Unmet need for the utilization of women's labor:

Findings from three impoverished communities in outer Beirut, Lebanon

Marwan Khawaja, Rozzet Jurdi, Shireen Assaf, and Joumana Yeretzian

Center for Research on Population and Health

Faculty of Health Sciences

American University of Beirut

Beirut, Lebanon

Tel: +961 1 35 00 00 ext. 4668

Fax: +961 1 74 44 70

Email: marwan.khawaja@aub.edu.lb

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Abstract

This paper examines cause-specific labor force non-participation among women living in three impoverished communities in the outskirts of Beirut, Lebanon. It uses an expanded labor force utilization framework, separating the socially discouraged from other labor non-participants. This study is based on data from a sample survey of some 2699 households, carried out in 2002. The analyses are limited to women between the ages of 15-59 which yielded a total of 3813 women, 9% of whom reported to be socially discouraged from seeking employment. Descriptive and bivariate analysis of the affect of the independent variables chosen will be first investigated. A multinomial logit model is then fitted to the data in order to uncover the impact of individual and household characteristics on the socially discouraged group as well as women labor force participation. The focus is on covariates pertaining to both women respondents and their spouses (heads of household in other household domains), but several human-capital, demographic and socio-economic factors are also included. Our findings overall indicate a strong influence of social and demographic factors on discouragement. These include residence, marital status, households with children and experience. Surprisingly, education of head and women, presence of children and income have no noticeable influence on social discouragement.

Introduction

The region of the Middle East and North Africa (MENA) has by far the lowest female labor force participation rates in the world (ILO, 2007). Despite its urbanization, and its relatively high educational profile, Lebanon has a labor force participation rate of only 20% among women aged 15-64 (UNFPA 2003). Recent figures from studies of poor communities in particular countries in the region show even lower rates of participation, which is puzzling given the apparent economic need for paid work, especially among the urban poor (Miles 2002). Even at the national level, female labor force participation rates are found to be even lower than those in Lebanon; for example women over 15 years of age in 2006 had labor participation rates of 8.6% in Jordan (Jordan DOS 2006) and 17.5% in the Palestinian Territories (PCBS 2007).

Although many factors such as the low level of industrialization in the region may account for the persistently low female involvement in the labor force, the Arab traditional value system, and its patriarchal character in particular, has also been often singled out as the main reason for the extremely low levels of women's involvement in the labor force and for the kinds of work women do (Hijab 1989; Moghadam 2003; Yousef 1972). The patriarchal family structure not only prevents women from joining the labor force but also creates a traditional division of labor where women tend to hold less paid or unpaid positions compared to males (Moghadam 2003). According to Yousef (1972), there are institutional mechanisms that seclude women "from activities outside marriage and prevent them from participating in public activities which presupposes contact with the opposite sex." As a result, women are traditionally involved either in agricultural activities in the countryside or in some semi-professional white-collar jobs in urban areas where contact with men is minimal (Lewin-

Epstein and Semyonov 1992). Recently, this segmented picture of women's involvement in the labor force seems to persist in many Arab countries, and especially in those with a relatively large urban tertiary sector. Selectivity by education is evident in the patterns of labor force participation, and those who are economically active are not necessarily representative of Arab women. With the remarkable increase in women's education across the region, one would expect a parallel trend toward greater involvement of women in the cash economy. And yet, this has not been the case.

Paradoxically, greater opportunities for women's participation in the labor force (and also education) is generating 'reactive' neo-conservatism among men, often leading husbands to 'force' women to stay home (Donahoe 1999; Marnisi CHECK?; Miles 2002; Moghadam 2003). This recent social conservatism is manifested in male-centered gender attitudes as well as in traditional life-style practices (e.g., dress), especially among the young.

The purpose of this paper is to examine cause-specific labor force non-participation among women living in three impoverished, urban communities in the outskirts of Beirut, Lebanon. The paper relies on data which included a detailed list for reasons for non-participations in the labor force, providing a unique opportunity to investigate patterns of women's actual involvement in the labor force as well as women's 'unmet need' for joining the labor force, with a focus on 'socially discouraged' or otherwise marginal women laborers. Specifically, it examines the determinants of labor non-participation among women of working age (15-59) using an expanded labor force utilization framework, separating the socially discouraged from other labor non-participants.

