

Access to Microcredit Programs and Spousal Violence in Rural Bangladesh

Abstract

While the female empowerment impact of the microcredit programs has been evaluated in numerous dimensions such as gender gap in education, women's asset ownership, loan control, mobility, and work hours (Goetz and Sen Gupta 1994, Hashemi et al. 1996, Pitt and Khandker 1998, Pitt et al. 2006), the impact of the programs on women's spousal violence experience has rarely been investigated.

There are two opposite theoretical predictions of the effect of women's financial independence on spousal violence. The theory of marital bargaining predicts a negative effect: based on higher bargaining power resulting from better outside option (Farmer and Tiefenthaler 1997, Tauchen, Witte and Long 1991). In contrast, the theory of male backlash predicts a positive effect: in a patriarchal society where options outside marriage are virtually impossible, when an increase in women's financial independence challenges the social norm of male dominance and female dependence, the challenged male might try to restore his authority by exercising more violence (Aizer 2007, Luke and Munshi 2007).

The question of whether women's access to credit increases or decreases spousal violence directed at women has important practical policy implications. If the credit in the hands of women actually exacerbates violence against women in a patriarchal society, rather than to improve their status, the effectiveness of a "gendered" policy design needs to be reconsidered.

A handful of existing studies that examine the relationship between the access to credit and violence against women in Bangladesh (Koenig et al 2003, Schuler et al. 1996) is inconclusive. Schuler et al. (1996) find statistical evidence that the credit programs reduce spousal violence by making women's lives more public through group meetings and social networks. Koenig et al.

(2003), on the other hand, find that credit membership is associated with significantly elevated risks of violence in culturally conservative areas but, reduces the risk of violence in a less conservative area.

A concern with the existing studies is that they fail to address the well-known endogeneity problems associated with the non-random program placement and household unobservables that are correlated with both the program participation and spousal violence. For example, if the credit programs are selectively placed in places where deprivation of women are more serious in both economic and social dimensions, simple comparison of the outcomes of the villages with/without programs might provide a biased result that incorporates the intrinsic differences in treatment of women across the villages. Further, there can be household level unobservables that are correlated with participation in the program and domestic violence at the same time. If, for example, a woman in a more egalitarian household is more likely to participate in the credit program and less likely to experience violence, the coefficient of the participation falsely captures the effect of household cultures rather than the effect of the program.

I address the endogeneity problems with a standard difference-in-difference estimation based on the quasi experimental nature of the program placement. Assuming that the eligibility rule is orthogonal to violence propensity within the household, the problem associated with household level unobservables is addressed by exploiting the eligibility rule of the microcredit programs, which is meant to exclude households with more than 0.5 acre of cultivable land.¹ The bias

¹ As is noted by Morduch (1998), however, a significant proportion of participating households in the credit programs own more than the *de jure* eligibility of 0.5 acre of land. This seeming mis targeting can be explained by the *de facto* eligibility rule that takes into account the quality of land (Pitt 1999). Given that the eligibility criteria is based on the “cultivable” land, a household with more than 0.5 acre of land can still be eligible if some portion of its land is uncultivable. The *de facto* eligibility rule, however, is unknown to the researchers. Following Pitt (1999), I deal with this issue by gradually raising the eligibility cutoffs beyond 0.5 acres. That way those who do have choice to participate but choose not to participate can be treated appropriately. The downside of such an approach is that some of the households that are in fact ineligible will be treated as eligible, weakening the statistical power of the results. This classification error, however, does not undermine the consistency of the program effects, because

associated with non-random program placement can be eliminated by comparing differences in spousal violence experience of eligible and ineligible households across program and non-program villages.

The empirical analysis of this paper draws on a cross section of 1874 households over 239 clusters (village/mahalla) in rural Bangladesh from the 2004 Bangladesh Demographic Health Survey. Out of 239 clusters, 221 clusters have at least one credit program available (Grameen, BRAC, PROSHIKA, ASHA). There are 1230 eligible households and 613 ineligible households. The survey obtains information on the incidence of physical spousal violence directed at women. The spousal violence questions are addressed to currently married men, and cover physical assault of 6 different types -- pushing, shaking or throwing something at her/ slapping or twisting her arm/ punching her with your fist or something that could hurt her /kicking or dragging her/ trying to strangle, kick or burn her/ physically forcing her to have sexual intercourse with her-- For each type of physical violence, the answers are coded as indicator variables that take the value of one if the male respondent gives an affirmative answer and zero otherwise. Women's credit program participation is also an indicator variable that takes the value of one if the woman is a member of a program and zero otherwise.

The naïve linear probability model results show no significant effect of the program participation on the probability of violence in the past year in all 6 types. Similarly, with the *de jure* eligibility rule, the difference-in-difference estimation does not show a significant effect on spousal violence of the credit program eligibility in a program village. With the *de facto* eligibility, on the other hand, the difference-in-difference estimation shows a significant negative effect on pushing, punching, or forcing sex, starting from the cut-off level of 1.3 acre. The

treating a possibly exogenous behavior as endogenous still yields consistent estimates as in the fixed vs random effects estimation case (Pitt 1999). I, therefore, apply the *de facto* eligibility rule by raising the eligibility cut-off by 0.1 acre up to 2.0 acre of land.

effects lose the statistical significance at a cut-off level of 1.9 acre, suggesting that inclusion of too many ineligible households into the eligible groups undermines the statistical power. Further, the instrumental variable estimation using the interaction between the village level program availability and the household level *de facto* eligibility of the program as the instrument for the program participation indicates that women's credit program participation decreases the probability of pushing by 0.4, punching by 0.3, and coercive sex by 0.4. The findings, therefore, reconfirm the female empowerment impact of the programs in an additional dimension.

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