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Measures and outcomes of a psychosocial group approach in Rwanda
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CHAPTER 8

SUMMARY & GENERAL DISCUSSION
INTRODUCTION

This thesis presents different aspects of a quasi-experimental, longitudinal study on a psychosocial intervention (sociotherapy) in northern Rwanda, combining measurements on mental health, social functioning, intimate partner violence and social capital.

Firstly, this chapter offers a summary of our findings, secondly, it reflects on these results and lastly, it will discuss scientific research in post-conflict settings in general.

SUMMARY OF FINDINGS

The objectives of this thesis were to assess whether sociotherapy impacts mental health, social functioning and social capital. To this end we tried to establish valid methods and suitable instruments. Chapters 2, 3 and 4 describe work on the adaptation and validation of our instruments. Chapter 5 then presents the effect of the sociotherapy intervention on mental health. Chapter 6 presents data on partner violence and its associations with mental health. Chapter 7 addresses the relation between change in social capital and change in mental health.

Chapter 2 describes qualitative research methods used to enable and improve the measurements used in the quantitative study. A theoretical background is given, explaining psychometric and cognitive validity of measures/instruments in general and describing steps for translation. More specifically, it describes how qualitative information was collected and presents how we adapted and validated our three main outcome measures for use within the local context. Psychological wellbeing was measured by use of the Self Reporting Questionnaire (SRQ-20), social functioning by use of a locally designed questionnaire, the Byumba Social Functioning Questionnaire (BSFQ), and social capital by use of an adapted version of the Social Capital Assessment Tool (Short A-SCAT).

Specifically the work on the Short A-SCAT indicated how, in a complex socio-cultural setting, seemingly straightforward and clear concepts can be quite ambiguous and understood in a variety of ways. Our experiences underline that for any mental health or psychosocial study, a substantial contribution from qualitative research is essential to adapt research instruments to the local context.

Chapter 3 evaluates the reliability and criterion validity of the locally composed instrument to measure social functioning in Rwanda. The instrument, the Byumba Social Functioning Questionnaire (BSFQ), was composed in concordance with a well-described method for culture-specific and sex-specific function assessment. To ascertain criterion validity our respondents were not only assessed by use of the BSFQ, but also by use of four scales of the Medical Outcomes Study’s 36-item Short-Form (SF-36). These four scales comprise 19 items covering domains of social functioning comparable to the BSFQ, and show strong internal consistency. The 19-item instrument was named the SF-19, and was adapted for use in the local context.
The BSFQ’s internal consistency appeared to be just acceptable for women but questionable for men, versus good to excellent values for the SF-19. BSFQ total scores showed a strong floor effect, thereby proving incapable of showing variation at the bottom of the scale. The SF-19 showed more variation in total score distribution. These results indicate that the BSFQ did not perform as well as we expected, and appeared not to be suitable for measuring social functioning in the study context. It may measure limitations in practical activities of daily living rather than in social participation. Although possible differences in the roles of men and women in low-income countries are not acknowledged in the SF-19, the wording of its items prove to be appropriate for both sexes. This chapter therefore suggests that re-wording the SF-19 items seems to sufficiently compensate for its possible cultural inadequacy in the Rwandan context.

**Impact of sociotherapy on social functioning**

One of our main research questions was whether sociotherapy changed participants’ social functioning. We measured social functioning with the above mentioned instruments: the BSFQ, as well as the SF-19. Chapter 3 describes the validity of these instruments, but does not answer our main research question, as to whether sociotherapy affected participants’ social functioning. We therefore carried out additional analyses to answer that question. Contrary to our expectations, we did not see a significant effect of sociotherapy on social functioning (see tables below). The SF-19 performed better than the BSFQ and showed more variation in scores, but it still did not measure a change in social functioning of respondents. We present the mean scores of the BSFQ and the SF-19 at three measurement points to illustrate the lack of significant change over time for social functioning, using the matched selection of participants who were interviewed 3 times (experimental group versus control group). In tables 1 and 2, the scores are presented seperately for men and women, because the BSFQ is different for each gender. The tables show some variety in scores over time, for both men and women and for both instruments. However, none of the changes in scores was significant, not between T0 and T1, nor between T1 and T2.

