu?	NO 0	
	(CIRCLE RESPONSE)		
	[EVER ATTENDED SCHOOL]		
	What is the highest level of education that you	PRIMARY 1	
	attended?	SECONDARY 2	
	Sukulu munalekezera pati?	HIGHER 8	
	(WRITE ANSWER IN SPACE)		
	[SCHYRS]		
	Can you read this sentence to me?	CANNOT READ AT ALL 1	
	Tsopano ndikufuna mundiwerengele mawu awa?	ABLE TO READ ONLY PART OF	
		SENTENCE 2	
	(SHOW RESPONDENT CARD WITH SENTENCE	ABLE TO READ THE WHOLE	
	ON & CIRCLE DESCRIPTION OF THEIR	SENTENCE 3	
	READING ABILITY)	BLIND/VISUALLY IMPAIRED 4	
	"I LIKE TO GO TO THE MARKET"		
	"NDIMAKONDA KUPITA KU MSIKA"		
	[LITERACY]		
	Do you read a newspaper or magazine, almost	ALMOST EVERYDAY 1	
	every day, at least once a week, less than once a	AT LEAST ONCE A WEEK 2	
	week or not all?	LESS THAN ONCE A WEEK 3	
	Mumawerengako nyuzipepa kapena magazine	NOT AT ALL 4	
	tsiku lirilonse, kamodzi pamulungu, kuchepera		
	kamodiz paumulngu or simuwerenga kumene?		
	READ OUT QUESTION		
	(CIRCLE RESPONSE)		1

NO.	QUESTIONS AND FILTERS	CODING CATE	ORIES	SKIP TO
	Do you listen to the radio almost every day, at	ALMOST EVERYDAY	1	
	least once a week, less than once a week or not	AT LEAST ONCE A WEEK	2	
	all?	LESS THAN ONCE A WEE	K 3	
	Mumamvera wailesi tsiku lirilonse, kamodzi	NOT AT ALL	4	
	pamulungu, kuchepera kamodiz paumulngu or			
	simumvera kumene?			
	(CIRCLE RESPONSE)			
	[RADIO]			
	Do you watch television almost every day, at least	ALMOST EVERYDAY	1	
	once a week, less than once a week or not all?	AT LEAST ONCE A WEEK	2	
	Mumaonerako kanema/television tsiku lirilonse,	LESS THAN ONCE A WEE	K 3	
	kamodzi pamulungu, kuchepera kamodiz	NOT AT ALL	4	
	paumulngu or simumvera kumene?			
	(CIRCLE RESPONSE)			
	[TV]			
	Who else usually lives in your house with you?	FATHER	Α	
	Kodi pakhomo pano kawirikawiri mumakhala ndi	MOTHER	В	
	ndani?	HUSBAND	С	
		CHILDREN	D	
	(CIRCLE ALL RESPONSES)	BROTHER	E	
		SISTER	F	
		MOTHER-IN-LAW	G	
		FATHER-IN-LAW	Н	
		OTHER RELATIVE	1	
		OTHER NON-RELATIVE	J	

SECTION 2: WORK HISTORY Interviewer says: "Now I would like to ask you some questions about your work and the ownership of goods in your household."

Tsopano ndikufunsani mafunso okhudza ntchito imene mumagwira komanso katundu amene ali pakhomo pano"

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP TO
	How much agricultural land do members of this	ACRES			
	household own? Kodi pakhomo pano muli ndi	HECTARES			
	malo olima akulu bwanji?	FOOTBALL PITCH			
	INSERT NUMBER: IF NO LAND INSERT 0)	DON'T	KNOW	98	
	[LANDANY]				
	Does this household own any pig, sheep, goats,	YES	1		
	cattle?	NO	0		
	Kodi pa khomo pano, muli ndi ziweto monga				
	nkhumba, nkhosa, mbuzi kapena ng'ombe?				
	Does this household own Chickens, Ducks,	YES	1		
	Rabbits, Pigions?	NO	0		
	Kodi pa khomo pano, muli ndi ziweto monga				
	nkhuku, bakha, kalulu, nkhunda?				
NOW I WILL ASK YOU ABOUT THINGS CONCERNING YOU.					
TSOPA	TSOPANO NDIKUFUNSANI MAFUNSO OKHUDZANA NDI INUYO				

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP TO
	Aside from your household chores and work, did	YES	1		
	you do any work outside the home in the past 12	NO	0		
	months for which you received money?				
	Mwagwilapo ntchito yolipidwa pamiyezi 12 yapitayi				
	kupatula ntchito zanu zapakhomo?				
	(CIRCLE RESPONSE)				
	[OWNWORK12				
	Aside from your household chores and work, did	YES	1		
	you do any work outside the home in the past 12	NO	0		
	months for which you were paid in goods?	110	O		
	Mwagwilapo ntchito yolipidwa katundu pamiyezi				
	12 yapitayi kupatula ntchito zanu zapakhomo?				
	(CIRCLE RESPONSE)				
	[GOODS12]				
	Do you have any cash savings of your own,	YES	1		
	including in a VSLA group?	NO	0		→2008
	Kodi muli ndi ndalama zanuzanu zomwe				
	mumasunga kuphatikizapo zanu za ku VSLA?				
	[SAVINGS]				
	In the past 12 months have you used any of your	YES	1		
	own savings for money-lending or for business?	NO	0		
	M'miyezi 12 yapitayi, mwabwereketsako ndalama				
	zanu kwa munthu kapena kupangira bizinesi?				
	[MONEYUSE]				
	Do you have any land that is owned by you alone?	YES	1		
	Kodi muli ndi malo anu?	NO	0		
	Do you own any assets that could help you	YES	1		
	generate income?	NO	0		
	Kodi muli ndi zinainazake, zimene zingathe				
	kukupezetsani ndalama pakhomo pano?				
	[ASSETOWN]				
	What proportion of your household expenses are	ALL/MO:	ST 1		
	met from the money you earn, would you say,	SOME	2		
	your money is used to pay for all, most, half, some	NONE	3		
	or none?				
	Ndalama zimene mumazipezazo, ndigawo				
	lochuluka bwanji limene mumathandizira banja				
	lanu, mungati ndi zonse, zochulukirapo, pang'ono				
	kapena ayi?				
	[PROPEARN]				
<u> </u>	1-	CDACC	POOE	1	
	What is the roof on your house made from?	GRASS		-	
	Kodi nyumba yanu ili ndi denga lanji?	METALI		2	
	(CIRCLE RESPONSE)	STONE		3	
	[HOUSE]		CALONE	4	
			C PLUS GRASS	5	
		OTHER_		6	
		(SPECIF			
	How many rooms are used for sleeping?	NUMBE	R OF ROOMS		
	Nyumba yanu ili ndi zipinda zingati zogona?				
	[ROOMS]				
	ı				1

NO.	QUESTIONS AND FILTERS	CODIN	G CATEGORIES		SKIP TO
	Is the cooking usually done in the house, in a	IN THE	HOUSE	1	
	separate room or outdoors?	IN A SE	PARATE ROOM	2	
	Mumaphiikira mnyumba, mu kithchini ya panja or	OUT-D	OORS	3	
	panja chabe?	OTHER	.	6	
	[COOKING	(SPECI	FY)		
	Do you have electricity, solar power or generator	YES	1		
	in your home? Kodi nyumba mumagwiritsa ntchito	NO	0		
	magetsi, solar or generator?				
	[ELEC]				
		PIPED	WATER	1	
	Where do you get your drinking water?	DUG W	'ELL	2	
	Kodi madzi akumwa mumatunga kuti?	WATER	RFROM		
	[WATER]	SPRING	G/LAKE/RIVER OR	STREAM	
				3	
		BOLEH	OLE	4	
		OTHER	<u> </u>	6	
		(SPECI	FY)		
	What kind of toilet facility do members of your	FLUSH	TOILET	1	
	household usually use?	PIT LA	TRINE	2	
	Kodi muli ndi chimbudzi chotani?	BUCKE	T	3	
	[TOILET]	NO FA	CILITY/BUSH/FIELD) 4	
		OTHER	R	6	
		(SPEC	IFY)		
	Does your household own a bicycle?	YES	1		
	Kodi pakhomo pano muli ndi njinga yakapalasa?	NO	0		
	[CYCLE]				
	Does your household own a radio?	YES	1		
	Kodi pakhomo pano alipo amene ali ndi wailesi?	NO	0		
	[RADIO]				
	Do you or someone in your household own a	YES	1		
	mobile phone or other telephone?	NO	0		
	Kodi pakhomo pano alipo amene ali ndi foni ya				
	m'manja?				
	[PHONE]				
	Does your household own a television?	YES	1		
	Kodi pakhomo pano muli ndi kanema/television	NO	0		
	[TELEVISON				
	Does your household own a refrigerator?	YES	1		
	Kodi pakhomo pano muli ndi filiji	NO	0		
	[FRIDGE]				
	Does your household own an oxcart?	YES	1		
	Kodi pakhomo pano muli ndi ngolo?	NO	0		
	Does your household own a bed?	YES	1		
	Kodi pa khomo pano muli ndi bedi yogonapo?	NO	0		
	[BED				

SECTION 3: BIRTH HISTORY

Interviewer says: "Now I would like to ask you some questions about your experiences with pregnancy and child birth." $\[\]$

Tsopano ndikufunsani mafunso okhudzana ndi uchembere"

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	How many times have you been pregnant?	NUMBER OF TIMES	
	Kodi mwakhalapo oyembekezera kangati?	<u>OR</u>	
	(WRITE ANSWER IN SPACE)	DON'T KNOW 98	
	[NUMPREG]		
	How many live births have you had in your life?	NUMBER OF LIVE BIRTHS	
	Kodi inu mwaberekapo ana amoyo angati m'moyo	<u>OR</u>	
	mwanu?	DON'T KNOW 98	
	(WRITE ANSWER IN SPACE)		
	[NUMLB]		
	Have you ever had a child who died in the first year of	YES 1	
	his/her life? Kodi mudaberekapo mwana amene	NO 0	→3005
	anamwalira asanakwanitse chaka?		
	(CIRCLE RESPONSE)		
	[CHDEATH]		
	How many children have you had who died in the first	LESS THAN 12 MONTHS DEATHS	
	year of life? Ndi ana anu angati amene adamwalira		
	asanathe chaka?	<u>OR</u>	
	(WRITE ANSWER IN SPACE)	DON'T KNOW 98	
	[NUMCHDEATH]		
	How many living sons and daughters do you have?	NUMBER OF SONS	
	Kodi muli ndi ana amuna ndi akazi angati	<u>AND</u>	
	(WRITE ANSWER IN SPACE)	NUMBER OF DAUGHTERS	
	Is it correct that you have living children?	TOTAL CHILDREN	
	Kodi ndizoona kuti muli ndi ana		
	(ADD UP THE NUMBER OF SONS AND		
	DAUGHETERS FROM THE PREVIOUS QUESTION)		
	(IF RESPONDENT SAYS A NUMBER DIFFERENT		
	TO THE SUM OF SONS AND DAUGHERS IN		
	Q3005?, THEN REPEAT Q3006?)		
	Charities with the aldest and decrease to the		
	Starting with the oldest, could you please tell me how		
	old each of your children is now?	AGE	
	Kuyambira mwana wamkulu, mungandiuzeko kuti	CHILD 1 Y M D	
	anawa ali ndizaka zingati? (WRITE AGES NEXT TO CHILD NUMBER, AND	CHILD 2 Y M D	
	CIRCLE WHETHER AGE IS YEARS (Y), MONTHS		
	(M), OR DAYS (D)	CHILD 4 Y M D	
		CHILD 5 Y M D	
		CHILD 6 Y M D	
		CHILD 7 Y M D	
	Again starting with the oldest shild, can you place		
	Again, starting with the oldest child, can you please tell me if each of your children is in school?	YES NO CHILD 1 2	
	Pa ana amene mwatchulawa, kuyambira wamkulu, ndi		
		CHILD 3 1 2	
	angati amene akupita ku sukulu?	CHILD 3 1 2	
	(GO THROUGH EACH OF THE CHILDREN FROM	CHILD 5 1 2	
	OLDEST TO YOUGEST AND CIRCLE YES OR NO.	CHILD 6 1 2	
	FOR CHILDREN AGED UNDER 5 CIRCLE NO)	CHILD 7 1 2	
	I ON GUILDNEIN AGED UNDER 3 CIRCLE NO)	OHILD I Z	

SECTION 4: GENDER RELATIONS

Interviewer says: "I would like to ask you some questions about men and women, and how they behave together: some of the questions will address sensitive subjects, such as your relationship with your husband. All responses will remain confidential and you do not have to answer a question if you do not want to. Also, if interrupted by another person, I will pause the interview or change the subject in order to maintain privacy

"Ndikufuna ndikufunseni mafunso okhudza abambo ndi amayi, ndi momwe amakhalira limodzi. Mafunso ena akhudzapo nkhani zovuta kukamba, mwachitsanzo za banja lanu ndi amuna anu. Mayankho onse tiwasunga mwachinsinsi ndipo mukhale omasuka kusayankha funso limene simukufuna kuyankha. Chinanso ndi chakuti ngati pangabwere ena, ndiyamba ndasiya kufunsa mafunso kapena tisintha nkhani ndi cholinga chakuti tisunge chinsinsi."

NO.	QUESTIONS AND FILTERS	CODING	CATEGORIES	SKIP TO
Somet	imes a husband is angry with his wife. In your opinion	n, is a hus	band justified in hitting his wife in t	he following
situatio	ons.			
Nthaw	i zina mwamuna amanyasidwa kapena kukwiisidwa	ndi zimen	e mkazi wawo amapanga. M'maga	nizomwanu,
mukuo	na kuti nkoyenera kuti mwamuna azimenya mkazi w	ake ngati _l	pakachitika zinthu ngati izi:	
	Is he justified in hitting his wife, if she goes out	YES	1	
	without telling him?	NO	0	
	M'maganizo mwanu, mukuona kuti nkoyenera kuti			
	mwamuna azimenya mkazi wake <u>ngati wachoka</u>			
	pakhomo osamusanzika mwamuna wake?			
	[JUSTOUT]			
	Is he justified in hitting his wife if she neglects	YES	1	
	their children? M'maganizo mwanu, mukuona kuti	NO	0	
	nkoyenera kuti mwamuna azimenya mkazi wake			
	ngati mkazi sakusamalira ana pakhomo?			
	[JUSTKIDS]			
	Is he justified in hitting his wife if she argues with	YES	1	
	him?	NO	0	
	M'maganizo mwanu, mukuona kuti nkoyenera			
	kuti mwamuna azimenya mkazi wake			
	akakangana naye?			
	[JUSTARGUE]			
	Is he justified in hitting his wife if she refuses to	YES	1	
	have sex with him?	NO	0	
	M'maganizo mwanu, mukuona kuti nkoyenera kuti			
	mwamuna azimenya mkazi wake akana			
	kugonana naye?			
	[JUSTSEX]			
	Is he justified in hitting his wife if she did not cook	YES	1	
	the food properly?	NO	0	
	M'maganizo mwanu, mukuona kuti nkoyenera kuti			
	mwamuna azimenya mkazi wake akapsereza			
	chakudya?			
	[JUSTFOOD]			
Please	tell me if you think a woman is justified in refusing to	have sex	with her husband in the following	situations.
	zani ngati kuli koyenera kuti mkazi akane kugonana			
	First, is a woman justified in refusing to have sex	YES	1	
	with her husband if she knows he has a sexually	NO	0	
	transmitted disease?,			
	Ngati akudziwa kuti mwamuna ali ndi matenda			
	opasirana kudzera mnjira yogonana?			
	[REFUSESTD			

NO.	QUESTIONS AND FILTERS	CODING	CATEGORIES	SKIP TO	
	Is a woman justified in refusing to have sex with	YES	1		
	her husband if she knows he has sex with other	NO	0		
	women?				
	Kodi ndikoyenera kuti mkazi akane kugonana ndi				
	mamuna wake ngati akudziwa kuti mwamuna				
	amagonana ndi akazi ena?				
	[REFUSEWOMEN]				
	Is a woman justified in refusing to have sex with	YES	1		
	her husband if she has recently given birth?	NO	0		
	Kodi ndikoyenera kuti mkazi akane kugonana ndi				
	mamuna wake ngati mkazi wangobereka				
	kumene?				
	[REFUSEBIRTH]				
	Is a woman justified in refusing to have sex with	YES	1		
	her husband if she is tired or not in the mood?	NO	0		
	Kodi ndikoyenera kuti mkazi akane kugonana ndi				
	mamuna wake ngati watopa kapena alibe				
	chilakolako?				
	[REFUSETIRED]				
I AM	NOW GOING TO READ SOME STATEMI	ENTS AF	BOUT relationships betweer	n men and	
1					

I AM NOW GOING TO READ SOME STATEMENTS ABOUT relationships between men and women. Please tell me if you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree.

TSOPANO NDIKUWERENGERANI ZIGANIZO ZOKHUZANA NDI UBALE PAKATI PA AMUNA AND AKAZI. MUNDIUZE NGATI MUKUGWIRIZANA NAZO KWAMBIRI KAPENA AMANGOGWIRIZANA NAZO, KAPENA SAGWIRIZANA NAZO KAPENA SAGWIRIZANA NAZO KONSE

It is the mother's responsibility to take care of the	STRONGLY AGREE	1	
children.	AGREE	2	
Ndi udindo wa amayi kusamalira ana.	NEITHER AGREE/DISAGREE	3	
	DISAGREE	4	
[RESPCHILD]	STRONGLY DISAGREE	5	
A woman can choose her own friends, even if her	STRONGLY AGREE	1	
husband disapproves of them.	AGREE	2	
Mkazi ali ndi ufulu wosankha azinzake amene	NEITHER AGREE/DISAGREE	3	
akufuna, ngakhale mwamuna asagwirizane nazo.	DISAGREE	4	
	STRONGLY DISAGREE	5	
[FRIENDS]			
A man should have the final say about decisions	STRONGLY AGREE	1	
in his home. Mwamuna ayenera kupanga	AGREE	2	
chiganizo chomaliza m'banja.	NEITHER AGREE/DISAGREE	3	
	DISAGREE	4	
	STRONGLY DISAGREE	5	
[MANSAY]			
A man is the one who decides when to have sex	STRONGLY AGREE	1	
with his wife. Mamuna ndi amene ayenera	AGREE	2	
kunena nthawi yoti agonane mkazi wake	NEITHER AGREE/DISAGREE	3	
[MANSEX]	DISAGREE	4	
	STRONGLY DISAGREE	5	
Women have the same rights as men to work and	STRONGLY AGREE	1	
study outside of their home.	AGREE	2	
Akazi ndi amuna ali ndi ufulu ofanana wokagwira	NEITHER AGREE/DISAGREE	3	
ntchito kwina komanso kupita sukulu	DISAGREE	4	
[RIGHTS]	STRONGLY DISAGREE	5	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	A woman should tolerate being beaten by her	STRONGLY AGREE	1	
	husband to keep her family together	AGREE	2	
	Mkazi adzipirira akamenyedwa ndi mwamuna	NEITHER AGREE/DISAGREE	3	
	wake kuti asunge banja lake.	DISAGREE	4	
	,	STRONGLY DISAGREE	5	
	A woman who carries condoms with her is an	STRONGLY AGREE	1	
	"easy woman."	AGREE	2	
	Mkazi amene amayenda ndi makondomu ndi	NEITHER AGREE/DISAGREE	3	
	mkazi wophweka kapena wachimasomaso	DISAGREE	4	
	[EASY]	STRONGLY DISAGREE	5	
	A woman is a real woman only when she has had	STRONGLY AGREE	1	
	a child.	AGREE	2	
	Mkazi ndi mkazi weni ngati anaberekapo mwana	NEITHER AGREE/DISAGREE	3	
	[REALWOMAN]	DISAGREE	4	
	[STRONGLY DISAGREE	5	
	A couple should decide together how many	STRONGLY AGREE	1	
	children to have.	AGREE	2	
	Mkazi ndi mamuna ayenera kugwirizana za	NEITHER AGREE/DISAGREE	3	
	nambala ya ana amene akufuna kubereka	DISAGREE	4	
	[COUPLE]	STRONGLY DISAGREE	5	
	A woman can suggest to her husband that they	STRONGLY AGREE	1	
	use condoms.	AGREE	2	
	Mkazi atha kumuwuza mamuna wake kuti	NEITHER AGREE/DISAGREE	3	
	agwiritse ntchito makondomu pogonana naye.	DISAGREE	4	
	[USECONDOMS]	STRONGLY DISAGREE	5	
	Men should help with the household duties.	STRONGLY AGREE	1	
	Amuna ayenera kuthandiza ntchito za pa khomo	AGREE	2	
	[MENHELP]	NEITHER AGREE/DISAGREE	3	
		DISAGREE	4	
		STRONGLY DISAGREE	5	
	If a woman wants to avoid being pregnant it is her	STRONGLY AGREE	1	
	responsibility alone.	AGREE	2	
	Ngati mkazi sakufuna kutenga pakati, ndi udindo	NEITHER AGREE/DISAGREE	3	
	wa iye yekha	DISAGREE	4	
	[AVOIDP]	STRONGLY DISAGREE	5	
	It is just as important for a girl to go to school as it	STRONGLY AGREE	1	
	is for a boy to go to school.	AGREE	2	
	Ana akazi ayenera kupatsidwa mwayi otumizidwa	NEITHER AGREE/DISAGREE	3	
	ku sukulu chimodzimodzi ana amuna.	DISAGREE	4	
	[GIRLSCHOOL]	STRONGLY DISAGREE	5	
	It's better to have more sons than daughters in a	STRONGLY AGREE	1	
	family.	AGREE	2	
	Ndikwabwino kukhala ndi ana amuna ambiri	NEITHER AGREE/DISAGREE	3	
	kuposa akazi.	DISAGREE	4	
	[SONPREF]	STRONGLY DISAGREE	4 5	
ļ				
	When there is not enough food in the house, the	STRONGLY AGREE	1	
	men should eat first.	AGREE	2	
	Mnyumba mukakhala chakudya choperewela	NEITHER AGREE/DISAGREE	3 4	
	mpoyenera kuti ayambilire kudya ndi abambo	DISAGREE		
	[MENFIRST]	STRONGLY DISAGREE	5	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	A woman can go to the health facility without her	STRONGLY AGREE	1	
	husband's permission.	AGREE	2	
	Mkazi atha kupita ku chipatala osatsanzika kwa	NEITHER AGREE/DISAGREE	3	
	mamuna wake	DISAGREE	4	
	[FPPERM]	STRONGLY DISAGREE	5	
	A woman can use family planning without her	STRONGLY AGREE	1	
	husband's permission.	AGREE	2	
	Mkazi atha kugwiritsa njira za kulera osaudza kwa	NEITHER AGREE/DISAGREE	3	
	mamuna wake	DISAGREE	4	
	[FPPERM]	STRONGLY DISAGREE	5	
	[[OTTOTOLT BIOTOTEL		
Propo	sed instructions for community norms questions: No	w I'm going to ask you some ques	tions abou	t what most
people	e in your community think. For each question, I'd like	you to tell me whether most peop	ole in your d	community
	nly agree, agree, neither agree nor disagree, disagree		•	
•	pa ndifunsa mafunso okhudza zammene anthu ambin		a funso liril	onse.
•	iuze ngati anthu ambri ammudzi mwanu amagwirizan	· ·		*
	a sagwirizana nazo kapena sagwirizana nazo konse.	. ,	J	,
	Do most people in your village agree that women	STRONGLY AGREE	1	
	have the same rights as men to work and study	AGREE	2	
	outside of their home?	NEITHER AGREE/DISAGREE	3	
	Anthu ambiri mmudzi mwanu muno amagwirizana	DISAGREE	4	
	nazo kuti amayi ali ndi ufulu wa chibadwidwe	STRONGLY DISAGREE	5	
	ngati wa amuna wokagwira ntchito kwina.	OTHORISET BIOMOREE	Ü	
	Do most people in your village agree that a man	STRONGLY AGREE	1	
	is the one who decides when to have sex with his	AGREE	2	
	wife?	NEITHER AGREE/DISAGREE	3	
	wile?	DISAGREE	3 4	
	Anthu ambiri mmudzi mwanu muna amagujirizana		5	
	Anthu ambiri mmudzi mwanu muno amagwirizana	STRONGLY DISAGREE	5	
	nazo kuti mwamuna ndiamene adziganiza nthawi			
	yoti agonenane ndi mkazi wake.	OTDONOLY A ODES		
	Do most people in your village agree that a man	STRONGLY AGREE	1	
	should have the final say about decisions in his	AGREE	2	
	home?	NEITHER AGREE/DISAGREE	3	
		DISAGREE	4	
	Anthu ambiri mmudzi mwanu muno amagwirizana	STRONGLY DISAGREE	5	
	nazo kuti mwamuna ndiamene adzikhala ndi			
	maganizo omaliza pa nkhani za pakhomo.			
	Do most people in your village agree that a	STRONGLY AGREE	1	
	woman can choose her own friends, even if her	AGREE	2	
	husband disapproves of them?	NEITHER AGREE/DISAGREE	3	
		DISAGREE	4	
	Anthu ambiri mmudzi mwanu muno amagwirizana	STRONGLY DISAGREE	5	
	nazo kuti mkazi angathe kusankha okha amene			
	angakhale anzake ngakhale mwamuna wake			
	sakufuna.			
	Do most people in your village agree that it is just	STRONGLY AGREE	1	
	as important for a girl to go to school as it is for a	AGREE	2	
	boy to go to school?	NEITHER AGREE/DISAGREE	3	
	-	DISAGREE	4	
	Anthu ambiri mmudzi mwanu muno amagwirizana	STRONGLY DISAGREE	5	
	nazo kuti mwana wamkazi adzipta ku sukulu			
	chimodzimodzi mwana wa mwamuna.			
	i " " " "	I .		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	Do most people in your village agree that men	STRONGLY AGREE	1	
	should help with the household duties?	AGREE	2	
		NEITHER AGREE/DISAGREE	3	
	Anthu ambiri mmudzi mwanu muno amagwirizana	DISAGREE	4	
	nazo kuti mwamuna adzithandiza ndi ntchito za	STRONGLY DISAGREE	5	
	pakhomo.			
	Do most people in your village agree that when	STRONGLY AGREE	1	
	there is not enough food in the house, the men	AGREE	2	
	should eat first?	NEITHER AGREE/DISAGREE	3	
		DISAGREE	4	
	Anthu ambiri mmudzi mwanu muno amagwirizana	STRONGLY DISAGREE	5	
	nazo kuti pakhomo pakakhal chakudya chochepa,			
	amuna adziyamba kudya ndi mwamuna?			

SECTION 5: SELF -EFFICACY

Interviewer says: Now I am going to ask you some questions about how confident you feel in your own ability to do certain things: for each one I would like you to tell me whether you are completely sure you could do it, somewhat sure you could do it, neither sure or unsure you could do it, somewhat unsure you could do it, very unsure you could do it.

