**The impact of support programs for social inclusion of survivors of sexual violence**

*Micro-level evidence from Eastern DRC*

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**Abstract**

Sexual violence constitutes a massive challenge in the eastern Democratic Republic of the Congo (DRC), and many survivors of sexual violence report facing marginalization and social exclusion among family members and in their local communities. A number of support programs are in place to support survivors of sexual violence, but the impacts of such programs are rarely systematically assessed. We therefore ask: What are the feelings of social exclusion among survivors of sexual and gender-based violence (SGBV), and what are the effects of support programs on the sense of social exclusion and economic wellbeing? To answer this, we we have collected survey data on 1,203 women aged 15-87 in South Kivu of which about one third are survivors of SGBV, and about 80% of the full sample have been beneficiaries of a support program. Results based on matching analysis indicate that, in general, survivors of sexual violence feel less included across various social settings than non-survivors. We also find that support programs significantly improve women’s economic wellbeing (be it survivors or non-survivors) although the programs seem to be particularly beneficial for survivors in this respect. The programs studied also seem increase the beneficiaries´ perceived level of social inclusion, but the effect appears to be somewhat weaker for survivors than for non-survivors. Hence, there is potential for improvement as regards how the programs work actively to integrate survivors of sexual violence in the community, and how communities welcome sexual violence survivors.

**Keywords**

Sexual violence, SGBV, social exclusion, support programs, DRC, South Kivu

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# Introduction

Various UN Security Council Resolutions have identified sexual and gender-based violence as a security problem; and called for more systematic data collection and analysis of the consequences of war for women, and ways to alleviate these problems, particularly sexual violence.[[2]](#footnote-2) Sexual and gender-based violence (SGBV) related to conflict settings in particular, has received significantly increased attention from researchers, looking at particular contexts and countries (e.g. Blay-Tofey & Lee 2015; Leiby 2009; Meger 2010; Peterman & Johnson 2009; Rustad et al. 2016) as well as global patterns (e.g. Cohen 2013; Cohen & Nordås 2014; Wood 2012).

In the Democratic Republic of the Congo (DRC), sexual and gender-based violence (SGBV), gender inequality, and infringements on women’s rights constitute massive challenges (Peterman et al. 2011). The DRC is officially a post-conflict country, but still in a situation of considerable insecurity and instability, and sexual and gender-based violence (SGBV) has been and still is widespread in the eastern provinces. Most groups operating in eastern DR Congo have been accused of committing sexual violence, both rebel groups, militia groups and not the least the state military, the FARDC (e.g. Baaz and Stern 2009; Cohen and Nordås, 2014). Armed actors have terrorized the population via sexual violence (commonly called conflict-related SGBV) in a way that prevents a normal life and causes extreme trauma, stigma and fragmentation of families (Bartels et al. 2010a; Mukwege & Nangini 2009). In the popular narrative, SGBV in eastern DR Congo has been associated with a scramble for lucrative minerals and other natural resources; and although a simplified and probably even misleading causal explanation for sexual violence, women living near artisanal mining sites with armed group presence are more vulnerable to sexual violence by non-partners than women living less proximate to these sites (Rustad et al. 2016).

In the midst of this situation, significant local initiatives are addressing SGBV problems and assisting survivors of sexual violence. The focus on improving survivors´ inclusion in the community, to strengthen their livelihoods, and to generally empower women and girls to improve their lives. One of the most established and well-known institutions in this regard is the Panzi Hospital in Bukavu, South Kivu, and associated support programs. Panzi Hospital is a general referral hospital but also specializes in medical treatment of survivors of SGBV, and several programs for social, economic, juridical and psychological assistance have been initiated around the hospital under the auspices of Panzi Foundation DRC. These initiatives have been started recognizing that it is important to not only treat the *medical* problems of the patients admitted to the hospital for treatment of sexual-violence related problems, but to also provide socioeconomic support for sexual violence survivors. Once these patients leave the hospital, they not only face traumas, but they are also assumed to likely face stigmatized and risk being rejected by family and community. A few studies have recently been carried out that try to systematize what the situation is for women in the DR Congo in general, as well as focusing particularly on the problem of sexual violence specifically (e.g. Baaz & Stern 2009, 2010; Babalola 2013; Bartels et al. 2010a, b; Dossa et al., 2014; Kasangye et al. 2014; Kelly et al, 2009, 2011; Kohli et al. 2014; Peterman et al. 2011; Rustad et al. 2016).