There are two possible explanations for this study outcome. One is that sociotherapy has in fact had an effect, but that the instruments used to measure this effect performed sub-optimally. Secondly, the intervention period may have been too short; three months of sociotherapy may not have sufficed to change participants’ direct social relations and ability to perform daily activities in this particular context. One other manifestation of social functioning, partner violence, is addressed in chapter 6.
Table 1  Social functioning measured with the BSFQ  
*(Low score = good social functioning, min 0, max 40. Sd = standard deviation)*

<table>
<thead>
<tr>
<th>Mean score BSFQ for men</th>
<th>Experimental group (N=33)</th>
<th>Control group (N=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>sd</td>
</tr>
<tr>
<td>T0</td>
<td>4.91</td>
<td>(4.19)</td>
</tr>
<tr>
<td>T1</td>
<td>2.82</td>
<td>(4.66)</td>
</tr>
<tr>
<td>T2</td>
<td>5.00</td>
<td>(5.09)</td>
</tr>
</tbody>
</table>

Mean score BSFQ for women (N=43) (N=37)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>sd</th>
<th>Mean</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0</td>
<td>5.98</td>
<td>(6.79)</td>
<td>3.84</td>
<td>(4.80)</td>
</tr>
<tr>
<td>T1</td>
<td>4.21</td>
<td>(5.03)</td>
<td>3.57</td>
<td>(4.54)</td>
</tr>
<tr>
<td>T2</td>
<td>3.70</td>
<td>(4.46)</td>
<td>5.40</td>
<td>(5.72)</td>
</tr>
</tbody>
</table>

Table 2  Social functioning measured with the SF-19  
*(High score = good social functioning, min 0, max 400. Sd = standard deviation)*

<table>
<thead>
<tr>
<th>Mean score SF-19 for men</th>
<th>Experimental group (N=33)</th>
<th>Control group (N=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>sd</td>
</tr>
<tr>
<td>T0</td>
<td>266.89</td>
<td>(105.32)</td>
</tr>
<tr>
<td>T1</td>
<td>288.21</td>
<td>(123.93)</td>
</tr>
<tr>
<td>T2</td>
<td>277.68</td>
<td>(109.66)</td>
</tr>
</tbody>
</table>

Mean score SF-19 for women (N=43) (N=37)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>sd</th>
<th>Mean</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0</td>
<td>210.06</td>
<td>(102.56)</td>
<td>196.17</td>
<td>(124.91)</td>
</tr>
<tr>
<td>T1</td>
<td>206.03</td>
<td>(107.56)</td>
<td>195.34</td>
<td>(115.84)</td>
</tr>
<tr>
<td>T2</td>
<td>256.63</td>
<td>(100.77)</td>
<td>221.55</td>
<td>(122.56)</td>
</tr>
</tbody>
</table>
Chapter 4 addresses the validation process of the Self Reporting Questionnaire (SRQ-20) for local use in Rwanda. The SRQ-20 is an instrument developed by the WHO to screen for possible mental health problems. We aimed to use the SRQ-20 to measure the effect of sociotherapy (see Chapter 5) on mental health. Therefore, its translated version had to meet the criteria for culture-specific use. Besides, the instrument needed to have longitudinal validity in order to be used for effect measurement; the SRQ-20 had never been tested with regards to this quality before. Our results support both the cultural and the longitudinal validity of the Rwandan translation of the SRQ-20. Establishment of the instrument’s longitudinal validity has relevance beyond our particular effect study: Effect studies of mental health interventions are mostly done by measuring symptoms of specific psychiatric disorders (posttraumatic stress disorder or depression mostly), while by now there seems to be consensus about the debatable meaning of psychiatric diagnoses in post-conflict contexts. Professionals world-wide have become aware that in post-conflict regions, symptoms as established through epidemiological studies may not indicate the presence of psychiatric disorders.

Our study showed that mental health intervention outcomes can also be established by use of a measure for general psychological well-being: the SRQ-20, an instrument used in numerous settings.

Chapter 5 describes our study to establish the effect on mental health of the community-based sociotherapy program in northern Rwanda, by use of the now validated SRQ-20. We used a controlled study design, with three measurement moments: right before and directly after the series of group sessions, and at eight months follow-up. The control group comprised inhabitants of the region who did not participate in sociotherapy. The intervention was shown to have a significant positive effect on mental health: the experimental group’s mean SRQ-20 scores decreased by 2.3 points (p=0.033). This effect continued at follow-up after eight months. Women in the experimental group scoring above the locally established cut-off at baseline improved with 4.8 points to below cut-off (p<0.001), a clinically relevant outcome. To our knowledge, this is the first controlled study in history on the effect of a large scale community level psychosocial intervention in a post-conflict setting.