"Tsopano ndikufunsani mafunso okhudza chitsikimikizo cha inu pakupanga zinthu zosiyanasiyana. Pa funso liri lonse ndikufuna mundiuze ngati mukutsimikiza kwambiri, mukutsimikiza, palibe,simukutsimikiza kapena simukutsimikiza kwambiri kuti mutha kupanga zinthu zimene zitchulidwezi"

Now I am going to ask some questions about how confident or sure you are that you could use family planning if you wanted to. Even if you do not want to use family planning right now, try to imagine sometime in the future when you might wish to use family planning. Panopa ndikufunsani mafunso angapo okhuzana ndi chitsimikizo pogwiitsa ntchito njira zakulera. Ngakhale kuti simukufuna kugwiritsa ntchito njira zakulerazo panopa, ingoyerekedzani kuti mtsogolo muno mutadzafuna kugwiritsa ntchito njira zakulera. COMPLETELY SURE 1 How sure are you that you could bring up the topic of family planning with your husband? Muli ndi chitsimikizo chanji kuti mutha kuyambitsa kukambirana ndi mwamuna wanu zakulera?[SUREFP] How sure are you that you could tell your husband that you wanted to use family planning? Muli ndi chitsimikizo chanji kuti mungathe kuwauza amunai anu kuti mukufuna kuyamba kugwiritsa ntchito njira zakulera? [SURETELL]	NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO		
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might wish to use family planning. Panopa ndikufunsani mafunso angapo okhuzana ndi chitsimikizo pogwiitsa ntchito njira zakulera. Ngakhale kuti simukufuna kugwiritsa ntchito njira zakulerazo panopa, ingoyerekedzani kuti mtsogolo muno mutadzafuna kugwiritsa ntchito njira zakulera. COMPLETELY SURE 1 How sure are you that you could bring up the topic of family planning with your husband? Muli ndi chitsimikizo chanji kuti mutha kuyambitsa kukambirana ndi mwamuna wanu zakulera?[SUREFP] How sure are you that you could tell your husband that you wanted to use family planning? Muli ndi chitsimikizo chanji kuti mungathe kuwauza amunai anu kuti mukufuna kuyamba kugwiritsa ntchito njira zakulera? NOT AT ALL SURE 5 NEITHER SURE/UNSURE 1 SOMEWHAT SURE 2 NEITHER SURE/UNSURE 3 SOMEWHAT UNSURE 4 NOT AT ALL SURE 5					0 ,		
Panopa ndikufunsani mafunso angapo okhuzana ndi chitsimikizo pogwiitsa ntchito njira zakulera. Ngakhale kuti simukufuna kugwiritsa ntchito njira zakulerazo panopa, ingoyerekedzani kuti mtsogolo muno mutadzafuna kugwiritsa ntchito njira zakulera. COMPLETELY SURE 1 How sure are you that you could bring up the topic of family planning with your husband? Nuli ndi chitsimikizo chanji kuti mutha kuyambitsa kukambirana ndi mwamuna wanu zakulera?[SUREFP] How sure are you that you could tell your husband that you wanted to use family planning? Muli ndi chitsimikizo chanji kuti mungathe kuwauza amunai anu kuti mukufuna kuyamba kugwiritsa ntchito njira zakulera? NOT AT ALL SURE 5 NEITHER SURE/UNSURE 1 SOMEWHAT SURE 2 NEITHER SURE/UNSURE 3 SOMEWHAT UNSURE 4 NOT AT ALL SURE 5		, , , , , ,	.g,,				
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Zakulera?[SUREFP] How sure are you that you could tell your		,		-			
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kuwauza amunai anu kuti mukufuna kuyamba SOMEWHAT UNSURE 4 kugwiritsa ntchito njira zakulera? NOT AT ALL SURE 5		husband that you wanted to use family planning?	SOMEWHAT SURE	2			
kugwiritsa ntchito njira zakulera? NOT AT ALL SURE 5		Muli ndi chitsimikizo chanji kuti mungathe	NEITHER SURE/UNSURE	3			
		kuwauza amunai anu kuti mukufuna kuyamba	SOMEWHAT UNSURE	4			
		kugwiritsa ntchito njira zakulera?	NOT AT ALL SURE	5			
II 15 - 1 - 1		[SURETELL]					

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	How sure are you that you could use family	COMPLETELY SURE	1	
	planning?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chanji kuti mutha kugwiritsa	NEITHER SURE/UNSURE	3	
	ntchito njira zakulera.	SOMEWHAT UNSURE	4	
	[SUREFPTALK]	NOT AT ALL SURE	5	
	How sure are you that you could use family	COMPLETELY SURE	1	
	planning, even if your husband did not want to?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chanji kuti mutha kugwiritsa	NEITHER SURE/UNSURE	3	
	ntchito njira zakulera ingakhale kuti mwamuna	SOMEWHAT UNSURE	4	
	wanu sakufuna?	NOT AT ALL SURE	5	
	[SUREUSE]			
		•		

Now I am going to ask you some questions about whether you feel you can refuse to have sex in certain situations. Please remember your answers will be kept completely secret and you don't have to answer questions you don't want to.

Ndingokukumbusani kuti zokambiranazi ndi zachinsinsi ndiponso simuli okakamizidwa kuyankha funso lomwe simukufuna kuyankha inuyo muli ndi chitsimikizo chotani kuti mutha kukana. Tsopano ndikufunsani mafunso ngati mwina nthawi zina mumakana kugonana ndi mwamuna wanu

IIIvviiia	ninawi zina mumakana kugonana nui mwamuna w	anu		
	How sure are you that you could refuse to have	COMPLETELY SURE	1	
	sex with your husband when you don't want to	SOMEWHAT SURE	2	
	have sex but he does?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chanji kuti mutha kukana	SOMEWHAT UNSURE	4	
	kugonana ndi amuna anu ngati simukufuna	NOT AT ALL SURE	5	
	kutero pamene iyeyo akufuna?			
	[SURESEX]			
	How sure you that you could refuse to have sex	COMPLETELY SURE	1	
	with your husband if he <i>insists</i> that you have sex	SOMEWHAT SURE	2	
	with him?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kukana	SOMEWHAT UNSURE	4	
	kugonana ndi mamuna ngatiakukukakamira kuti	NOT AT ALL SURE	5	
	mugonenayebe?			
	[REFUSETIRED]			
	How sure you that you could refuse to have sex	COMPLETELY SURE	1	
	with your husband if you were feeling tired or	SOMEWHAT SURE	2	
	sick?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kukana	SOMEWHAT UNSURE	4	
	kugonana ndi mwamuan wanu ngati mwatopa	NOT AT ALL SURE	5	
	kapena mwadwala?			
	[REFUSETIRED]			
	How sure you that you could refuse to have sex	COMPLETELY SURE	1	
	with your husband if he gets angry with you if you	SOMEWHAT SURE	2	
	don't have sex?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kukana	SOMEWHAT UNSURE	4	
	kugonana ndi mwamuna wanu ngati iwo ali	NOT AT ALL SURE	5	
	okwiya?			
	[REFUSEANGRY]			
	How sure you that you could refuse to have sex	COMPLETELY SURE	1	
	with your husband if he threatens to hurt you if	SOMEWHAT SURE	2	
	you won't have sex?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kukana	SOMEWHAT UNSURE	4	
	kugonana ndi mwamuna wnu anu atakuopsezani	NOT AT ALL SURE	5	
	kuti akupwetekani?			
	[REFUSEHURT]			
		1		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	How sure you that you could refuse to have have	COMPLETELY SURE	1	
	sex with your husband if he threatens to have sex	SOMEWHAT SURE	2	
	with other women if you don't have sex with him?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kukana	SOMEWHAT UNSURE	4	
	kugonana mwamuna wanu ngati atakuopsezani	NOT AT ALL SURE	5	
	kuti akagonana ndi akazi ena mukakana			
	kugonana naye?			
	[REFUSEOTHER]			
	How sure are you that you could refuse to have	COMPLETELY SURE	1	
	sex with your husband if he threatens to end the	SOMEWHAT SURE	2	
	marriage if you don't have sex with him?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kukana	SOMEWHAT UNSURE	4	
	kugonana mwamuna wanu ngati atakuopsezani	NOT AT ALL SURE	5	
	kuti banja litha?			
	[REFUSEOTHER]			
	•	•		•
Now I	would like to ask about going to the health facility. F			·
	How sure are you that you could go to the health	COMPLETELY SURE	1	
	facility if you wanted to go?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti mutha kupita	NEITHER SURE/UNSURE	3	
	kuchipatala mutafuna?	SOMEWHAT UNSURE	4	
	[SUREGO]	NOT AT ALL SURE	5	
	How sure are you that you could go to the health	COMPLETELY SURE	1	
	facility if you were worried that the staff would	SOMEWHAT SURE	2	
	treat you badly?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupitabe	SOMEWHAT UNSURE	4	
	kuchipatala ngakhale mukudziwa kutii ogwira	NOT AT ALL SURE	5	
	ntchito kumeneko sakakulandirani bwino?			
	[SUREBAD]			
	How sure are you that you could go to the health	COMPLETELY SURE	1	
	facility if your husband objected to your going?	SOMEWHAT SURE	2	
	Muuli ndi chitsimikizo chotani kuti mungapite	NEITHER SURE/UNSURE	3	
	kuchipatala ngakhale amuna anu atakuletsani?	SOMEWHAT UNSURE	4	
	[SUREOBJ]	NOT AT ALL SURE	5	
	How sure are you that you could go to the health	COMPLETELY SURE	1	
	facility even if you feel you have some work to do	SOMEWHAT SURE	2	
	at home?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupita	SOMEWHAT UNSURE	4	
	kuchipatala ngakhale muli ndi ntchito zotimugwire	NOT AT ALL SURE	5	
	pakhomo?			
	[SUREFAM]	COMPLETE: V.C.::=		
	How sure are you that you could go to the health	COMPLETELY SURE	1	
	facility if your family thought you were neglecting	SOMEWHAT SURE	2	
	your household duties?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupita	SOMEWHAT UNSURE	4	
	kuchipatala ngakhale banja lanu likuona ngati	NOT AT ALL SURE	5	
	mukuthawa ntchito pakhomo?			
NI. '	[SUREFAM]			
	would like to ask about attending community meeting		anana relelese l	0011
rsopa	no ndikufunsani zokhuzana ndi kupita/ kukhalanawo	pa misonkhano ya mimudzi ka	apena m'aera i	arıu.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
NO.	How sure are you that you could attend a	COMPLETELY SURE	1	SKIF TO
	community meeting?	SOMEWHAT SURE	2	
	, ,	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupita ku		_	
	msonkhano wa m'mudzi/ m'dera lanu inuyo mutafuna?	SOMEWHAT UNSURE	4	
		NOT AT ALL SURE	5	
	[SUREMEET]	OOMBI ETELV OURE		
	How sure are you that you could attend a	COMPLETELY SURE	1	
	community meeting if your family did not	SOMEWHAT SURE	2	
	encourage you to go?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupita ku	SOMEWHAT UNSURE	4	
	msonkhano wa m'mudzi ngakhale banja lanu	NOT AT ALL SURE	5	
	silikukulimbikitsani kuti mupite? [SUREMEETFAM]			
	How sure are you that you could attend a	COMPLETELY SURE	1	
	community meeting if your family did not want you	SOMEWHAT SURE	2	
	to go?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupita ku	SOMEWHAT UNSURE	4	
	msonkhano wa m'mudzi ngati banja lanu	NOT AT ALL SURE	5	
	silikufuna kuti inu mupite?		· ·	
	[SUREFAMNO]			
	How sure are you that you could attend a	COMPLETELY SURE	1	
	community meeting if your family would not help	SOMEWHAT SURE	2	
	with your household duties so that you could			
	1	NEITHER SURE/UNSURE SOMEWHAT UNSURE	3	
	attend?		4	
	Muli ndi chitsimikizo chotani kuti inu mutha kupita	NOT AT ALL SURE	5	
	ku msonkhano wa m'mudzi ngati banja lanu			
	silikufuna kukuthandizani ntchito za pakhomo ndi			
	cholinga choti inuyo mupite ku msonkhano?			
	[SUREMEETCHORES]	COMPLETELY OUR		
	How sure are you that you could express your	COMPLETELY SURE	1	
	opinion at a community meeting?	SOMEWHAT SURE2	0	
	Muli mali abitainaikina abakani kudhasukha ku	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupereka	SOMEWHAT UNSURE	4	
	maganizo anu pa msonkhano wa m'mudzi/	NOT AT ALL SURE 5		
	m'dera lanu?			
	[SUREOPINION]			
	How sure are you that you could express your	COMPLETELY SURE	1	
	opinion at a community meeting if some people	SOMEWHAT SURE	2	
	did not agree with that opinion?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupereka	SOMEWHAT UNSURE	4	
	maganizo anu pa msonkhano wa m'mudzi	NOT AT ALL SURE	5	
	ngakhale anthu ena koma ochepa sakugwirizana			
	ndi maganizo anuwo?			
	[SUREDISAGREE]			
	How sure are you that you could express your	COMPLETELY SURE	1	
	opinion at a community meeting if most people	SOMEWHAT SURE	2	
	did not agree with that opinion?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha kupereka	SOMEWHAT UNSURE	4	
	maganizo anu pa msonkhano wa m'mudzi	NOT AT ALL SURE	5	
	ngakhale anthu ena ambiri sakugwirizana ndi		•	
	maganizo anuwo?			
	[SUREDISAGREE]			
	[5525.67.67.622]	I		i l

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
Now, I	would like to ask some questions about eating a var	iety of foods when you are preg	gnant and lact	ating. When
I say a	variety of foods that includes food from animal source	ces, such as meat, eggs, and n	nilk.	
Tsopai	no ndikufunsani mafunso okhuzana ndi kudya zakud	lya zamagulu pamene muli oye	embekedzera k	comanso
mukuy	ramwitsa. zakudya zake monga nyama, madzira ndi i	mkaka.		
	First, when you are pregnant or breastfeeding,	COMPLETELY SURE	1	
	how sure are you that you could eat a variety of	SOMEWHAT SURE	2	
	foods, assuming that all these foods are available	NEITHER SURE/UNSURE	3	
	in the home?	SOMEWHAT UNSURE	4	
	Pamene muli oyembekedzera, muli ndi	NOT AT ALL SURE	5	
	chitsimikizo chotani kuti mutha kudya zakudya za			
	magulu, kuphatikizapo?			
	[SUREEAT]			
	When you are pregnant or breastfeeding, how	COMPLETELY SURE	1	
	sure are you that you could eat a variety of foods,	SOMEWHAT SURE	2	
	even if there was not enough food for everyone in	NEITHER SURE/UNSURE	3	
	the household?	SOMEWHAT UNSURE	4	
	Pamene muli oyembekedzera or mukuyamwitsa,	NOT AT ALL SURE	5	
	muli ndi chitsimikizo chotani kuti mutha kudya			
	zakudya za magulu, kuphatikizapo			
	[SUREENOUGH]			
	When you are pregnant or breastfeeding, how	COMPLETELY SURE	1	
	sure are you that you could eat a variety of foods	SOMEWHAT SURE	2	
	if there is only enough for you or your husband	NEITHER SURE/UNSURE	3	
	(just enough for one of you, but not both of you)?	SOMEWHAT UNSURE	4	
	Muli ndi chitsimikizo chotani kuti mutha kudya	NOT AT ALL SURE	5	
	zakudya zamagulu kuphatikizapo zochokera ku			
	nyama/ ziweto ngati pakhomo pali chakudya			
	chongokwanira mmodzi mwa inuyo kapena			
	amuna anu, koma osati nonse nthawi imodzi?			
	[SUREHUSBAND]			
Now, I	would like to ask some questions about breastfeeding	=		
	If you wanted to give only breast milk to your baby	COMPLETELY SURE	1	
	for the first six months of life, how sure are you	SOMEWHAT SURE	2	
	that you could do this?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha	SOMEWHAT UNSURE	4	
	kuyamwitsa mwana mkaka wa mumawere okha	NOT AT ALL SURE	5	
	basi kuyambira tsiku lobadwa mpaka atakwanitsa			
	miyezi isanu ndi umodzi?			
	[SUREBREAST]			
	If you wanted to give only breast milk to your baby	COMPLETELY SURE	1	
	for the first six months of life, how sure are you	SOMEWHAT SURE	2	
	that you could do this if you don't have the	NEITHER SURE/UNSURE	3	
	encouragement of your family?	SOMEWHAT UNSURE	4	
	Muli ndi chitsimikizo chotani kuti mutha	NOT AT ALL SURE	5	
	kukwanitsa kuyamwitsa mwana mkaka wa			
	mmawere okha basi kwa miyezi isanu ndi umodzi			
	kuchokera tsiku lobadwa ngati simukulandira			
	chilimbikitso kuchokera ku banja lanu?			
	[SUREBFFAM]			
	mmawere okha basi kwa miyezi isanu ndi umodzi kuchokera tsiku lobadwa ngati simukulandira chilimbikitso kuchokera ku banja lanu?			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	If you wanted to only give breast milk for the first	COMPLETELY SURE	1	
	six months of life, how sure are you that you could	SOMEWHAT SURE	2	
	do this if your family tries to give the baby water	NEITHER SURE/UNSURE	3	
	or other liquids?	SOMEWHAT UNSURE	4	
	Muli ndi chitsimikizo chotani kuti mungathe	NOT AT ALL SURE	5	
	kuyamwitsa mwana wanu mkaka wa mumawere			
	okha basi kwa miyezi isanu ndi umodzi kuchokera			
	tsiku lobadwa ngakhale kuti banja lanu likufuna			
	kumupatsa mwana madzi kapena zakumwa zina?			
	[SUREBFLIQ]			
	If you wanted to only give breast milk for the first	COMPLETELY SURE	1	
	six months of life, how sure are you that you could	SOMEWHAT SURE	2	
	do this if your family does not help with household	NEITHER SURE/UNSURE	3	
	duties including childcare to give you time to	SOMEWHAT UNSURE	4	
	breastfeed?	NOT AT ALL SURE	5	
	Muli ndi chitsimikizo chotani kuti mutha			
	kukwanitsa kuyamwitsa mwana wanu mkaka wa			
	mumawere okha basi kwa miyezi isanu ndi			
	umodzi ngakhale banja lanu lisakukuthandizani			
	ntchito zapakhomo komanso kutsamalira ana ndi			
	cholinga choti inu mukhale ndi nthawi yoyamwitsa			
	mwana?			
	[SUREBFCHORE]			
Now I	would like to ask you several questions about child c	are.		
Tsopai	no ndikufunsani mafunso angapo okhuza kusamalira	ana.		
	How sure are you that you could ask an adult in	COMPLETELY SURE	1	
	your household to watch the children?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti mungathe	NEITHER SURE/UNSURE	3	
	kumuuza munthu wa mkulu pakhomo panu kuti	SOMEWHAT UNSURE	4	
	ayang'anire ana?	NOT AT ALL SURE	5	
	[SUREWATCH]			
	How sure are you that you could ask an adult in	COMPLETELY SURE	1	
	your household to watch the children when you	SOMEWHAT SURE	2	
	want to rest because you are sick?	NEITHER SURE/UNSURE	3	
	Mungatsimikize bwanji kuti mungathe kumuuza	SOMEWHAT UNSURE	4	
	munthu wa mkulu pakhomo panu kuti ayang'anire	NOT AT ALL SURE	5	
	ana pamene inu mukufuna kupuma chifukwa			
	mwadwala?			
	[SURESICK]			
	How sure are you that you could ask an adult in	COMPLETELY SURE	1	
	your household to watch the children when you	SOMEWHAT SURE	2	
	need to go to the health facility?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mungathe	SOMEWHAT UNSURE	4	
	kumuuza munthu wa mkulu pakhomo panu kuti	NOT AT ALL SURE	5	
	ayang'anire ana pamene inu mukufuna kupita			
I	kuchipatala?			
	Ruoriipataia:			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	How sure are you that you could ask an adult in	COMPLETELY SURE	1	
	your household to watch the children when you	SOMEWHAT SURE	2	
	want to go visit a friend or family member?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mungathe	SOMEWHAT UNSURE	4	
	kumuuza munthu wa mkulu pakhomo panu kuti	NOT AT ALL SURE	5	
	ayang'anire ana pamene inu mukufuna			
	kukayendera anzanu kapena abale anu?			
	[SUREVISIT]			
Now I	would like to ask you several questions about your h	usband's participation in hous	ehold duties.	
Tsopa	no ndikufunsani mafunso angapo okhuza mbali imen	ne amuna anu amatengapo pa	ntchito zapakh	пото.
	How sure are you that you could ask your	COMPLETELY SURE	1	
	husband to do some of the household duties?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti mungathe	NEITHER SURE/UNSURE	3	
	kupempha amuna anu kuti akuthandizeni ntchito	SOMEWHAT UNSURE	4	
	za pakhomo?	NOT AT ALL SURE	5	
	[SUREASKCHORE]			
	How sure are you that you could ask your	COMPLETELY SURE	1	
	husband to do some of the household duties if	SOMEWHAT SURE	2	
	you want his help and he isn't doing anything else	NEITHER SURE/UNSURE	3	
	at the time?	SOMEWHAT UNSURE	4	
	Muli ndi chitsimikizo chotani kuti mutha	NOT AT ALL SURE	5	
	kupempha/ kuuza amuna anu kuti agwire zina			
	mwa ntchito za pakhomo ngati inu mukufuna			
	kuthandizidwa pamene iwo akungokhala pa			
	nthawiyo			
	[SURETIME]			
	How sure are you that you could ask your	COMPLETELY SURE	1	
	husband to do some of the household duties if	SOMEWHAT SURE	2	
	you want to go to an important community	NEITHER SURE/UNSURE	3	
	meeting?	SOMEWHAT UNSURE	4	
	Muli ndi chitsimikizo chotani kuti mutha	NOT AT ALL SURE	5	
	kupempha/ kuuza amuna anu kuti agwire zina			
	mwa ntchito za pakhomo ngati inuyo mukufuna			
	kupita ku msonkhano ofunikira m'dera mwanu?			
	[SURECHOREM]			
	How sure are you that you could ask your	COMPLETELY SURE	1	
	husband to do some of the household duties if	SOMEWHAT SURE	2	
	you want to go visit a friend or family member?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti mutha	SOMEWHAT UNSURE	4	
	kupempha/ kuuza amuna anu kuti agwire zina	NOT AT ALL SURE	5	
	mwa ntchito za pakhomo ngati inuyo mukufuna			
	kukawayendera anzanu kapena achibale anu?			
	[SURECHOREV]			

SECTION 6: DECISION MAKING

Now, I would now like to ask you about who usually makes decisions in your household.

"Tsopano ndikufuna ndikufunseni za amene amapanga ziganizo pa khomo pano"

NO. QUESTIONS AND	FILTERS	CODING CATEGORIES	SKIP TO
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
		YOU (RESPONDENT) 1	
	First, would you tell me which member of your	YOUR HUSBAND 2	
	household usually makes decisions about your health	BOTH YOU & YOUR HUSBAND	
	care?	3	
	Would this person be: you, your husband, both and	MOTHER/FATHER-IN-LAW 4	
	your husband together, your mother-in-law or father-in-	SOMEONE ELSE 5	
	law, or your own parents or someone else?	MOTHER/FATHER 6	
	Ndi ndani amene amapanga ziganizo zokhuza		
	chitsamaliro cha moyo wanu wa pakhomo panu wa		
	tsiku ndi tsiku?		
	[DECHEALTH]		
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about making large household purchases?	YOUR HUSBAND 2	
	Ndindani amene amapannga ziganizo mukamagula	BOTH YOU & YOUR HUSBAND	
	zinthu zikuluzikulu zofunikira za pakhomo panu?	3	
	[DECLP]	MOTHER/FATHER-IN-LAW 4	
	,	SOMEONE ELSE 5	
		MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about making household purchases for daily	YOUR HUSBAND 2	
	needs?	BOTH YOU & YOUR HUSBAND	
	Ndindani amene amapannga ziganizo mukamagula	3	
	zinthu zofunikira za tsiku ndi tsiku za pakhomo panu?	MOTHER/FATHER-IN-LAW 4	
	[DECSP]	SOMEONE ELSE 5	
		MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about when you will visit	YOUR HUSBAND 2	
	family/relatives/friends?	BOTH YOU & YOUR HUSBAND	
	Ndindani amene amapannga ziganizo mukamafuna	3	
	kukayendera abale anu kapena anzanu?	MOTHER/FATHER-IN-LAW 4	
	[DECVISIT]	SOMEONE ELSE 5	
		MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about when your whole household will visit	YOUR HUSBAND 2	
	family/relatives/friends?	BOTH YOU & YOUR HUSBAND	
	Ndindani amene amapannga ziganizo pamene banja	3	
	lanu likufuna kukayendera abale anu kapena anzanu?		
	[DECVISIT]	MOTHER/FATHER-IN-LAW 4 SOMEONE ELSE 5	
	[DEGVIOIT]	MOTHER/FATHER 6	
		WOTTLENFATTIER 0	
-	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about what food should be cooked each	YOUR HUSBAND 2	
	day?	BOTH YOU & YOUR HUSBAND	
	Ndindani amene amapanga ziganizo zokhuza	3	
	chakudya choti muphike tsiku ndi tsiku pa khomo	MOTHER/FATHER-IN-LAW 4	
	panu?	SOMEONE ELSE 5	
	[DECFOOD]		
<u> </u>	[DEGLOOD]	MOTHER/FATHER 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about how food is distributed in the	YOUR HUSBAND 2	
	household?	BOTH YOU & YOUR HUSBAND	
	Ndindani amene amapanga ziganizo zokhuza	3	
	kagawidwe ka chakudya pa khomo panu?	MOTHER/FATHER-IN-LAW 4	
	[DECDIS]	SOMEONE ELSE 5	
		MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about whether to give a baby other liquids	YOUR HUSBAND 2	
	besides breast milk during the first 6 months?	BOTH YOU & YOUR HUSBAND	
	Ndindani amene amapanga chisankho choti mwana	3	
	oyamwa mkaka wa mumawere atha kupatsidwanso	MOTHER/FATHER-IN-LAW 4	
	zakumwa zina pamene iye asanakwanitse miyezi	SOMEONE ELSE 5	
	isanu ndi umodzi ya kubadwa pakhomo panu?	MOTHER/FATHER 6	
	[DECLIQ]		
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about how to use the money you bring into	YOUR HUSBAND 2	
	the household?	BOTH YOU & YOUR HUSBAND	
	Ndindani amapanga ziganizo zakagwiritsidwe ntchito	3	
	ka ndalama zimene inuyo mumabweretsa pakhomo?	MOTHER/FATHER-IN-LAW 4	
	[DECEARN]	SOMEONE ELSE 5	
	[[MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about how to use the money your husband	YOUR HUSBAND 2	
	brings into the household?	BOTH YOU & YOUR HUSBAND	
	Ndindani amapanga ziganizo zakagwiritsidwe ntchito	3	
	ka ndalama zimene amuna anu amabweretsa	MOTHER/FATHER-IN-LAW 4	
	pakhomo?	SOMEONE ELSE 5	
	[DECEARN]	MOTHER/FATHER 6	
 	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about when your family will sell a large asset	YOUR HUSBAND 2	
	(like a cow)	BOTH YOU & YOUR HUSBAND	
	(like a cow) Ndindani amapanga ziganizo choti m'banja mwanu	3	
		MOTHER/FATHER-IN-LAW 4	
	mutha kugulitsa katundu wamkulu-mkulumonga	SOMEONE ELSE 5	
	ng'ombe?		
<u> </u>	[DECSELL]		
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about when your family will sell a small asset		
	(like a chicken)	BOTH YOU & YOUR HUSBAND	
	Ndindani amapanga ziganizo choti m'banja mwanu	3	
	mutha kugulitsa katundu wamung'ono-mung'ono	MOTHER/FATHER-IN-LAW 4	
	monga nkhuku?	SOMEONE ELSE 5	
	[DECSELL]	MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about what you can wear?	YOUR HUSBAND 2	
	Ndindani amapanga chisankho cha zobvala zimene	BOTH YOU & YOUR HUSBAND	
	mungabvale tsiku limenelo ?	3	
	[DECWEAR]	MOTHER/FATHER-IN-LAW 4	
		SOMEONE ELSE 5	
		MOTHER/FATHER 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about who you can spend time with?	YOUR HUSBAND 2	
	Ndindani m'banja mwanu amene amakusankhirani	BOTH YOU & YOUR HUSBAND	
	anzanu ocheza nawo?	3	
	[DECTIME]	MOTHER/FATHER-IN-LAW 4	
		SOMEONE ELSE 5	
		MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about how you spend your time?	YOUR HUSBAND 2	
	Ndindani amapanga chiganizo chakagwiritsidwe	BOTH YOU & YOUR HUSBAND	
	ntchito ka nthawi yanu m'banja mwanu?	3	
	[DECTIMEH]	MOTHER/FATHER-IN-LAW 4	
		SOMEONE ELSE 5	
		MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about whether you can work to earn money?	YOUR HUSBAND 2	
	Ndindani amapanga chiganizo choti inuyo mutha	BOTH YOU & YOUR HUSBAND	
	kugwira ntchito kuti mupeze ndalama pa khomo panu?	3	
	[DECWORK]	MOTHER/FATHER-IN-LAW 4	
		SOMEONE ELSE 5	
		MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about when you and your husband have	YOUR HUSBAND 2	
	sex?	BOTH YOU & YOUR HUSBAND	
	Ndindani amapanga chiganizo choti inu ndi mwamuna	3	
	wanu mugonane?	MOTHER/FATHER-IN-LAW 4	
	[DECSEX]	SOMEONE ELSE 5	
		MOTHER/FATHER 6	
	Which member of your household usually makes	YOU (RESPONDENT) 1	
	decisions about whether you and your husband use	YOUR HUSBAND 2	
	family planning?	BOTH YOU & YOUR HUSBAND	
	Ndindani amapanga chisankho choti inu ndi amuna	3	
	anu mugwiritse ntchito njira zakulera?	MOTHER/FATHER-IN-LAW 4	
	[DECFP]	SOMEONE ELSE 5	
		MOTHER/FATHER 6	

SECTION 7: GENDER COMMUNICATION

Interviewer reads: I would now like to ask you about things you may discuss with your husband: for each one please tell me if you discuss this always, often, sometimes, seldom or never.

"Ndikufuna ndikufunseni zokhudza zinthu zimene mungathe kukambilana ndi amuna anu. Pa chili chonse nditchulechi, mundiuze ngati mumakambilana nthawi zonse, kawirikawiri, nthawi zina, nthawi pang'ono kapena simukambilana olo pang'ono"

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	How often do you and your husband discuss things that	ALWAYS 1	
	happened during the day?	OFTEN 2	
	Mwachidule, kodi inuyo ndi amuna anu, mumakambirana	SOMETIMES 3	
	zinthu zimene zachitika pa tsikulo? Mowirikiza bwanji?	SELDOM 4	
	[TDAY]	NEVER 5	

NO.	QUESTIONS AND FILTERS	CODING CATEGO	RIES	SKIP TO
	How often do you and your husband discuss your worries	ALWAYS	1	
	or feelings?	OFTEN	2	
	Kodi inuyo ndi mwamuna wanu mumakambirana za	SOMETIMES	3	
	nkhawa zanu? Mowirikiza bwanji?	SELDOM	4	
	[TWORRY]	NEVER	5	
	How often do you and your husband discuss what to	ALWAYS	1	
	spend household money on?	OFTEN	2	
	Kodi inuyo ndi mwamuna wanu mumakambirana	SOMETIMES	3	
	zakagwiritsidwe ntchito ka ndalama zanu za pakhomo?	SELDOM	4	
	Mowirikiza bwanji?	NEVER	5	
	[TMONEY]			
	How often do you and your husband discuss when to have	ALWAYS	1	
	children?	OFTEN	2	
	Kodi inuyo ndi mwamuna wanu mumakambirana za	SOMETIMES	3	
	nthawi yoti mudzakhale ndi ana? Mowirikiza bwanji?	SELDOM	4	
	[TKIDS]	NEVER	5	
	How often do you and your husband discuss family	ALWAYS	1	
	planning?	OFTEN	2	
	Kodi inuyo ndi mwamuna wanu mumakambirana nkhani	SOMETIMES	3	
	zakulera, monga ana amene mukufuna kudzakhala nawo?	SELDOM	4	
	Mowirikiza bwanji?	NEVER	5	
	[TFP]			

SECTION 8: FEMALE MOBILITY

Interviewer reads: Now I would like to ask you about going places. Please tell me whether you are permitted to go to the following places on your own, only if someone accompanies you, or not at all?