Finding efficient ways to achieve female empowerment is difficult; in particular sustainable ways of empowering vulnerable women in violent and poverty-stricken post-conflict settings. Despite the importance of effective programming towards sexual violence survivors in particular, relatively little research has been done on how support programs work, and what their long-term effects are for women (in terms of i.a. health, social status, employment, and re-integration) and for society at large (Bosmans 2007; Steiner et al. 2009). A few studies that focus on assistance to survivors exist (e.g. Bolton 2009; Bosmans 2007; Douma & Hilhorst 2012; Roka et al. 2014; Steiner et al. 2009). Some of these studies (e.g. Kelly et al. 2009; Douma & Hilhorst 2012; and Steiner et al. 2009) call into question the effectiveness of some of these programs and highlight the need for further research and critical evaluation. However, there is an acute lack of data that can be used to critically and systematically assess the focus and impact of the programs designed to assist survivors in various ways. Although anecdotal evidence suggests positive benefits of programming, support programs themselves could also have the unintended effect of leading to increased levels of stigma among survivors, or a stronger visibility of who has been raped and who would therefore potentially be excluded or perceived negatively by the community. For example, in one focus group interview we carried out in 2014 in a village in South Kivu, it was pointed out that because a support program provided shoes that were very recognizable, this because a sign of being a survivor: “when they returned, they all had similar pairs of shoes and all the women who had such pairs of shoes were said to have been raped.”[[3]](#footnote-3)

In sum, systematic research on program effectiveness is scarce and represents a significant knowledge gap. In this paper, we therefore present new directed survey data of women in South Kivu, particularly women who have recently been in support programs and many of whom are survivors of sexual violence, and analyze their situation terms of their experience of social exclusion and effect of programming. Specifically, we ask three research questions: (1) *Is the general feeling of social inclusion/exclusion different for survivors and non-survivors? (2) Do support programs improve perceived economic wellbeing of their beneficiaries, and particularly sexual violence survivors?* And (3) i*s the feeling of inclusion/exclusion different for survivors that have been exposed to support programs?*

Before presenting our research design, data and analyses, we give an overview of existing knowledge on consequences of conflict-related sexual violence for survivors and the effects of support programs.

# Knowledge on consequences of sexual violence and effects of support programs

Sexual violence is generally believed to be associated with considerable shame and stigma for the victims. In addition to the challenges of coping with physical complications and psychological trauma, many survivors face marginalization and social exclusion among family members and in their local communities. One consequence for survivors can be outright rejection by their husbands. From focus group interviews we conducted in South Kivu province, women tell about feelings of shame. One woman in a village in Kalehe territory, for example, said in an interview that “when they raped me, I stayed in my house for seven months, I was ashamed and couldn’t approach other people”. Another woman interviewed in Kavumu territory said that “When he [the husband] came back, he said I simply cannot take back a wife who has been raped...”. Another woman explained family rejection and said that “for us who were both raped and whose husbands were killed, we were rejected by both our native families and by the families-in-law. We had to cope with our problems - poverty, misery, illnesses- by ourselves. We were considered as useless people”.

These situations have many associated problems for mental health and livelihoods. One study from 2011 based on 255 women treated at Panzi Hospital found that of the women in this sample who had been raped, 29% were rejected by their families and 6% by their communities (Kelly et al. 2011), often based on a sense that they were contaminated by disease. They therefore concluded that sexual violence can not only have physiological and psychological health effects, it can also destroy family and community structures. Another study based on treated patients at Panzi Hospital has also found that several extreme forms of sexual violence were reported, that there was intentional transmission of sexually transmitted diseases such as chlamydia and HIV, and that there were challenges associated with socioeconomic reintegration (Mukwege and Nangini 2009).