We expect women who are younger, living in patriarchal households, less educated and poorer to have higher 'unmet need' for employment (socially discouraged) than other

women. We expect variations by community for both structural and cultural (mainly religious) factors.

Prior research

There is considerable research on the determinants of female labor force participation. Here, we group variables suggested by previous research into household demographics, human capital and contextual factors.

Previous research suggests that household composition characteristics can act as important predictors of women labor non-utilization (Parrado, 2002). The differential propensity of families to supply members to the labor market is obviously a function of demographic factors, particularly the burden of dependency especially on women. In the Arab context, the demands of family life and the centrality of the roles of the wife and the mother have been repeatedly documented as important barriers to women employment (Hijab 1989; Moghadam 2003). Thus, our primary predictor variables include marital status, presence of children, female headed households, household type, education and age of household head and household income.

Marriage has traditionally marked a clear dividing line in women's employment history with women entering the labor market when single and exiting it around the time of marriage or at the birth of her first live child (Al-Qudsi 1998; Parrado 2002). The presence of children also represents an additional constraint on the time and mobility of mothers (Al-Qudsi 1998; Presser 1989), increasing non-labor utilization because of childbearing responsibilities, lack of child care, and a relatively rigid gender division of labor (Parrado 2002). In a study in Venezuela, Falaris (1995) argues that labor participation decreases with

the presence of children, with the impact being greatest when children belong to the youngest age group.

Previous studies also showed that household headship is significantly related to women's labor force participation (Gurak and Kritz 1996). In general, male headed households, with their patriarchal settings, are mostly characterized by a rigid gendered division of labor where women being largely confined to household responsibilities (Parrado, 2002). The literature reveals a contradictory pattern in households headed by women however. Safa (1995) argues that, "in order to cope with inadequate and uncertain male support in circumstances of male poverty, unemployment, migration, abandonment and/or death, women bear the blunt of family responsibility, often single-handedly socializing their children and providing economic support for their families". In such circumstances, they may be both highly motivated and able to work outside the home (Parrado and Tienda 1997).

The literature on the relationship between household (extended) type and women labor force participation provides mixed support to the positive influence of extended household formation on labor force participation (Tienda and Glass 1985; Gurak and Kritz 1996). For one thing, the presence of other woman adults in a household offers women assistance with child care and other household tasks (Gurak and Kritz 1996). On the other hand, the presence of other adults may depress labor force participation if the earnings of those adults are sufficient for sustaining the household. Also, the presence of the spouse and other male relatives has significantly been found to depress the participation of women in the labor market because of greater restraint on women's mobility (Gurak and Kritz 1996). Miles (2002) has found that the presence of a son at home reduces significantly women's prospects of finding a job as family ties in job searches are 'invested' in their sons rather than their

daughters in the Jordanian context. The characteristics of the head are also important predictors of woman non-labor utilization. We expect households headed by older heads with little or no education to be less likely to restrict women's labor force participation.

Household income is another household-level variable found important in predicting female labor force utilization. One might be tempted to argue that an increase in income will decrease women's labor participation rates (Nam 1991). In fact, Falaris (1995) argues that the probability of female labor participation decreases with husband's earnings. On the other hand, Miles (2002) found that constraints to woman's employability are higher in the two Jordanian settings that have low income and are densely populated.

The local social context has also been identified as an important factor behind differentials participation of women in the labor force (Gurak and Kritz 1996; Parrado 2001; Semyonov 1980). The local context, usually indexed by place of residence, may shape or modify the socioeconomic strategies pursued by families. It is therefore expected that women living in the more conservative communities of He el Sellom and Burj Barajneh Camp relative to Nabaa are more likely to be socially discouraged from participating in the labor force.