Chapter 6 sheds light on intimate partner violence (IPV) in post-genocide Rwanda. Several studies have shown a significant association between IPV against women and mental health in both developed and in low- and middle-income countries. In post-conflict settings, the relationship between IPV and mental health is likely to be more complex, given the high levels of violence experienced by the population as a whole. In this cross-sectional study (all married respondents at baseline) we explore the association between IPV and common mental disorders (CMD), and more specifically, suicidal ideation, among inhabitants of Byumba province. We use the concept of “mutual partner violence” thereby exploring the association between IPV and CMD in victims, perpetrators, and those who state they are both. Symptoms suggestive of CMD were established by use of the Self-Reporting Questionnaire (SRQ-20), and physical intimate partner violence was measured using the Conflict Tactics Scale, Short Version (CTS2S). The study findings suggest that reported IPV is associated with CMD and suicidal ideation. Those
who state to be both victim and perpetrator, or only perpetrator, seem more likely to report mental health problems than victims and people who do not report IPV. In a post-conflict situation, perpetrators of IPV may suffer from mental health problems as much as, or even more than, victims. Longitudinal data are needed to clarify the complex relationship between CMD and IPV, especially if outcomes may also be related to other forms of violence experienced in the past.

Chapter 7 presents the search for links between social capital and mental health in our study population. To date, reviews show inconclusive results on the association between community social capital and mental health. Evidence that social capital can intentionally be promoted is also scarce, while it is increasingly considered an important construct in social policy and health. It has been suggested that promotion of social capital may impact post-conflict recovery both through increased social cohesion and through better mental health. However, those few studies on community interventions and social capital have tended to rely on cross-sectional study designs. This longitudinal study assesses whether elements of social capital can be promoted by sociotherapy, and which of these elements are salutary for mental health. Mental health was assessed by use of the SRQ-20 and to measure social capital we used the short version of the Adapted Social Capital Assessment Tool (Short A-SCAT), and adapted this version further for local use. Latent growth models were used to examine whether the effects of sociotherapy on mental health and social capital were related.

We consider three elements of social capital; cognitive social capital (sense of belonging, trust, safety), support (received from groups or individuals), and civic participation (collaboration within own neighbourhood, communication with leaders). Both mental health and civic participation improved over time in the intervention group, but not in the control group. Although mental health and civic participation were correlated at baseline, linear changes over time were not significantly correlated. Support and cognitive social capital did not show consistent changes over time. In conclusion, the intervention promoted both mental health and one specific element of social capital, namely civic participation, but these effects were independent within our sample.

DISCUSSION

In this section, we will discuss several aspects of the context and the intervention that we studied, as well as the methodology that we applied. More specifically, we will discuss, firstly, the possible influence of the complex context of Rwanda on our outcomes. Secondly, we will discuss whether the intervention appropriately suited the context. Thirdly, a consideration of the details and working elements of sociotherapy will be discussed; and finally, we discuss some methodological issues and limitations.
**Context**

The Rwandan context plays an important role in understanding and evaluating our research design and the effect of sociotherapy. Rwanda, in many aspects, still can be characterised as a post-civil war area and is therefore highly complex in terms of the socio-cultural setting. In Rwanda people are generally very poor; more than 60% of the population lives below the poverty line. Additionally, 3% of the population is HIV positive. A pertinent question then is: does a psychosocial group approach really change a participant’s life, when she is a poor widow, HIV-positive, taking care of several children, having witnessed the murder of her husband and other family members during the genocide? A recent study from 2008 shows that 14 years after the genocide, posttraumatic stress disorder (PTSD) remained a significant public health problem in Rwanda, with prevalence estimated at 26.1%. Participants who fulfilled diagnostic criteria for PTSD scored significantly lower on the social functioning scales (SF-36 scales). The population of Rwanda is young: an estimated 42.7% are under the age of 15, and 97.5% are under 65. Our study was directed at respondents aged over 15, leaving out a substantial part of the population.