Tsopano ndikufuna ndikufunseni zokhudza kupita malo osiyanasiyana. Mundiuze ngati muli ololedwa kupita kumalo otsatilawa panokha, kapena pokhapokha wina akupelekezeni kapena simupita ndi komwe?

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	Are you permitted to go to the market to buy or sell things	ON MY OWN 1	
	on your own, only if someone accompanies you, or not at	IF SOMEONE ACCOMPANIES	
	all?	ME 2	
	Kodi muma loledwa kupita ku msika kukagula kapena	NOT AT ALL 3	
	kukagulitsa zinthu nokha, kapena mumachita		
	kuperezedwa kapena simuloledwa?		
	[MMARKET]		
	Are you permitted to go fetch water on your own, only if	ON MY OWN 1	
	someone accompanies you, or not at all?	IF SOMEONE ACCOMPANIES	
	Mumaloledwa kukatunga madzi panokha, pokhapokha	ME 2	
	kapena mumachita kuperezedwa kapena simuloledwa?	NOT AT ALL 3	
	[MWATER]		
	Are you permitted to go to training course including adult	ON MY OWN 1	
	literacy classes on your own, only if someone	IF SOMEONE ACCOMPANIES	
	accompanies you, or not at all?	ME 2	
	Mumaloledwa kupita ku maworkshop or sukulu za kwacha	NOT AT ALL 3	
	panokha, pokhapokha kapena mumachita kuperezedwa		
	kapena simuloledwa?		
	[MSCHOOL]		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	Are you permitted to go to the health facility on your own,	ON MY OWN 1	
	only if someone accompanies you, or not at all?	IF SOMEONE ACCOMPANIES	
	Mumaloledwa kupita ku chipatala panokha, pokhapokha	ME 2	
	kapena mumachita kuperezedwa kapena simuloledwa?	NOT AT ALL 3	
	[MCLINIC]		
	Areyou permitted to go to a community meeting on your	ON MY OWN 1	
	own, only if someone accompanies you, or not at all?	IF SOMEONE ACCOMPANIES	
	Mumaloledwa kupita ku msonkhano wa pa mudzi	ME 2	
	panokha, pokhapokha kapena mumachita kuperezedwa	NOT AT ALL 3	
	kapena simuloledwa?		
	[MMEET]		
	Are you permitted to go to homes of close-by friends on	ON MY OWN 1	
	your own, only if someone accompanies you, or not at all?	IF SOMEONE ACCOMPANIES	
	Mumaloledwa kupita ku nyumba kwa anzanu apafupi	ME 2	
	(aneba) panokha, pokhapokha kapena mumachita	NOT AT ALL 3	
	kuperezedwa kapena simuloledwa? [MMEET]		
	Are you permitted to go to outside the village on your own,	ON MY OWN 1	
	only if someone accompanies you, or not at all?	IF SOMEONE ACCOMPANIES	
	Mumaloledwa kupita kutali ndi mudzi wanu panokha,	ME 2	
	pokhapokha kapena mumachita kuperezedwa kapena	NOT AT ALL 3	
	simuloledwa?		
	[MMEET]		
	Are you permitted to go to church or mosque on your own,	ON MY OWN 1	
	only if someone accompanies you, or not at all?	IF SOMEONE ACCOMPANIES	
	Mumaloledwa kupita ku tchalichi/muzikiti panokha,	ME 2	
	pokhapokha kapena mumachita kuperezedwa kapena	NOT AT ALL 3	
	simuloledwa?		
	[MMEET]		

SECTION 9: SOCIAL CAPITAL

Interviewer reads: I would now like to ask you some questions about your community. For each of the following statements, do you strongly agree, agree, are undecided, disagree, or strongly disagree?

Ndikufuna ndikufunseni mafunso okhudza mudzi lanu lino. Pa statement ili yonse imene ndinene, mukuvoemereza kwambiri, mukuvomereza, palibe, mukutsutsa kapena mukutsutsa kwambiri?

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	The majority of people in this village can be trusted.	STRONGLY AGREE	1	
	Anthu ambiri m'mudzi mmuno ndi okhulupirika.	AGREE	2	
	[TRUST]	NEITHER AGREE/DISAGREE	3	
		DISAGREE	4	
		STRONGLY DISAGREE	5	
	The majority of people in this village generally get	STRONGLY AGREE	1	
	along with each other.	AGREE	2	
	Anthu ambiri m'mudzimuno amagwirizana.	NEITHER AGREE/DISAGREE	3	
		DISAGREE	4	
	[ALONG]	STRONGLY DISAGREE	5	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	I feel that I am really a part of this village.	STRONGLY AGREE	1	
	Ndimamva mkati mwanga kuti ndinedi m'modzi	AGREE	2	
	mwa anthu a m'mudzimuno.	NEITHER AGREE/DISAGREE	3	
	[PART]	DISAGREE	4	
		STRONGLY DISAGREE	5	
	I think that the majority of people in this village	STRONGLY AGREE	1	
	would try to take advantage of me if they got the	AGREE	2	
	chance.	NEITHER AGREE/DISAGREE	3	
	Anthu ambiri mmudzi muno atha kutengerapo	DISAGREE	4	
	mwayi pa ine atapatsidwa mpata woterowo chifukwa	STRONGLY DISAGREE	5	
	amandionerera.			
	[ADVANT]			
	I can rely on people in my village if I need to borrow	STRONGLY AGREE	1	
	money.	AGREE	2	
	Nditha kudalira anthu a m'mudzi mwanga muno	NEITHER AGREE/DISAGREE	3	
	nditafuna kubwereka ndalama.	DISAGREE	4	
	[BORROW]	STRONGLY DISAGREE	5	
	I can rely on people in my village if I need to talk	STRONGLY AGREE	1	
	about my problems.	AGREE	2	
	Nditha kudalira anthu a m'mudzi mwanga muno	NEITHER AGREE/DISAGREE	3	
	nditafuna kukamba za mavuto anga.	DISAGREE	4	
	[PROBLEMS]	STRONGLY DISAGREE	5	
	I can rely on people in my village to help deal with a	STRONGLY AGREE	1	
	violent or difficult family member.	AGREE	2	
	Nditha kuthandizana ndi anthu a m'mudzi mwanga	NEITHER AGREE/DISAGREE	3	
	muno kuthana ndi munthu ovuta/ovutitsa m'banja	DISAGREE	4	
	mwanga.	STRONGLY DISAGREE	5	
	[DIFFICULT]	STRONGET DISAGREE	3	
	I can rely on people in my village to help me if I have	STRONGLY AGREE	1	
	difficulty breastfeeding my baby.	AGREE	2	
	Nditha kuthandizidwa ndi anthu ammudzi mwanga	NEITHER AGREE/DISAGREE	3	
	muno ngati ndili ndi vuto poyamwitsa mwana	DISAGREE	4	
	wanga.	STRONGLY DISAGREE	5	
	[COMMBF]	3TRONGET DISAGREE	5	
	I can rely on people in my village to help me if I can't	STRONGLY AGREE	1	
	provide my child with enough healthy food.	AGREE	2	
	1.			
	Nditha kuthandizidwa ndi anthu ammudzi mwanga	NEITHER AGREE/DISAGREE	3	
	muno ngati sindingakwanitse kumupatsa mwana	DISAGREE STRONGLY DISAGREE	4 5	
	wanga chakudya cha thanzi.	STRONGLY DISAGREE	ວ	
	[COMMFOOD]	STRONGLY ACREE	1	
	I can rely on people in my village to help take care of	STRONGLY AGREE	1	
	my children/household if I need to go to the doctor	AGREE	2	
	or hospital.	NEITHER AGREE/DISAGREE	3	
	Nditha kuthandizidwa ndi anthu ammudzi mwanga	DISAGREE	4	
	muno kusamalira ana anga kapena pakhomo panga	STRONGLY DISAGREE	5	
	ine nditapita kwa a dotolo kapena kuchipatala.			
	[COMMDR]	CTPONICLY A OPER		
	I can rely on people in my village to help take care of	STRONGLY AGREE	1	
	my children/household if I need to go outside the	AGREE	2	
	home to work.	NEITHER AGREE/DISAGREE	3	
	Nditha kuthandizidwa ndi anthu ammudzi mwanga	DISAGREE	4	
	muno kuti atha kusamalira ana ndi pakhomo panga	STRONGLY DISAGREE	5	
	ine nditapita kuntchito.			
	[COMMWORK]			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	The people in my village are an integrated group.	STRONGLY AGREE 1	
		AGREE 2	
	Anthu a m'mudzi ndi mitundu yosiyasiyana koma	NEITHER AGREE/DISAGREE	
	amakhala mololerana	3	
	[INTERG]	DISAGREE 4	
		STRONGLY DISAGREE 5	
			1

SECTION 10: SOCIAL COHESION

Interviewer reads: Now, i am going to tell you about some different situations, and i will ask you to tell me about who, apart from your family, you might turn to for help in these situations imagine for a moment that you are 8 months pregnant and you have started bleeding heavily.

Tsopano ndifotokoza zinthu zingapo zongoyerekeza ndipo ndikufunsani kuti mundiuze kuti ndi ndani amene mungapezeko thandizo mu nthawi/zinthu ngati izi. tiyerekeze kuti muli ndi mimba ya miyezi 8 ndipo mwayamba kutaya magazi kwambiri

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO	
	How sure are you that there is someone in your	COMPLETELY SURE	1		
	village who you could go to for advice?	SOMEWHAT SURE	2		
	Muli ndi chitsimikizo chotani kuti mungathe kupeza	NEITHER SURE/UNSURE	3		
	munthu m'mudzi mwanu munora lanu amene	SOMEWHAT UNSURE	4		
	angakupatseni malangizo?	NOT AT ALL SURE	5		
	[SCADVICE]				
	How sure are you that there is someone in your	COMPLETELY SURE	1		
	village who could take you to the hospital?	SOMEWHAT SURE	2		
	Muli ndi chitsimikizo chotani kuti munthu wina	NEITHER SURE/UNSURE	3		
	m'mudzimwanu angakutengereni kuchipatala inu	SOMEWHAT UNSURE	4		
	mutadwala?	NOT AT ALL SURE	5		
	[SCHEALTH]				
	How sure are you that there is someone in your	COMPLETELY SURE	1		
	village who would help care for your children or	SOMEWHAT SURE	2		
	household while you are away?	NEITHER SURE/UNSURE	3		
	Muli ndi chitsimikizo chotani kuti munthu wina	SOMEWHAT UNSURE	4		
	m'mudzi mwanu angathe kusamalira ana kapena	NOT AT ALL SURE	5		
	pakhomo panu pamene inu mwachokapo?				
	[SCKIDS]				
	How sure are you that there is someone in your	COMPLETELY SURE	1		
	community who would loan you money for	SOMEWHAT SURE	2		
	transport?	NEITHER SURE/UNSURE	3		
	Muli ndi chitsimikizo chotani kuti pali munthu	SOMEWHAT UNSURE	4		
	m'mudzi mwanu amene angakubwerekeni ndalama	NOT AT ALL SURE	5		
	yoti muyendere.				
	[SCMONEY]				
Ok no	Ok now let's think about a different situation. Try to imagine that your husband has beaten you severely the				

Ok, now let's think about a different situation. Try to imagine that your husband has beaten you severely. this may never have happened, but try to imagine being in that situation.

Tsopano tiyerekeze nthawi/chinthu china. Yeserani kuyerekeza kuti mwamenyedwa kwambiri. izi zitha kukhala kuti izi ndi zinthu zoti mwina sizinakuchitikireni,koma tiyeni mungoyerekeza

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	So, if your husband has beaten you severely, how	COMPLETELY SURE	1	
	sure are you that there is someone in your village	SOMEWHAT SURE	2	
	who you could talk to about your problem?	NEITHER SURE/UNSURE	3	
	Ndiye amuna anu atati akumunyeni kwambiri, muli	SOMEWHAT UNSURE	4	
	ndi chitsimikizo chotani kuti mutha kupeza munthu	NOT AT ALL SURE	5	
	m'mudzi mwanu muno oti mutha kukambirana naye			
	za vutoli?			
	[S1TALK]			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who you could go to for advice?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti m'mudzi mwanu	NEITHER SURE/UNSURE	3	
	muno muli munthu oti mutha kukatengako uphungu	SOMEWHAT UNSURE	4	
	kapena malangizo?	NOT AT ALL SURE	5	
	[S1ADVICE]			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would loan you money if you needed it?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti mungathe kupeza	NEITHER SURE/UNSURE	3	
	munthu m'mudzi mwanu muno amene	SOMEWHAT UNSURE	4	
	angakubwerekeniko ndalama mutazifuna?	NOT AT ALL SURE	5	
	[S1MONEY]			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would shelter you if you needed it?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti mungathe kupeza	NEITHER SURE/UNSURE	3	
	munthu m'mudzi mwanu muno amene	SOMEWHAT UNSURE	4	
	angakupatseni malo okhala?	NOT AT ALL SURE	5	
	[S1SHELTER]			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would take you to the hospital?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti mungathe kupeza	NEITHER SURE/UNSURE	3	
	munthu m'mudzi mwanu muno amene angaku	SOMEWHAT UNSURE	4	
	tengereni inuyo kuchipatala mutavulazidwa?	NOT AT ALL SURE	5	
	[S1HEALTH]			
Ok, let's	s move onto another situation. Imagine that you have ju	st had a baby the past 6 mont	hs. you wa	nt to
breastfe	eed but you are having trouble (your baby is fussy and o	does not seem to be feeding w	ell, or you	are also
worried	you might not have enough milk.)			
Chabwi	ino, tipitirize. Tayerekezani kuti mwangobereka kumene	e mwana. mukufuna kumuyam	witsa mwai	na
komam	ukuvutika chifukwa chakuti mwanayo akuwinyawinya n	dipo sakuyamwa moyenerera	kapena mu	ıli ndi
nkhawa	n kuti mulibe mkaka wokwanira			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who you could go to for advice?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti mungathe kupeza	NEITHER SURE/UNSURE	3	
	munthu m'mudzi mwanu amene angakupatseni	SOMEWHAT UNSURE	4	
	malangizo?	NOT AT ALL SURE	5	
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would support you and encourage you to	SOMEWHAT SURE	2	
	breastfeed?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti m'mudzi mwanu	SOMEWHAT UNSURE	4	
	muno muli munthu oti atha kukuthandizani komanso	NOT AT ALL SURE	5	
	kukulimbikitsani kuti muziyamwitsa?	INOT AT ALL SUIL	5	
	,			
	[S2SUPPORT]			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would show you some strategies to help	SOMEWHAT SURE	2	
	you breastfeed?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti m'mudzi mwanu	SOMEWHAT UNSURE	4	
	muno muli munthu oti atha kukuphunzitsani njira	NOT AT ALL SURE	5	
	zina zoyamwitsira?			
	[S2SHOW]			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would help you prevent others from	SOMEWHAT SURE	2	
	giving your baby water or other liquids?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti m'mudzi mwanu	SOMEWHAT UNSURE	4	
	muno muli munthu oti atha kukuthandizani kuletsa	NOT AT ALL SURE	5	
	anthu ena kuti asamupatse mwana wanu madzi			
	kapena zakumwa zina?			
	[S2OTHERS]			
	1 -			
TRY TO	O IMAGINE THAT YOU HAVE NOT HAD ANY FOOD T	O FEED YOUR CHILDREN F	OR 2 DAY	S.
TIYERE	EKEZE KUTI MWAKHALA KWA MASIKU AWIRI OPAN	IDA CHAKUDYA CHAKUTI M	UWAPATS	E ANA ANU
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who you could ask for advice?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti m'mudzi mwanu	NEITHER SURE/UNSURE	3	
	muno muli munthu oti mutha kukatengako uphungu	SOMEWHAT UNSURE	4	
	kapena malangizo?	NOT AT ALL SURE	5	
	[S3ADVICE]			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would connect you with available child	SOMEWHAT SURE	2	
	feeding programs?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti m'mudzi mwanu	SOMEWHAT UNSURE	4	
	muno muli munthu oti atha kukulumikidzitsani ndi	NOT AT ALL SURE	5	
	magulu amene amapereka zakudya za ana?			
	[S3CONNECT]			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would help feed your family by giving	SOMEWHAT SURE	2	
	food?	NEITHER SURE/UNSURE	3	
	Muli ndi chitsimikizo chotani kuti m'mudzi mwanu	SOMEWHAT UNSURE	4	
	muno mutha kupezeka munthu oti angalithandize	NOT AT ALL SURE	5	
	banja lanu ndi chakudya?			
	[S3FOOD]			
	How sure are you that there is someone in your	COMPLETELY SURE	1	
	village who would lend you money to buy food?	SOMEWHAT SURE	2	
	Muli ndi chitsimikizo chotani kuti m'mudzi mwanu	NEITHER SURE/UNSURE	3	
	muno mutha kupezeka munthu oti angalibwereke	SOMEWHAT UNSURE	4	
	banja lanu ndalama zogulira chakudya?	NOT AT ALL SURE	5	
	[S3MONEY]			

SECTION 11: COLLECTIVE EFFICACY & SOCIAL PARTICIPATION

Interviewer reads: Now I am going to ask some questions about how the women in your community help each other and work together to improve their lives.

tsopano ndikufunsani mafunso okhudza amayi a M'MUDZI MWANU MUNO ndi momwe amathandizirana komanso kugwirira ntchito limodzi kuti apititse miyoyo yao patsogolo

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	How sure are you that the women in your village	COMPLETELY SURE 1	
	could prevent each other from being beaten or injured	SOMEWHAT SURE 2	
	by family members?	NEITHER SURE/UNSURE 3	
	Muli ndi chitsimikizo chotani kuti amayi a m'mudzi	SOMEWHAT UNSURE 4	
	mwanu muno atha kutetezana ku mchitidwe omenya	NOT AT ALL SURE 5	
	kapena kuvulazidwa ndi wina aliyense wa m'banja		
	mwanu?		
	[WBEAT]		
	How sure are you that the women in your village	COMPLETELY SURE 1	
	could improve how women are treated at the health	SOMEWHAT SURE 2	
	facility?	NEITHER SURE/UNSURE 3	
	Muli ndi chitsimikizo chotani kuti amayi a m'mudzi	SOMEWHAT UNSURE 4	
	mwanu muno atha kupititsa patsogolo m'mene	NOT AT ALL SURE 5	
	angamalandilidwire kuchipatala?	THE TAT ALL SOILE	
	[WHEALTH]		
	How sure are you that the women in your village	COMPLETELY SURE 1	
	could obtain government services and entitlements?	SOMEWHAT SURE 2	1
	Muli ndi chitsimikizo chotani kuti amayi a m'mudzi	NEITHER SURE/UNSURE 3	1
	mwanu muno atha kupeza nawo mwayi ogwiritsa	SOMEWHAT UNSURE 4	1
	ntchito zitukuko za chithandizo kuchokera ku boma?	NOT AT ALL SURE 5	
	[WGOV]	NOT AT ALL SURE 5	
		COMPLETELY SURE 1	
	How sure are you that the women in your village		
	could improve the health and well-being of women	SOMEWHAT SURE 2	
	and children in the village?	NEITHER SURE/UNSURE 3	
	Muli ndi chitsimikizo chotani kuti amayi a m'mudzi	SOMEWHAT UNSURE 4	
	mwanu muno atha kupititsa patsogolo umoyo	NOT AT ALL SURE 5	
	wabwino komanso kukhala kwabwino kwa amayi ndi		
	ana m'mudzi?		
	[WKIDS]		
	Could you tell me whether, in the last 12 months, you		
	have been an active member in any of the following	YES NO	
	groups?	Work related/Trade Union?	1
	Mungandiuzeko ngati inuyo m'miyezi khumi ndi iwiri	1 0	1
	yapitayi mwakhala membala olimbikira m'magulu	Agricultural Cooperative	1
	awa:	1 0	1
	(READ ALL RESPONSES AND PAUSE AFTER	Credit group/VSLA Group	1
	EACH RESPONSE)	1 0	
	(MULTIPLE ANSWERS POSSIBLE- CIRCLE ALL	Women's Group	1
	THE ANSWERS A RESPONDENT GIVES	1 0	
	Work related/Trade Union?	Political Group	
	Agricultural Cooperative	1 0	1
	Credit group/VSLA Group	Church or Religious Group	1
	Women's Group	1 0	1
	Political Group	PLHIV Support Goup	1
	Church or Religious Group	1 0	1
1	PLHIV Support Goup	Community Based Organization	1
	Community Based Organization	1 0	
			1
	1	1	1

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	In the past 12 months have you received help from		
	any of the following groups in your village? Help could	YES NO	
	include emotional support, economic assistance, or	Work related/Trade Union?	
	help to learn or do things.	1 0	
	M'miyezi khumi ndi iwiri yapitayi, munalandilapo	Agricultural Cooperative	
	thandizo kuchoka ku magulu awa?Thandizo litha	1 0	
	kukhala uphungu,thandizo la zachuma kapena	Credit group/VSLA Group	
	kukuphunzitsani luso linalake.	1 0	
	(READ ALL RESPONSES AND PAUSE AFTER	Women's Group	
	EACH RESPONSE)	1 0	
	(CIRCLE "1", IF THE THE RESPONDENTS	Political Group	
	MENTIONS YES AND "0" IF THE RESPONDENT	1 0	
	MENTIONS "NO")	Church or Religious Group	
	Work related/Trade Union?	1 0	
	Agricultural Cooperative	PLHIV Support Goup	
	Credit group/VSLA Group	1 0	
	Women's Group	Community Based Organization	
	Political Group	1 0	
	Church or Religious Group		
	PLHIV Support Goup		
	Community Based Organization		
	In the past 12 months have you received help from		
	any of the following people in your village? Help could	YES NO	
	include emotional support, economic assistance, or	Family	
	help to learn or do things?	1 0	
	M'miyezi khumi ndi iwiri yapitayi, munalandilapo	Neighbours	
	thandizo kuchoka kwa anthu awa? ?	1 0	
	(READ ALL RESPONSES AND PAUSE AFTER	Friends who are not neigbours	
	EACH RESPONSE)	1 0	
	(MULTIPLE ANSWERS POSSIBLE - CIRCLE "1", IF	Community Leaders	
	THE THE RESPONDENTS MENTIONS YES AND	1 0	
	"0" IF THE RESPONDENT MENTIONS "NO"	Church/Religious Leaders	
	Family	1 0	
	Neighbours	Politicas /Government	
	Friends who are not neigbours	Officials/Civil Servants	
	Community Leaders	1 0	
	Church/Religious Leaders	People from community	
	Politicas /Government Officials/Civil Servants	organizations	
	People from community organizations	1 0	
	In the past 12 months, have you joined together with	YES 1	
	other people in your village to address a problem or	NO 0	
	common issue?		
	M'miyezi khumi ndi iwiri yapitayi, mwakumanako		
	limodzi ndi anthu a m'mudzi wanu kukambirana nawo		
	za mavuto ndi nkhani zina zokhudza mudzi wanu?		
<u> </u>	[GROUP]		
	In the past 12 months, has your village carried out or	YES 1	
	organized activities with people from another	NO 0	
	villages?		
	M'miyezi khumi ndi iwiri yapitayi, mwagwirako ntchito		
	mogwirizana ndi anthu a midzi ina yoyandikana		
	nayo?		
	[ACTIVITY]		

NO.	QUESTIONS AND FILTERS	CODING	G CATEGORIES	SKIP TO
	In the past 12 months, have you spoken out in public	YES	1	
	about a problem that affects someone else?	NO	0	
	M'miyezi khumi ndi iwiri yapitayi, mwayankhulako pa			
	gulu zokhudzana ndi vuto limene wina wake			
	akukumana nalo?			
	[PROBLEM]			
	In the past 12 months, have you talked with local	YES	1	
	authorities or governmental organizations about	NO	0	
	problems in the village?			
	M'miyezi khumi ndi iwiri yapitayi, mwawauzako a			
	maudindo kapena mabungwe a boma zokhudza			
	mavuto amene mukukumana nawo m'mudzi mwanu?			
	[TALKED]			
	In the past 12 months, have you attended a	YES	1	
	demonstration about a problem in your village?	NO	0	
	M'miyezi khumi ndi iwiri yapitayi, mwapitako ku			
	msonkhano kapena zionetsero zokhuzana ndi			
	mavuto amene mukukumana nawo m'mudzi mwanu?			
	[RALLY]			

SECTION 12: CONTRACEPTIVE USE

Interview reads: "I would like to ask you some questions about your health and your use of family planning, that is, the various ways that a couple can avoid or delay a pregnancy."