Evaluations of programs and their impact are often lacking, and proper experimental designs are difficult to carry out for a variety of pragmatic and ethical reasons. Findings to date are therefore few and unclear. In one study, Bolton (2009) evaluates psychosocial activities implemented by the International Rescue Committee (IRC) in South Kivu, and explored local concepts of psychosocial problems related to gender-based violence and functioning. At baseline, women reported particularly high levels of impairment in functioning (e.g. farming, trading, cooking, looking after children), as well as symptoms of anxiety and fear. At follow-up assessments, they reported substantial improvements in both functioning and symptomatology. However, the study had significant weaknesses in research design in that, in addition to the lack of a control group, the type of interventions and the implementing partners involved changed between the start and closure of the study, making it hard to infer which intervention was responsible for changes over time. In a more recent study, Bass et al (2013) did a controlled trial of psychotherapy for Congolese survivors of sexual violence. They report mean scores for combined depression and anxiety [range 0-3] improved in the individual-support group (2.2 at baseline, 1.7 at the end of treatment, and 1.5 at 6 months after treatment), but improvements were significantly greater in the therapy group (2.0 at baseline, 0.8 at the end of treatment, and 0.7 at 6 months after treatment) (P<0.001 for all comparisons).

One broader systematic review of the academic and grey literature on “the effectiveness of mental health and psychosocial support interventions for populations exposed to sexual and other forms of gender-based violence in the context of armed conflicts” (Tol et al. 2013: 1) found that there were only very few and limited studies on this topic. The meta-analysis suggested beneficial effects of mental health and psychosocial interventions, and that evaluation of such interventions in real-life settings would be feasible through partnerships with humanitarian organizations. However, on the basis of the existing evidence, it was not possible to make robust conclusions on the effectiveness of particular approaches in various support interventions for populations affected by sexual violence in conflict zones. The authors therefore concluded that more rigorous research was urgently needed. This paper provides one such rigorous assessment of how support to female survivors of sexual violence affects their sense of exclusion specifically, as well as their sense of improvement in economic wellbeing. The focus is on women in eastern DR Congo, but in particular the situation for female survivors of sexual violence versus women in general. Our first, basic hypothesis based on existing qualitative data and some systematic studies is that survivors of sexual violence are likely to feel more socially excluded than non-survivors:

***H1****: Sexual violence survivors are less likely to feel socially included than women who have not experienced conflict-related sexual violence.*

The intention of the many programs that exist to support survivors of sexual violence is both to improve their economic situation and to reduce the stigma of survivors. However, many of the programs target not only survivors but also other “vulnerable” women, as defined by poverty, health needs, etc. Part of the rationale behind this is also to avoid that the programs are associated with survivors of sexual violence only, which could lead to increased stigma. In any case, we expect, based on the stated intensions of the support programs to improve inclusion and livelihoods of their beneficiaries that the programs have an overall positive effect (both for survivors and non-survivors) with regard to perceptions of social inclusion AND improved economic wellbeing. Hence, we will test the following hypotheses:

***H2a****: Program beneficiaries are more likely to feel socially included than women who have not benefited from such programs.*

***H2b****: Program beneficiaries are more likely to rate their economic living conditions as improved during the last year than women who have not benefited from such programs.*

However, although the programs reach out to vulnerable women in particular, they were made to support survivors of sexual violence in particular. Given the assumed higher level of social exclusion among survivors of sexual violence and the economic despair that often arise as a consequence of sexual violence (for example if women are abandoned by their husbands and extended families and need to take care of their children on their own), we expect support programs to have a particular positive effect for survivors, both with regard to perceived social inclusion and perceived improvements in economic wellbeing. We hence propose the following hypotheses:

***H3a****: Support programs have a particular positive effect on perceived social inclusion for survivors compared to non-survivors*

***H3a****: Support programs have a particular positive effect on perceived improved economic wellbeing for survivors compared to non-survivors*

# Research design

To test our hypotheses, we have conducted a targeted survey of women in South Kivu province in Eastern DRC, as well as focus group interviews of survivors of sexual violence. We focus on two main programs that support survivors of sexual violence in this study, Dorcas Rurale and Ushindi. Both operate in South Kivu Province in eastern DRC. Below, we describe a little of the selection process and activities of the programs.

Dorcas Rural (DR) recruited (i) female survivors of sexual violence or (ii) women with gynecological ailments who received medical care at Panzi general referral hospital, or (iii) women who are identified as vulnerable based on self-reported indicators such as number of meals per day, number of children in school, marital status, and living conditions. DR provided participants with (i) a loan, (ii) seeds, (iii) livestock (pigs), (iv) school fees for up to two children, (v) training in income generating activities (soap- or basket-making), and (vi) literacy training. The initial loan was $30-50. Once repaid, another loan of $20-50 was given, and once that was repaid a final loan of $20-50 was given. DR also provided access to an agricultural training field within 15km of participants’ homes, which served as a gathering place for participants to discuss their daily challenges and strategies in addition to learning farming techniques. Finally, participants were also organized into savings groups and trained on budgeting separately for individual loans, public goods, and an emergency fund. These groups were open to non-participants as well. Women could participate in DR for up to 3 years.