**Intervention**

We assumed the sociotherapy group approach fitted well into the context of Byumba, as there was a strong Christian community related to the ECR (Episcopal Church of Rwanda, since 2007 Anglican Church of Rwanda) and the programme was rolled out by the Diocese. Rwanda historically has a culture of groups, with a family or compound (rugo) being the basic unit of social life. Interestingly, our colleagues who performed most of the qualitative research sometimes witnessed how participants of the sociotherapy group became more autonomous during the sessions, and that they started speaking in the first person, while they were not accustomed to doing that in the beginning of the group (personal communication ThR). Rwandans tend to speak using examples and metaphors, not statements on what they think or would like. It seemed some participants gained a sense of individuality and autonomy within the group, where democratic rules and equality between members applied. It was not further explored as such, but it might explain our outcomes on cognitive social capital: the level of cognitive social capital (trust, belongingness) did not change in participants. Contrary to feeling more connected and more part of a community, participants might have felt more separate.

Another thought then arises, about the ‘dark side of social capital’. What is the effect of forming groups in a context like Byumba? It offers the possibility of excluding others who are not part of the group, causing a split between participants and non-participants. Bonding on the one hand, can lead to exclusion on the other.

Observations like the one above about starting to speak in the first person come from observations of one or two sociotherapy groups. We do not know which elements within the group were most influential. It may have been the combination of particular participants, or the activities that were most applied within the group (songs, role plays, games). The effect was not dependent on which facilitator led the group. Our study
Our research shows the intervention had an effect on mental health and civic participation, especially for women, but it leaves many questions still unanswered. We do not know which elements of this complex intervention were most effective, or what underlying mechanisms caused the noted change.

The sociotherapy program in Rwanda, running from late 2005 onwards, was open to all inhabitants of Byumba experiencing psychosocial needs. While it primarily aimed at social bonding and did not target specific mental health symptoms, our effect study suggests that it did have significant mental health effects. Apparently, it promoted mental health, well-being or recovery for most participants, even though no mental health professionals were involved as group facilitators. The intervention model may serve as an example for community-based (carried out by local people for local people) psychosocial interventions for survivors of collective violence at the community level. It proved to have the capacity to reach thousands of beneficiaries within years with modest funding and relatively little training of facilitators. It is in line with intervention models as suggested in the literature, and with the Inter-Agency Standing Committee (IASC) Guidelines on Mental Health and Psychosocial Support in Emergency Settings, a consensus document endorsed by all relevant players. In the ‘IASC pyramid’, the model would be classed at the level of interventions strengthening community and family supports, but it would easily allow the addition of focused, non-specialized supports or specialized services for those for whom the program would not suffice. In Rwanda, specialized care could have complemented the programme for those still experiencing serious mental health problems after participation. Unfortunately, this has not been accomplished due to lack of resources.

A psychosocial intervention like sociotherapy aspires to influence more than illness, it aims to impact social determinants as well. The social determinants of health are the circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics. Sociotherapy aspired to reach more than the individuals in the group and to extend the effect to people surrounding them. Some examples of the qualitative research by our colleagues show that this was certainly possible. Some of the sociotherapy groups continued after the programme ended; the participants continued meeting each other and most of these groups started income generating activities (an activity of which the main purpose is to generate a financial profit). A group started by buying one goat together, for milk and for offspring. Another group paid for fixing a roof of a different member each month. This suggests that microcredit approaches or management and leadership projects might be an effective addition to a psychosocial approach; possibly a combination of these would achieve more effect. The addition of a microcredit approach to sociotherapy, meaning every group would also start a small microcredit project, could be a great combined intervention.

In a recent review of hundred and sixty mental health and psychosocial support activities in humanitarian settings which were reported from 2007 to 2010, only four interventions classed in the ‘IASC pyramid’ level of ‘strengthening community and family
structures’ concerned controlled studies. Three of these were programs for children and adolescents, and only one was targeting adults. The authors of the review in question, however, point at methodological weakness of the latter study. While to date there seems to be consensus on the way mental health and psychosocial support should be provided in post-conflict settings, there is hardly any evidence yet for such programs targeting adults. This illustrates the relevance of the data yielded by our study. In future, sociotherapy tailored to children or a different group approach specifically directed at children could be a great addition to the programme.