"Tsopano ndikufunsani mafunso okhudza umoyo wanu komanso kagwiritsidwe ntchitoka njira za kulera, zimene mabanja angathe kugwiritsa ntchito kuti asakhale ndi pakati posayembekezela"

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	In the past 12 months have you ever visited a	YES 1	
	health facility seeking care for yourself?	NO 0	
	M'miyezi khumi ndi iwiri (12) yapitayi, kodi		
	munapitako ku chipatala kuti mukalandire		
	chithandizo chanu inuyo?		
	[HEALTH]		
	In the past 12 months have you ever visited a	YES 1	
	health facility seeking care for your child?	NO 0	
	M'miyezi 12 yapitayi, munapitako ku chipatala	NO CHILDREN 9	
	ndi mwana?		
	[CHEALTH]		
	How many kilometers is it to your nearest health	KILOMETERS	
	facility?	DON'T KNOW 998	
	Pali mtunda wautali bwanji kukafika ku chipatala		
	chomwe muli nacho pafupi? [DISTANCE]		
	How long does it take you to walk to your	MINUTES	
	nearest health facility?	DON'T KNOW 998	
	Mumatenga nthawi yaitali bwanji kuti mukafike		
	ku chipala chomwe muli nacho pafupi?		
	[WALK]		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	Last time you went to a health facility, how did	VERY WELL 1	
	they treat you? Very well, fairly well, not very	FAIRLY WELL 2	
	well, or very badly?	NOT VERY WELL 3	
	Kodi a chipatala adakuthandizani motani pa	VERY BADLY 4	
	ulendo wanu otsiliza kupita ku chipatala?		
	(READ RESPONSES)		
	[TREAT]		
	Do you know of a place where you can get	YES 1	
	methods to avoid or delay pregnancy?	NO 0	
	Kodi mukudziwa malo amene mungapezeko		
	njira zakulera?		
	[FPKNOW]		
	Have you ever used a method to avoid or delay	YES 1	
	pregnancy?	NO 0	→12012
	Kodi munagwiritsapo njira ya kulera ya mtundu		
	wina uliwonse?		
	(CIRCLE RESPONSE)		
	[FPUSE]		
	What methods have you ever used to avoid or	ORAL PILLS A	
	delay pregnancy?	CONDOM (MALE) B	
	Ndi njira yanji ya kulera imene munagwiritsapo	CONDOM (FEMALE) C	
	ntchito?	MALE STERILIZATION D	
	(DO NOT READ LIST)	FEMALE STERILIZATION E	
	(MULTIPLE ANSWERS POSSIBLE)	IUD F	
	(CIRCLE ALL THAT APPLY)	STANDARD DAYS/RHYTHM G	
	[FPUSE]	ABSTINENCE H	
		IMPLANT I	
		INJECTIONS J	
		DIAPHRAM/FOAM/JELLY K	
		WITHDRAWAL L	
		BREASTFEEDING M	
		OTHER X	
		(SPECIFY)	
	Are you currently using a method to avoid or	YES 1	
	delay pregnancy?	NO 0	→12012
	Kodi pakali mukugwiritsantchito njira ina iliyonse		
	yakulera?		
	(CIRCLE RESPONSE)		
	[FPUSENOW]		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	What method or methods of family planning are	ORAL PILLS	Α	
	you currently using?	CONDOM (MALE)	В	
	Ndi njira yanji ya kulera imene mukugwiritsa	CONDOM (FEMALE)	С	
	ntchito pakadali pano?	MALE STERILIZATION	D	
	(DO NOT READ LIST)	FEMALE STERILIZATION	Е	
	(MULTIPLE ANSWERS POSSIBLE)	IUD	F	
	(CIRCLE ALL THAT APPLY)	STANDARD DAYS/RHYTHM	G	
	[FPMETHODNOW]	ABSTINENCE	Н	
	,	IMPLANT	1	
		INJECTIONS	J	
		DIAPHRAM/FOAM/JELLY	K	
		WITHDRAWAL	L	
		BREASTFEEDING	М	
		OTHER	Х	
		(SPECIFY)		
	What is the MAIN reason you are not currently	FERTILITY RELATED		
	using a method to avoid or delay a pregnancy?	NOT HAVING SEX	1	
	Ndichifukwa chiyani simukugwiritsa ntchit nira ya	INFREQUENT SEX	2	
	kulera?	MENOPAUSAL/HYSTERECT	_	
	(DO NOT READ RESPONSES)		3	
	[REASON]	INFECUND/SUB-FECUND	4	
		POST-PARTUM AMENORRH	-	
		T GOT T / M CT GIM / M M E CT GT M M	5	
		BREASTFEEDING	6	
		FATALISTIC	7	
		AM PREGNANT	8	
		OPPOSITION	Ü	
		RESPONDENT	9	
		HUSBAND	10	
		OTHERS	11	
		RELIGION	12	
		KNOWLEDGE		
		DOES NOT KNOW METHOD	13	
		DOES NOT KNOW SOURCE		
		METHOD		
		HEALTH	15	
		SIDE EFFECTS	16	
		LACK OF ACCESS/DISTANC	-	
			17	
		COST TOO MUCH	18	
		INCONVENIENT	19	
		OTHER	20	
	Do you think that you will use a method to delay	YES 1		
	or avoid pregnancy in the future?	NO 0		
	Kodi mukuganiza kuti mungadzagwiritsenso	UNSURE 8		
	ntchito njirayi mtsogolo muno?			
	(DO NOT READ RESPONSES)			
	[FUTURE]			
	Have you ever been pregnant?	YES 1		
	Kodi munalipo nd mimba? [PREGNANT]	NO 0		
	Are you currently pregnant?	YES 1		
	Kodi ndi inu woyembekezera?	NO 0		
	[PREGNANT]			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	When do you want to have your first child: within	WITHIN NEXT 12 MONTHS	1
	the next 12 months, 1-2 years, more than 2	AFTER 1-2 YEARS	2
	years, or don't know?	AFTER MORE THAN 2 YEARS :	3
	Kodi mukufuna mwana wanu woyamba	DON'T KNOW	1
	muzakhlae naye liti?	DON'T WANT ANOTHER CHILD 5	;
	(READ RESPONSES AND CIRCLE ONE) [NEXTPREG]		
	When do you want to have your next child:	WITHIN NEXT 12 MONTHS	1
	within the next 12 months, 1-2 years, more than	AFTER 1-2 YEARS	2
	2 years, or don't know?	AFTER MORE THAN 2 YEARS :	3
	Kodi mukufuna mwana wanu wotsatira	DON'T KNOW	1
	atadzabadwa liti?	DON'T WANT ANOTHER CHILD 5	;
	(READ RESPONSES AND CIRCLE ONE)		
	[NEXTCHILD]		
	How many more children would you like to	CHILDREN	
	have?	DON'T KNOW 98	
	Kodi mukufuna mutaonjezera ana angati? (INSERT NUMBER)		
	[MORECHILD]		
	Thinking back to the time you were pregnant	THEN 1	
	with your last child (or this child if currently	LATER 2	
	pregnant), did you want to become pregnant	NOT AT ALL 3	
	then, did you want to wait until later, or did you		
	not want to have any more children at all?		
	Nthawi imene munakhala ndi mimba komaliza.		
	munfuna kuti mukhale ndi mimba nthawi		
	imeneyoyo, kapena munkafuna kudikira, kapena		
	simunkafuna kukhala ndi mwana ndi komwe?		
	(READ RESPONSES – CIRCLE ONE)		
	[WANTED]		
	,		
<u> </u>			

SECTION 13: PARENTAL CARE, DANGER SIGNS, DELIVERY CARE, POSTNATAL CARE: ONLY FOR WOMEN WHO HAVE EVER BEEN PREGNANT

Interviewer Reads: "Now, I would like to ask you some questions about the last time you were pregnant and the last time that you gave birth."

"Tsopano ndikufunsani mafunso okhudza mimba yomaliza imene munakhala nayo komanso za nthawi yomaliza imene munabereka"

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	When you were pregnant last, did you see anyone	YES	1	
	for antenatal care?	NO	0	→13005
	Kodi m'nthawi yomwe munali ndi pathupi komaliza,			
	munapitako ku sikelo?			
	(CIRCLE RESPONSE)			
	[ANC_ANY]			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	How many months pregnant were you when you first	MONTHS	
	accessed antenatal care?	DON'T KNOW 98	
	Munali ndi pa thupi pa miyezi ingati i pa nthawi		
	yomwe munayamba kupita ku sikelo?		
	(WRITE ANSWER IN SPACE)		
	(WRITE <u>EITHER</u> WEEKS <u>OR</u> MONTHS)		
	[ANC_WHEN]		
	During your most recent pregnancy, how many	TIMES	
	times did you receive antenatal care?	DON'T KNOW 98	
	Pa uchembere wanu wa posachedwapa, ndikangati		
	kamene munakapita ku sikelo?		
	(WRITE ANSWER IN SPACE)		
	[ANC_NUM]		
	During your most recent pregnancy, who provided	HEALTH PERSONAL	
	antenatal care to you?	DOCTOR/CLINICAL OFFICER A	
	Pa uchembere wanu wa posachedwapa, ndi ndani	NURSE/MIDWIFE B	
	amene anakuthandizani ku sikelo?	PATIENT ATTENDANT C	
	(DO NOT READ LIST)	HEALTH SURVEILLACE	
	(MULTIPLE ANSWERS POSSIBLE)	ASSISTANT D	
	(CIRCLE ALL THAT APPLY)	OTHER PERSONAL	
	Hint: For health personnel, probe on the colour of	TRADITIONAL BIRTH	
	the uniform	ATTENDANT E	
		OTHER F	
	Constitute a superior has problemed that some have a	NO-ONE G	
	Sometimes a woman has problems that can happen	HIGH FEVER A	
	during pregnancy, delivery and after delivery. Can	SEVERE HEADACHE/	
	you tell me what are all of the problems that can	BLURRED VISION B	
	happen during pregnancy, labor, and after delivery	SWELLING OF HANDS	
	that require immediate attention from a trained	AND FACE C	
	health care worker or health facility?	RETAINED PLACENTA D	
	Kodi mungathe kundiuza mavuto onse amene	CONVULSIONS/FIT/	
	mzimayi angakumane nawo kuyambira pamene ali	ECLAMPSIA E	
	woyembekezera, nthawi yobereka, komanso	ANY AMOUNT OF	
	atangochira kumene amene angafunike chithandizo	VAGINAL BLEEDING F	
	cha dotolo kapena kuchipatala?	FOUL SMELLING	
	(DO <u>NOT</u> READ LIST)	DISCHARGE G	
	(MULTIPLE ANSWERS POSSIBLE)	PROLONGED LABOUR H	
	(CIRCLE ALL ANSWERS SAID BY RESPONDENT)	MALPRESENTATION (IF	
		ANY PART OF THE BABY	
		OTHER THAN THE HEAD IS	
		SEEN IN BIRTH PASSAGE,	
		LIKE BUTTOCKS,HANDS,	
		FOOT OR CORD I	
		DON'T KNOW Z	
		OTHER X	
	Was the last baby you had, born alive?	YES 1	
	Kodi mwana wanu womaliza kubwadwa, anabadwa	NO 0	→13011
	wa moyo? (CIRCLE RESPONSE)		
	[BORNALIVE]		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	What did you name the child you most recently			
	delivered?	NAME		
	Mwana wanu womaliza kubadwa dzina lake ndi			
	ndani?			
	(WRITE NAME IN SPACE)			
	Is (name) still alive?	YES 1		
	Kodiali moyo?	NO 0		→13011
	(CIRCLE RESPONSE)			
	[STILLALIVE]			
	How old is (name)?	YEARS		
	Kodiali ndi zaka zingati?	OR		
	(WRITE ANSWER IN SPACE)	DAYS		
	(WRITE <u>EITHER</u> DAYS <u>OR</u> MONTHS)	OR		
	[CHAGE]	MONTHS		
		NO 98		
	How old was (name) when she/he died?	YEARS		
	Kodianali ndi zaka zingati nthawi imene	OR		
	adamwalira?	DAYS		
	(WRITE ANSWER IN SPACE)	OR		
	(WRITE <u>EITHER</u> DAYS <u>OR</u> MONTHS)	MONTHS		
	[CHAGE]	NO 98		
	Where did you deliver (name)?	OWN HOME	1	
	Kodianabadwira kuti?	OTHER'S HOME	2	
	(DO NOT READ LIST)	GOVERNMENT HOSPITAL/	-	
	(ONLY ONE RESPONSE)	CLINIC	3	
	(CIRCLE RESPONSE)	GOVERNMENT HEALTH	Ü	
	[DEL_WHERE]	CENTER	4	
	[SEE_WIERE]	GOVERNMENT HEALTH	•	
		POST	5	
		OTHER PUBLIC	6	
		NGO HEALTH FACILITY	7	
		PRIVATR HOSPITAL/CLINIC	8	
		OTHER PRIVATE	9	
		TRADITIONAL BIRTH	Ü	
		ATTENDANT	10	
		OTHER	96	
-	Did anyone provide you with care while you were in	YES 1	55	
	labor to deliver (name)?			12014
	Kodi panali wina aliyense anakuthandizani nthawi	NO 0		→13014
	imene amabadwa?			
	(CIRCLE RESPONSE)			
	1 `			
-	[DEL_ANY]	HEALTH PERSONAL		
	Who assisted you with the delivery of (name)?			
	Kodi ndi ndani amene anakuthandizani nthawi imene amabadwa?	DOSCTOR/CLINICAL OFFICER	٨	
		NURSE/MIDWIFE	A	
	(DO NOT READ LIST)	PATIENT ATTENDANT	B C	
	(MULTIPLE ANSWERS POSSIBLE)		C	
	(CIRCLE ALL THAT APPLY)	HEALTH SURVEILLACE	D	
		ASSISTANT	D	
		OTHER PERSONAL		
		TRADITIONAL BIRTH	_	
		ATTENDANT	E	
		OTHER	F	
		NO-ONE	G	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	Immediately after (name) was born, before you were	YES 1	
	discharged, did anyone check your health?	NO 0	→13017
	atabadwa, alipo amene anakuonani kuti		
	mulibwanji asanakutulutseni?		
	(CIRCLE RESPONSE)		
	[POST_ANY]		
	How long after delivery did the first check take	IMMEDIATELY 0	
	place?	HOURS	
	Panatenga nthawi yaitali bwanji, kuti muonedwe	OR	
	koyamba kuchokera nthawi imene anabadwa?	DAYS	
	(ONLY ONE ANSWER)		
	(CIRCLE RESPONSE <u>OR</u> WRITE ANSWER IN		
	SPACE)		
	[POST_TIME]		
	Who checked your health after you delivered	HEALTH PERSONAL	
	(name)?	DOSCTOR/CLINICAL	
	Ndi ndani amene adakuonaniatabadwa?	OFFICER A	
	(DO NOT READ LIST)	NURSE/MIDWIFE B	
	(MULTIPLE ANSWERS POSSIBLE)	PATIENT ATTENDANT C	
	(CIRCLE ALL THAT APPLY)	HEALTH SURVEILLACE	
		ASSISTANT D	
		OTHER PERSONAL	
		TRADITIONAL BIRTH	
		ATTENDANT E	
		OTHER F	
		NO-ONE G	
	VIEWER:		
	(Q67, "WAS THE CHILD BORN ALIVE?"		
	CONTINUE TO NEXT QUESTION (Q77)		
IF NO,	SKIP TO Q91: REVISE THE SKIP	LVEC	_
	After (name) was born, did anyone check his/her	YES 1	
	health within 48 hours?	NO 0	→14001
	(atabadwa, alipo amene anamuona kuti ali		
	bwanji pasanathe masiku awiri?		
	(CIRCLE RESPONSE)		
	[POSTCH_ANY]	IMMEDIATELY 0	1
	How long was the time period between (name)'s		
	birth his/her receiving a health check? (dzina) atabadwa, panatenga nthawi yaitali bwanji	HOURS OR	
	kuti aonedwe?	DAYS	
	(ONLY ONE ANSWER)	WEEKS	
	(CIRCLE RESPONSE <u>OR</u> WRITE ANSWER IN	WLLNO	
	SPACE)		
	[POSTCH_TIME]		
	[FOSTOR_TIME]		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP TO
	Who checked (name)'s health after she/he was	HEALTH PERSONAL		
	born?	DOSCTOR/CLINICAL		
	Kodi (dzina) atabadwa, adamuona kuti ali bwanji,	OFFICER	Α	
	ndi ndani?	NURSE/MIDWIFE	В	
	(DO NOT READ LIST)	PATIENT ATTENDANT	С	
	(MULTIPLE ANSWERS POSSIBLE)	HEALTH SURVEILLACE		
	(CIRCLE ALL THAT APPLY)	ASSISTANT	D	
		OTHER PERSONAL		
		TRADITIONAL BIRTH		
		ATTENDANT	Е	
		OTHER	F	
		NO-ONE	G	

SECTION 14: BREASTFEEDING Interview Read: "Now, I would like to ask you some questions about breastfeeding."

"Tsopano ndikufunsani mafunso okhudza kuyamwitsa mwana"

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	After (name) was born, did you squeeze and throw	YES 1	
	away your first milk?	NO 0	
	Kodi (dzina) atabadwa, munamfinya mabere ndikutaya		
	mkaka woyambirira wachikasu?		
	(CIRCLE RESPONSE)		
	[BF_COLOS]		
	Did you ever breastfeed (name)?	YES 1	
	Kodi (dzina) munamuyamwitsako?	NO 0	→14004
	(CIRCLE RESPONSE)		
	[BF_EVER]		
	Why did you not breastfeed (name)?	CHILD DIED 1	→15001
	Ndi chifukwa chani simunayamwitse?	ON INSTRUCTION FROM	14007
		HOSPITAL 2	}
		OTHER6	
		(SPECIFY)	
	How soon after birth did you first put (name) to your	IMMEDIATELY 0	
	breast?	HOURS	
	Panatenga nthawi yaitali bwanji (dzina) atangobadwa	OR	
	kuti mumuyamwitse?	DAYS	
	(EITHER CIRCLE RESPONSE <u>OR</u> WRITE ANSWER		
	IN SPACE AND CALCULATE)		
	[BF_TIME]		
	In the first month of (name)'s life, how often in 24 hours	TIMES IN 24 HOURS	_
	were you giving him/her breast milk?	NO 98	
	M'mwezi woyamba (dzina) atabadwa,		
	mumamuyamwitsa kangati pa tsiku?		
	(WRITE ANSWER IN SPACE)		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	After (name) was born, did you exclusively breastfeed?	YES 1	
	By "exclusively"we mean, did (name) take only	NO 0	
	breastmilk and nothing else to eat or drink.		
	(dzina) atabadwa, munampatsa mkaka wa m'mawere		
	mwakathithi? Ndikati mwakathithi ndikutanthauza		
	kumuyamwitsa mkaka wa m'mawere okha osampatsa		
	chakudya kapena chakumwa chilichonse.		
	(CIRCLE RESPONSE)		
	[EBF_EVER]		
	Did you give (name) anything to DRINK besides breast	YES 1	
	milk, such as water, tea, or animal milk, before s/he was	NO 0	→14009
	six months old?		
	Kupatula mkaka wa mmawere, kodi munampatsako		
	(dzina) chakumwa chilichonse monga madzi, tea		
	kapena mkaka wogula?		
	(CIRCLE ANSWER)		
	[BF_EARLYDRINK]		
	What did you give (name) to DRINK besides <i>breast milk</i>	ANIMAL MILK A	
	before they were six months old?	PLAIN WATER B	
	Kupatula mkaka wa mmawere, kodi munampatsa chiani	SUGAR OR GLUCOSE	
	(dzina) kuti amwe pasanathe miyezi 6?	WATER C	
	(CIRCLE ALL RESPONSES)	GRIPE WATER D	
	(ONOLE ALL RESI GNOLO)	SUGAR-SALT-WATER	
		SOLUTION E	
		FRUIT JUICE F	
		INFANT FORMULA G	
		TEA/INFUSIONS H	
		HONEY J HERBAL INFUSTIONS K	
		PORRIDGE OR DAWALE L	
	Did you give (name) enything to EAT heaides broast	OTHER X YES 1	
	Did you give (name) anything to EAT besides breast	. = -	
	milk before s/he was six months old?	NO 0	
	Kupatula mkaka wa m'mawere, ndi chiyani chimene		
	munampatsako (dzina) kuti adye pasanathe miyezi 6		
	atabadwa?		
	(CIRCLE ANSWER)		
	[BF_EARLYFOOD]	V50	
	Are you currently breastfeeding (name)?	YES 1	→14012
	Kodi (dzina) mukumuyamwitsabe?	NO 0	
	(CIRCLE RESPONSE)		
	(CHECK IF Q14002=0, CIRCLE NO)		
	[BF_CURRENT]		
	Are you currently giving (name) anything else besides	YES 1	15001
	breast milk?	NO 0	}
	Kodi (dzina) mukumupatsa china chili chonse kupatula		۲
	mkaka wa mmawere?		
	(CIRCLE RESPONSE)		
	[EBF_CURRENT]		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	How old was (name) when you stopped giving him/her breast milk entirely?	DIED BEFORE BREASTFEEDING 1	
	Kodi (dzina) munamusiyitsa kuyamwa ali wamkulu bwanji? (WRITE ANSWER IN <u>ONE</u> SPACE) [BF_AGESTOP]	DAYS OR MONTHS	

SECTION 15: FOOD

Interviewer Reads: "I would like to ask you some questions about the foods you and your family eat."

"Tsopano ndikufunsani mafunso okhudza chakudya chimene inu ndi banja lanu mumadya komanso za malo amene mumagonapo"

NO.	QUESTIONS AND FILTERS	CODING	CATE	ORIES		SKIP TO
	How often do you have no food to eat of any kind in your	NEVER			1	
	household during rainy season?	RARELY			2	
	Kodi ndi kangati kamene mumatha kukhala opanda	OFTEN			3	
	chakudya chilichonse pakhomo pano nyengo ya mvula?					
	[FOOD]					
	Durng the rainy season, how often do you go to sleep	NEVER			1	
	hungry?	RARELY			2	
	Ndi kangati kamene mumatha kugona ndi njala nyengo ya	OFTEN			3	
	mvula.					
	[HUNGRY]					
	Durng the rainy season, how often do you go a whole day	NEVER			1	
	and night without eating?	RARELY			2	
	Ndikangati kamene mumatha kukhala kutandala tsiku	OFTEN			3	
	lonse mpaka usiku kuchezera ndi njala nyengo ya mvula?					
	[EATING]					
	In the past 7 days have you eaten any of the following		YES	NO		
	items?	Α	1	2		
	Sabata yathayi, munadyako zakudya izi?	В	1	2		
	(READ ALL RESPONSES: FOR EACH ONE CIRCLE Y	С	1	2		
	FOR YES OR N FOR NO)	D	1	2		
	Wheat, corn, rye, oats, rice or millet?	E	1	2		
	White potatoes, white yams, manioc, cassava, sweet	F	1	2		
	potatoes	G	1	2		
	Meat, poutry, fish, seafood	Н	1	2		
	Eggs	1	1	2		
	Beans, groundniuts					
	Milk and Milk products					
	Pumpkin, carrots, squash					
	Dark green, leafy vegetables					
	Other fruits or vegetables					

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
	In the past 7 days has your husband eaten any of the	YES NO	
	following items?	A 1 2	
	Kodi amuna anu adyako izi mu sabata imodziyapitayi?	B 1 2	
	(READ ALL RESPONSES: FOR EACH ONE CIRCLE Y	C 1 2	
	FOR YES OR N FOR NO)	D 1 2	
	SKIP IF NOT CURRENTLY MARRIED	E 1 2	
	Wheat, corn, rye, oats, rice or millet?	F 1 2	
	White potatoes, white yams, manioc, cassava, sweet	G 1 2	
	potatoes	H 1 2	
	Meat, poutry, fish, seafood	1 2	
	Eggs		
	Beans, groundniuts		
	Milk and Milk products		
	Pumpkin, carrots, squash		
	Dark green, leafy vegetables		
	Other fruits or vegetables		
	Do you and your husband eat together or you wait until he	HE EATS FIRST 1	
	has finished before you eat?	WE EAT TOGETHER 2	
	Kodi inu ndi amuna anu mumudyera limodzi kapena		
	mumadikira kuti iwowo amalize kaye kudya ndipamene inu		
	mumadya?		
	SKIP QUESTION IF NOT CURRENTLY MARRIED		
	[WAITEAT]		
	In the past week, did your husband help with the cooking?	OFTEN 1	
	Often, Sometimes, Almost Never, Never?	SOMETIMES 2	
	Kodi amuna anu anakuthandizaniko kuphika sabata	ALMOST NEVER 3	
	yathayi? kangati?	NEVER 4	
	(READ RESPONSES)	INC VER	
	(SKIP QUESTION IF NOT CURRENTLY MARRIED)		
	[HELPCOOK]		
	In the past week, did your husband help with looking after	OFTEN 1	
	the children? Often, Sometimes, Almost Never, Never?	SOMETIMES 2	
	Kodi amuna anu anakuthandizaniko kuyang'anira ana	ALMOST NEVER 3	
	pakhomo sabata imeneyi? Kngati?	NEVER 4	
	(READ RESPONSES)		
	(SKIP QUESTION IF NOT CURRENTLY MARRIED)		
	[HELPKIDS]		
	In the past week, did your husband help with the	OFTEN 1	
	household chores? Often, Sometimes, Almost Never,	SOMETIMES 2	
	Never?	ALMOST NEVER 3	
	Kodi amuna anu anakuthandizaniko kugwira ntchito za	NEVER 4	
	pakhomo sabata yathayi? Kangati?		
	pakhomo sabata yathayi? Kangati? (READ RESPONSES)		
	(READ RESPONSES)		
	(READ RESPONSES) (SKIP QUESTIONS IF NOT CURRENTLY MARRIED)	HOURS	

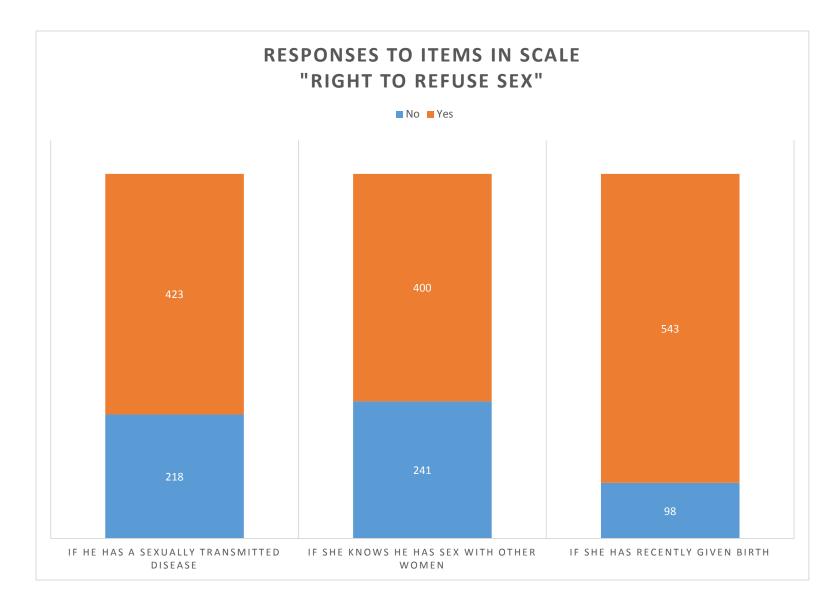
Enumerator's Remarks:		

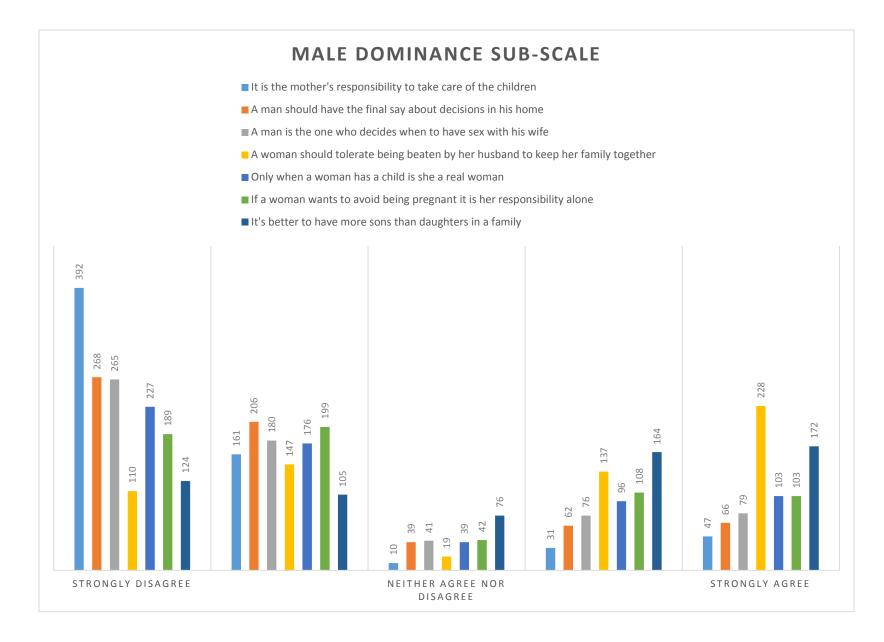
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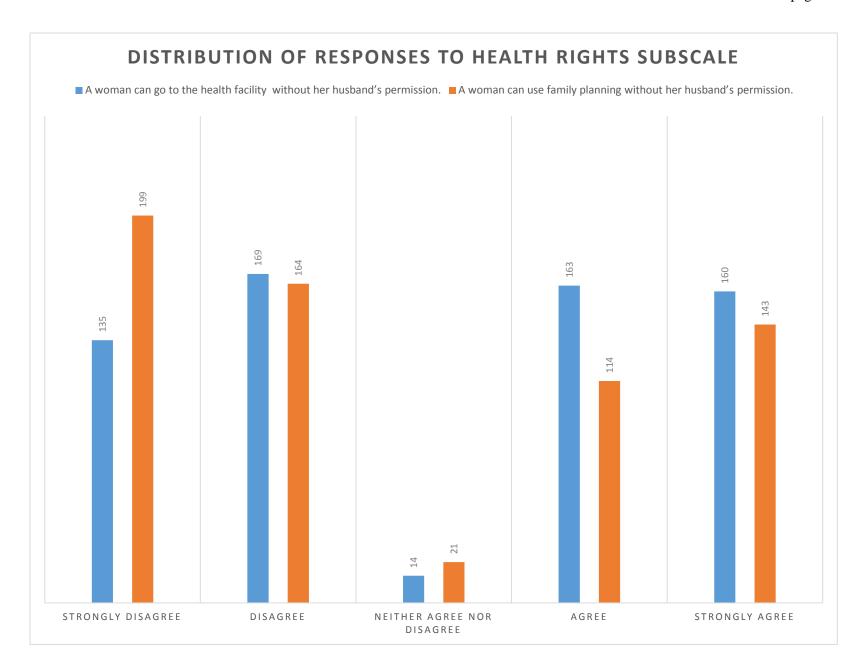
Supervisor's Remarks:		
supervisor s remains.		