USHINDI recruited female survivors of SGBV who had been declared psychologically healthy (i.e. lack of trauma) and identified as financially vulnerable. USHINDI organized voluntary savings and loan associations (VSLA) and provided training in literacy, management, entrepreneurship, and leadership. Training lasted 6 months on average. Program support staff visited each VSLA for 12 months. There are also men and non-survivors involved in the USHINDI program, but the sample in the survey is only women (survivors and non-survivors).

## 3.1 Data

In order to address the research questions and hypotheses presented above we surveyed 1,203 women aged 15-87 in South-Kivu during 2 July – 1 August 2015. Since our point of departure is trying to assess the effectiveness of support programs directed at survivors of sexual violence and other “vulnerable” women, we surveyed two groups of women (i) women who had been affiliated with Dorcas Rurale and USHINDI (including both survivors and non-survivors), and (ii) women from the same geographic areas who had not participated in either program. From the lists of women who participated in the support programs, we randomly selected 889 to survey (452 from Dorcas Rurale in Kalehe, Kabare and Walungu territories and 437 from USHINDI in Mwenga territory. Seven of the twelve Health Areas in which USHINDI operated were deemed inaccessible due to insecurity, therefore only randomly selected women from the other five Health Areas were interviewed).

To compare support program participants with women who had not participated, we selected a convenience sample of women in the same areas. These were women who were as similar as possible to the women in the support programs. Lists of village residents are extremely difficult and expensive to obtain in rural Congo (the last census was in 1984); therefore, we recruited adult women who we encountered in public areas in those areas. We interviewed a total of 314 women who did not participate in DR or USHINDI (although 63 of these reported that they had participated in some other support program).

The map below shows the four territories from which respondents were sampled highlighted in red.



**Figure 1. Sampled territories in South Kivu**

We recruited twelve women in Bukavu with university degrees to serve as enumerators, and they were subsequently trained in survey technique, research ethics, and for conducting the particular survey. The enumerators used tablets with the program ODK to administer the questionnaire, as many of the women surveyed would not be able to self-administer the questionnaire. The questionnaire was written in French and English and then translated into Swahili and read out to the respondents in one-to-one interviews. The surveys were conducted in Swahili, with French or Mashi (a local language) used as needed. The entire questionnaire included more than 400 variables/questions listed in 7 different sections: (i) demographic background factors, (ii) family planning; (iii) pregnancy and childbirth; (iv) gender relations; (v) exposure to violence/conflict; (vi) support programs; and (vii) stigma/empowerment.[[4]](#footnote-4) The variables used in this particular analysis are outlined below.

## Dependent variables: Perceived social inclusion and improved economic wellbeing

Social exclusion or inclusion has been conceptualized and studied in many different ways in existing studies. It has been used to refer to “a disparate group of people living on the margins of society and, in particular, without access to the system of social insurance” (Percy-Smith 2000: 1). This has often been studied through aggregate measures of group-based discrimination and legal obstacles to achieving the same level of political influence or economic wellbeing as other groups of people in society. However, no clear-cut and agreed-upon definition exists across literatures interested in social exclusion processes.

