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UNINTENDED CONSEQUENCES OF MICROFINANCE FOR
WOMEN'S EMPOWERMENT IN GHANA**

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**IS WOMEN EMPOWERMENT A ZERO SUM GAME? UNINTENDED
CONSEQUENCES OF MICROFINANCE FOR WOMEN'S EMPOWERMENT IN
GHANA**

ABSTRACT

Purpose: Against the background of growing concerns that development interventions can sometimes be a zero-sum game, this paper examines the unintended consequences of microfinance for women empowerment in Ghana.

Design/methodology/approach: The study employs a participatory mixed-method approach including household questionnaire surveys, focus group discussions and key informant interviews to investigate the dynamics of microfinance effects on women in communities of different vulnerability status in Ghana.

Findings: The results of hierarchical regression, triadic closure and thematic analyses demonstrate that the economic benefits of microfinance for women is also directly associated with conflicts amongst spouses, girl child labour, polygyny and the neglect of perceived female-domestic responsibilities due to women's devotion to their enterprises.

Originality/value: In the light of limited empirical evidence on potentially negative impacts of women empowerment interventions in Africa, this paper fills a critical gap in knowledge that will enable NGOs, policy makers and other stakeholders to design and implement more effective interventions that mitigate undesirable consequences.

Keywords – *Microfinance; Women Empowerment; Unintended Consequences; Ghana.*

INTRODUCTION

Development interventions can sometime have unintended, and rather significant, consequences. More often than not, interventions aimed at resolving or mitigating one problem can end up precipitating new problems or aggravating existing ones. For instance, uptake of technological innovations is usually a key part of firm strategy in order for the firm to improve their productivity and achieve competitive advantage. Conversely, technological innovations are known to lead to increased unemployment and greater inequality as firms rely more and more on automation and less on human workers (Frey and Osborne, 2015; Sveiby et al., 2009). Similarly, interventions aimed at improving the lives of slum dwellers are sometimes used to justify state-sponsored evictions of slum dwellers and their settlements (Meth, 2013). This has led some practitioners to express the concern that, if not well designed and carefully implemented, development interventions can be a zero sum game where what is gained in one area is lost, in equal or greater measure, in other areas.

One of the areas of growing concerns, especially in sub-Saharan African contexts, is women economic empowerment schemes. Within the past decade, there is increasing awareness that interventions aimed at improving poor women's financial conditions can have negative, undesirable consequences on women's wellbeing. For example, while women economic empowerment can contribute to household welfare due to increased financial power of women, it can also alter power relations within the household and thus lead to increased risk of domestic violence from men trying to re-assert control (Aísa, 2014). The risk of domestic violence is especially high in sociocultural contexts where gender roles are rigidly defined and women economic empowerment disrupts existing gender norms by facilitating new models of behaviour (Hughes et al., 2015). Given the prevalence of gendered poverty in sub-Saharan Africa (Blackden et al., 2006) and the growing interest in women empowerment schemes to mitigate gendered poverty, there is a critical need for practitioners to engage carefully with the challenge of unintended consequences in their design of women empowerment interventions. Sadly, there is little empirical data illuminating these unintended consequences. This paper fills this critical gap in knowledge.

A number of scholars have argued that microfinance for women can be effective in

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3 alleviating poverty and improving enterprise development (Ogato, 2013; Salia, 2014;
4 Srivinis and Shivanna, 2014). Within this context, Al-Dajani and Marlow (2013) observed
5 that marginalised subordinated women are empowered through their home-based enterprises.
6 Case studies in Asia indicate that access to micro-finance enhances women's economic
7 independence and bargaining powers, but the positive impacts are often limited and hindered
8 by a culture of patriarchy pervasive in Asia (Kulkarni, 2011). Similarly, in African countries
9 such as Ghana, women's inability to contribute to household income is due to their weaker
10 financial and social position within society (Agyei et al., 2016). Therefore, it is argued that
11 access to microfinance, in addition to offering employment, may also improve female
12 psychological and social empowerment (Ganle et al., 2015; Seidu and Bambangi, 2006).
13 However, little scholarly attention has been given to the corresponding impact of
14 microfinance on family cohesions and women well-being. For example, women business
15 owners often experience gender discrimination and sexual harassment (Zeidan and Bahrami,
16 2011), and these experiences discourage women from taking on entrepreneurial activities.
17 This study examines the microfinance literature, in order to understand the unintended
18 consequences emanating from microfinance in Ghana; their impact on women's
19 empowerment, family structures and challenges for microfinance institutions and the wider
20 community.

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34 The rest of the paper is organised as follows. Section one considers the theoretical
35 perspectives on microfinance for women empowerment. Section two describes sources, the
36 data set and variables used. Section three analyses the empirical findings and Section four
37 pulls together the evidence presented and highlights the alternative explanation to an
38 established and well embedded narrative.