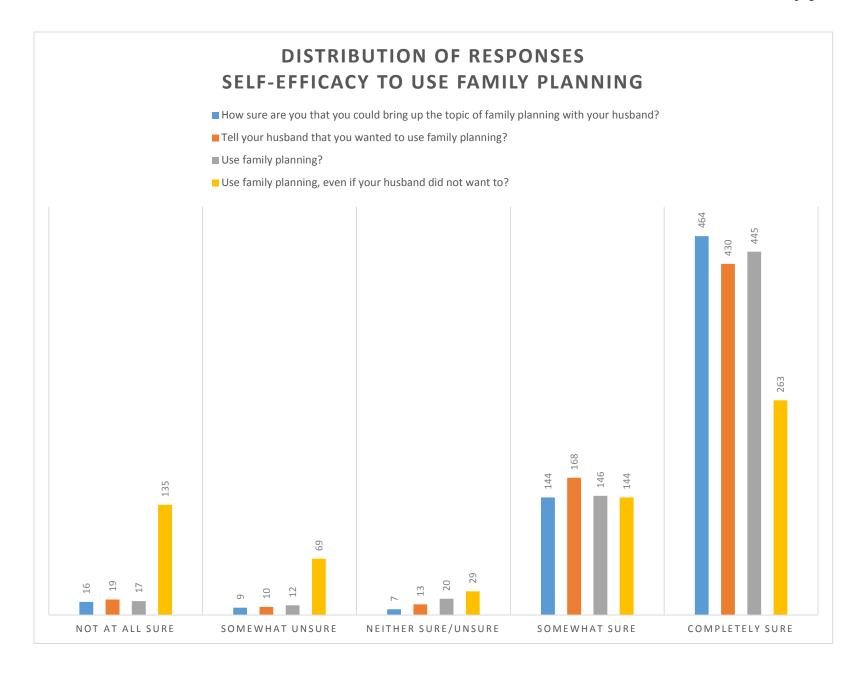
END OF QUESTIONNAIRE

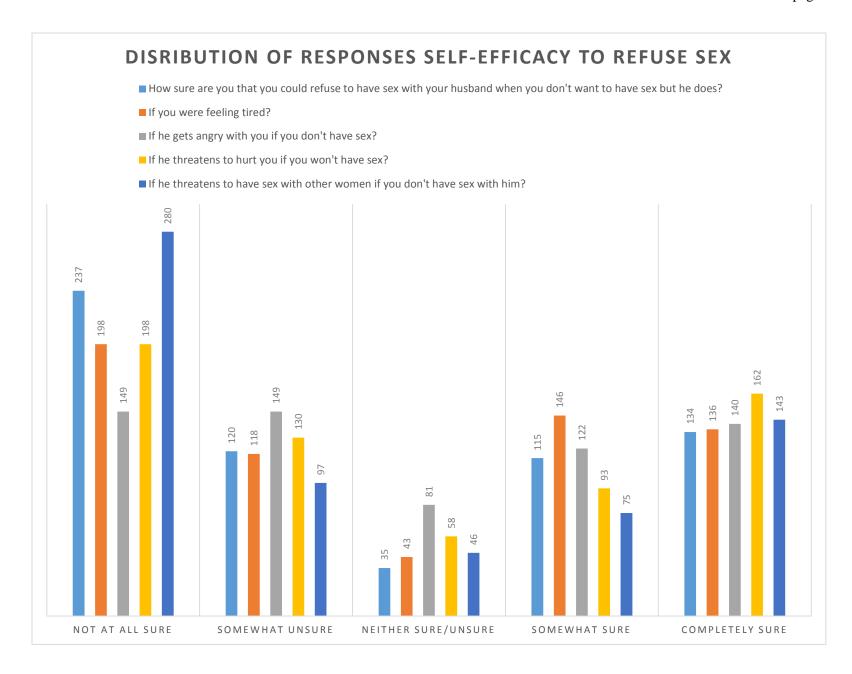
Annex 2: Distribution of Responses to WE-MEASR Sub-Scales