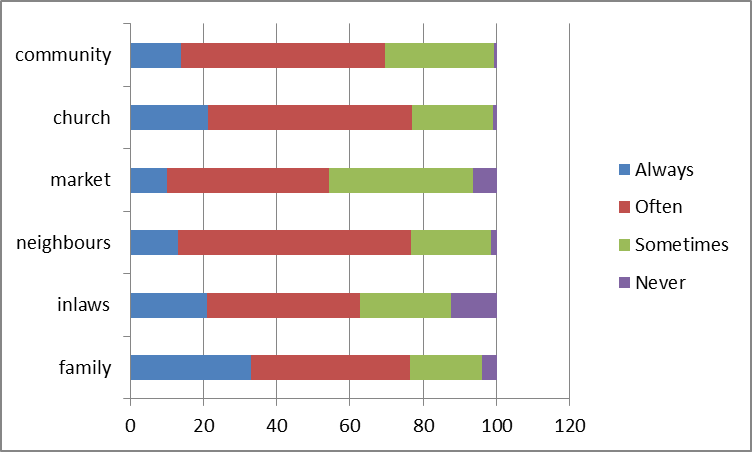
In this study, we argue that a person´s own sense of social exclusion or inclusion due to specific traits or social markers is an important focus of study, and that exclusion or inclusion can emerge in various subtle ways that involve everyday interactions in families and communities. Particularly in the context of the DRC, due to weak governance and lack of social welfare, social insurance is informal and based on personal interactions. Based on qualitative interviews we conducted in various locations in South Kivu in 2014 and 2015, we see that social inclusion or exclusion does occur in many different settings. Women mention not only the social stigma leading to problems with the relationship to community members, such as neighbors, members of local churches, but also to their own families and in-laws. In tight knit communities and villages in South Kivu, family ties and different social arenas are of critical importance for survival and wellbeing. We therefore include various indicators of feeling of social inclusion or exclusion, capturing these different arenas and social exclusion and inclusion at the micro-level.

Our composite measure of social inclusion focuses on whether or not women feel welcome in six different but key social contexts: the family, with in-laws, with neighbors, at the market, at church, and in the community writ large. It is based on the questions listed in Table 1, below. The response categories were 0=never, 1=sometimes, 2=often, 3=always. We added the scores on the six variables so that we got a social inclusion index ranging from 0 (minimum perception of social inclusion) to 18 (maximum perception of social inclusion).

Table 1. Social Inclusion Index

|  |  |
| --- | --- |
| Question | Response categories |
| How often do you feel welcome with your family? | Never, Sometimes, Often, Always |
| How often do you feel welcome with your in-laws? | Never, Sometimes, Often, Always |
| How often do you feel welcome with your neighbors? | Never, Sometimes, Often, Always |
| How often do you feel welcome at the marked? | Never, Sometimes, Often, Always |
| How often do you feel welcome at church? | Never, Sometimes, Often, Always |
| How often do you feel welcome in the community?” | Never, Sometimes, Often, Always |

The share of responses on the different questions are presented in Figure 2, below. The good news is that a large share (36.5% of our sample) often or always feel socially included in all the six social settings, whereas 5.9% never or only sometimes feel included in all the settings.



N=1,092

**Figure 2. Share of respondents who feel welcome in different social settings (%)**

In order to capture perceived improved economic wellbeing we use a variable from the survey asking about how the respondent perceives her living conditions compared to one year prior to the survey (question 8f46): *In general, how are your living conditions now compared to one year ago?*

* *Much better*
* *Better*
* *Same*
* *Worse*
* *Much worse*

We reverse the categories so that higher values indicate higher satisfaction with the development of own living conditions. The recoded variable ranges from 0 (much worse) to 4 (much better).

The distribution is shown in Figure 3 below (N=1,161).

N=1,161

**Figure 3. Perceived improvement in living conditions**

## Main independent variables: Sexual violence and support programs

Our subsequent analyses focus on two main independent variables. First, we create a dummy for whether the respondent has **experienced conflict-related sexual violence[[5]](#footnote-5)**. Respondents were asked a set of questions concerning household (and individual) exposure to various forms of violence committed by armed groups (variables d0-d8), including members of the household being killed, experiences of looting, burning, extortion, and also rape and other forced sexual acts. To construct our measure of whether or not the woman is a survivor of sexual violence, we use two main survey questions: *Have you or anyone else in your household ever been raped (that is, physically forced to have sexual intercourse)?* And *Have you or anyone else in your household ever been forced to perform other sexual acts?* We couple this with information from a subsequent question for each one, where the woman is asked whether the victim was herself and/or someone else. All respondents who reported to have experienced either type of sexual violence were assigned the value ‘1’ on our survivor dummy. Otherwise they were coded as ‘0’. According to this operationalization 420 woman, or 34.9% of our sample are SV survivors.

Second, we created a variable for **support program involvement** taking the value ‘1’ if the respondent was/had been involved in a support program (app. 80% of the sample) and ‘0’ otherwise (app. 20% of the sample).

Since we would like to explore to which extent support programs are successful of increasing the perception of social inclusion among survivors we also create an interaction effect multiplying the dummy for survivor with the dummy for program involvement. Not all survivors have been through support programs and not all program beneficiaries are survivors. In fact most of the program participants are non-survivors. This is often intentional in order to avoid stigma of “program-women”. Table 2 below shows the distribution of program beneficiaries by survivor status.