In addition to household composition and social context, women labor non-utilization is also associated to the characteristics of the respondent. A set of personal characteristics are derived from the human capital perspective (Becker 1979, 1985; Cain 1966; Mincer 1993). As shown by previous research, human capital variables such as education, vocational skills and labor market experience play a pivotal role in determining entry into, and continued attachment to, the labor market. This perspective is essentially similar to the equally known status attainment model (Blau and Duncan 1967; Duncan et al. 1972) in emphasizing labor

market returns to individual attributes. Most studies of women labor force participation in developing countries recognize the importance of human capital in determining women's labor market behavior. For instance, in a series of cross-country comparisons in countries of Latin America, Psacharopoulos and Tzannatos (1993) showed that women with higher educational attainment were far more likely to work outside the home than their less educated counterparts, particularly among married women. A study conducted on four Arab countries (Jordan, Kuwait, Oman and Palestinian Territories) has also found a strong positive association between education and female labor participation (Al-Qudsi 1998). However, development economists argue that the effect of education on female labor force participation is not uniform across years of education; rather the relationship may be U-shaped. In fact some studies have reported higher rates of participation at the illiterate level, lower for women with primary and secondary levels, and higher yet for women with post-secondary education. The high rates of participation among women with low education and income are attributed to the pressing need to earn some income (Cameron et al. 2001).

Here, we consider the influence of two human-capital variables: completed levels of education and experience as indexed by age. Consistent with previous studies, we expect that women with higher levels of education are more likely to be in labor force participants. We expect a non-linear relation between age and labor force participation. Salway (2003) found that in Bangladesh age has a strong association with female force participation. In her study, age of the respondent was greatly confounded to marital status, with young, unmarried women exhibiting the highest levels of labor participation.

Finally, we control for the influence of health factors that limit women from participating in the labor market, namely the presence of chronic disease and disability.

Another factor that has important bearing on women's participation in the labor force in poor urban environments is welfare dependency. This is particularly relevant in our context because of the long-time presence of various non-governmental organizations (e.g., UN Works and Relief Agency for Palestinian Refugees) providing support for families in economic hardship. Thus, we also control for the effect of welfare benefits in the final model.

The Setting

Beirut, the capital of Lebanon, is a middle-sized city in the Middle East, which with its suburbs shelters around a quarter of the nation's population (CAS, 2007). Poverty, overcrowding, congestion, noise and air pollution are but a few of the issues facing these residents. These factors together with present of the Palestinian refugees in the Beirut camps contributed to the expansion of the poverty belt around the capital and changed the social fabric of the city and its neighborhoods.

Three communities namely Nabaa, located in the eastern suburbs of Beirut and Hey el Sellom and Burj el Barajneh Camp, in the southern suburbs, were chosen for this study on practical grounds, including their high population density, prevailing poverty conditions, presence of rural immigrants or war displaced populations, lack of basic infrastructure, in addition to ease of sampling. Although similar in these respects, the three areas differ in their socio-demographic characteristics. Nabaa is the only community that has a religious mix (77% of the sample Christian, 23% Muslim) while Hey el Sellom and Burj el Barajneh Camp are almost 100% Muslim. Whereas Nabaa and Hey el Sellom are predominantly Lebanese communities (91% and 96% respectively), Burj el Barajneh Camp consists mainly of Palestinians (91%). Nabaa stands out in terms of female employment where 31% of the

females aged 15 - 59 work as compared to 17% - 18% in the other two communities. Burj el Barajneh Camp is also different from the other two communities in that it has a lower employment rate for men, 63% relative to 72%-73% and lower mean household income per year, 4,854,000 L.P. (1500 L.P= $1) as compared to 8,588,000 and 9,974,000 L.P. for Hey el Sellom and Nabaa respectively. Finally educational attainment is low in the three communities with the mean years of schooling ranging between 6-7.5 years for those aged 15 years and above. Males are still slightly more educated than females across the three communities.