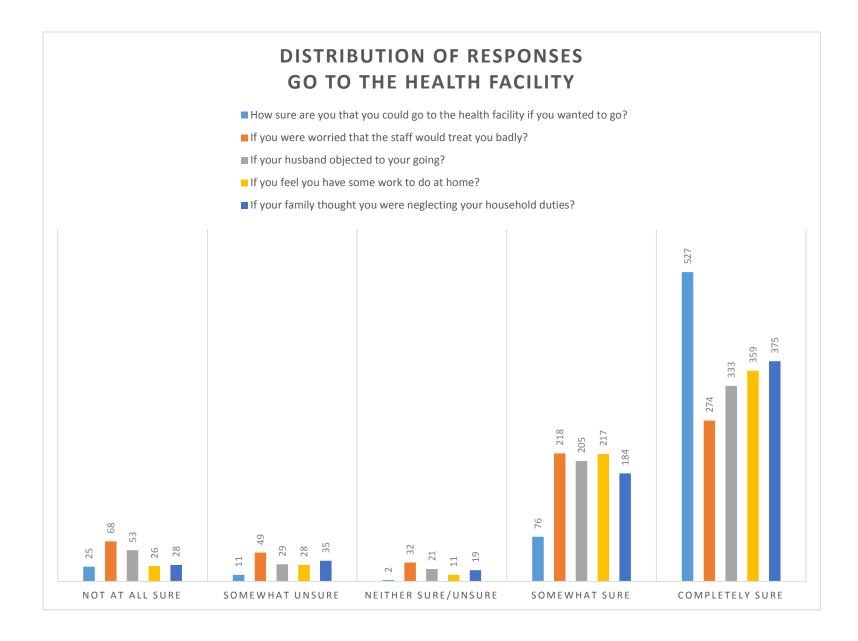


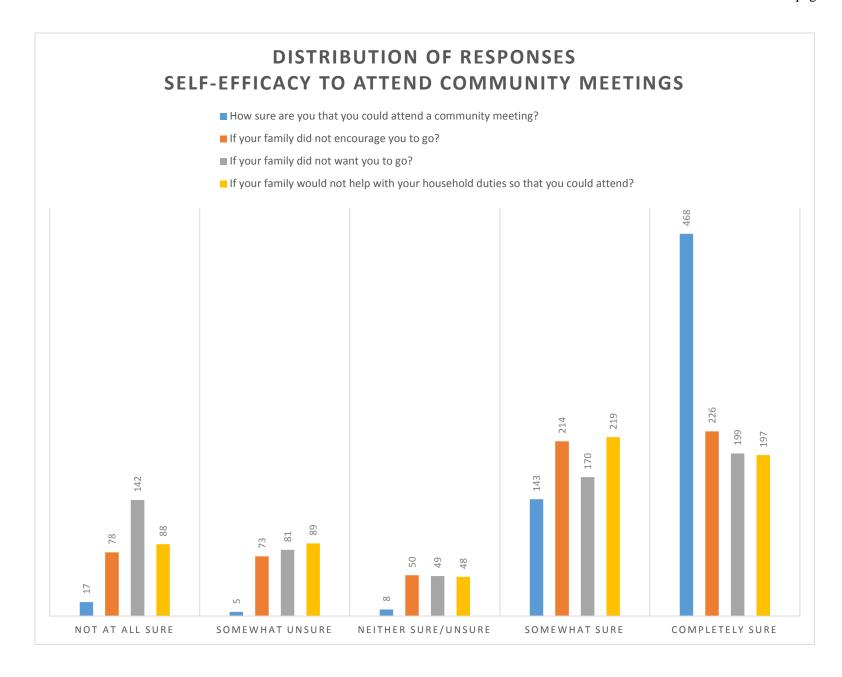


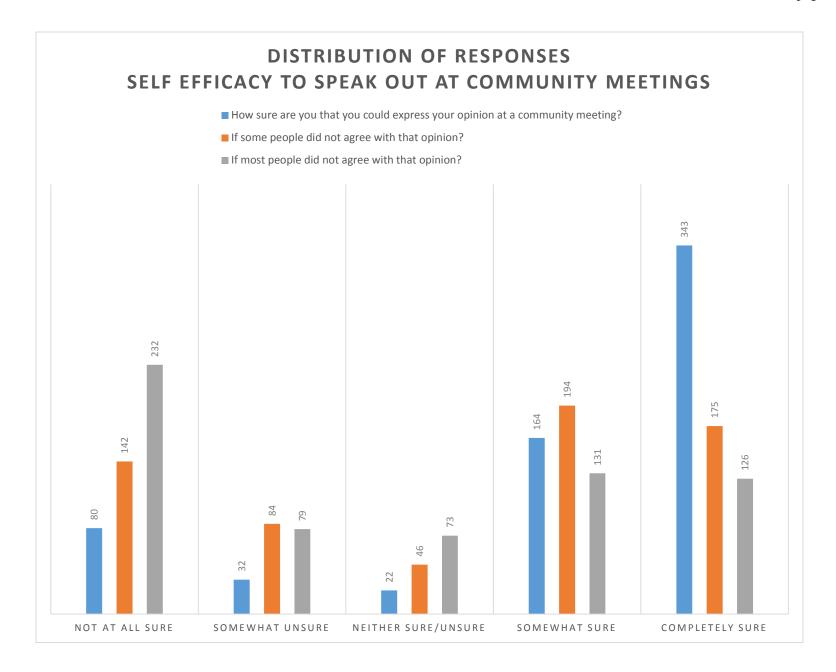


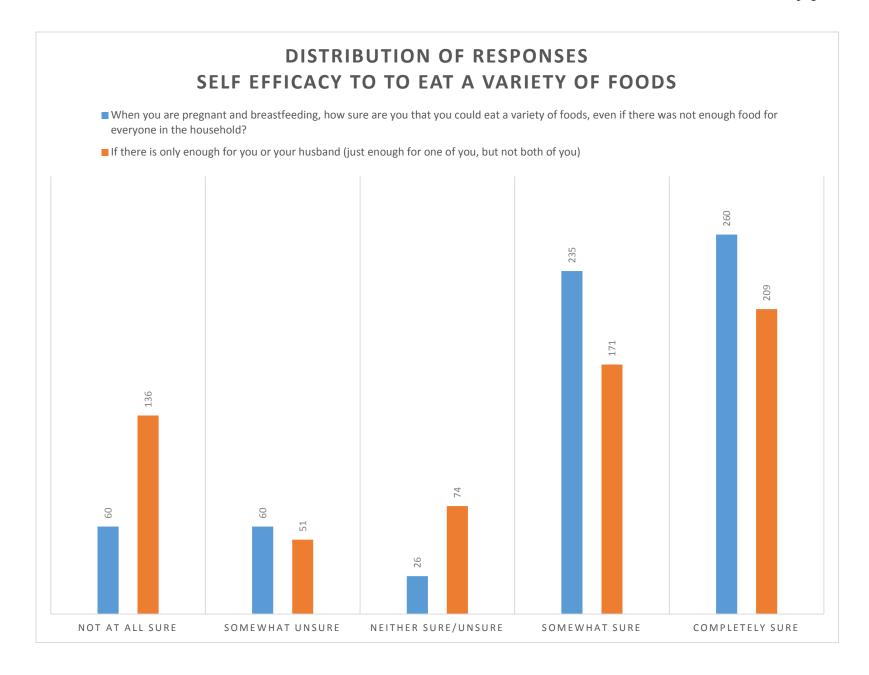


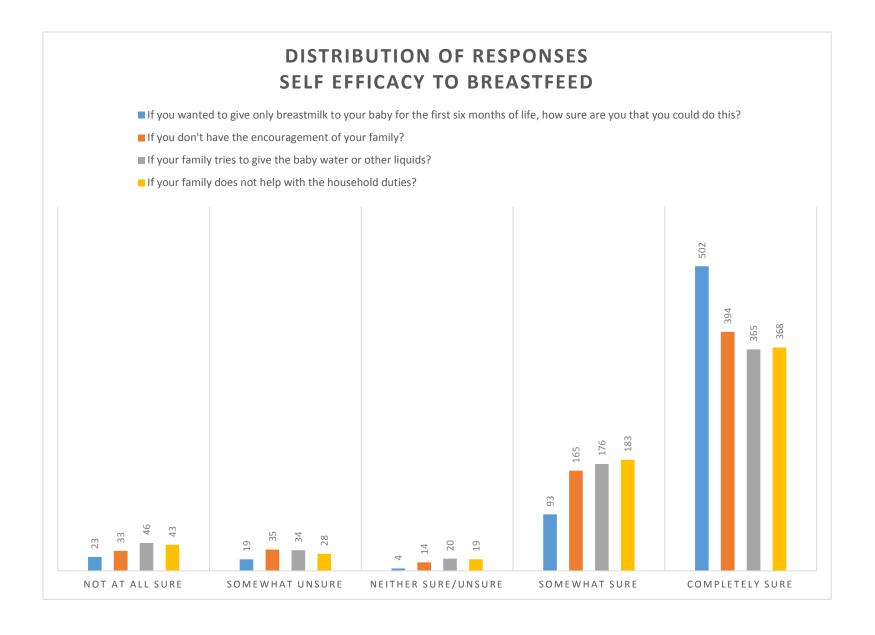


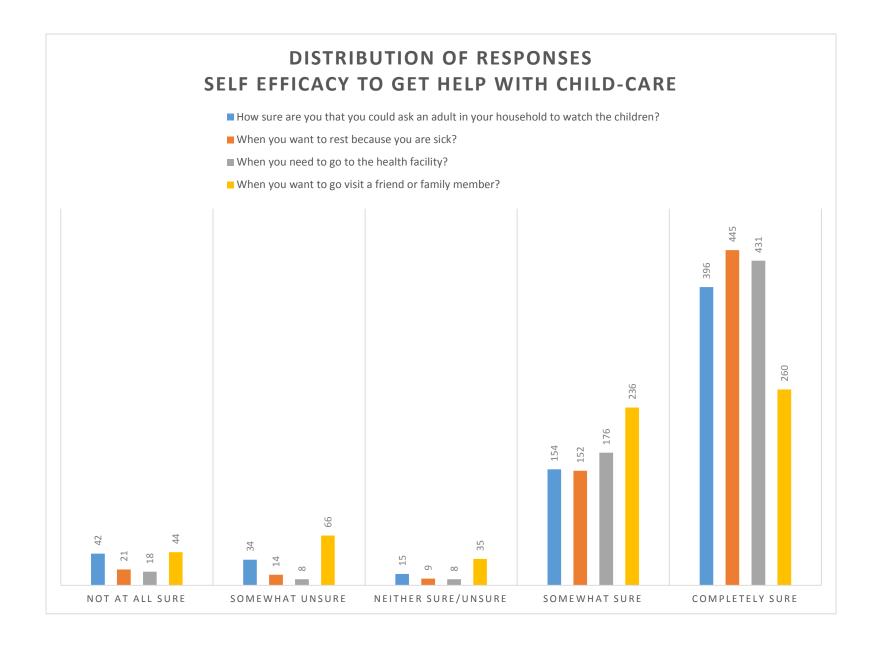


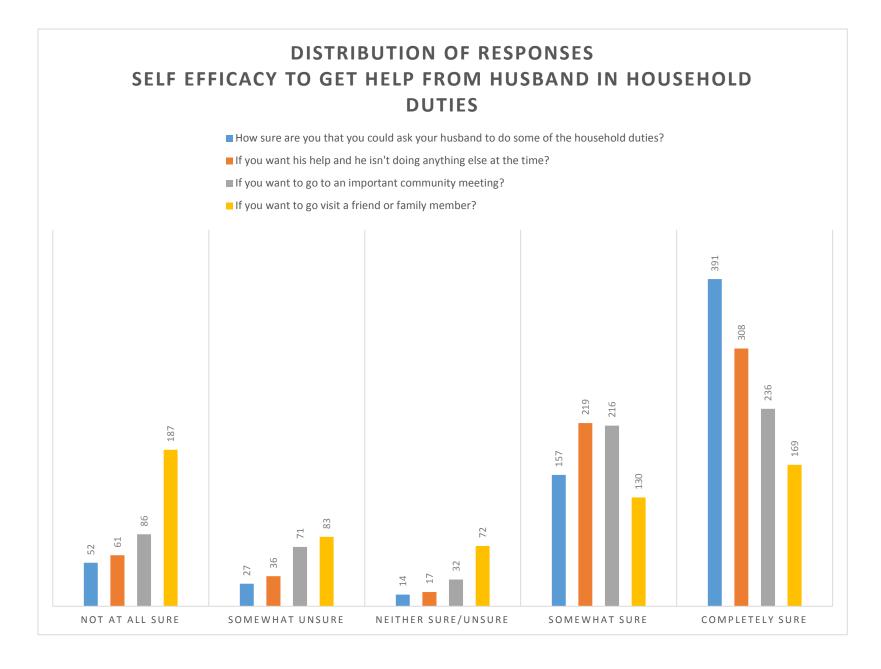




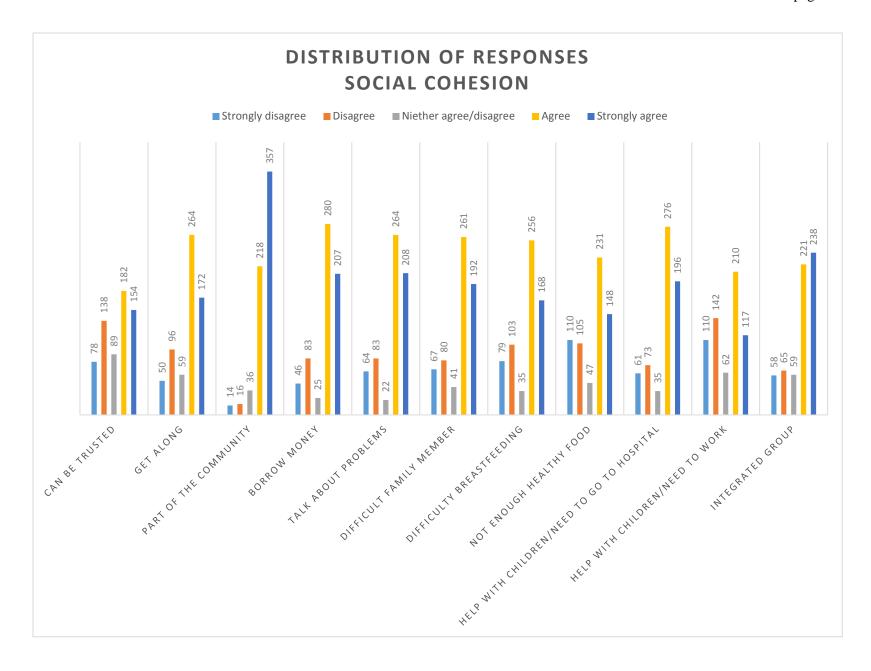


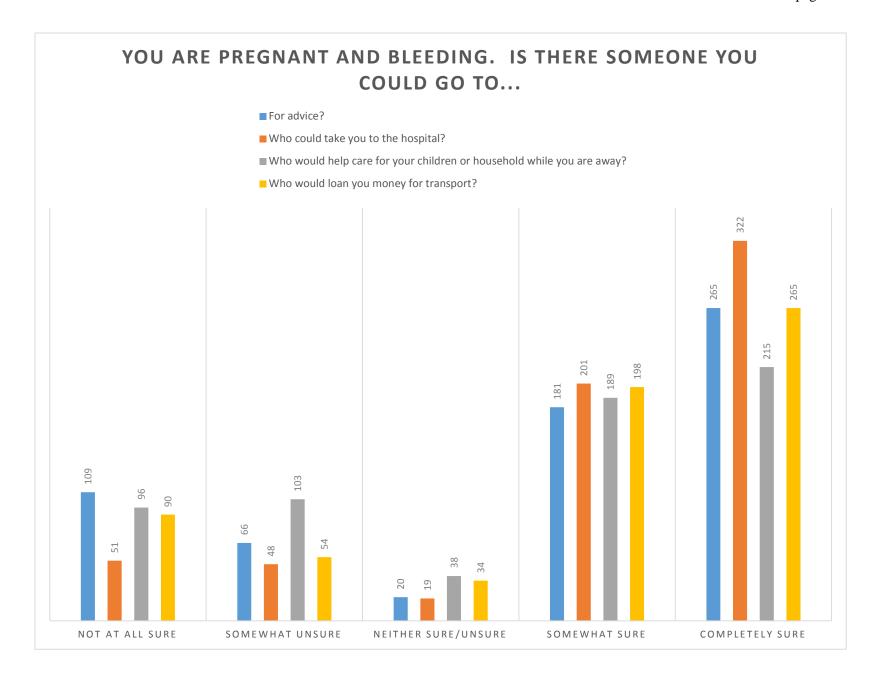


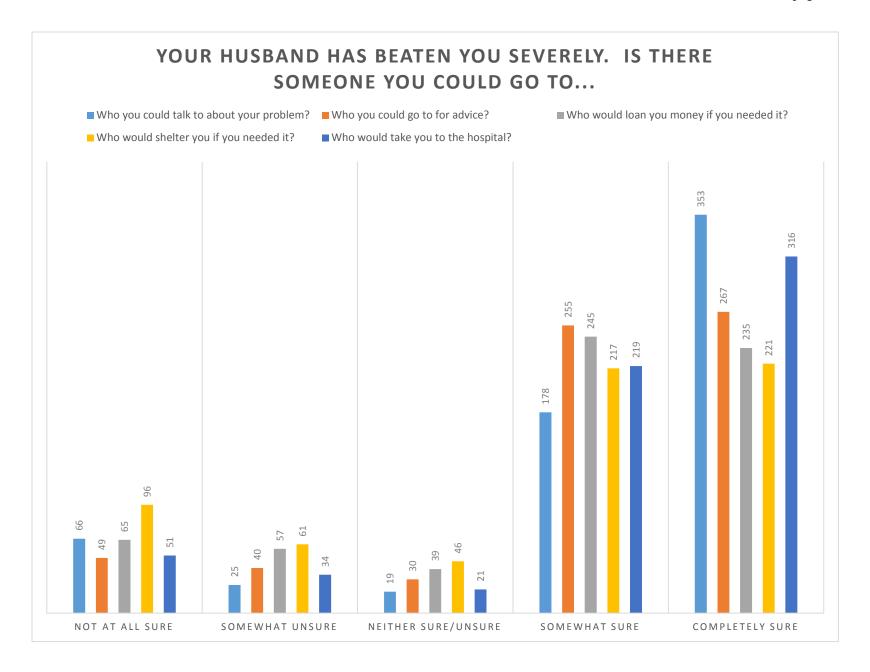


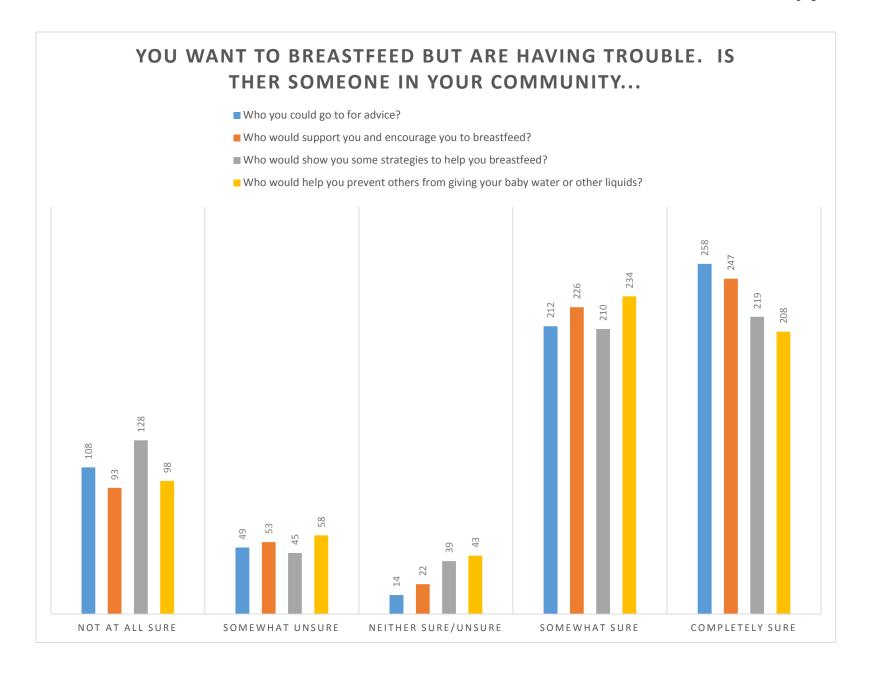


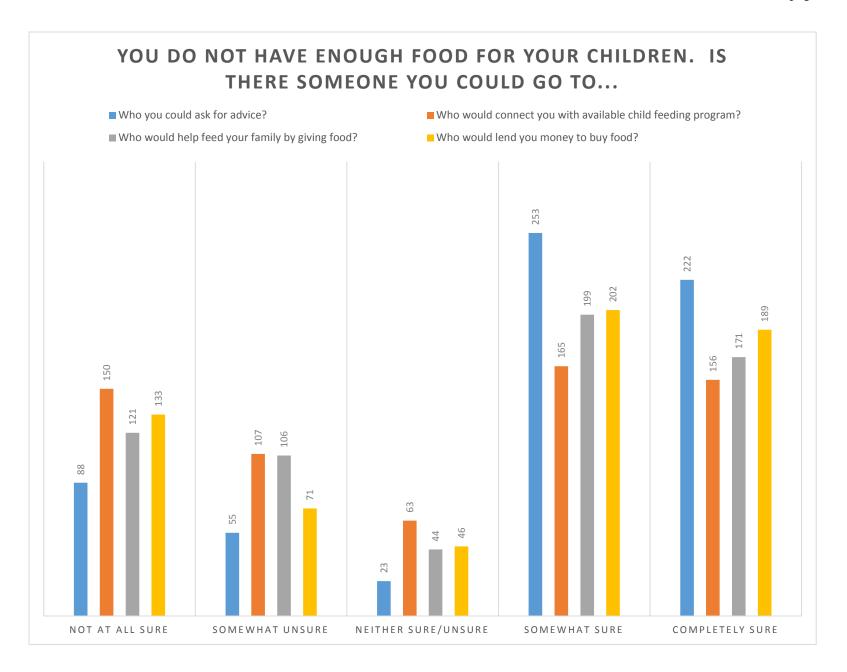


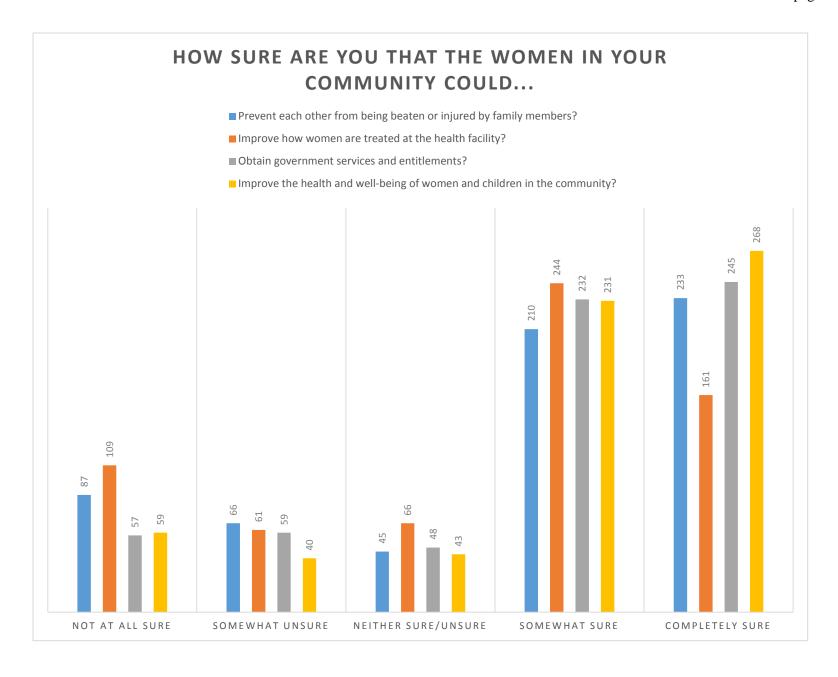


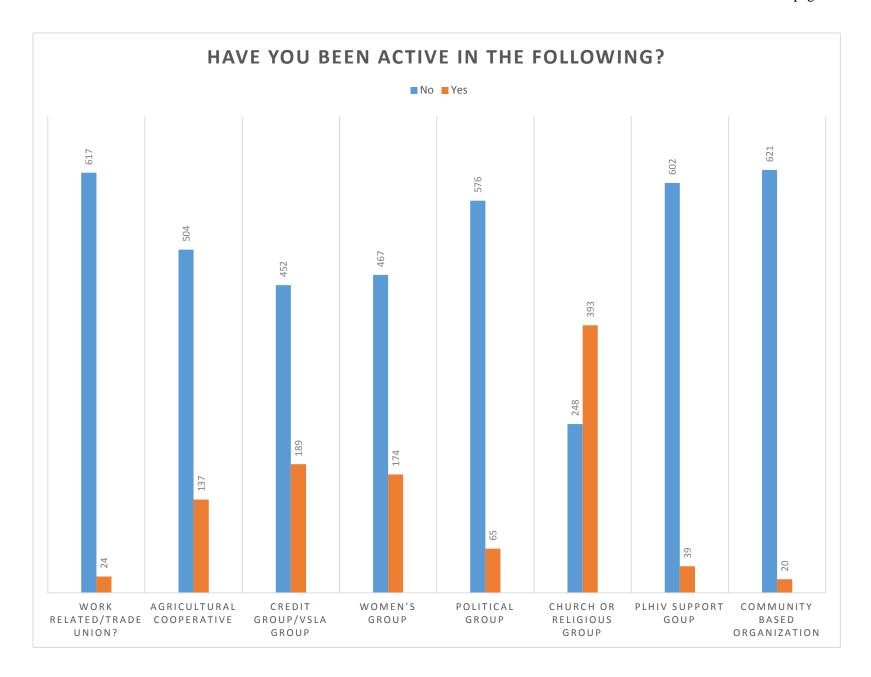


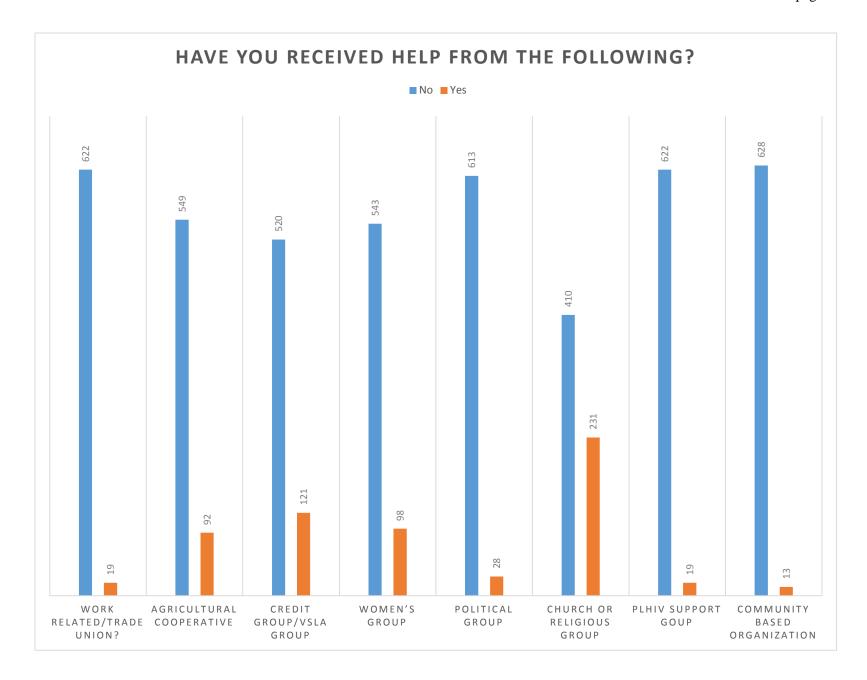


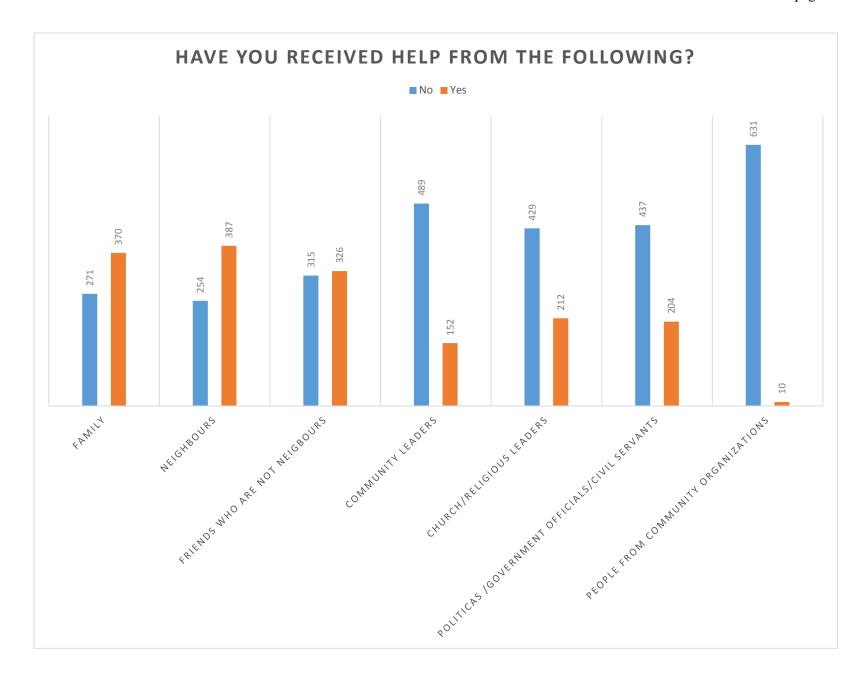


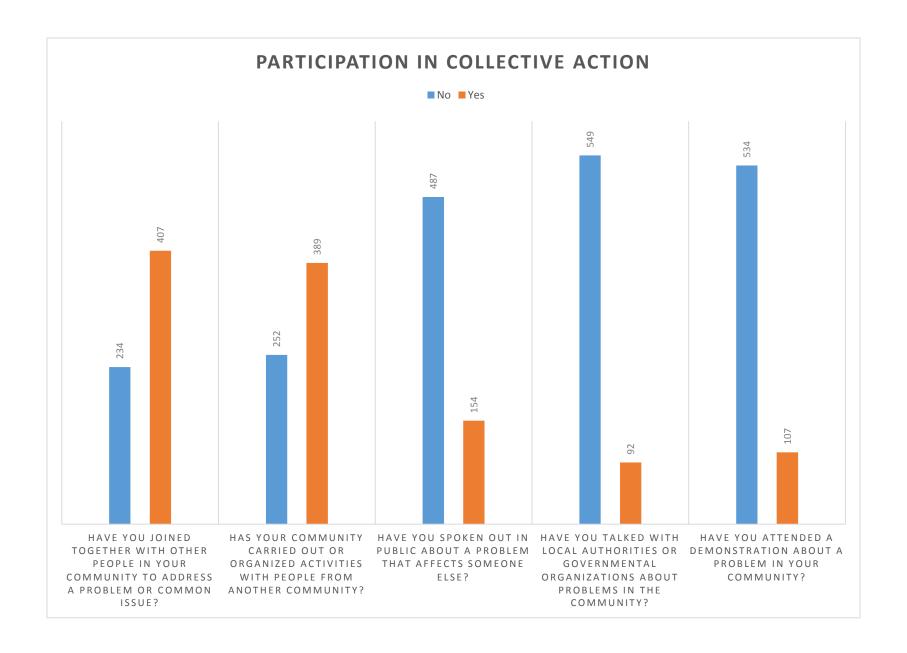


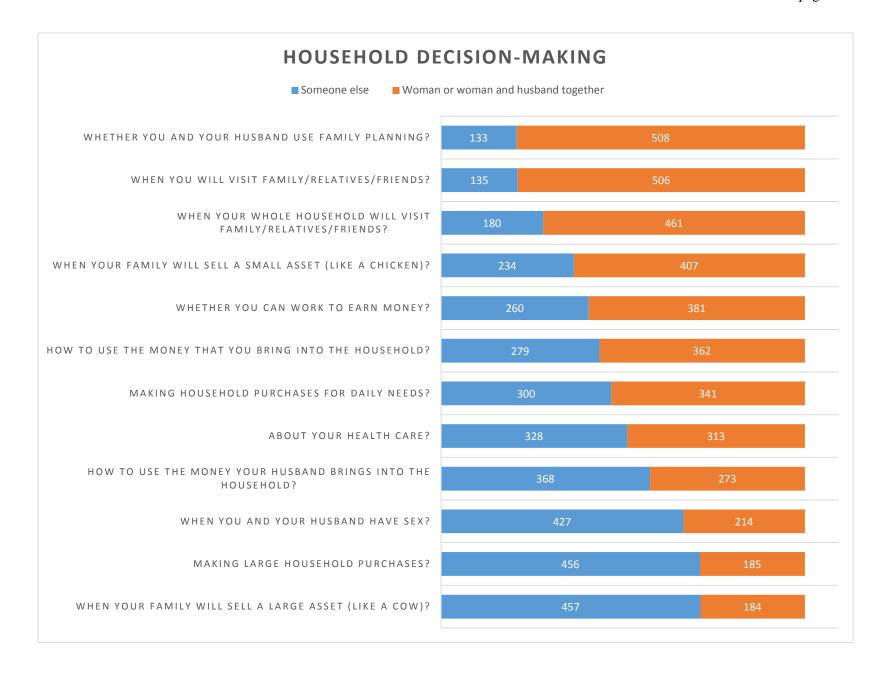


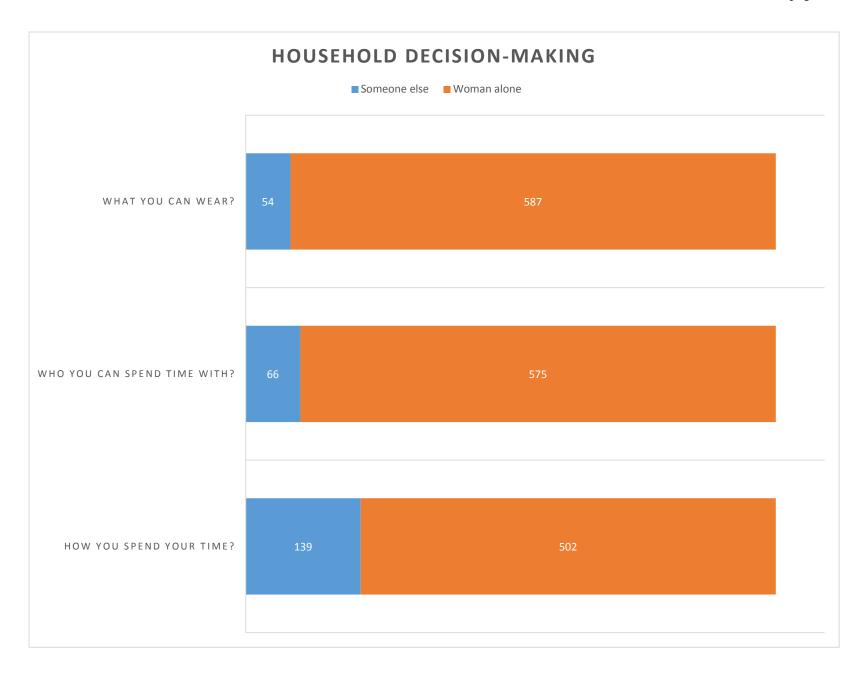


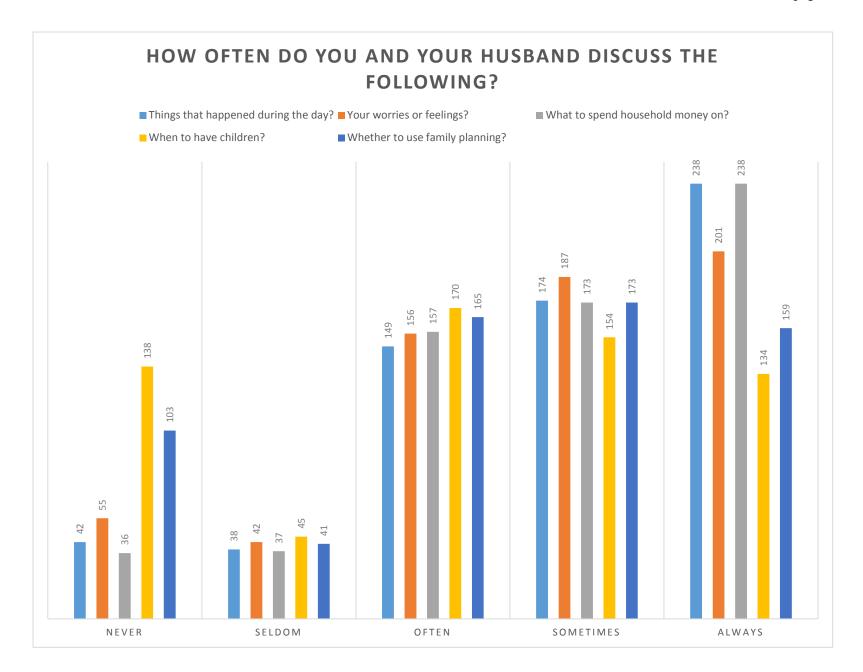












Annex 3. ANOVA results for model selection

Table A3.1. Results of ANOVA testing association between postmarital residence and women's empowerment outcomes

Sub-scale	p-
	value
Tolerance of intimate partner violence	0.066
Gender equitable attitudes	0.005
Right to refuse sex	0.344
Health rights	0.023
Self-efficacy family planning	0.762
Self-efficacy refuse sex	0.460
Self-efficacy health facility	0.001
Self-efficacy community meeting	0.316
Self-efficacy speak up at community meeting	0.522
Self-efficacy feed a variety of foods	0.000
Self-efficacy breastfeeding	0.011
Self-efficacy help with childcare	0.000
Self-efficacy husband participation	0.001
Social cohesion	0.004
Community support pregnant and bleeding	0.000
Community support husband beating	0.001
Community support difficulty breastfeeding	0.000
Community support no food	0.000
Collective efficacy	0.000

Collective action	0.007
Participation in community groups	0.106
Help from community groups	0.030
Help from community members	0.024
Household decision making	0.048
Interspousal communication	0.133
Female mobility	0.075
Personal assets	0.587

Annex 4: Model Selection

Gender Attitudes and Behaviors: Rejecting male dominance

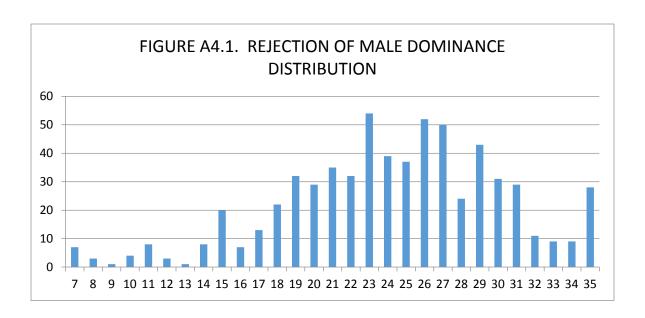


Table A4.1. Model statistics for rejection of male dominance

Source	SS	df	MS	Number of obs	=	637
				F(21, 615)	=	7.3
Model	4394.267	21	209.2508	Prob > F	=	0
Residual	17622.12	615	28.65386	R-squared	=	0.1996
				Adj R-squared	=	0.1723
Total	22016.39	636	34.61696	Root MSE	=	5.3529

Table A4.2. Model, rejection of male dominance

	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
Lilongwe	-1.17019	1.255459	-0.93	0.352	-3.6357	1.295317
Chewa	5.628214	1.57692	3.57	0	2.531414	8.725014

Lost children 0.340614 0.124714 2.73 0.006 0.095697 0.585532 Female-headed household Husband stays with her Husband participation -2.40509 1.301496 -1.85 0.065 -4.96101 0.150825 Husband participation 0.425307 0.226766 1.88 0.061 -0.02002 0.870637 Primary -2.10544 0.63884 -3.3 0.001 -3.36001 -0.85086 Secondary -5.13382 0.999878 -5.13 0 -7.09741 -3.17024 Patrilocal 2.363373 3.826695 0.62 0.537 -5.1516 9.878347 Autolocal -2.77767 1.814201 -1.53 0.126 -6.34045 0.785108 Matrilocal -5.06319 1.713988 -2.95 0.003 -8.42917 -1.69721 Primary X patrilocal -6.65022 4.416713 -1.51 0.133 -15.3239 2.023447 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527							
Lost children 0.340614 0.124714 2.73 0.006 0.095697 0.585532 Female-headed household Husband stays with her Husband participation -2.40509 1.301496 -1.85 0.065 -4.96101 0.150825 Husband participation 0.425307 0.226766 1.88 0.061 -0.02002 0.870637 Primary -2.10544 0.63884 -3.3 0.001 -3.36001 -0.85086 Secondary -5.13382 0.999878 -5.13 0 -7.09741 -3.17024 Patrilocal 2.363373 3.826695 0.62 0.537 -5.1516 9.878347 Autolocal -2.77767 1.814201 -1.53 0.126 -6.34045 0.785108 Matrilocal -5.06319 1.713988 -2.95 0.003 -8.42917 -1.69721 Primary X patrilocal -6.65022 4.416713 -1.51 0.133 -15.3239 2.023447 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527	Ngoni	5.805682	1.717407	3.38	0.001	2.43299	9.178375
Female-headed household Husband stays with her Husband participation Primary Patrilocal Autolocal Primary X patrilocal Primary X patrilocal Primary X autolocal Secondary X patrilocal Primary X autolocal Secondary X matrilocal Primary X autolocal Secondary X autolocal Primary X autolocal Secondary X autolocal Second	Household goods	-0.36956	0.106333	-3.48	0.001	-0.57838	-0.16074
household Husband stays with her -2.0794 0.752715 -2.76 0.006 -3.5576 -0.6012 Husband participation 0.425307 0.226766 1.88 0.061 -0.02002 0.870637 Primary -2.10544 0.63884 -3.3 0.001 -3.36001 -0.85086 Secondary -5.13382 0.999878 -5.13 0 -7.09741 -3.17024 Patrilocal 2.363373 3.826695 0.62 0.537 -5.1516 9.878347 Autolocal -2.77767 1.814201 -1.53 0.126 -6.34045 0.785108 Matrilocal -5.06319 1.713988 -2.95 0.003 -8.42917 -1.69721 Primary X patrilocal -6.65022 4.416713 -1.51 0.133 -15.3239 2.023447 Primary X autolocal 1.588187 1.953247 0.81 0.416 -2.24766 5.42403 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527	Lost children	0.340614	0.124714	2.73	0.006	0.095697	0.585532
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Primary -2.10544 0.63884 -3.3 0.001 -3.36001 -0.85086 Secondary -5.13382 0.999878 -5.13 0 -7.09741 -3.17024 Patrilocal 2.363373 3.826695 0.62 0.537 -5.1516 9.878347 Autolocal -2.77767 1.814201 -1.53 0.126 -6.34045 0.785108 Matrilocal -5.06319 1.713988 -2.95 0.003 -8.42917 -1.69721 Primary X patrilocal -6.65022 4.416713 -1.51 0.133 -15.3239 2.023447 Primary X matrilocal 1.588187 1.953247 0.81 0.416 -2.24766 5.42403 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527 Secondary X patrilocal -4.12566 4.758465 -0.87 0.386 -13.4705 5.219153 Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X auto	Husband stays with her	-2.0794	0.752715	-2.76	0.006	-3.5576	-0.6012
Secondary -5.13382 0.999878 -5.13 0 -7.09741 -3.17024 Patrilocal 2.363373 3.826695 0.62 0.537 -5.1516 9.878347 Autolocal -2.77767 1.814201 -1.53 0.126 -6.34045 0.785108 Matrilocal -5.06319 1.713988 -2.95 0.003 -8.42917 -1.69721 Primary X patrilocal -6.65022 4.416713 -1.51 0.133 -15.3239 2.023447 Primary X matrilocal 1.588187 1.953247 0.81 0.416 -2.24766 5.42403 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527 Secondary X patrilocal -4.12566 4.758465 -0.87 0.386 -13.4705 5.219153 Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 Di	Husband participation	0.425307	0.226766	1.88	0.061	-0.02002	0.870637
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Matrilocal -5.06319 1.713988 -2.95 0.003 -8.42917 -1.69721 Primary X patrilocal -6.65022 4.416713 -1.51 0.133 -15.3239 2.023447 Primary X matrilocal 1.588187 1.953247 0.81 0.416 -2.24766 5.42403 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527 Secondary X patrilocal -4.12566 4.758465 -0.87 0.386 -13.4705 5.219153 Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Patrilocal	2.363373	3.826695	0.62	0.537	-5.1516	9.878347
Primary X patrilocal -6.65022 4.416713 -1.51 0.133 -15.3239 2.023447 Primary X matrilocal 1.588187 1.953247 0.81 0.416 -2.24766 5.42403 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527 Secondary X patrilocal -4.12566 4.758465 -0.87 0.386 -13.4705 5.219153 Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Autolocal	-2.77767	1.814201	-1.53	0.126	-6.34045	0.785108
Primary X matrilocal 1.588187 1.953247 0.81 0.416 -2.24766 5.42403 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527 Secondary X patrilocal -4.12566 4.758465 -0.87 0.386 -13.4705 5.219153 Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Matrilocal	-5.06319	1.713988	-2.95	0.003	-8.42917	-1.69721
Primary X matrilocal 1.588187 1.953247 0.81 0.416 -2.24766 5.42403 Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527 Secondary X patrilocal -4.12566 4.758465 -0.87 0.386 -13.4705 5.219153 Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945							
Primary X autolocal 5.173057 1.945928 2.66 0.008 1.351587 8.994527 Secondary X patrilocal -4.12566 4.758465 -0.87 0.386 -13.4705 5.219153 Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Primary X patrilocal	-6.65022	4.416713	-1.51	0.133	-15.3239	2.023447
Secondary X patrilocal -4.12566 4.758465 -0.87 0.386 -13.4705 5.219153 Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Primary X matrilocal	1.588187	1.953247	0.81	0.416	-2.24766	5.42403
Secondary X matrilocal -3.66102 2.744381 -1.33 0.183 -9.05051 1.728479 Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Primary X autolocal	5.173057	1.945928	2.66	0.008	1.351587	8.994527
Secondary X autolocal 1.15471 2.601858 0.44 0.657 -3.95489 6.264314 District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Secondary X patrilocal	-4.12566	4.758465	-0.87	0.386	-13.4705	5.219153
District X goods -0.41125 0.205916 -2 0.046 -0.81563 -0.00687 District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Secondary X matrilocal	-3.66102	2.744381	-1.33	0.183	-9.05051	1.728479
District X ethnicity 4.417973 1.685978 2.62 0.009 1.107001 7.728945	Secondary X autolocal	1.15471	2.601858	0.44	0.657	-3.95489	6.264314
,	District X goods	-0.41125	0.205916	-2	0.046	-0.81563	-0.00687
_cons 24.50239 1.812148 13.52 0 20.94364 28.06114	District X ethnicity	4.417973	1.685978	2.62	0.009	1.107001	7.728945
	_cons	24.50239	1.812148	13.52	0	20.94364	28.06114

Interaction terms were tested for significance using the F statistic. Significant interactions and their p values are listed below. From among these interactions, post-marital residence X ethnicity was not significant when included with the remaining interactions. It was removed from the final model.

Table A4.3. Interaction term selection, model for rejecting male dominance

Interaction	F statistic p	Notes
District X household goods	0.003	Retained as centered product term
District X ethnicity	0.0289	Retained as centered product term
Post-marital residence X education	0.0148	Retained in final model
Post-marital residence X ethnicity	0.0433	Not significant in final model

Gender Attitudes and Beliefs: Health Rights

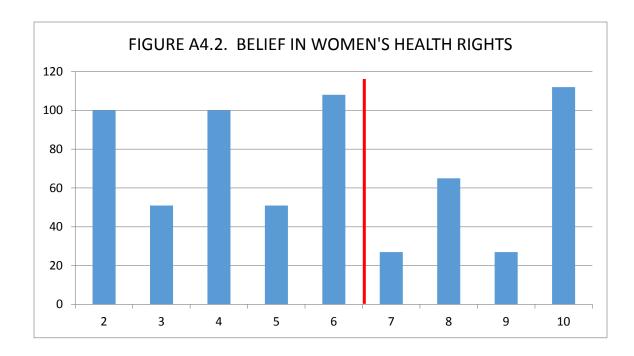


Table A4.4. Model statistics for women's belief in health rights

Logistic regression	Number of obs	=	639
	LR chi2(26)	=	57.3
	Prob > chi2	=	0.0004
Log likelihood = -388.86115	Pseudo R2	=	0.0686

Table A4.5 Model, belief in women's health rights

	Odds Ratio	Std. Err.	Z	P>z	[95% Conf.	Interval]
Husband stays at home	2.070707	0.639726	2.36	0.018	1.13018	3.793932
Household goods (quintile 2)	1.675065	0.417265	2.07	0.038	1.028002	2.729412
Household goods (quintile 3)	1.013927	0.276512	0.05	0.96	0.594118	1.730379
Household goods (quintile 4)	1.388955	0.384576	1.19	0.235	0.807247	2.389846
Household goods (quintile 5)	1.115426	0.308664	0.39	0.693	0.648476	1.918615

Lost 2-4 children	1.989642	0.533737	2.56	0.01	1.176071	3.366017
Lost 5 or more children	2.154137	0.644524	2.56	0.01	1.198372	3.872176
Husband helps (low)	0.703257	0.175393	-1.41	0.158	0.431345	1.14658
Husband helps (med)	0.634937	0.140198	-2.06	0.04	0.411889	0.978771
Husband helps (high)	0.365052	0.13052	-2.82	0.005	0.181142	0.735685
Personal assets (1)	1.281199	0.389188	0.82	0.415	0.706397	2.323724
Personal assets (2)	0.734479	0.214697	-1.06	0.291	0.414155	1.302554
Personal assets (3)	1.415022	0.447394	1.1	0.272	0.761439	2.62961
Personal assets (4)	1.366984	0.582898	0.73	0.463	0.592654	3.153014
Personal assets (5)	0.456063	0.38364	-0.93	0.351	0.087699	2.371679
Catholic	0.576085	0.28483	-1.12	0.265	0.218591	1.51824
CCAP	0.409042	0.207049	-1.77	0.077	0.151672	1.103136
Other	0.703354	0.323716	-0.76	0.445	0.285373	1.733547
Patrilocal	2.114617	1.490694	1.06	0.288	0.531104	8.419456
Autolocal	4.045171	2.885492	1.96	0.05	0.999447	16.37246
Matrilocal	6.090132	6.164274	1.78	0.074	0.83765	44.27829
Small but no large livestock	1.870327	0.545289	2.15	0.032	1.056214	3.311946
Large but no small livestock	1.996834	0.757078	1.82	0.068	0.949769	4.198228
Both large and small	2.175869	0.676976	2.5	0.012	1.182495	4.003743
livestock						

Table A4.6. Interaction term selection, belief in women's health rights

Interaction term	Chi-square p	Notes
Religion X Post-marital residence	0.004	Included in final model
Post-marital residence X livestock	0.005	Included in final model

Self-efficacy to go to the health facility

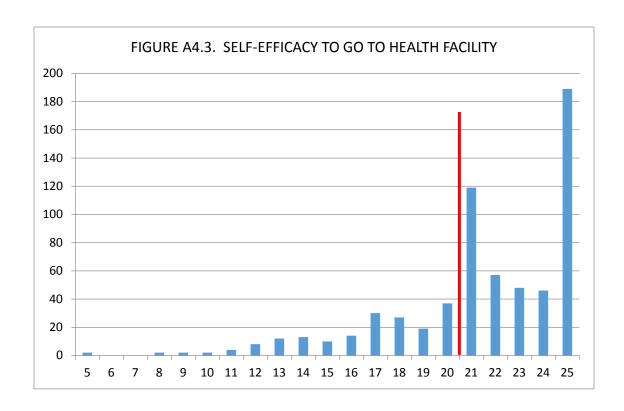


Table A4.7. Model statistics for self-efficacy to go to the health facility

Logistic regression	Number of obs	=	639
	LR chi2(25)	=	105.77
	Prob > chi2	=	0
Log likelihood = -327.95922	Pseudo R2	=	0.1389

Table A4.8. Model, self-efficacy to go to the health facility

	Odds	Std. Err.	Z	P>z	[95%	Interval]
	Ratio				Conf.	
Matrilineal	0.531049	0.11258	-2.99	0.003	0.350497	0.804609
Personal assets (1)	2.189392	0.70897	2.42	0.016	1.160612	4.130096
Personal assets (2)	2.125076	0.648575	2.47	0.014	1.168388	3.86511
Personal assets (3)	1.587866	0.533698	1.38	0.169	0.821706	3.068395

Personal assets (4)	0.68756	0.314267	-0.82	0.412	0.280703	1.684126
Personal assets (5)	0.727059	0.521917	-0.44	0.657	0.178048	2.968944
Husband helps (low)	0.87921	0.233234	-0.49	0.627	0.522744	1.478758
Husband helps	1.602757	0.395504	1.91	0.056	0.988147	2.599645
(med)						
Husband helps	2.511386	1.006146	2.3	0.022	1.145232	5.507235
(high)						
Lost 2-4 children	1.677235	0.445068	1.95	0.051	0.997059	2.821417
Lost 5 or more	1.947693	0.609733	2.13	0.033	1.054504	3.597433
children						
Patrilocal	1.502231	1.044544	0.59	0.558	0.384479	5.869503
Autolocal	4.828651	2.180549	3.49	0	1.992671	11.70082
Matrilocal	2.637337	0.959941	2.66	0.008	1.292243	5.382537
Lilongwe	0.407623	0.089511	-4.09	0	0.265058	0.626868
Small but no large	0.614944	0.187366	-1.6	0.111	0.338443	1.117342
livestock						
Large but no small	0.521046	0.20475	-1.66	0.097	0.241206	1.125547
livestock						
Both large and small	0.876274	0.261197	-0.44	0.658	0.488559	1.571677
livestock	4 262205	0.450667	0.02	0.252	0.740444	2 (17240
Agland (>0 & <=1)	1.363285	0.453667	0.93	0.352	0.710114	2.617248
Agland (>1 & <=2)	1.572014	0.540263	1.32	0.188	0.801528	3.083144
Agland (>2 & <=3)	0.934931	0.378482	-0.17	0.868	0.422857	2.067119
Agland (>3 & <=4)	1.859008	0.988604	1.17	0.244	0.655571	5.271601
Agland (>4)	4.0108	2.192808	2.54	0.011	1.37359	11.71129
Chose husband	2.485128	2.314107	0.98	0.328	0.400613	15.41603
Husband stays with	0.402394	0.374702	-0.98	0.328	0.064868	2.496175
her						

Table A4.9. Interaction term selection, self-efficacy to go to the health facility

Interaction term	Chi-square p	Notes
Husband stays with her X chose husband herself	0.0092	Retained in model
Matrilineal X husband stays with her	0.0233	Removed from model for multicollinearity
Post-marital residence X district	0.0082	Removed from model for non- significance
Agricultural land X chose husband herself	0.004	Tested through product term; insignificant in final model
Agricultural land X personal assets	0.013	Tested through product term; insignificant in final model
Agricultural land X husband helps	0	Tested through product term; insignificant in final model

Agricultural land X livestock	0.03	Tested through product term; insignificant in final model
Matrilineal X chose husband	0.004	Tested through product term; insignificant in final model
Chose husband X husband helps	0	Tested through product term; insignificant in final model
Chose husband X post-marital residence	0.006	Tested through product term; insignificant in final model
Chose husband X district	0.001	Tested through product term; insignificant in final model
Chose husband X lost children	0.008	Tested through product term; insignificant in final model