39 40 41 42 43 **GENDER AND FINANCE**

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46 The theory of gender empowerment is situated in a construct of social interaction
47 (Stromquist, 2015). In recent years, scholars have engaged in debates about how men and
48 women "do gender" and how they contribute to the construction of gender identities by
49 engaging in a process of reciprocal positioning that impacts upon poverty (Darlington and
50 Mulvaney, 2014). Klugman et al. (2014) observed that the process of shared growth
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3 eliminates extreme poverty. This perspective points to the nexus between gender
4 empowerment and poverty which has implications for conceptualizing women's
5 empowerment. The nature and form of poverty is situated in levels of inequalities (García-
6 Rodríguez, 2012). Thus, powerlessness, lack of representation and lack of freedom is a
7 suitable starting point for describing poverty (Lang, 2011).
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13 Micro finance institutions (MFIs) can be effective in improving women's gender reciprocal
14 positioning by helping them to overcome the finance gap. Blattman et al. (2013) observed
15 that access to finance through MFIs has the potential to accelerate the growth of women-
16 owned enterprises. However, negative outcomes affecting family and social cohesion have
17 the potential to negate female achievements, for example through the experience of domestic
18 violence. Thus, this paper seeks to test the hypothesis:
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24 H₁: There is a significantly positive relationship between the success of MFI's
25 services for women's empowerment and poor family cohesion.
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29 Family cohesion entails paternal and maternal warmth (Jaggers et al., 2015) and it is
30 considered an essential attribute for healthy family functioning (Jin, 2015). Friggeri et al.
31 (2011) suggests that cohesion theory builds upon a notion of triadic closure. A property
32 which states that given three nodes Y , X and Φ ; if there is a strong tie between $Y - X$ and $Y - \Phi$
33 it is likely there will be a strong or weak tie between $X - \Phi$ (Opsahl, 2013). To simplify
34 these relationships and to put it in the context of this study, it is proposed that, for example, Y
35 = negative trust; X = microfinance related conflict and Φ = poor family cohesion. Based on
36 this the study can predict that if Negative Trust (NT) shares a tie with both Microfinance
37 Related Conflict (MRC) and Poor Family Cohesion (COH), then, a link between
38 microfinance related conflict and poor family cohesion can be anticipated, be it weak or
39 strong.
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48 *[Figure 1.0 about here]*
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50 Consistent with the conceptualisation of the unintended consequences of microfinance on
51 female empowerment from the literature reviewed, this study is guided by the framework
52 given in **figure (1.0)** above to examine how microfinance fosters unintended consequences
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3 and creates poor family cohesion through occurrences such as spousal disputes, polygyny
4 practices and the neglect of perceived female domestic responsibilities.
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8 Family and social cohesion is a construct of an active participatory process connecting a
9 group of people through a notion of trust, shared commitment and reciprocity (Peterson and
10 Hughey, 2004). It is an embodiment of healthy relationships that buffer against ill-being (see
11 Falb et al., 2014; Fuligni and Tsai, 2015). Family and community support help to build social
12 capital, resilience cohesion that impact positively on female empowerment (Baiyegunhi,
13 2014; Bernier and Meinzen-Dick, 2014; Milanov et al., 2015). However, existing research
14 has not given adequate attention to the complexities of power relations within the family and
15 the impact of role reversals arising from women improved financial position (Mayoux, 2001).
16 While recent studies have raised concerns that microfinance for women can deepen conflict
17 and further isolate women (Silverberg, 2014; Stam and Meier zu Selhausen, 2014) and also
18 have negative impact on the welfare and education of girl children due to increased demand
19 for child labour (Augsburg et al., 2012; Beaman et al., 2012), the empirical data on this
20 subject is scant, particularly in African contexts. Thus, the paper examines the hypothesis:
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30 H₂: Microfinance initiatives contribute to the demand for child-labour and impact
31 negatively on school attendance for girls.
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35 However, some studies have also suggested that women with better education are able to
36 achieve better outcomes from micro-finance interventions, and overcome or mitigate
37 potential negative consequences (Augsburg et al., 2012; Leatherman et al., 2011). Moreover,
38 Raven and Le (2015) have argued that training female microcredit recipients in business
39 skills will improve business performance and probably have other important effects. Thus,
40 this paper seeks to test if education levels of women can reduce unintended poor family
41 cohesion arising from access to micro-finance. This is captured in the following hypothesis:
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47 H₃: The level of recipient education positively moderates the relationship between
48 poor family cohesion and MFI's services for women's empowerment.
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CULTURAL AND INSTITUTIONAL ISSUES

Although Ghana is largely a matrilineal society, much of the power is still appropriated by men, both at home and in society. For example, in ancient Asante Kingdom, the only political office open to women is the queen mother. Aside from this, women past the age of menopause are allowed to occupy some spiritual leadership roles (Akyeampong and Obeng, 1995). Some have argued that Ghanaian women actually fared better in pre-colonial times, and that the marginalization of women in the distribution of power was worsened by the advent of colonialism as colonial administrators disregarded existing political arrangements and assigned more political power to native males (Bawa and Sanyare, 2013). This trend has continued to postcolonial times, where women are left on the periphery of political and economic power. The most visible- and arguably the most significant- manifestation of women's disadvantaged position in Ghana is economic disempowerment. Women, particularly those in rural areas, often spend most of their times attending to domestic duties at home, and have little or no opportunities for profitable commercial activities. Their vulnerability to poverty is associated with, and usually worsened by, unequal gender relations (Awumbila, 2006). It is in recognition of this problem that the United Nations declared, in the sustainable development goals (SDGs) that "...the achievement of full human potential and of sustainable development is not possible if one half of humanity continues to be denied its full human rights and opportunities", and that it "will work for a significant increase in investments to close the gender gap and strengthen support for institutions in relation to gender equality and the empowerment of women at the global, regional and national levels" (United Nations, 2015).