The historical growth of these communities and the origin of their residents also vary. As described by Makhoul (2003), Nabaa for example was originally allocated to receive Armenian refugees and grew as individuals from rural areas (South and the Bekaa valley) moved to the city in search of more work and higher financial rewards. Hey el Sellom, on the other hand, was originally an olive grove cultivated by farmers who came from the South and the Bekaa looking for work. These farmers began to build first tin and wooden houses then gradually progressed to concrete structures as the civil war exploded in the country. The buildings in this area are still considered illegal by the Lebanese government as they are not registered and official maps for this area still label it as olive groves. Finally, Burj el Barajneh Camp was originally established in 1948 as a temporary residence for Palestinian refugees. At that time, it consisted mainly of a land set up with tents which were gradually replaced by zinc roof rooms and in the late 1950's small houses with concrete rooftops.

Data and methods

The data used in this paper are from the Urban Health Study conducted by the Center for Research on Population and Health (CRPH) at the American University of Beirut in the year 2002. This study consisted of a baseline survey of 2,700 households in three different communities in the poorer suburbs of the capital Beirut.

The sample was chosen using a probability proportional to size, stratified sampling design. Since no sampling frames were available, area maps were developed for the study communities before dividing the communities into blocks. A sample of blocks was then selected based on a quick count before proceeding to a complete count of households per sampled block. A sample of households was finally chosen from each block. The survey was conducted in two phases. Phase I which took place between May and July 2002, covered household information including demographics, education, general health and insurance coverage, migration, labor, income and women and work issues. Phase II consisted of questionnaires about health and was completed during the spring of 2003. The present paper used information from the household roster of the household questionnaire. The data were collected using face-to-face interviews by interviewers recruited locally from the three communities and trained interviewing techniques and the administration of the survey instrument by CRPH staff and study investigators.

Our analyses will use the labor force data collected in these communities using a series of questions developed to assess the employment status of individuals 15 and over according to the International Labor Organization framework (ILO, 1983). Here, we restrict the sample to women aged 15-59 at the time of the survey. A total of 3,813 women met these criteria. Out of these, 23 women were excluded because there was no information on labor

force participation. Unlike traditional studies of labor force participation, the outcome variable was divided into three categories namely, in the labor force (i.e. employed and unemployed women seeking work), out of the labor force because they are socially discouraged (i.e. reporting that they are not seeking work due to parent or husband disapproval) and out of the labor force for other reasons such as homemaking, schooling, or illness. This is an expansion on the traditional ILO (1983; 1990) definition of labor that allows for the definition and evaluation of a new but neglected category of marginal laborers, the socially discouraged.

Our dependent variable is therefore female labor force participation: women were classified as being in labor force, socially discouraged from joining the labor force, or not in labor force for other reasons. The focus of our study is on discouragement from work.

Our independent variables were chosen to indicate the impact of household composition, social context, and human capital characteristics on labor non-utilization. The focus is on covariates pertaining to both women respondents and their social and spatial surroundings.

The household composition was studied by asking women first about their marital status (single; married; or widowed, separated, divorced). Then, the presence of children at home was investigated and the ages of these children categorized as under 6 years, from 6 to 14 years or both. The household type was categorized as married couple with children or without children, married couple only, one spouse with children, or other household members without children. The education of the household head was recoded as none, elementary, intermediate, secondary or more. Finally, the mean age of the household head and the mean household income were included.

The local context was measured by community of residence, and thus included the three communities of Nabaa, Hey el Sellom and Burj el Barajneh Camp. The human capital variables included the education of women categorized as in the household composition variable for education of head of household into none, elementary, intermediate, and secondary and more. Experience was measured by the age of the female and its squared value. Other variables used in the analysis included receiving welfare, having any chronic disease, or having any disability.

This is largely an exploratory study and we seek to gain insights into the determinants of labor non-utilization, particularly for those reporting to be socially discouraged. For the analysis, the characteristics of women in each of the three labor force categories were first examined using descriptive statistics. The association of reported characteristics with labor force participation was assessed by χ^2 statistics. Multinomial logistic regression procedures were used to estimate the effect of housing composition, context and human capital characteristics on the odds of being in the labor force relative to being out of labor force. Another multinomial logistic regression model was also conducted to analyze being socially discouraged relative to being out of labor force.