Self-efficacy to eat a variety of foods

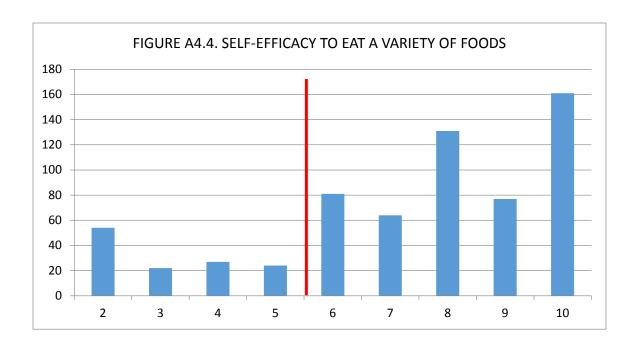


Table A4.10. Model statistics for self-efficacy to eat a variety of foods

Logistic regression	Number of obs	=	625
	LR chi2(19)	=	128.8
	Prob > chi2	=	0
Log likelihood = -245.55746	Pseudo R2	=	0.2078

Table A4.11. Model, self-efficacy to eat a variety of foods

Self-efficacy to eat a	Odds	Std. Err.	Z	P>z	[95%	Interval]
variety of foods	Ratio				Conf.	•
Lilongwe	0.156703	0.044516	-6.52	0	0.089799	0.273454
Husband stays with her	0.390514	0.18001	-2.04	0.041	0.158223	0.963839
Personal assets (>3)	2.068079	0.633017	2.37	0.018	1.135072	3.767998
Number of children (2)	0.655274	0.245731	-1.13	0.26	0.314208	1.366556
Number of children (3)	0.392978	0.164573	-2.23	0.026	0.172941	0.892971
Husband helps (low)	1.156498	0.339492	0.5	0.62	0.650539	2.055971
Husband helps (med)	2.616464	0.771358	3.26	0.001	1.468157	4.662908
Husband helps (high)	4.157444	1.992286	2.97	0.003	1.62526	10.63482
Primary	0.866959	0.250793	-0.49	0.622	0.491772	1.528387

Secondary	0.316676	0.141504	-2.57	0.01	0.131906	0.760268
Husband age (31-40)	1.334343	0.458518	0.84	0.401	0.68041	2.616763
Husband age (41-50)	2.246002	0.999091	1.82	0.069	0.939225	5.370945
Husband age (51-68)	2.085489	1.375971	1.11	0.265	0.572268	7.600051
Ag land (>0 & <=1 acres)	0.278612	0.1498	-2.38	0.017	0.097126	0.799211
Ag land (>1 & <=2 acres)	0.339044	0.188388	-1.95	0.052	0.114101	1.007446
Ag land (>2 & <=3 acres)	0.289765	0.179912	-2	0.046	0.085811	0.978469
Ag land (>3 & <=4 acres)	0.430805	0.320775	-1.13	0.258	0.10011	1.853879
Ag land (>4 acres)	0.323236	0.220043	-1.66	0.097	0.085126	1.227371

Table A4.12. Interaction term selection, self-efficacy to eat a variety of foods

Interaction term	Chi-square	Notes
	р	
Number of children X husband's age	0	Tested through product term
Cumulative assets (binary) X agricultural land	0.029	Tested through product term; not significant in final model
Husband help X agricultural land	0.002	Tested through product term; not significant in final model

Self-efficacy to get help with childcare

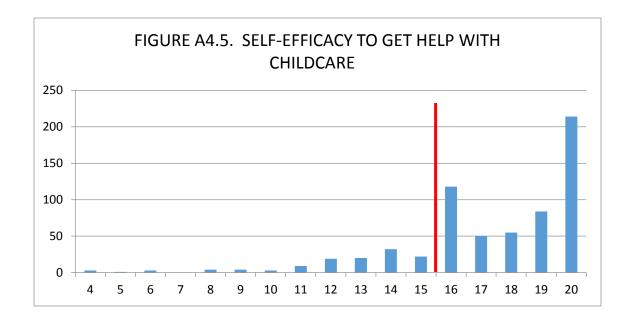


Table A4.13. Model statistics, self-efficacy to get help with childcare

Logistic regression	Number of obs	=	639
	LR chi2(16)	=	61.18
	Prob > chi2	=	0
Log likelihood = -278.05028	Pseudo R2	=	0.0991

Table A4.14. Model, self-efficacy to get help with childcare

	Odds Ratio	[95% Conf.	Interval]	P>z	Std. Err.	Z
Chose her own husband	3.786899	0.871618	16.45285	0.076	2.8382	1.78
Personal assets (1)	1.459044	0.769486	2.766532	0.247	0.476292	1.16
Personal assets (2)	2.520882	1.349518	4.708975	0.004	0.803689	2.9
Personal assets (3)	1.787964	0.895683	3.569137	0.099	0.630585	1.65
Personal assets (4)	12.86394	1.644455	100.6296	0.015	13.50094	2.43
Personal assets (5)	1.411504	0.265574	7.502016	0.686	1.203053	0.4
Husband helps low	1.7791	1.036243	3.054495	0.037	0.490629	2.09
Husband helps med	3.543504	2.091174	6.004486	0	0.953493	4.7
Husband helps high	3.887178	1.54461	9.782503	0.004	1.830402	2.88
Household goods quintile 2	0.966112	0.536913	1.738406	0.908	0.289565	-0.12
Household goods	2.240155	1.046459	4.795501	0.038	0.869943	2.08

quintile 3						
Household goods quintile 4	1.14087	0.588161	2.212974	0.697	0.38566	0.39
Household goods quintile 5	0.860231	0.469985	1.574514	0.625	0.265317	-0.49
Patrilocal	1.661812	0.301212	9.168374	0.56	1.448051	0.58
Autolocal	1.990412	0.921923	4.297253	0.08	0.781591	1.75
Matrilocal	1.160237	0.572779	2.350208	0.68	0.417858	0.41

Table A4.15. Interaction term selection, self-efficacy to get help with childcare

Interaction term	Chi-square Notes
	р
No interaction terms included in this	
model	

Self-efficacy to breastfeed



Table A4.16. Model statistics, self-efficacy to breastfeed exclusively

Logistic regression	Number of obs	=	626
	LR chi2(34)	=	115.48
	Prob > chi2	=	0
Log likelihood = -371.04285	Pseudo R2	=	0.1347

Table A4.17. Model, self-efficacy to breastfeed exclusively

Self-efficacy to breastfeed	Odds Ratio	Std. Err.	Z	P>z	[95% Conf.	Interval]
Household goods quintile 2	2.579628	1.329524	1.84	0.066	0.939406	7.083716
Household goods quintile 3	0.650524	0.45973	-0.61	0.543	0.162822	2.599045
Household goods quintile 4	8.070886	6.582522	2.56	0.01	1.63189	39.9164
Household goods quintile 5	3.529118	3.662862	1.22	0.224	0.461537	26.98522
Small livestock but no large	0.832047	0.35855	-0.43	0.67	0.357556	1.93621
Large livestock but no small	1.598291	0.909952	0.82	0.41	0.523652	4.878304
Both small and large livestock	0.783121	0.326212	-0.59	0.557	0.346145	1.77174
Primary	2.723795	1.061655	2.57	0.01	1.268823	5.847198
Secondary	2.395453	1.436089	1.46	0.145	0.739753	7.756903

Matrilineal	1.837844	0.782177	1.43	0.153	0.798072	4.23229
Husband stays with her	4.216801	1.450487	4.18	0	2.148763	8.275187
One personal assets	0.81325	0.252116	-0.67	0.505	0.442937	1.493157
Two personal assets	0.919991	0.2689	-0.29	0.775	0.518787	1.631465
Three personal assets	0.667974	0.216527	-1.24	0.213	0.353865	1.2609
Four personal assets	0.352219	0.170882	-2.15	0.031	0.136096	0.911551
Five personal assets	1.024687	0.698809	0.04	0.971	0.269212	3.900208
Two children	1.258843	0.274043	1.06	0.29	0.821618	1.928737
Three or more children	2.739016	0.70155	3.93	0	1.657962	4.524958
Patrilocal	0.327822	0.27627	-1.32	0.186	0.062849	1.709946
Autolocal	4.749563	1.593943	4.64	0	2.460324	9.168854
Matrilocal	1.656258	0.528711	1.58	0.114	0.885946	3.096339

Table A4.18. Interaction terms, self-efficacy to breastfeed exclusively

Interaction term	Chi-	Notes
	square	
	р	
Household goods X livestock	0.034	
Education X matrilineality	0.001	
Number of children X chose husband herself	0.001	Tested with product term; removed from model
Household goods X locality	0.008	Tested with product term; removed from model
Household goods X chose husband herself	0.006	Tested with product term; removed from model
Education X locality	0.027	Tested with product term; removed from model
Locality X chose husband herself	0.006	Tested with product term; removed from model
Matrilineality X chose husband herself	0.022	Tested with product term; removed from model

Self-efficacy to get husband participation

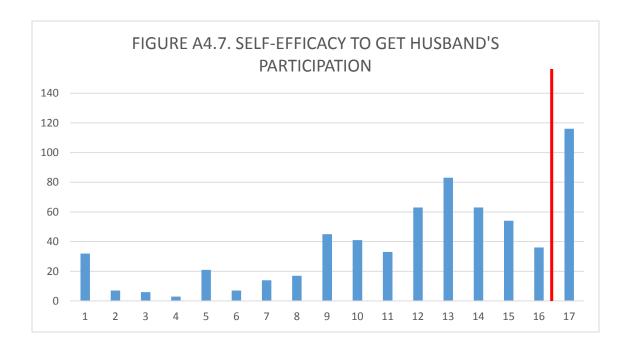


Table A4.19. Model statistics, self-efficacy to get husband's participation

Logistic regression	Number of obs	=	639
	LR chi2(17)	=	113.14
	Prob > chi2	=	0
Log likelihood = -246.13048	Pseudo R2	=	0.1869

Table A4.20. Model, self-efficacy to get husband's participation

	Odds Ratio	Std. Err.	Z	P>z	[95% Conf.	Interval]
Patrilocal	1.552046	1.12285	0.61	0.543	0.375916	6.407939
Autolocal	4.107787	2.069472	2.8	0.005	1.530309	11.02648
Matrilocal	0.059838	0.064558	-2.61	0.009	0.007222	0.495825
Lilongwe	4.903839	1.38474	5.63	0	2.819519	8.528986
Husband helps (low)	1.776666	0.678675	1.5	0.132	0.840335	3.756291
Husband helps (med)	3.14311	1.126586	3.2	0.001	1.556908	6.345359
Husband helps (high)	5.218724	2.38521	3.62	0	2.130708	12.78217

Household goods (quintile	2.116869	0.687683	2.31	0.021	1.119886	4.00142
2)						
Household goods (quintile	2.352693	0.81299	2.48	0.013	1.195161	4.631312
3)						
Household goods (quintile	1.393147	0.529002	0.87	0.383	0.661883	2.932329
4)						
Household goods (quintile	1.579587	0.588912	1.23	0.22	0.760665	3.280152
5)						
Ag land (>0 $\& <=1$ acres)	2.006739	0.883674	1.58	0.114	0.846567	4.756858
Ag land (>1 & <=2 acres)	1.752619	0.78185	1.26	0.208	0.731077	4.20157
Ag land (>2 & <=3 acres)	1.943036	1.022902	1.26	0.207	0.69242	5.452453
Ag land (>3 & <=4 acres)	1.680022	1.172136	0.74	0.457	0.427996	6.594631
Ag land (>4 acres)	3.520146	1.920394	2.31	0.021	1.208351	10.25483
Ag land (>3 & <=4 acres)	1.680022	1.172136	0.74	0.457	0.427996	6.594631

Table A4.21. Interaction terms, self-efficacy to get husband's participation

Interaction term	Chi-square p	Notes
District X post-marital residence	0.0461	Removed from final model for non-significance
Husband help X Post- marital residence	0	Tested with product term; significant in final model
Husband help X Agricultural land	0	Tested with product term; removed from final model for non-significance

Community support while pregnant and bleeding

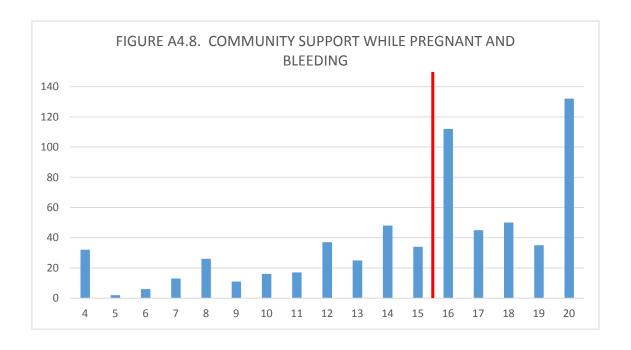


Table A4.22. Model statistics, community support while pregnant and bleeding

Logistic regression	Number of obs	=	639
	LR chi2(18)	=	64.28
	Prob > chi2	=	0
Log likelihood = -402.11709	Pseudo R2	=	0.074

Table A4.23. Model, community support while pregnant and bleeding

	Odds Ratio	Std. Err.	Z	P>z	[95% Conf.	Interval]
Chose husband herself	0.132089	0.146964	-1.82	0.069	0.014921	1.169292
Personal assets (1)	1.979384	0.595792	2.27	0.023	1.097285	3.570594
Personal assets (2)	2.384473	0.671276	3.09	0.002	1.37329	4.140211
Personal assets (3)	1.971354	0.608595	2.2	0.028	1.076421	3.610332
Personal assets (4)	2.774096	1.200688	2.36	0.018	1.187691	6.479474
Personal assets (5)	2.835445	1.959091	1.51	0.131	0.731984	10.98351
Husband helps (low)	1.642684	0.391884	2.08	0.037	1.029173	2.621921

Husband helps (med)	2.519821	0.533585	4.36	0	1.663886	3.816065
Husband helps (high)	2.094981	0.659883	2.35	0.019	1.129968	3.884132
Primary	0.704126	0.158666	-1.56	0.12	0.452733	1.095112
Secondary	0.92396	0.309074	-0.24	0.813	0.479643	1.77987
Patrilocal	0.386539	0.249282	-1.47	0.141	0.109206	1.36817
Autolocal	1.955399	0.559387	2.34	0.019	1.116167	3.425637
Matrilocal	0.482833	0.146706	-2.4	0.017	0.266173	0.87585
Age (25-34)	0.825672	0.173885	-0.91	0.363	0.546445	1.247583
Age (35-44)	0.514733	0.130263	-2.62	0.009	0.313451	0.845268
Age (45-49)	0.656074	0.238608	-1.16	0.246	0.321647	1.338217

Table A4.24. Interaction terms, community support while pregnant and bleeding

Interaction terms	Chi-square p	Notes
Personal assets X husband help	0.047	Tested with product term
Chose husband herself X personal assets	0.022	Tested with product term; not included in model due to insufficient cell size
Chose husband herself X husband participation	0	Tested with product term; not included in model due to insufficient cell size
Chose husband herself X age	0.043	Tested with product term; not included in model due to insufficient cell size

Community support after being beaten by husband

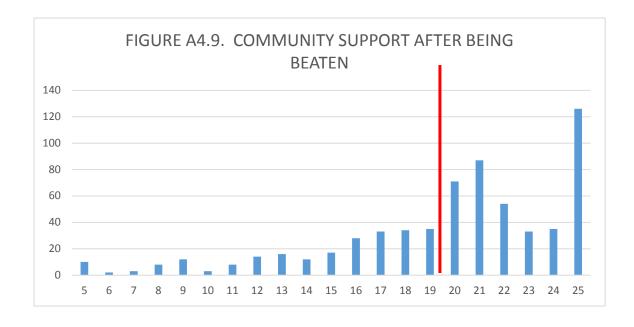


Table A4.25. Model statistics, community support after being beaten

Logistic regression	Number of obs	=	636
	LR chi2(22)	=	104.69
	Prob > chi2	=	0
Log likelihood = -364.9473	Pseudo R2	=	0.1254

Table A4.26. Model, community support after being beaten

	Odds Ratio	Std. Err.	Z	P>z	[95% Conf.	Interval]
Lilongwe	0.464744	0.091582	-3.89	0	0.315847	0.683834
Husband stays with her	0.435409	0.278733	-1.3	0.194	0.124162	1.526882
Husband helps (low)	1.407612	0.353486	1.36	0.173	0.860449	2.302718
Husband helps (med)	2.716177	0.629286	4.31	0	1.724848	4.277255
Husband helps (high)	3.113058	1.121095	3.15	0.002	1.536905	6.305616
Husband age (31-40)	0.523107	0.11336	-2.99	0.003	0.342082	0.799928
Husband age (41-50)	0.426318	0.115702	-3.14	0.002	0.250449	0.725684
Husband age (51-68)	0.681699	0.258963	-1.01	0.313	0.323772	1.43531
Ag land (>0 & <=1 acres)	1.502698	0.47563	1.29	0.198	0.808075	2.794421

691189	0.880874	3.02	0.002	1.416873	5.111607
912682	0.738046	1.68	0.093	0.897822	4.074698
869296	0.883014	1.32	0.185	0.74061	4.718098
883602	1.855992	2.84	0.005	1.522094	9.908961
731112	0.494697	-0.46	0.643	0.194102	2.753836
180789	0.777296	2.19	0.029	1.084479	4.38537
638419	0.202218	-1.42	0.157	0.343154	1.187741
641528	0.281978	-1.01	0.313	0.271067	1.518286
444649	0.284104	-1.27	0.205	0.127102	1.555548
164837	0.146864	-2.02	0.043	0.028752	0.945028
100464	0.121122	-1.91	0.057	0.009458	1.067186
039929	0.066092	-1.95	0.052	0.001557	1.02387
	912682 869296 883602 731112 180789 638419 641528 444649 164837	912682 0.738046 869296 0.883014 883602 1.855992 731112 0.494697 180789 0.777296 638419 0.202218 641528 0.281978 444649 0.284104 164837 0.146864 100464 0.121122	912682 0.738046 1.68 869296 0.883014 1.32 883602 1.855992 2.84 731112 0.494697 -0.46 180789 0.777296 2.19 638419 0.202218 -1.42 641528 0.281978 -1.01 444649 0.284104 -1.27 164837 0.146864 -2.02 100464 0.121122 -1.91	912682 0.738046 1.68 0.093 869296 0.883014 1.32 0.185 883602 1.855992 2.84 0.005 731112 0.494697 -0.46 0.643 180789 0.777296 2.19 0.029 638419 0.202218 -1.42 0.157 641528 0.281978 -1.01 0.313 444649 0.284104 -1.27 0.205 164837 0.146864 -2.02 0.043 100464 0.121122 -1.91 0.057	912682 0.738046 1.68 0.093 0.897822 869296 0.883014 1.32 0.185 0.74061 883602 1.855992 2.84 0.005 1.522094 731112 0.494697 -0.46 0.643 0.194102 180789 0.777296 2.19 0.029 1.084479 638419 0.202218 -1.42 0.157 0.343154 641528 0.281978 -1.01 0.313 0.271067 444649 0.284104 -1.27 0.205 0.127102 164837 0.146864 -2.02 0.043 0.028752 100464 0.121122 -1.91 0.057 0.009458

Table A4.27. Interaction terms, community support after being beaten

Interaction term	Chi-square p	Notes
Husband stays with her X personal assets	0	Tested through product term; retained in model
Husband stays with her X husband help	0.0208	Insignificant in final model
Agricultural land X personal assets	0.007	Tested through product term; insignificant in final model

Community support for difficulty breastfeeding

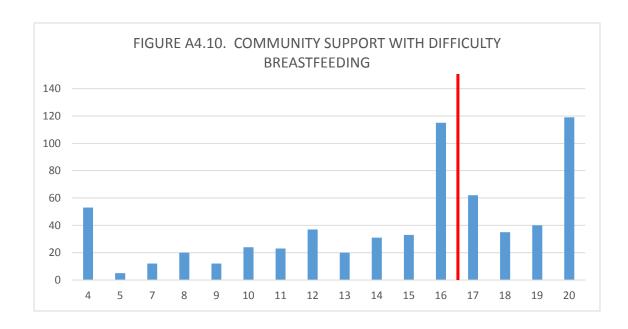


Table A4.28. Model statistics, community support with difficulty breastfeeding

Logistic regression	Number of obs	=	636
	LR chi2(36)	=	122.06
	Prob > chi2	=	0
Log likelihood = -372.233	Pseudo R2	=	0.1409

Table A4.29. Model, community support with difficulty breastfeeding

		•	•	U		
	Odds	Std. Err.	Z	P>z	[95%	Interval]
	Ratio				Conf.	
Lilongwe	0.400	0.077	-4.780	0.000	0.275	0.583
Husband age (31-40)	1.708	0.459	1.990	0.046	1.009	2.891
Husband age (41-50)	2.082	0.832	1.840	0.066	0.952	4.556
Husband age (51-68)	2.196	1.249	1.380	0.166	0.721	6.692
Personal assets (1)	1.875	0.592	1.990	0.047	1.010	3.484
Personal assets (2)	2.669	0.790	3.320	0.001	1.495	4.767
Personal assets (3)	2.123	0.701	2.280	0.023	1.111	4.057
Personal assets (4)	4.166	2.027	2.930	0.003	1.605	10.813

Personal assets (5)	2.874	2.175	1.400	0.163	0.652	12.667
Husband helps (low)	1.643	0.417	1.960	0.050	1.000	2.701
Husband helps (med)	2.498	0.563	4.060	0.000	1.606	3.886
Husband helps (high)	2.429	0.814	2.650	0.008	1.260	4.683
Primary	0.568	0.141	-2.280	0.023	0.349	0.924
Secondary	0.757	0.283	-0.740	0.457	0.364	1.574
Patrilocal	0.800	0.536	-0.330	0.740	0.215	2.977
Autolocal	1.590	0.498	1.480	0.138	0.861	2.936
Matrilocal	0.490	0.158	-2.220	0.027	0.261	0.921
Age (25-34)	0.432	0.169	-2.150	0.032	0.200	0.930
Age (35-44)	0.253	0.135	-2.580	0.010	0.089	0.717
Age (45-49)	0.225	0.167	-2.010	0.044	0.053	0.961
Household goods (quintile 2)	0.583	0.249	-1.260	0.207	0.252	1.348
Household goods (quintile 3)	0.348	0.185	-1.990	0.047	0.123	0.985
Household goods (quintile 4)	1.359	0.830	0.500	0.616	0.410	4.502
Household goods (quintile 5)	0.595	0.363	-0.850	0.394	0.180	1.967

Table A4.30. Interaction terms, community support with difficulty breastfeeding

Interaction term	Chi-square p	Notes
AgeXgoods	0.0467	In final model
husbageXcumeassets	0.002	Tested through product term; not significant in final model
ageXcumeassets	0.008	Tested through product term; not significant in final model
cumeassetsXcatlostchild	0	Tested through product term; not significant in final model

Community support when there is no food

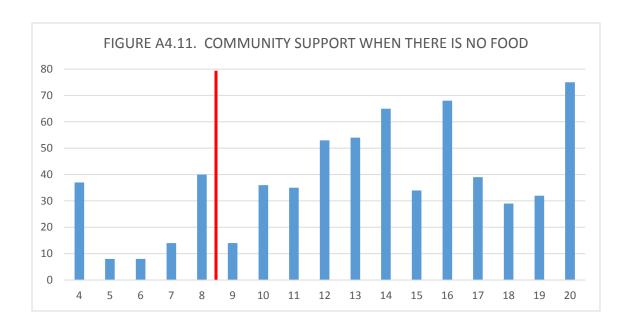


Table A4.31. Model statistics, community support when there is no food

Logistic regression	Number of obs	=	636
	LR chi2(18)	=	66.89
	Prob > chi2	=	0
Log likelihood = -372.233	Pseudo R2	=	0.1162

Table A4.32. Model, community support when there is no food

	Odds Ratio	Std. Err.	Z	P>z	[95% Conf.	Interval]
Matrlineal	1.755496	0.413032	2.39	0.017	1.106954	2.784005
Personal assets (1)	1.575435	0.543537	1.32	0.188	0.801179	3.09793
Personal assets (2)	2.373234	0.792182	2.59	0.01	1.233704	4.565309
Personal assets (3)	1.930844	0.725831	1.75	0.08	0.924206	4.033905
Personal assets (4)	3.077139	2.149995	1.61	0.108	0.782372	12.10267
Personal assets (5)	2.426009	2.707172	0.79	0.427	0.272296	21.61445
Number of children (2)	0.684676	0.187552	-1.38	0.167	0.400236	1.17126
Number of children (3)	0.55009	0.163694	-2.01	0.045	0.306998	0.985672

Patrilocal	0.608737	0.439112	-0.69	0.491	0.148052	2.502902
Autolocal	1.508075	0.66653	0.93	0.353	0.634182	3.586178
Matrilocal	0.303225	0.10262	-3.53	0	0.156205	0.58862
Husband helps (low)	2.394994	1.667501	1.25	0.21	0.611871	9.374512
Husband helps (med)	1.05416	0.460452	0.12	0.904	0.447823	2.481458
Husband helps (high)	1.178531	0.8388	0.23	0.817	0.292087	4.755212
Lilongwe	0.340863	0.139344	-2.63	0.008	0.152972	0.759536

Table A4.33. Interaction terms, community support when there is no food

Interaction term	Chi-square p	Notes
hhelpcatXdistrict	0.0425	In final model

Collective efficacy

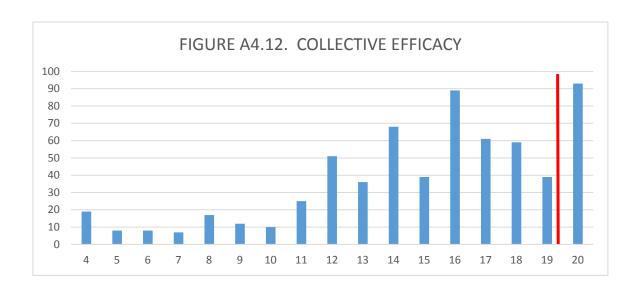


Table A4.34. Model statistics, collective efficacy

Logistic regression	Number of obs	=	625
	LR chi2(12)	=	51.27
	Prob > chi2	=	0
Log likelihood = -235.5046	Pseudo R2	=	0.0982

Table A4.35. Model, collective efficacy

	Odds Ratio	Std. Err.	Z	P>z	[95% Conf.	Interval]
Lilongwe	4.282908	1.347035	4.63	0	2.312192	7.933295
Matrilocal	4.615504	1.990894	3.55	0	1.981774	10.7494
Autolocal	2.716299	1.881087	1.44	0.149	0.699044	10.55481
Matrilineal	1.742876	0.450843	2.15	0.032	1.049736	2.893699
Husband helps (low)	1.605556	0.575138	1.32	0.186	0.795628	3.239968
Husband helps (med)	2.036565	0.638707	2.27	0.023	1.101398	3.765755
Husband helps (high)	2.597303	1.050036	2.36	0.018	1.175979	5.736485
Husband's age (31-40)	0.550609	0.160493	-2.05	0.041	0.31098	0.974887
Husband's age (41-50)	1.378229	0.423842	1.04	0.297	0.754318	2.518191
Husband's age (51-68)	1.096133	0.496411	0.2	0.839	0.451207	2.662874

Table A4.36. Interaction terms, collective efficacy

Interaction term	Chi-square p	Notes
Post-marital residence X district	0.0303	Included in final model

Help from community groups

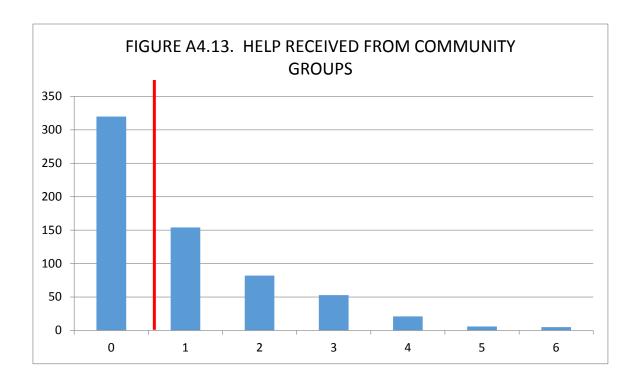


Table A4.37. Model statistics, help from community groups

Logistic regression	Number of obs	=	639
	LR chi2(30)	=	212.84
	Prob > chi2	=	0
Log likelihood = -336.49852	Pseudo R2	=	0.2403

Table A4.38. Model, help from community groups

	Odds Ratio	Std. Err.	Z	P>z	[95% Conf.	Interval]
Lilongwe	0.121991	0.078443	-3.27	0.001	0.034592	0.430201
Household goods (1)	0.689675	0.279702	-0.92	0.36	0.311483	1.527053
Household goods (2)	0.504374	0.203779	-1.69	0.09	0.228479	1.113419
Household goods (3)	0.418707	0.177541	-2.05	0.04	0.182382	0.961253
Household goods (4)	2.641892	1.297193	1.98	0.048	1.009177	6.916124
Chewa	2.577582	1.680054	1.45	0.146	0.718462	9.247434
Ngoni	1.748063	0.796427	1.23	0.22	0.715723	4.269421
Husband helps (low)	0.856372	0.241561	-0.55	0.583	0.492674	1.488554