The underdeveloped financial environment, the persistent finance gap, financial exclusion, and income distribution inequalities in Ghana impede female economic engagement and negatively impacts economic development (Banerjee et al., 2013; Klugman et al., 2014) found that commercial banks in Ghana lack the strategies to target women entrepreneurs. Conversely, Maldonado and González-Vega (2008) reported that some microfinance programs generate negative effects of child-labour that weakens family relationships and negatively impacts women's wellbeing. It is therefore important to examine microfinance effects on women in Ghana within a framework of the current cultural and behavioural

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3 dimensions with the view to encouraging entrepreneurial uptake for women, while
4 minimising potential negative impacts.
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7 *Women`s empowerment*

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10 Evaluations of household economics suggest gender inequalities are the result of deficient
11 power structures in African families. Due to their low financial status, women have weaker
12 bargaining power. Microfinance have a poverty reducing effect and improves female
13 psychological and social empowerment in Ghana, reinforcing their confidence and self-
14 esteem to actively participate in household and community decision making processes
15 (Annim and Alnaa, 2013; Halkias et al., 2011). Conversely, lack of asset ownership and
16 access to credit impedes entrepreneurial growth in Africa (United Nations, 2009), and these
17 constraints are often greater for female entrepreneurs (Goltz et al., 2015). In Sub-Saharan
18 Africa, women have limited access to finance despite producing more than 80% of the food
19 in the region (Jalbert, 2000).
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28 Aggarwal et al. (2015) report that women borrowers have a greater social impact; yet the
29 gender gap in access to finance remains unfavourable to women in Ghana. Women have the
30 potential to enter entrepreneurship and make a greater contribution to the GDP of Ghana`s
31 economy. However, the heavy dependence of women on male family members suppresses
32 their entrepreneurial attributes, and adversely impact their family and economic well-being.
33 Moreover, inefficiency and the cost of microfinance impede women`s ability to escape
34 poverty (Schindler, 2010).
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41 In theory, scholars have argued that microfinance gender targeted strategy has an economic
42 justification in that women clients have lower write-offs, lower credit loss provisions, less
43 risky loan portfolios, and good repayment character. For example, Ghanaian women were
44 found to be well organised, with low default rates and higher returns on lending portfolios
45 (Lindvert, 2006). Ghanaian women as debtors are considered to be more passive, submissive
46 and vulnerable. These traits make them more reliable borrowers.
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52 In spite of the argument in favour of women microfinance, targeted microfinance gender
53 policy is often not the preferred strategy of many microfinance institutions. Some studies
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3 have shown that MFIs in Africa sometimes identify family heads as a channel through which
4 they can deliver loans to individuals in the family for enterprise development (Gobezie,
5 2009). In effect, the heads of families in Africa, who are often men, control the resources
6 they receive on behalf of women (Tamale, 2004). This denial of access to finance
7 disempowers women from gaining self-sufficiency through enterprise. The traditional family
8 model in Ghana, in which men dominate the family structure, enables them to use finance as
9 a means of exercising control over the household. The absence of robust legal systems in
10 Ghana gives rise to additional complex cultural, social issues and creates an environment that
11 generates a set of outcomes that disempower women.
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19 The intrinsic nature of domestic responsibilities and managing a business constrains the
20 work-life balance for female entrepreneurs in Ghana. Enterprises require a high level of
21 commitment that often strains family relationships and cohesion. Enterprise, if successful,
22 provides financial empowerment to women that in turn alter the social and economic
23 dynamics of family. In African countries, men who are successful in their use of
24 microfinance to exit poverty are also more likely to marry several women to reflect their
25 status and prosperity (Gibson and Mace, 2007). In this context, microfinance may have the
26 undesirable consequences of instigating humiliation and domestic abuse by male spouses.
27 Whilst microfinance has generated considerable interest in the economic development
28 literature with respect to its impact on poverty alleviation, its contribution towards family and
29 social cohesion in Ghana raises some fundamental questions which remain unanswered.
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38 This study focused on clients of Opportunity International Savings and Loans Limited (OI);
39 the single largest provider of microfinance to women in Ghana. OI provides loans using
40 individual and group lending. Group lending was examined due to the unique nature of the
41 approach. Using a peer screening mechanism, the women select members into groups to
42 receive loans without providing any collateral. The group members undertake to enforce loan
43 contracts. Therefore, anytime a group member defaults in repayments the group is obliged to
44 pay the loan to avoid losing access to future credit from OI. The loan size for the women
45 entrepreneurs investigated is between GHs. 250 and GHs. 5,000.
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METHOD

This study adopts the approach of Carullo et al. (2015) to match perception with facts, by tabulating information derived from the questionnaires to determine both the intended and unintended consequences of implementing microfinance projects. Carullo et al. (2015) suggested that often, data acquired through questionnaires and manipulated on the background of a notion of triadic closure has the potential to unearth relationships that reflect three dimensions of cohesion and how it may impact microfinance beneficiaries; namely the presence of conflict in a family is an indicator of lack of trust. Secondly, trust and social cohesion, are a construct of an active participatory process connecting a group of people through a notion of trust (Peterson and Hughey, 2004). Lastly, trust underpins the concepts of conflict and social cohesion in families and societies (Misztal, 1996). These three narratives were used to understand how negative trust, conflict and poor social cohesion in family relationships emerge as by-products of microfinance programs in Ghana.