Findings

Table 1 describes the distribution of the women according to the household composition, context, human capital and other characteristics used in the analysis. The results showed that most women were married (56.1%) with an average age of 32.3 years. The women in the sample lived mostly in male headed households (85.3%) and as a married couple with children (66.8%). The education of the head of the households was not very high with most

having either no education (38.3%) or elementary level education (39.3%). On the other hand, the women appear to have a higher education level with 25.3% having no education compared to the 38.3% for the head of households. The average annual income in these communities was found to be almost 9,600 thousand Lebanese Pounds which is equivalent to $6,400 per year. Despite this low level of household income, most women (85.2%) did not receive welfare. More women in the sample were from the Nabaa community (39.7%) than Burj el Barajneh Camp (36.0%) or Hey el Sellom (24.4%). A quarter (24.9%) of the women reported having a chronic disease and only 1.6% reported having a disability.

Table 2 presents the characteristics of the sample and the percentages of women reporting labor force participation. A total of 29.2% of the women were found to be in the labor force and 61.8% out of the labor force with an additional 9% being socially discouraged. All characteristics for the household composition as well as the context and human capital variables were found to have a significant association with female labor participation; the other variables studied such as receiving welfare were not found to be significant. As for household composition, the majority of married women (70.5%) reported being out of labor force, followed by single women (51.6%) and widowed/divorced (46.7%). Widowed or divorced women were the most socially discouraged group (12.4%), with an additional 46.7% being out of labor force for other reasons. The presence of children represented strong association for being out of labor force. Most women reported being out of the labor force (72.3%) had children between 6-14 and most women reported being socially discouraged (11.2%) had children under 6 years. The higher percent of non-working women were in the category of male-headed households where 9.7% reported social discouragement and 64.8% reported being out of labor force. Married couples with no children represented the majority

(26.3%) who were socially discouraged from working while 67.3% of married couples with children are out for other reasons.

The highest percentage of socially discouraged was found in those with the head of the household having elementary education (9.6%). Households that social discouraged women for labor participation were also found to have a younger average age of the head of household (42.6) than households than have women in the labor force (49.5) or out of the labor force (45.8) and they also have the lowest average household income. Burj el Barajneh Camp had 13.8% of its females socially discouraged as compared to Hey el Sellom and Nabaa with 10.0% and 4.1% respectively. For human capital, most women that were socially discouraged had elementary education (12.0%) and most women that were found in the labor force (48.1%) had the highest level of education of secondary or more and the lowest percentage of socially discouraged (5%). Receiving welfare, having a chronic disease, or having disability were not significantly associated with women's labor force participation.

Table 3 presents the multivariate analysis for female labor participation. The first column presents the multivariate analysis of in the labor force as the outcome with out of the labor force as the base category, and the second column presents the multivariate analysis of social discouragement for labor participation as the outcome with out of the labor force as the base category. Single women were 4.3 times and widowed/divorced were 3.7 times more likely to be in the labor force as compared to married women. The presence of children affected the women's labor force participation in a negative way where women with no children were more likely to be in the labor force as compared to women having children of different ages. This also showed in the household type where married couples with no children have the highest odds of woman in the labor force (2.2) comapared to married couple

with children as the reference category. Women who living in female-headed households were 2.3 times more likely to be in the labor force as compared to women living in a male-headed household. The age and education of the head of household as well as the income of the household were not found to be significant predictors for women in the labor force.

For social context, the findings show that women in Nabaa are more likely to be in the labor force compared to those living in the other two communities. Both Burj el Barajneh Camp and Hey el Sellom were 1.3 times less likely to have women in the labor force compared to Nabaa residents.

Women's education had a U-shaped association with women's employment where those having elementary and intermediate education levels being less likely to join the labor force as compared with women having no education or secondary and more. The age of the women also showed a significant association with being in the labor force. Receiving welfare or having a chronic disease were not found to be significant predictors for women labor force participation. However, women with disability were 2.6 less likely to be in the labor force compared to other women.