**Table 2. Sexual violence survivor status and support program exposure in sample**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Survivor of SGBV | |  |
| Support Program participant |  | **No** | **Yes** | **Total** |
|  | **No** | 201 (26%) | 50 (12%) | 251 (21%) |
|  | **Yes** | 582 (74%) | 370 (88%) | 952 (79%) |
|  | **Total** | 783 (65%) | 420 (35%) | 1,203 (100%) |

## Identification strategy

As the main dependent variable, *perception of social inclusion*, is continuous, we use OLS regression. Descriptive variables of all the variables used are provided in Table 4 below. In order to estimate the impact of having experienced conflict-related sexual violence and/or being involved in support programs on the perceptions of social inclusion it is important to control for confounding variables that might influence both the independent and dependent variables. Since we could not do an experimental design or assure a perfectly representative sample of women but are interested in isolating the effect of support programs on the perception of social inclusion and economic wellbeing for survivors, we use matching as the preferred method. We rely on coarsened exact matching (CEM) package in Stata. CEM is a monotonic imbalance-reducing matching method, which means that the imbalance in covariates between the treated (in our case program beneficiaries) and control group (non-program beneficiaries) is reduced. Coarsened exact matching is faster and easier to use and understand, requires fewer assumptions, is more easily automated, and possesses more attractive statistical properties for many applications than do other matching methods. Through the use of CEM, users temporarily coarsen their data, exact match on these coarsened data, and then run their analysis on the uncoarsened, matched data. CEM bounds the degree of model dependence and causal effect estimation error by *ex-ante* user choice, is monotonic imbalance bounding (so that reducing the maximum imbalance on one variable has no effect on others), does not require a separate procedure to restrict data to common support, meets the congruence principle, is approximately invariant to measurement error, and balances all nonlinearities and interactions in sample (i.e., not merely in expectation).[[6]](#footnote-6)

First, in order to estimate the effect of survivor status on social exclusion and economic wellbeing we matched respondents on characteristics that are (i) unlikely to have changed due to survivor status, (ii) unlikely to be reported differently due to survivor status, but (iii) that are likely to influence social inclusion perceived economic wellbeing. These variables include a variable for age-category, education level, ethnic affiliation, religion, and territory of residence. Further, in order to estimate the effect of program exposure we also match on survivor status as well as the mentioned variables.

Once the data are matched, we fit a linear regression with strata fixed effect, assuming that the effect of the program is constant across all levels of the social inclusion index and the improved economic wellbeing variable.

Table 3, below, presents the descriptive statistics for all variables used in the analysis.

**Table 3. Descriptive statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Obs | Mean | Std. Dev. | Min | Max |
| Social inclusion (index) | 1,092 | 11.106 | 3.327 | 0 | 18 |
| Perceived improved living conditions | 1,161 | 2.363 | 0.995 | 0 | 4 |
| SV survivor | 1,092 | 0.360 | 0.480 | 0 | 1 |
| Support program | 1,092 | 0.820 | 0.385 | 0 | 1 |
| Age group |  |  |  |  |  |
| *15-30 yrs* | 1,092 | 0.194 | 0.396 | 0 | 1 |
| *31-45 yrs* | 1,092 | 0.395 | 0.489 | 0 | 1 |
| *41-60 yrs* | 1,092 | 0.334 | 0.472 | 0 | 1 |
| *>60 yrs* | 1,092 | 0.077 | 0.267 | 0 | 1 |
| Education level |  |  |  |  |  |
| *no education* | 1,088 | 0.448 | 0.497 | 0 | 1 |
| *primary education (some or completed)* | 1,088 | 0.349 | 0.477 | 0 | 1 |
| *secondary education (some or completed)* | 1,088 | 0.203 | 0.403 | 0 | 1 |
| Ethnicity |  |  |  |  |  |
| *Shi* | 1,092 | 0.308 | 0.462 | 0 | 1 |
| *Rega* | 1,092 | 0.478 | 0.500 | 0 | 1 |
| *Other* | 1,092 | 0.214 | 0.411 | 0 | 1 |
| Religion |  |  |  |  |  |
| *Catholic* | 1,092 | 0.491 | 0.500 | 0 | 1 |
| *Protestant* | 1,092 | 0.446 | 0.497 | 0 | 1 |
| *Other* | 1,092 | 0.063 | 0.243 | 0 | 1 |
| Territory of residence |  |  |  |  |  |
| *Kalehe* | 1,092 | 0.196 | 0.397 | 0 | 1 |
| *Walungu* | 1,092 | 0.103 | 0.305 | 0 | 1 |
| *Kabare* | 1,092 | 0.200 | 0.400 | 0 | 1 |
| *Mwenga* | 1,092 | 0.489 | 0.500 | 0 | 1 |
| *Uvira* | 1,092 | 0.012 | 0.109 | 0 | 1 |