Therefore, a mixed method approach was used to investigate the impact of microfinance on family cohesion in beneficiary communities in Ghana. The study adopts a cross sectional quantitative data survey analysis on a sample of 1200 selected microenterprises owned by women operating in Ghana. The main study questionnaire was developed based on preliminary focus group discussions and pilot questionnaires. Having carried out the pre-tests and final revision, the final questionnaire comprised of three sections: (1) personal and family information, (2) quantifiable information using the Likert scale and semi-structured questions. In section 3, the sample consisted of women who took loans 2, 3 and 4 years earlier and served as the respondents for this study because of their experience as beneficiaries of a loan. In total, 264 valid responses were obtained from a sample of 1200 microenterprises approached, a response rate of 22 per cent that compares favourably when benchmarked with similar studies (see for example; Alabi et al., 2007).

However, the study found no significant difference between early and late respondents, which demonstrates evidence of the lack of non-response bias. To gain a deeper appreciation of emerging issues from the statistical evidence, 30 semi-structured interviews were carried out with women entrepreneurs to corroborate the findings reported from the questionnaire,

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3 following the example of Skovdal (2010).
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6 *Variables*
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9 In order to test the hypotheses, a set of variables relating to the nature of the links between
10 family cohesion, dependent variable and independent variables are summarised in Table 1.
11 Evidence from Table 1 shows the Cronbach alpha values and their respective factor loadings.
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15 *[Table 1 about here]*
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17 The main dependent variable is family cohesion (COH). COH is measured in terms of
18 spousal disputes, polygyny practice and perceived neglect of female domestic
19 responsibilities. The Cronbach alpha score of 0.77 was obtained as the reliability score, which
20 is also within (Hair et al., 2006) threshold reliability level. This study also adopt MFS
21 provision as the main independent variable. Four items on a five point Likert scale measure
22 MFS. Each respondent was asked their individual response on the benefits of the use of each
23 of these services with a 5 point Likert scale of (1) strongly disagree and (5) strongly agree.
24 The Cronbach alpha of 0.78 indicates a high reliability score (Adomako et al., 2016). Also,
25 separate individual dummies were created for each of the four (4) MFS provided as separate
26 independent variables. Following previous studies by Karlan and Valdivia (2011) and
27 (Usman, 2015), the study controlled for education, location, age and firm size; as these
28 factors have been reported to have intra relationship (Karlan and Valdivia, 2011; Usman,
29 2015) and their inclusion accounts for any exigencies that may affect the model. Detailed
30 definitions of all the variables included in the model are presented in Table 2 below.
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43 *[Table 2 about here]*
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45 **Empirical Approach**

46 Following existing experiments of entrepreneurial analysis (Adomako et al., 2016; Adomako
47 and Danso, 2014), the study moderated hierarchical regression analysis to estimate the
48 relationship between microfinance success for women's enterprise (empowerment) and poor
49 family cohesion in beneficiary communities. This study adopted the approaches of these
50 previous entrepreneurial studies and similar other ones (Cadogan et al., 2006) to develop an
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interactive model used to estimate the moderating impact of education on the success of MFI services for women's empowerment and family cohesion. To test the robustness of the model the data was tested for multicollinearity, heteroscedasticity, and serial correlation. The correlation matrix for all the continuous variables suggested that none of the variables had coefficients greater than the threshold of 0.87 or 0.97, consistent with the results reported by Field (2005). Using the robust standard error, the models (1) and (2) were checked for the presence of heteroscedasticity and serial. The models.

$$COH = \beta_0 + \beta_1 X + \beta_2 Z + \varepsilon \quad (1)$$

$$COH = \beta_0 + \beta_1 X + \beta_2 Z + \beta_3 XN + \varepsilon \quad (2)$$

$$COH = \beta_0 + \beta_1 X + \beta_2 Z + \beta_3 CT + \varepsilon \quad (3)$$

Where:

COH is the main dependent variable. X denotes the independent variable MFS. Where MFS is for specification (1) and (2). Whilst training, social capital, savings and credit for specification (3). Z represents control variables (Firm Size, Education, Location and Age) that may influence family cohesion (COH). XN represents the interaction between access to MFS and education (EDU). CT denotes the interactive term for credit and training. ε represents the idiosyncratic shocks. $\beta_{(1)}$ and $[\beta]_{(2)}$ are vectors of the parameters to be estimated. These variables are defined in **Table 2**.

Questionnaire Results

Table 2 presents the descriptive statistics of all the variables adopted for the study. The average mean score for poor family cohesion is 4, suggesting that the success of microfinance for women's enterprise development could result in poor family cohesion. The study also find an average score of 4, for access to MFI services, suggesting that majority of the respondents have been able to access at least one of the four services offered by the MFIs.