The second column of table 3 shows the multivariate analysis of the associations between the background variables and being socially discouraged from joining the labor force. There was a significant association between female social discouragement and the marital status, and being widowed, separated or divorced were 2.7 times more likely to be socially discouraged from work as compared to married women. Being single was not found to be significant for social discouragement as it was for being in the labor force. The presence of children affects the women's employment in a negative way where women with children at any age were more likely to be socially discouraged from work because of their obligations to

16

child care; however, this was not found to be significant. Household type, on the other hand, showed a significantly higher odds (3.6) for married couples with no children to be socially discouraged from labor force as compared to married couples having children. As in the multivariate analysis of in the labor force, the age and education of the head of household as well as the income of the household were not found to be significant predictors of being socially discouraged from the labor force.

For social context, with Nabaa as the reference category, Burj Brajneh Camp residents were more likely to have women socially discouraged from joining the labor force (2.9 odds) followed by Hey-El-Sullom residents (2.0 odds).

The results of human capital variables showed that women having higher education levels (intermediate and secondary or more) were less likely to be socially discouraged for labor participation. The age of the women was also found to be a significant predictor of social discouragement. All the other variables in the analysis including receiving welfare, having a chronic disease or having a disability, were found to be non-significant predictors of being socially discouraged to participate in the labor force.

Summary and conclusions

Our findings indicate that women are more likely to participate in the labor force if they are single, have no children, live in female headed households, have higher education, and are young with no disabilities. This was also supported extensively in the literature were it was found that women who are free from the obligations of the home as well as with the skills and education necessary for work are more likely to participate in the labor force (Hijab 1989; Moghadam 2003; Al-Qudsi 1998; Presser 1989. Those socially discouraged for labor

participation were found to be widowed or divorced, married with children and others in the households, and young. Since no studies have been conducted to analyze labor participation with the distinction between out of the labor force and socially discouraged, and we are not able therefore to build upon the findings of other studies. Our findings showed that education of the head of household, the presence of children, the household income and education of the women were not found to be significant predictors of social discouragement. However some of these variables (e.g., being single) are also found to be significant predictors of being out of the labor force. Another interesting finding is that women who are widowed or divorced are more likely to be in the labor force but also more likely to be socially discouraged for labor participation. This discrepancy could be due to the living situation of these women; i.e. if they are widowed or divorced and living alone with their children or if they are living with other family members that can be socially discouraged to seek work.

We should also consider that there may be underreporting of social discouragement as a reason for labor non-participation by the women. Women may not want to reveal that this is indeed the reason why they are not working because they are ashamed of their lack of control or decision making authority.

The findings with regard to context have shown that those women residing in Nabaa were more likely to participate in the labor force and less likely to be socially discouraged compared to the other two communities. This has a great deal to do with ethnicity as Nabaa is mostly occupied by Christians compared to the almost 100% Muslim residents in the other two communities. In general, Muslim women can be considered to be living under more patriarchal and conservative surroundings which cause them to be more likely to be socially

discouraged to participate in the work force compared to Christian women.

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Table 1: Distribution of women in the three study communities, Beirut, 2002

Characteristics	%	N
Household composition		
Marital status		
Married	56.1	2150
Widowed/Divorced	9.9	381
Single	34.0	1304
Presence of children		
None	35.7	1370
Only under 6	14.0	535
Between 6-14	27.3	1049
Both (0-14)	23.0	882
Household head		
Male	85.3	3273
Female	14.7	563
Household type		
Married couple with children	66.8	2561
Married couple with children & others	11.1	425
Married couple only	3.6	137
One spouse with children	12.8	491
Other without children	5.8	221
Education of head		
None	38.3	1469
Elementary	39.3	1509
Intermediate	11.6	446
Secondary or more	10.7	441
Mean age of head (S.D.)	46.6 (12.6)	
Mean annual household income in thousand LL (S.D.)	8602.3 (7448.1)	
Context		
Community		
Nabaa	39.7	1522
HS	24.4	935
BBC	36.0	1379
Human capital		
Education of respondent		
None	25.3	971
Elementary	41.4	1587
Intermediate	20.1	771
Secondary or more	13.2	506
Mean age of respondent (S.D.)	32.3 (11.7)	
Welfare		
Receives welfare	14.8	568
Does not receive welfare	85.2	3268
Health		
Has chronic disease	24.9	955
No chronic disease	75.1	2881
Has disability	1.6	63
No disability	98.4	3773