# Results

Table 4 shows the results from the matching tests with regard to how survivor status and program exposure affect perceptions of social exclusion (Models 5a-5c) and improvements in economic living conditions (Models 5d-5f). As explained above, we first set the strata, i.e. we create groups of respondents that are similar on the following background factors: age, education level, ethnicity, religion, and territorial affiliation. Next we measure the effect of survivor status and support program exposure on the dependent variables social inclusion and improved economic situation with fixed effects regression (xtreg).

Table 4. The effect of survivor status and support program exposure on perceived social inclusion and economic wellbeing

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 4a | 4b | 4c | 4d | 4e | 4f |
|  | Social  Inclusion | Social  Inclusion | Social  Inclusion | Economic wellbeing | Economic wellbeing | Economic wellbeing |
| Survivor | -0.741\*\*\* |  |  | -0.090 |  |  |
|  | (0.279) |  |  | (0.081) |  |  |
| Support program |  | 0.992\*\*\* | 1.064\*\*\* |  | 0.699\*\*\* | 0.608\*\*\* |
|  |  | (0.291) | (0.328) |  | (0.083) | (0.094) |
| Support program\*survivor |  |  | -0.337 |  |  | 0.410\*\* |
|  |  |  | (0.712) |  |  | (0.200) |
| Constant | 11.370\*\*\* | 10.206\*\*\* | 10.224\*\*\* | 2.387\*\*\* | 1.772\*\*\* | 1.753\*\*\* |
|  | (0.147) | (0.253) | (0.280) | (0.043) | (0.071) | (0.072) |
| Sigma\_u | 1.839 | 1.666 | 1.630 | 0.543 | 0.438 | 0.466 |
| Sigma\_e | 3.260 | 3.202 | 3.204 | 0.981 | 0.963 | 0.961 |
| Rho | 0.242 | 0.213 | 0.206 | 0.234 | 0.172 | 0.190 |
| Number of obs | 897 | 761 | 761 | 955 | 814 | 814 |
| Number of groups | 76 | 79 | 79 | 77 | 80 | 80 |

Coarsened exact matching (CEM) with fixed effects regression. Standard errors in parentheses. \* Significant at 10%; \*\* Significant at 5%; \*\*\* significant at 1%. #effects are borderline significant at 10.6 and 10.8% respectively. Strata are matched on age-group, education level, ethnic affiliation, religion, territory of residence and survivor status (except in Models 4a and 4d where survivor status is the treatment). Unmatched cases are dropped from the models to reflect the actual N upon which the results were based.

First, Model 4a indicates that survivors of sexual violence feel less socially included overall (regardless of support program exposure). This apparently stronger feeling of social exclusion is in line with our first hypothesis. Survivors also report less satisfaction with regard to economic improvement during the last 12 months. The effect is even negative (Model 4d), albeit not statistically significant.

Further, we see from Models 4b and 4e that support programs seem to have a general positive significant effect, both with regard to perceived social inclusion and improved economic wellbeing, which is in line with Hypotheses H2a and H2b.

However, as mentioned above, the support programs tend to include a large share of non-survivors as well. Because we are particularly interested in the effectiveness of the programs when it comes to improving the situation for survivors (cf. H3a and H3b), we also include interaction terms between survivor status and program exposure in order to assess this. This yields some interesting results. First, in model 4c we see that the positive effect of programs appears to be weaker, if anything, for survivors than for non-survivors given the negative sign of the interaction term. However, the interaction term is not statistically significant, and hence we cannot conclude that support programs have any different effect for survivors compared to non-survivors. In other words, H3a is not supported. However, as shown in Model 4f, we see that the positive effect of program exposure with regard to perceived improvements in economic wellbeing is stronger for survivors, and significantly so. In fact, the effect is almost 1.5 times stronger for survivors than for non-survivors.