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3 The average age of entrepreneurs and firm size were found to be 38 years and 8 employees
4 respectively. The results also reveal that about 70 per cent are educated at tertiary level.
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6 Furthermore, 70 per cent of the micro businesses are located in the capital city of Ghana,
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11 *[Table 3 about here]*
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13 **The correlation matrix results reported in Table 4** indicate a significant and positive
14 (0.588, $p < 0.01$) association between poor family cohesion (COH) and successful use of
15 microfinance services (MFS) by women. Poor family cohesion and FIRMSIZE are significant
16 and positively correlated (0.630, $p < 0.01$) and (0.195, $p < 0.05$) respectively. The control
17 variables also demonstrated a positive and significant correlation (0.113, $p < 0.1$) between
18 age (Age) and Firm size (FIRMSIZE). However, none of the variables had their coefficients
19 greater than the threshold of 0.87 or 0.97 as suggested by Field (2005). Therefore, their
20 inclusion in the multiple regression analysis does not create the problem of multicollinearity.
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27 *[Table 4 about here]*
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29 **The regression results in Table 5** present the results of estimation of the relationship
30 between poor family cohesion (COH) and the successful use of microfinance services (MFS)
31 by women. The table also shows evidence of the moderating impact of education upon the
32 relationships between microfinance services and poor family cohesion. The results of Model
33 **1** show a positive and significant (35.54, $p < 0.01$) relationship between MFS on COH
34 indicating that the outcomes of female access and use of MFI services could result in poor
35 family cohesion (COH). This result confirms the first hypothesis (H_1) and is consistent with
36 existing literature on the development and growth of women entrepreneurs (Chimthanawala,
37 et al., 2015).
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48 In terms of the control variables, the study finds a significantly (-0.694, $p < 0.01$) negative
49 relationship between the level of education of women and poor family cohesion. The results
50 suggest that more educated females are able to minimise the factors of poor family cohesion
51 thus confirming the second hypothesis (H_2) and in line with findings reported by
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(Samarakoon and Parinduri, 2015) that level of education impacts positively on female entrepreneurial traits in middle-income countries. This investigation also found FIRMSIZE to be significant and negatively (-0.701, $p < 0.01$) related to COH. This is consistent with findings of Bonomo et al. (2015 and Nyakuma et al. (2016) Damijan *et al* (2015) that since large business have a large pool of resource base, they utilise these resources to reduce poor family cohesion instigators. However, the study did not find any significant relationship between age (AGE), location (LOC) and COH.

However, in the second section of Table 5 (**Model 2**), the study estimate the moderating impact of education on the relationship between poor family cohesion (COH) and microfinance services (MFS). It is argued that entrepreneurship education enables women to maximise the services of MFI's and relationships between highly educated women and positive family cohesion is more pronounced. Consistent with the second hypothesis (H_2), education was found to be significant and positively (0.812, $p < 0.01$) moderate the relations between poor family cohesion (COH) and microfinance services (MFS) for women's empowerment. This study also find the direct relationship between poor family cohesion (COH) and microfinance services (MFS) to be significantly positive (23.41, $p < 0.01$) which is consistent with evidence of **Model 1**. In terms of the control variables, education and firm size remain negatively significant (-2.895, $p < 0.01$; -0.793, $p < 0.01$) respectively. Also, location was found to be significantly positive (1.815, $p < 0.05$) in **Model 2**. However, the study did not find any significant relationship between AGE and COH.

In order to further enhance the robustness of the results, the four individual components of the microfinance institution services were disaggregated

[Table 6 about here]

Interview Results

Descriptive Statistics

Table 7 presents results of summary statistics of face-to-face interviews with thirty married women respondents. The average age of the male category interviewed was 46 years, a lower of 34 and upper age of 58 years. Respondents were married for an average of 18 years and

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3 had 6 children. However, in the second category, the average female respondent was about 38
4 years, married for an average of 16 years and with an average of 5 children.
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8 *[Table 7 about here]*
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10 Economic activity and income generation through self-employment enable women to
11 contribute towards household income and decision-making processes. Respondents
12 acknowledged that the microfinance loan enabled them to engage in micro-enterprise that
13 raised their income, status and respectability. Women entrepreneurs intentionally use
14 enterprise activity supported by micro finance to consolidate their position in society through
15 gaining purchasing power and independence. The women reported that asset deepening and
16 enterprise size confer power. One of the respondents said that:
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23 “Since acquiring additional sewing machines, protective clothes and employing additional workers,
24 now I am taken seriously by family, friends and microfinance institutions” Respondent A
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26 Respondent A, when quizzed, reported to have gained confidence when negotiating with men
27 within family and externally. This has helped her in attracting a good quality of employees
28 that improved the quality of garments, a reduction in absenteeism and improved productivity.
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32 The interviews corroborate the findings that formal education improved women’s access to
33 microfinance and productive use of the loan. Generally, those micro-entrepreneurs reported
34 that their primary and secondary level education was a barrier to their success in starting and
35 developing a microenterprise. Also, women with university level education said that their
36 husbands felt threatened and disempowered, giving rise to domestic disputes. Some of the
37 female respondents demonstrated limited skills and understanding of dispute resolution. This
38 was more pronounced for microfinance recipients without formal education and living in
39 poor areas. However, women who had received formal education were reported to be more
40 successful in accessing microfinance and positioned to identify opportunities and to resolve
41 conflicts that had the potential to engender negative family cohesion. This is reflected in the
42 comments of two respondents below:
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52 “...my ability to address some of these family problems is influenced by my level of education. I
53 ensure my daughter is educated and not stay in the market to help sell provisions.” Respondent D
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4 “.... my ability to address some family problems is influenced by my education and I am actively
5 supporting my girls to get education.” Respondent F
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9 Women in the sample recognised the role of trade associations in providing an enabling
10 environment and to support microenterprises in accessing resources for their growth. Trade
11 associations provide microenterprises the opportunity to participate in trade fairs to market
12 their produce and establish business contacts that assist growth. One of the interviewees
13 reported:
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19 “I have participated in three trade fairs organised by my trade association. I have also been invited to
20 trade fairs organised by other trade associations as a guest.” Respondent B
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23 Respondents reported that access to microfinance fostered economic and social benefits for
24 women. Participation in employment and support from MFIs inspires women to be
25 empowered. However, further exploration through interviews revealed profound weaknesses
26 in microfinance programs that impact negatively on female general wellbeing. All thirty
27 women respondents in the survey reported that their school age girls assisted them with their
28 businesses. Furthermore, they delegated household responsibilities to the girls thus, affecting
29 their education. These findings confirm the third hypothesis (H_3). In cases where the women
30 did not use the services of their daughters, they brought in young girls from other poor
31 families to support the business and family responsibilities. Furthermore, fourteen of the
32 respondents reported that the use of housemaids led to domestic disputes. Nine respondents
33 reported that these disputes were normally associated with husbands suspected of having
34 relationships with house maids. Seven women in the sample reported their husbands getting
35 married to maids that led to spousal disputes and family breakdown. As one respondent
36 observed,
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42 “My husband is always fighting me because of my continuous stay in the shop. I leave the house for
43 the shop by 6:00 am and come back home after 7:00 pm. To make matters worse my husband has
44 married my housemaid as a second wife because he thinks I am no longer able to satisfy his physical or
45 domestic needs.” Respondent E
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3 The analysis suggests that domestic violence and polygyny are two of the consequences of
4 women entering enterprises. Five of the respondents reported they prefer to stay overnight at
5 the market running their business than to go home to abusive husbands or rivals.
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9 The analysis of the women's responses suggests that the success of micro enterprises
10 displaces established cultural practices and norms. Success in women's enterprise had
11 implications for girl child labour. This is similar to the findings of Klugman et al. (2014) and
12 those described by (Basnet, 2015; Beaman et al., 2012) about a general decline in girl-child
13 education due to women owned enterprises.
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17 18 **DISCUSSION**