Table 2: Percent distribution of female labor participation in the three study communities

Characteristics	Female labor participation			X^2	P-value
	In labor force	Socially discouraged	Out of labor force		
Household composition					
Marital status				212.7	0.000
Married	20.1	9.4	70.5		
Widowed/Divorced	40.9	12.4	46.7		
Single	41.1	7.3	51.6		
Presence of children				145.7	0.000
None	39.5	8.1	52.3		
Only under 6	22.5	11.2	66.3		
Between 6-14	29.4	7.8	62.9		
Both (0-14)	17.2	10.5	72.3		
Household head				148.3	0.000
Male	25.5	9.7	64.8		
Female	50.8	5.2	44.0		
Household type				197.2	0.000
Married couple with children	24.0	8.7	67.3		
Married couple with children & others	32.5	10.4	57.1		
Married couple only	26.3	26.3	47.4		
One spouse with children	47.7	6.2	46.1		
Other without children	44.5	5.9	49.5		
Education of head				17.5	0.008
None	32.8	9.1	58.1		
Elementary	27.0	9.6	63.5		
Intermediate	26.3	8.3	65.4		
Secondary or more	28.3	7.4	64.4		
Mean age of head	(49.5)	(42.6)	(45.8)	_	_
Mean household income	(9422.7)	(6739.1)	(8391.3)	_	_
Context					
Community				134.5	0.000
Nabaa	37.1	4.1	58.8		
HS	24.4	10.0	65.6		
BBC	23.8	13.8	62.4		
Human capital					
Education of respondent				123.4	0.000
None	26.4	7.8	65.8		
Elementary	26.2	12.0	61.9		
Intermediate	26.5	7.1	66.4		
Secondary or more	48.1	5.0	46.9		
Mean age of respondent	(32.8)	(27.2)	(33.0)	_	_
Welfare/Health					
Receives welfare	28.4	11.3	60.3	4.5	0.107
Has chronic disease	27.8	7.8	64.4	4.6	0.103
Has disability	23.8	9.5	66.7	0.9	0.633
Total	**29.2**	**9.0**	**61.8**	_	_

Table 3: Effects of selected characteristics on female labor force participation in the three stury communities (out of the labor force as the reference category)

Predictor	In labor force		Social discouragement	
	OR	**P**	**OR**	**P**
Household composition				
Marital status				
Married	1.0	_	1.0	_
Widowed/Divorced	3.7	0.000	2.7	0.000
Single	4.3	0.000	0.9	0.578
Presence of children				
None	1.0	_	1.0	_
Only under 6	0.9	0.579	0.6	0.063
Between 6-14	0.9	0.383	0.8	0.177
Both (0-14)	0.5	0.000	0.7	0.073
Female headed	2.3	0.000	0.6	0.185
Household type				
Married couple with children	1.0	_	1.0	_
Married couple with children & others	1.5	0.004	1.6	0.028
Married couple only	2.2	0.002	3.6	0.000
One spouse with children	0.7	0.191	1.2	0.584
Other without children	0.9	0.527	1.0	0.916
Education of head				
None	1.0	_	1.0	_
Elementary	1.0	0.769	0.9	0.273
Intermediate	0.9	0.686	0.8	0.213
Secondary or more	0.9	0.677	0.7	0.097
Age of head	(0.000)	0.978	(-0.009)	0.264
Income (log)	(0.182)	0.131	(-0.013)	0.935
Context				
Community				
Nabaa	1.0	_	1.0	_
HS	0.8	0.000	2.0	0.000
BBC	0.8	0.023	2.9	0.000
Human capital				
Education of women				
None	1.0	_	1.0	_
Elementary	0.9	0.317	1.1	0.616
Intermediate	0.8	0.105	0.6	0.022
Secondary or more	1.7	0.001	0.6	0.056
Age of women	(0.354)	0.000	(0.115)	0.010
Age squared	(-0.005)	0.000	(-0.003)	0.000
Welfare/Health				
Receives welfare	0.9	0.636	1.0	0.989
Has chronic disease	1.1	0.644	1.0	0.804
Disabled	0.4	0.005	0.9	0.765