The main take-home lesson from these results is that support programs and their associated activities (e.g. various types of training) seem to significantly improve women’s economic wellbeing (be it survivors or non-survivors) although the programs seem to be particularly beneficial for survivors in this respect. However, when it comes to social inclusion, the picture is slightly different. Overall, programs seem to have the intended effect of increasing the attendants’ perceived level of social inclusion. However, if anything the effect appears to be somewhat weaker for survivors than for non-survivors. Hence, there seems to be particular potential for improvement as regards how the programs work actively to integrate survivors of sexual violence in the community. Ideally one should focus on activities/support that contribute to both improving these women’s economic AND social wellbeing, and potentially even consider expanding activities to focus more strongly on community sensitization.

# Discussion and Conclusion

Sexual violence is believed to have detrimental long term negative effects on the lives of survivors and, when militarized, on entire communities. In eastern DRC, the problem of sexual violence is well known and has occurred on a large scale. No one knows the exact scale of the problem, but the UN suggest that as many as 200,000 women are survivors of such violence in the DRC.[[7]](#footnote-7) There are programs established that assist these women to overcome the problems associated with sexual violence. However, there are relatively few population=based studies available that systematically compare the situation for survivors and non-survivors in general, and there is a significant knowledge gap in terms of evidence on how programs ameliorate social exclusion of women in general and in eastern DRC in particular.

This paper represents a first systematic survey-based study of the situation for women in eastern DRC, whether the feeling of inclusion/exclusion is different for survivors and non-survivors, and what impacts programming for survivors can have. Based on a survey of 1,203 women in South Kivu carried out in 2015, we find that survivors feel significantly less socially included than other women. In terms of the impact of programming, the programs are very highly regarded as helpful. However, the most important systematic positive effect for survivors is what the programs did to improve economic well-being. In terms of overcoming social exclusion problems, the programs seem less successful. When it comes to close social relations in particular, the survivors struggle to gain acceptance and to be valued and integrated into the communities.

Socio-economic empowerment is in itself of critical importance to women in DRC and perhaps to survivors of sexual violence who are rejected by their families or husbands in particular. Whether the socio-economic improvement in a survivor’s situation helps her in a significant way to gain acceptance and inclusion in the more intimate and personal spheres such as in the family seems less certain and less frequently the case. This echoes also findings we have gathered from focus groups with women survivors of sexual violence in various locations in South Kivu, as well as with studies looking at the issue of views of sexual violence survivors from the community perspective. For example, Finnbakk (2015) finds that community members generally do not mind integrating survivors into the community in terms of the economic spheres such as in the marketplace, but they have strong reservations against more personal contact and association with survivors, who in the minds of community members have “lost their value”. Similarly, Babalola (2013) finds that egalitarian and non-traditional gender attitudes were associated with lower prevalence of overall negative attitudes towards survivors, and therefore concludes that changing negative gender norms would be an important effort in order to increase the acceptance towards survivors.

One implication of the findings reported based on our survey of women in eastern DRC could therefore be that efforts to help the situation for women survivors of sexual violence also needs to include also a stronger focus on the attitudes of families and communities surrounding survivors of sexual violence as well as continuous improvements of the programs themselves, to try to find new ways to overcome social exclusion mechanisms in various social settings.

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2. E.g. UN Security Council resolutions 1325 (2000), UNSCR 1820 (2008), UNSCR 1888 (2009), and UNSCR 1960 (2010). [↑](#footnote-ref-2)
3. Woman interviewed in Kalehe territory, June 2014. [↑](#footnote-ref-3)
4. Because the survey was a “directed survey” (i.e. certain questions were automatically added or deleted based on responses to other questions), the number of survey respondents varies from question to question. [↑](#footnote-ref-4)
5. Conflict-related violence should not be distinguished with civil forms of sexual violence, such as e.g. domestic violence. In other words this variable does not include SV committed by partners. [↑](#footnote-ref-5)
6. See more about coarsened exact matching here: http://gking.harvard.edu/files/gking/files/cemStata\_0.pdf; https://pan.oxfordjournals.org/content/early/2011/08/23/pan.mpr013.full [↑](#footnote-ref-6)
7. <http://www.un.org/en/globalissues/briefingpapers/endviol/> [↑](#footnote-ref-7)