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21 This study found that microfinance promotes female entrepreneurship in Ghana. Female
22 empowerment is generally suggested as a key driver for MFIs reaching out to women clients.
23 However, the findings of this study in comparison with the existing literature (Mazumder and
24 Wencong, 2015; Siwale and Ritchie, 2012) suggest there is an insurgence of polygyny
25 practice due to availability of microfinance. Also, women's success with microfinance
26 destabilises the family power structure and creates conflict due to perceived neglect of
27 domestic responsibilities. This is attributed to women spending more time on their business
28 instead of their domestic responsibilities. The male spouses feel threatened by female
29 independent decision making, and this gives rise to family conflicts. Besides, the traditional
30 role of men is challenged, and to regain that authority they find alternative solutions through
31 a second marriage or divorce. These outcomes are similar to Silverberg, (2014 and Stam and
32 Meier zu Selhausen (2014) who found that whilst microfinance empowers women to be more
33 independent, it can encourage intimate partner violence and theft in patriarchal societies.
34 Moreover, these results are consistent with the arguments set out by Islam and Pakrashi
35 (2014) and Olowu (2011) that MFIs that focus on microfinance loans, mentoring and training
36 to empower women tends to overlook broader family dynamics and associated negative
37 outcomes. The microfinance group-lending approach and the accompanying pressure have
38 led to power struggles within families and amongst clans (Ali, 2014; Ashta et al., 2015;
39 Mahoney, 2014). The findings of this study suggest that in most cases, employing children in
40 microenterprise activities increased child-labour and reduced school enrolment. However, the
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adverse effects are more pronounced for girls than boys.

Consistent with evidence from the microfinance literature, the results of this study demonstrate that level of education, firm size and family cohesion are interlinked. Also, there is a strong relationship between level of education and benefits of the loan for recipients in Ghana. Karlan and Valdivia (2011) reported that education improves the managerial preparedness of micro entrepreneurs and impacts positively on family cohesion. Meanwhile, the study shows female microfinance clients in Ghana with a lower level of education are susceptible to severe incidences of poor family cohesion. Those with a higher level of education are relatively resilient. Evidence from Bonomo et al. (2015 and Damijan et al. (2015) has shown that larger microenterprises are able to leverage their greater resource advantage to reduce cases relating to poor family cohesion.

CONCLUSION

This study has examined the impact of microfinance on the success of enterprises, women empowerment and family well-being in Ghana. This research represents a significant step in designing more effective empowerment interventions through microfinance for women without disrupting family cohesion. The study challenges established conclusions about microfinance and concludes that there are some negative outcomes such as spousal disputes, polygyny practice and the neglect of perceived female responsibilities within the household, and these need to be considered in evaluations. Theoretically, microfinance helps women to exit poverty and gain better economic opportunities. However, the study suggests that women economic empowerment often precipitates or aggravates incidences of polygyny, family conflicts and adverse impacts on young girls' education and wellbeing. These effectually neutralise the benefits of microfinance. Thus, a major implication of this study is that, the family as a whole should be mentored to take on collective ownership and joint decision-making in the business before the credit facility is approved. This research challenges scholars, NGOs, lending managers, policy makers and stakeholders in the development sector to carry out more comprehensive evaluations of the impact that microfinance has on the wellbeing of women in order to achieve desired outcomes.