Husband helps (med)	0.909343	0.228965	-0.38	0.706	0.555139	1.489545
Husband helps (high)	2.2511	0.830853	2.2	0.028	1.092011	4.640478
Husband stays with her	0.364632	0.129174	-2.85	0.004	0.1821	0.730131
Personal assets (1)	1.786469	0.634529	1.63	0.102	0.890555	3.583691
Personal assets (2)	4.582334	1.519875	4.59	0	2.391989	8.778381
Personal assets (3)	5.567337	2.042286	4.68	0	2.712678	11.42607
Personal assets (4)	15.77664	8.837383	4.92	0	5.262697	47.29556
Personal assets (5)	50.7125	57.85626	3.44	0.001	5.42009	474.4862
Ag land (>0 & <=1 acres)	1.032546	0.364088	0.09	0.928	0.517327	2.060883
Ag land (>1 & <=2 acres)	1.472593	0.527131	1.08	0.28	0.730105	2.970159
Ag land (>2 & <=3 acres)	1.768924	0.738013	1.37	0.172	0.780871	4.007182
Ag land (>3 & <=4 acres)	4.166589	2.321612	2.56	0.01	1.397956	12.41846
Ag land (>4 acres)	1.050353	0.49539	0.1	0.917	0.416748	2.647262
Primary	2.619038	0.675812	3.73	0	1.579426	4.342946
Secondary	1.889872	0.721673	1.67	0.096	0.894108	3.994617
Patrilocal	6.888081	5.07847	2.62	0.009	1.623758	29.21966
Autolocal	0.196667	0.065073	-4.91	0	0.102823	0.376163
Matrilocal	1.204176	0.413832	0.54	0.589	0.613992	2.36166
		· · · · · · · · · · · · · · · · · · ·				

Table A4.39. Interaction terms, help from community groups

Interaction term	Chi-square p	Notes
District X husband helps	0.0356	Not significant in final model
District X household goods	0.005	Retained in final model
District X ethnicity	0	Tested through product term; not significant in final model
Personal assets X ethnicity	0	Tested through product term; not significant in final model
Agricultural land X ethnicity	0	Tested through product term; not significant in final model
Household goods X ethnicity	0.006	Not significant in final model

Social Capital: Help from Community Members

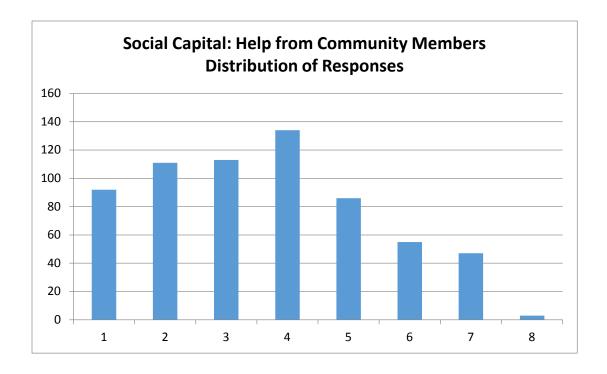


Table A4.40. Model statistics, help from community members

Source	SS	df	MS	Number of obs	=	639
				F(12, 626)	=	11.27
						11.27
Model	365.0496	12	30.4208	Prob > F	=	0
Residual	1689.16	626	2.698339	R-squared	=	0.1777
				Adj R-squared	=	0.1619
Total	2054.21	638	3.219764	Root MSE	=	1.6427

Table A4.41. Model, help from community members

		· ·				
	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
Personal assets	0.373578	0.058328	6.4	0	0.259037	0.48812
Help from husband	0.202892	0.066378	3.06	0.002	0.072543	0.333242
Age	-0.01729	0.008448	-2.05	0.041	-0.03388	-0.0007

Lilongwe	0.453623	0.310202	1.46	0.144	-0.15554	1.062786
Patrilocal	-1.37763	1.167942	-1.18	0.239	-3.67119	0.915928
Autolocal	-0.61485	0.234979	-2.62	0.009	-1.07629	-0.15341
Matrilocal	0.300807	0.357417	0.84	0.4	-0.40108	1.002689
Household goods	0.150569	0.042599	3.53	0	0.066914	0.234223

Table A4.42. Interaction terms, help from community members

Interaction terms	F statistic p
Husband stays with her X personal assets	0.021

Collective action

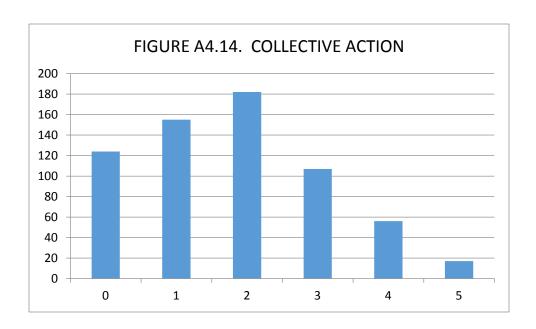


Table A4.43. Model statistics, collective action

Source	SS	df	MS	Number of obs	=	636
				F(16, 619)	=	4.87
Model	123.1588	16	7.697423	Prob > F	=	0
Residual	978.6085	619	1.580951	R-squared	=	0.1118
				Adj R-squared	=	0.0888
Total	1101.767	635	1.735067	Root MSE	=	1.2574

Table A4.44. Model, collective action

	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
Lilongwe	-0.59132	0.272293	-2.17	0.03	-1.12605	-0.05659
Personal assets	0.158537	0.045017	3.52	0	0.070132	0.246941
Female-headed household	0.565509	0.304481	1.86	0.064	-0.03243	1.163448
Husband helps	0.083394	0.051429	1.62	0.105	-0.0176	0.18439
Catholic	0.619778	0.296571	2.09	0.037	0.037371	1.202186
CCAP	0.400775	0.299281	1.34	0.181	-0.18695	0.988505
Other	0.407034	0.281243	1.45	0.148	-0.14527	0.959341
Primary	-0.03123	0.132709	-0.24	0.814	-0.29185	0.229382
Secondary	0.505336	0.197094	2.56	0.011	0.118282	0.89239

Patrilocal	-1.00493	0.389099	-2.58	0.01	-1.76904	-0.24081
Autolocal	-0.34491	0.162155	-2.13	0.034	-0.66335	-0.02647
Matrilocal	-0.28882	0.178734	-1.62	0.107	-0.63982	0.062174
Chewa	0.963596	0.322223	2.99	0.003	0.330814	1.596378
Ngoni	0.193454	0.243391	0.79	0.427	-0.28452	0.671425
Husband's age	0.020605	0.005884	3.5	0	0.009049	0.032161

Table A4.45. Interaction terms, collective action

Interaction term	F-value p	Notes
District X personal assets	0.01	Retained in final model

Household Decision-Making

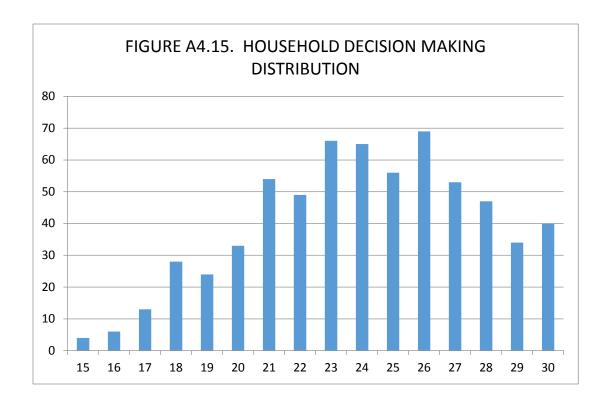


Table A4.46. Model statistics, household decision-making

				_		
Source	SS	df	MS	Number of obs	=	639
				F(11, 627)	=	7.24
Model	905.5219	11	82.32017	Prob > F	=	0
Residual	7133.42	627	11.37707	R-squared	=	0.1126
				Adj R-squared	=	0.0971
Total	8038.942	638	12.60022	Root MSE	=	3.373

Table A4.47. Model, household decision-making

Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
3.850752	0.936428	4.11	0	2.011837	5.689668
1.28359	0.425732	3.02	0.003	0.447556	2.119623
3.205916	0.808682	3.96	0	1.617863	4.79397
0.049167	0.017906	2.75	0.006	0.014003	0.08433
	3.850752 1.28359 3.205916	3.850752	3.850752	3.850752	3.850752 0.936428 4.11 0 2.011837 1.28359 0.425732 3.02 0.003 0.447556 3.205916 0.808682 3.96 0 1.617863

Husband helps at home	-0.39761	0.141027	-2.82	0.005	-0.67455	-0.12067
Primary	0.56775	0.354694	1.6	0.11	-0.12878	1.264282
Secondary	2.647792	0.523948	5.05	0	1.618887	3.676697
Patrilocal	0.731049	0.996035	0.73	0.463	-1.22492	2.687017
Autolocal	1.300126	0.446772	2.91	0.004	0.422776	2.177476
Matrilocal	0.994736	0.479425	2.07	0.038	0.053263	1.936209

Table A4.48. Interaction terms, household decision-making

Interaction terms	F statistic p
Husband stays with her X personal	0.021
assets	

Social Capital—Social Cohesion

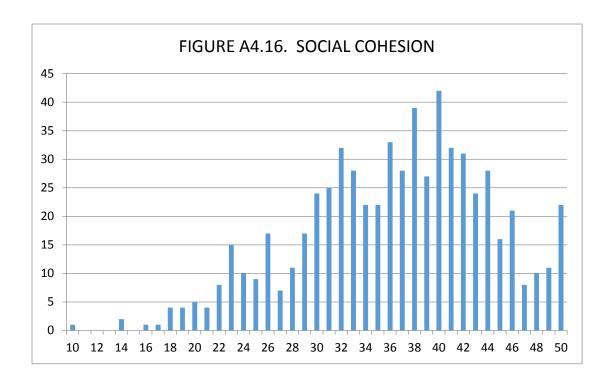


Table A4.49. Model statistics, social cohesion

Source	SS	Df	MS	Number of obs	=	628
				F(12, 615)	=	8.11
Model	5122.932	12	426.911	Prob > F	=	0
Residual	32384.45	615	52.65764	R-squared	=	0.1366
				Adj R-squared	=	0.1197
Total	37507.38	627	59.82038	Root MSE	=	7.2566

Table A4.50. Model, social cohesion

Social cohesion	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
Lilongwe	-5.26387	0.981138	-5.37	0	-7.19066	-3.33709
Primary	-2.75876	1.221184	-2.26	0.024	-5.15696	-0.36057
Husband helps	0.014264	0.824185	0.02	0.986	-1.6043	1.632822
Children lost	0.800547	0.400935	2	0.046	0.01318	1.587914

Number of children	-1.61489	0.926275	-1.74	0.082	-3.43393	0.204159
Patrilocal	-2.1469	2.233514	-0.96	0.337	-6.53314	2.239336
Autolocal	0.639308	0.934159	0.68	0.494	-1.19522	2.473837
Matrilocal	-2.08731	1.020081	-2.05	0.041	-4.09057	-0.08404
Secondary	-0.01877	1.856002	-0.01	0.992	-3.66364	3.626098

Table A4.51. Interaction, social cohesion

Interaction terms	F statistic p	
Husband help X district	0.0287	Retained in final model
Husband help X education	0.0031	Retained in final model
District X education	0.0408	Not significant in final model

Annex 5: Comparison of Results Across Models

	Health rights	Self- efficacy to go to health facility	Self- efficacy to eat a variety of food	Self- efficacy to get help with childcare	Self- efficacy to breast- feed	Self- efficacy to get husband's partic- ipation
Model statistics						
Log likelihood	-388.861	-327.959	-245.557	-278.050	-371.043	-246.130
N	639.000	639.000	625.000	639.000	626.000	639.000
Prob>chi2	0.000	0.000	0.000	0.000	0.000	0.000
Pseudo R2	0.069	0.139	0.208	0.099	0.135	0.187
District						
Ntcheu	NIM	(ref)	(ref)	NIM	NIM	(ref)
Lilongwe	NIM	***0.408	***0.157	NIM	NIM	***4.904
Post-marital residence						
Neolocal household	(ref)	(ref)	NIM	(ref)	(ref)	(ref)
Patrilocal	2.115	1.502	NIM	1.662	0.328	1.552
Autolocal	*4.045	***4.829	NIM	1.990	***4.75	**4.108
Matrilocal	6.090	**2.637	NIM	1.160	1.656	**0.060
Lineality						
Patrilineal	NIM	(ref)	NIM	NIM	(ref)	NIM
Matrilineal	NIM	**0.531	NIM	NIM	1.838	NIM
Household headship						
Male-headed	NIM	NIM	NIM	NIM	NIM	NIM
household						
Female-headed	NIM	NIM	NIM	NIM	NIM	NIM
household						
Husband						
residence						
Husband does	(ref)	(ref)	(ref)	NIM	(ref)	NIM
not stay with						
her						
Husband stays	*2.071	0.402	*0.391	NIM	***4.217	NIM

with her						
Chara haabaad						
Chose husband herself						
Did not choose	NIM	(ref)	NIM	(ref)	NIM	NIM
husband	INIIVI	(101)	INIIVI	(101)	INIIVI	IVIIVI
Chose husband	NIM	2.485	NIM	3.787	NIM	NIM
herself						
Religion						
No religion	(ref)	NIM	NIM	NIM	NIM	NIM
Catholic	0.576	NIM	NIM	NIM	NIM	NIM
CCAP	0.409	NIM	NIM	NIM	NIM	NIM
Other	0.703	NIM	NIM	NIM	NIM	NIM
Education						
No education	NIM	NIM	(ref)	NIM	(ref)	NIM
Primary	NIM	NIM	0.867	NIM	**2.724	NIM
Secondary	NIM	NIM	**0.317	NIM	2.395	NIM
_						
Ethnicity						
Other ethnicity	NIM	NIM	NIM	NIM	NIM	NIM
Chewa	NIM	NIM	NIM	NIM	NIM	NIM
Ngoni	NIM	NIM	NIM	NIM	NIM	NIM
Husband's						
participation None	(ref)	(ref)	(ref)	(ref)	NIM	(ref)
Low	0.703	0.879	1.156	*1.779	NIM	1.777
Medium	*0.635	1.603	2.616	***3.544	NIM	***3.143
High	**0.365	*2.511	4.157	**3.887	NIM	***5.219
9	0.000			0.007		0.220
Livestock						
No livestock	(ref)	(ref)	NIM	NIM	(ref)	NIM
Small livestock	*1.870	0.615	NIM	NIM	0.832	NIM
only						
Large livestock	1.997	0.521	NIM	NIM	1.598	NIM
only						
Both small and	*2.176	0.876	NIM	NIM	0.783	NIM
large livestock						
Normale and a f						
Number of children						
chilaren 0	NIM	NIM	(ref)	NIM	(ref)	NIM
1 to 2	NIM	NIM	(, 0,)	NIM	(. 5.)	NIM
3 to 4	NIM	NIM	0.655	NIM	1.259	NIM
5 or more	NIM	NIM	*0.393	NIM	***2.739	NIM
2 2						
Children who						
have died						
before age 1						
_						

0 to 1	(ref)	(ref)	NIM	NIM	NIM	NIM
2 to 4	**1.990	1.677	NIM	NIM	NIM	NIM
5 or more	**2.154	*1.948	NIM	NIM	NIM	NIM
3 01 111010		2.5 .6				
Household						
goods (quintile)						
1	(ref)	NIM	NIM	(ref)	(ref)	(ref)
2	*1.675	NIM	NIM	0.966	2.580	**2.117
3	1.014	NIM	NIM	*2.240	0.651	**2.353
4	1.389	NIM	NIM	1.141	**8.071	1.393
5	1.115	NIM	NIM	0.860	3.529	1.580
Personal assets						
0	(ref)	(ref)		(ref)	(ref)	NIM
1	1.281	*2.189	<=3	1.459	0.813	NIM
2	0.734	*2.125	(ref)	**2.521	0.920	NIM
3	1.415	1.588		1.788	0.668	NIM
4	1.367	0.688	>3	*12.864	*0.352	NIM
5	0.456	0.727	*2.068	1.412	1.025	NIM
Agricultural						
land (in acres)						
0	NIM	(ref)	(ref)	NIM	NIM	(ref)
> 0 & <=1	NIM	1.363	*0.279	NIM	NIM	2.007
>1 & <=2	NIM	1.572	0.339	NIM	NIM	1.753
>2 & <=3	NIM	0.935	*0.290	NIM	NIM	1.943
>3 & <=4	NIM	1.859	0.431	NIM	NIM	1.680
>4	NIM	*4.010	0.323	NIM	NIM	*3.52
Husband's age						
- 1	NIIN 4	NUNA	(maf)	NIINA	NIINA	NIIN 4
19-30	NIM	NIM	(ref)	NIM	NIM	NIM
31-40	NIM	NIM	1.334	NIM	NIM	NIM
41-50	NIM	NIM	2.246	NIM	NIM	NIM
51-68	NIM	NIM	2.085	NIM	NIM	NIM
Age						
18-24	NIM	NIM	NIM	NIM	NIM	NIM
25-34	NIM	NIM	NIM	NIM	NIM	NIM
35-44	NIM	NIM	NIM	NIM	NIM	NIM
45-59	NIM	NIM	NIM	NIM	NIM	NIM
45-55	INIIVI	INIIVI	INIIVI	IVIIVI	IVIIVI	IVIIVI
	.555	Odds Ratio				
	NIM	Not in Mod				
	(ref)	Reference				
	***	p<=.001	category			
	**	P<=.001				
	*	P<=.01 P<=.05				
	.555	Negative as	ssociation			
	1.555	Positive as				
l	1.555	i Obilive ass	Jociation			

	Communit y support while pregnant and bleeding	Communit y support after being beaten	Collective efficacy	Help from communit y groups	Communit y support difficult breastfeedi ng	Community support when there is no food
Model statistics						
Log likelihood	-402.117	-364.947	-235.505	-336.499	-372.233	-253.230
N	639.000	636.000	625.000	639.000	636.000	628.000
Prob>chi2	0.000	0.000	0.000	0.000	0.000	0.000
Pseudo R2	0.074	0.125	0.098	0.240	0.141	0.117
District						
Ntcheu	NIM	(ref)	(ref)	(ref)	(ref)	(ref)
Lilongwe	NIM	***0.465	***4.283	***0.122	***0.400	**0.341
Post-marital residence						
Neolocal	(ref)	(ref)	(ref)	(ref)	(ref)	(ref)
household			, ,			
Patrilocal	0.387	0.731 *2.181	***4 616	**6.888 ***0.107	0.800	0.609
Autolocal Matrilocal	**1.955 **0.483	0.638	*** 4.616 2.716	*** 0.197 1.204	1.590 *0.490	1.508 ***0.303
Matrilocal	0.463	0.038	2.710	1.204	0.490	0.303
Lineality						
Patrilineal	NIM	NIM	NIM	NIM	NIM	(ref)
Matrilineal	NIM	NIM	NIM	NIM	NIM	1.755
Household						
headship						
Male-headed	NIM	NIM	NIM	NIM	NIM	NIM
household	INIIVI	INIIVI	INIIVI	INIIVI	INIIVI	INIIVI
Female-						
headed household	NIM	NIM	NIM	NIM	NIM	NIM
Uuchar d						
Husband residence						
Husband						
does not stay	NIM	NIM	NIM	(ref)	NIM	NIM
with her						
Husband						
stays with	NIM	NIM	NIM	**0.365	NIM	NIM
her						

Chose husband

herself						
Did not						
choose	NIM	NIM	NIM	NIM	NIM	NIM
husband						
Chose husband	NIM	NIM	NIM	NIM	NIM	NIM
herself	INIIVI	INIIVI	INIIVI	INIIVI	INIIVI	IVIIVI
петзеп						
Religion						
No religion	NIM	NIM	NIM	NIM	NIM	NIM
Catholic	NIM	NIM	NIM	NIM	NIM	NIM
CCAP	NIM	NIM	NIM	NIM	NIM	NIM
Other	NIM	NIM	NIM	NIM	NIM	NIM
Education						
No education	(ref)	NIM	NIM	(ref)	(ref)	NIM
Primary	0.704	NIM	NIM	***2.619	0.568	NIM
Secondary	0.924	NIM	NIM	1.890	0.757	NIM
Secondary	0.524	141141	141141	1.050	0.737	141141
Ethnicity						
Other	NIM	NIM	NIM	(ref)	NIM	NIM
ethnicity	INIIVI	INIIVI	INIIVI	(161)	INIIVI	INIIVI
Chewa	NIM	NIM	NIM	2.578	NIM	NIM
Ngoni	NIM	NIM	NIM	1.748	NIM	NIM
Husband's						
Husband's participation						
	(ref)	(ref)	(ref)	(ref)	(ref)	(ref)
participation	(ref) *1.643	(ref) 1.408	(ref) 1.606	(ref) 0.856	(ref) 1.643	(ref) 2.395
participation None						
participation None Low	*1.643	1.408	1.606	0.856	1.643	2.395
participation None Low Medium High	*1.643 ***2.52	1.408 *** 2.716	1.606 *2.037	0.856 0.909	1.643 2.498	2.395 1.054
participation None Low Medium High Livestock	*1.643 ***2.52 *2.095	1.408 ***2.716 **3.113	1.606 *2.037 *2.597	0.856 0.909 *2.251	1.643 2.498 2.429	2.395 1.054 1.179
participation None Low Medium High Livestock No livestock	*1.643 ***2.52	1.408 *** 2.716	1.606 *2.037	0.856 0.909	1.643 2.498	2.395 1.054
participation None Low Medium High Livestock	*1.643 ***2.52 *2.095	1.408 ***2.716 **3.113	1.606 *2.037 *2.597	0.856 0.909 *2.251	1.643 2.498 2.429	2.395 1.054 1.179
participation None Low Medium High Livestock No livestock Small livestock only Large	*1.643 ***2.52 *2.095 NIM NIM	1.408 ***2.716 **3.113 NIM NIM	1.606 *2.037 *2.597 NIM NIM	0.856 0.909 *2.251 NIM NIM	1.643 2.498 2.429 NIM	2.395 1.054 1.179 NIM NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only	*1.643 ***2.52 *2.095	1.408 ***2.716 **3.113	1.606 *2.037 *2.597	0.856 0.909 *2.251	1.643 2.498 2.429	2.395 1.054 1.179 NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only Both small	*1.643 ***2.52 *2.095 NIM NIM	1.408 ***2.716 **3.113 NIM NIM	1.606 *2.037 *2.597 NIM NIM	0.856 0.909 *2.251 NIM NIM	1.643 2.498 2.429 NIM NIM	2.395 1.054 1.179 NIM NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only Both small and large	*1.643 ***2.52 *2.095 NIM NIM	1.408 ***2.716 **3.113 NIM NIM	1.606 *2.037 *2.597 NIM NIM	0.856 0.909 *2.251 NIM NIM	1.643 2.498 2.429 NIM	2.395 1.054 1.179 NIM NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only Both small	*1.643 ***2.52 *2.095 NIM NIM	1.408 ***2.716 **3.113 NIM NIM	1.606 *2.037 *2.597 NIM NIM	0.856 0.909 *2.251 NIM NIM	1.643 2.498 2.429 NIM NIM	2.395 1.054 1.179 NIM NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only Both small and large livestock Number of	*1.643 ***2.52 *2.095 NIM NIM	1.408 ***2.716 **3.113 NIM NIM	1.606 *2.037 *2.597 NIM NIM	0.856 0.909 *2.251 NIM NIM	1.643 2.498 2.429 NIM NIM	2.395 1.054 1.179 NIM NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only Both small and large livestock Number of children	*1.643 ***2.52 *2.095 NIM NIM NIM NIM	1.408 ***2.716 **3.113 NIM NIM NIM NIM	1.606 *2.037 *2.597 NIM NIM NIM	0.856 0.909 *2.251 NIM NIM NIM	1.643 2.498 2.429 NIM NIM NIM	2.395 1.054 1.179 NIM NIM NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only Both small and large livestock Number of children 0	*1.643 ***2.52 *2.095 NIM NIM NIM NIM	1.408 ***2.716 ***3.113 NIM NIM NIM NIM	1.606 *2.037 *2.597 NIM NIM NIM NIM	0.856 0.909 *2.251 NIM NIM NIM	1.643 2.498 2.429 NIM NIM NIM	2.395 1.054 1.179 NIM NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only Both small and large livestock Number of children 0 1 to 2	*1.643 ***2.52 *2.095 NIM NIM NIM NIM NIM	1.408 ***2.716 ***3.113 NIM NIM NIM NIM NIM	1.606 *2.037 *2.597 NIM NIM NIM NIM NIM	0.856 0.909 *2.251 NIM NIM NIM NIM	1.643 2.498 2.429 NIM NIM NIM	2.395 1.054 1.179 NIM NIM NIM
participation None Low Medium High Livestock No livestock Small livestock only Large livestock only Both small and large livestock Number of children 0	*1.643 ***2.52 *2.095 NIM NIM NIM NIM	1.408 ***2.716 ***3.113 NIM NIM NIM NIM	1.606 *2.037 *2.597 NIM NIM NIM NIM	0.856 0.909 *2.251 NIM NIM NIM	1.643 2.498 2.429 NIM NIM NIM	2.395 1.054 1.179 NIM NIM NIM

Children who have died

before age 1						
0 to 1	NIM	NIN	/ NIM	NIM	NIM	NIM
2 to 4	NIM	NIN	MIN NIM	NIM	NIM	NIM
5 or more	NIM	NIN	MIM NIM	NIM	NIM	NIM
Household goods (quintile)						
1	NIM	NIN		(ref)	NIM	NIM
2	NIM	NIN		0.690	NIM	NIM
3	NIM	NIN		0.504	NIM	NIM
4	NIM	NIN			NIM	NIM
5	NIM	NIN	// NIM	*2.642	NIM	NIM
Personal assets						
0	(ref)	(ref	NIM	(ref)	(ref)	(ref)
1	*1.979	0.642		1.786	*1.875	1.575
2	**2.384	0.44	5 NIM	***4.582	***2.669	**2.373
3	*1.971	*0.16	5 NIM	***5.567	*2.123	1.931
4	*2.774	0.100	O NIM	***15.777	**4.166	3.077
5	2.835	0.040	0 NIM	***50.713	2.874	2.426
Agricultural land (in acres)						
0	NIM	(ref	NIM	(ref)	NIM	NIM
> 0 & <=1	NIM	1.503		1.033	NIM	NIM
>1 & <=2	NIM	**2.69	1 NIM	1.473	NIM	NIM
>2 & <=3	NIM	1.913	3 NIM	1.769	NIM	NIM
>3 & <=4	NIM	1.869	9 NIM	**4.167	NIM	NIM
>4	NIM	**3.88	4 NIM	1.050	NIM	NIM
Husband's age						
19-30	NIM	(ref	ref)	NIM	(ref)	NIM
31-40	NIM	** 0.52 3		NIM	*1.708	NIM
41-50	NIM	**0.42		NIM	2.082	NIM
51-68	NIM	0.682		NIM	2.196	NIM
Age						
18-24	(ref)	NIN	/I NIM	NIM	(ref)	NIM
25-34	0.826	NIN	/I NIM	NIM	*0.432	NIM
35-44	**0.515	NIN	MIM NIM	NIM	**0.253	NIM
45-59	0.656	NIN	MIM NIM	NIM	*0.225	NIM
	(Gender			Househol	
	eq	uitable	Help from		d	
	at	titudes and	community members	Collective action	decision- making	Social cohesion

beliefs

Model statistics					
	7.3 (21,	11.270 (12,	4.870 (16,	7.240 (11,	8.110 (12,
F (df, N)	615)	626)	619)	627)	615)
Prob>F	0.000	0.000	0.000	0.000	0.000
R-squared	0.200	0.178	0.112	0.113	0.137
Adj. R-squared	0.172	0.162	0.089	0.097	0.120
District					
Ntcheu	(ref)	(ref)	(ref)	NIM	(ref)
Lilongwe	-1.17	0.454	*-0.591	NIM	***-5.264
Post-marital residence					
Neolocal	(ref)	(ref)	(ref)	(ref)	(ref)
Patrilocal	2.262	-1.378	**-1.005	0.731	-2.147
Autolocal	-2.778	**-0.615	*-0.345	**1.3	0.639
Matrilocal	**-5.063	0.301	-0.289	*0.995	*-2.087
Household headship Male-headed					
household	(ref)	NIM	(ref)	(ref)	NIM
Female-headed household	-2.405	NIM	0.556	***3.206	NIM
Husband residence Husband does not					
stay with her	(ref)	NIM	NIM	(ref)	NIM
Husband stays with	(101)	IVIIVI	INIIVI	(101)	INIIVI
her	**-2.079	NIM	NIM	***3.851	NIM
Religion					
No religion	NIM	NIM	(ref)	NIM	NIM
Catholic	NIM	NIM	*0.620	NIM	NIM
CCAP	NIM	NIM	0.401	NIM	NIM
Other	NIM	NIM	0.407	NIM	NIM
Education					
No education	(ref)	NIM	(ref)	(ref)	(ref)
Primary	***-2.105	NIM	-0.031	0.568	*-2.759
Secondary	***-5.134	NIM	*0.505	***2.648	-0.019

Ethnicity					
Other ethnicity	NIM	NIM	(ref)	NIM	NIM
Chewa	NIM	NIM	**0.964	NIM	NIM
Ngoni	NIM	NIM	0.193	NIM	NIM
Age	NIM	*-0.017	NIM	**0.049	NIM
Husband's age	NIM	NIM	***0.021	NIM	NIM
Personal assets	NIM	***0.374	***0.159	**1.284	NIM
Husband's help	0.432	**0.203	0.083	**-0.398	0.014
Number of children	NIM	NIM	NIM	NIM	-1.615
Number of children who have died before age 1	**0.341	***0.151	NIM	NIM	*0.081
Household goods	***-0.37	NIM	NIM	NIM	NIM