The main limitation of this study is that the above findings are restricted to Ghanaian female

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3 microfinance recipients. As a result, future research should broaden the scope of this
4 microfinance inquiry. Perhaps, to include a bigger sample with a cross-country or cultural
5 context that capture the unintended consequences of microfinance interventions targeted at
6 women. Also, the deployment of a longitudinal study may refine the individual dynamics of
7 the examined relationship due to the cross-sectional nature of this study.
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11 12 13 **DECLARATION OF CONFLICT OF INTEREST**

14 The authors declared no potential conflicts of interests with respect to the authorship and/or
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Table 1: Summary of predictor measures

This table shows the Cronbach alpha values and their respective factor loadings. Composition reliability is estimated as the sum of the square roots of the item-squared multiplied by correlation squared and divided by the same quantity plus the sum of the error variance. All variables are defined in Table 2.

Variable	Number of item	Scale format	Cronbach's alpha	AVE	CR
MFS	4	1 to 5 Likert scale	0.78	0.72	0.69
COH	3	1 to 5 Likert scale	0.77	0.80	0.81

Table 2: Variables and measurement

Variable	Measurement
COH= Poor Family Cohesion	Poor Family Cohesion is measured by three items (3): (a) spousal disputes, (b) polygyny practice and (c) perceived neglect of female domestic responsibilities. In the questionnaire, respondents were asked to tick whether they agree or disagree that access to and use of MFI services for women's empowerment result in each of the three measured outcome variables for poor family cohesion. We anchored each of these responses on a five-point Likert scales of "1" strongly disagree and "5" strongly agree in accordance with the guidelines by Raaijmakers et al. (2009).
Independent Variable	
MFS = Microfinance Services	Microfinance Services is measured by the four main services provided by Microfinance institutions (training, social capital, savings and credit). This was measured on a five -point scale with anchors ranging from strongly disagree to strongly agree.
	Control Variable
AGE = Age of female entrepreneurs	We measured firm age as the number of years the firm has been in operation Firm age was log transformed to normalise its distribution and then standardised before inclusion in the research model
EDU= Education Level of entrepreneurs	We captured education as any female microenterprise owner who has received at least up to Junior High School training. We capture this as "1" Yes if female micro-entrepreneurs have at least a Junior High School training and "0" No otherwise.
LOC = Location	Firms were selected only from suburbs of Accra (Dome, Ordokor and Circle). Location information was used to test whether it affects relationships between microfinance services and family cohesion. We capture this as "1" Yes if female micro-entrepreneurs have their businesses operating in each of these locations and "0" No otherwise.
Firmsize = Firmsize	We measured firm size as the natural logarithm of the number of employees of the firm.

Table 3: Descriptive Statistics

The table provides the sample characteristics across the 260 microfinance. The table also presents the results of collinearity test after the residual centring approach. The results from the VIF indicate that there is no issue of multicollinearity among the variables. All variables are defined in Table 2.

Collinearity statistics					
VARIABLE	OBS	MEAN	SD	VIF	TOLERANCE
COH	260	4.22	1.06	0.87	1,135
MFS	260	3.83	0.03	0.88	1.140
LOCATION	260	70.07	0.50	0.95	1,104
EDU	260	69.61	0.46	0.91	1,104
AGE	260	39	12.6	0.83	1,204
FIRMSIZE	260	7.8	4.38	0.92	1,080

Table 4: Correlation Matrix

The table provides Pearson correlation coefficients for the 260 microfinance. All variables are defined in Table 2.

Correlation is significant at *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

	COH	MFS	AGE	EDU	LOCATION	FIRMSIZE
COH	1.000					
MFS	0.588***	1.000				
AGE	0.024	-0.020	1.000			
EDU	0.630***	-0.053	0.074	1.000		
LOCATION	-0.097	-0.024	-0.006	-0.089	1.000	
FIRMSIZE	0.195**	-0.035	0.113*	0.039	0.097	1.000

Table 5: Regression Analysis for Microfinance Relationship with Poor Family Cohesion

This table reports the results of estimation of the relationship between poor family cohesion (COH) and the successful use of microfinance services (MFS) by women across 260 Ghanaian microfinance institutions. All variables are defined in Table 2. ***, ** and * represent coefficients significant at the 1%, 5% and 10% levels correspondingly (two-tailed tests). *T-statistics are in parentheses*

	(1)	(2)
VARIABLES	COH	COH
MFS	35.54***	23.41***
	(7.90)	(6.44)
AGE	0.0354	0.0238
	(0.98)	(0.74)
MFS * EDU		0.812***
		(4.71)
EDU	-0.694***	-2.895***
	(-9.35)	(-5.94)
LOCATION	1.076	1.815***
	(1.26)	(2.61)
FIRMSIZ	-0.701***	-0.793***
	(-7.19)	(-9.43)
CONSTANT	-47.48***	-15.95*
	(-4.70)	(-1.85)
OBSERVATIONS	260	260
R-SQUARED	0.689	0.791

Table 6: Individual effects of Microfinance services on Poor Family Cohesion

This table reports the results of estimation of the relationship between poor family cohesion (COH) and Individual Microfinance services (Credit, Savings, Social capital and Training) by women across 260 Ghanaian microfinance institutions. All variables are defined in Table 2. ***, ** and * represent coefficients significant at the 1%, 5% and 10% levels correspondingly (two-tailed tests). *t-statistics are in parentheses*

	(1)	(2)	(3)
	COH	COH	COH
			0.803***
	(4.88)	(5.96)	(9.22)
CREDIT	0.439***	0.518***	0.763***
	(4.84)	(6.24)	(9.22)
SAVINGS			0.827***
			(12.49)
SOCIAL CAPITAL			0.765***
			(9.52)
TRAINING X CREDIT		0.395***	0.0230
		(6.90)	(0.55)
EDU	-0.183***	-0.327***	-0.775***
	(-3.10)	(-5.38)	(-11.25)
FIRMSIZ	-0.0841	-0.291*	-0.764***
	(-0.46)	(-1.80)	(-9.07)
LOCATION	0.426	0.501	1.260*
	(0.27)	(0.36)	(1.95)
AGE	-0.0452	-0.0313	0.0452
	(-0.73)	(-0.54)	(1.27)
CONSTANT	19.10***	18.05***	1.136
	(6.37)	(6.04)	(0.97)
OBSERVATIONS	260	260	260
R-SQUARED	0.1542	0.2942	0.8045

Table 6: Summary Statistics and Univariate Analysis of Face to Face Interview respondent

The table presents results of the face to face interview response on the relationship between poor family cohesion (COH) and the successful use of microfinance services (MFS) by women across Ghanaian microfinance institutions.

Male Category							Female Category						
VARIABLE	OBS	MEAN	SD	MEDIAN	PERC 10	PERC 90	OBS	OBS	MEAN	SD	MEDIAN	PERC 10	PERC 90
Years of Marriage	15	18	9	14	10	29	15	16	13	11	3	39	
Number of children	15	6	3	6	3	8	15	5	2	6	2	8	
Age	15	46	10	44	34	58	15	38	14	34	23	58	

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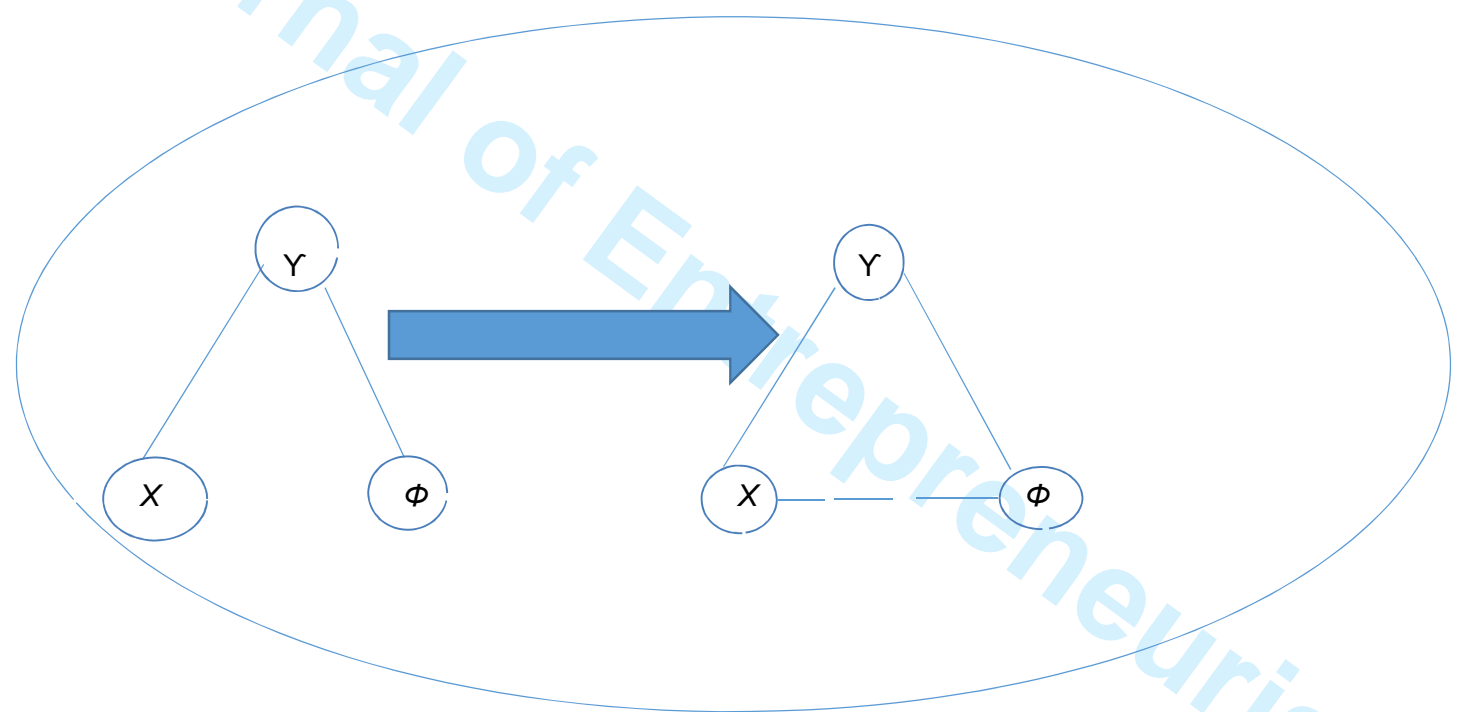


Figure 1.0 Description of relationships based on notion of triadic closure analysis: If Y , X and Φ are such that Y share a strong tie with both X and Φ , then X and Φ must share a tie (this maybe a weak or strong tie).