**Methodological issues**

Our study meets the standards according to the new Medical Research Council guidance on developing and evaluating complex interventions. These guidelines include: early phase piloting, integration of process and outcome evaluation, experimental designs are preferred to observational designs, recognition that complex interventions may work best if they are tailored to local contexts. Sociotherapy is a complex intervention; it requires a range of behaviours by facilitators as well as participants, it has several outcome variables and a high degree of tailoring the intervention was permitted. Our evaluation took place alongside the implementation of the sociotherapy programme started in 2005: the respondents for the pilot study were the first participants of sociotherapy. We assessed the feasibility of the group approach during our pilot study, and found the approach to be acceptable within the context; the group leaders and participants were compliant. We used the information from the pilot study to improve the actual study.

We applied an experimental design, a design as near to a randomized controlled trial as we could achieve: a quasi-experimental design, composing a control group equivalent to the experimental group with regard to our main outcome measure and to sex and age. We adapted and validated our instruments as advised by the MRC guidance. Unfortunately, there was more drop out of respondents in the actual study, than expected from our experience during the pilot study.

In our study several limitations can be noted. In general, the picture evoked in a quantitative study is already constrained by the structured way of interviewing and the use of closed questions and restricted response options, now there were even more constraints in Rwanda. Our respondents may have been willing to open up and provide valid answers if they were not asked about issues directly linked to social relations. Questions addressing the build-up of one’s social environment and one's position in it may not have elicited a reliable picture of reality. Before entering the field, we had been told repeatedly that people in Rwanda do not easily show their true face nor speak explicitly on topics in these domains. Our results may have been influenced by this difficulty to open up, as well as by our quantitative approach. Possibly our questionnaire was too long, as it contained many items covering various areas of functioning. Likert scales and dichotomous response options might not suit the Rwandan way of communicating, especially when asking about problems and more specifically when interviewing men. Our study suggests
that men did not benefit from the intervention like women did; our measuring instrument, however, may not have yielded reliable data from men. It seems we should have tested the validity of all the instruments for men and women separately, as an instrument is not valid if men systematically do not answer the questions in a reliable way.

Additionally, our adapted instruments for social functioning turned out to be less suitable than expected. We may have achieved better results and our effect may be underestimated because of these constraints in the instruments used. After all adaptations, it seems that validity of the resulting instruments needs to be tested in every new context.

Still, our longitudinal study achieved to underscore the need for psycho-social interventions at community level, it showed the importance of choosing, testing and validating instruments in the local context and it helped unravel the concept of social capital and its relation to mental health. The on-going close and comradely collaboration with our counterparts and interviewers, and our efforts to feed valid qualitative information into our study at all stages, may have helped to overcome some of the above constraints.

**Recommendations for future research**

Our experiences underline that for any mental health or psychosocial study, a substantial contribution from qualitative research is an unconditional requirement. In particular, it is crucial to use qualitative information to design instruments with local validity. Qualitative information also serves to inform researchers and facilitators which elements or components of the group approach seem to trigger change. We would recommend intensive qualitative research to inform and adapt instruments and very direct collaboration between qualitative and quantitative researchers, continuously during the study, in order to interpret given responses and intermediate/interim analyses.

Our findings urge replication of our study. Similar outcomes would have implications for future use of the approach in question. In future studies we would aim at larger groups of respondents, and ask less questions in one interview (selective selection of instruments). The validity of the instruments needs to be tested in every new context.

**CONCLUSIONS**

This thesis presents different aspects of a quantitative longitudinal study regarding a sociotherapeutic intervention in a post-conflict setting. A lot of effort was spent to target the intervention, as well as the measures of evaluation, to the local context.

From this work, two main conclusions can be drawn. Firstly, sociotherapy has been shown to improve the mental health of participants of
sociotherapy. We have demonstrated that in Rwanda it is feasible and culturally adequate to implement a large scale psychosocial intervention which primarily aims at social reintegration, rather than focusing at recovery from psychiatric disorder. However, we find a clear effect for women, not for men. This may mean the intervention did not reach men, or the way intervention outcomes were measured were not adequate for men, or both. Possibly, in a context like Rwanda (where they are known to keep their problems and feelings inside), men need a different approach. Future studies should explore the suitability of this intervention for men and women separately, taking differences between both genders into account.

Secondly, we have added to the body of research on the concept of social capital and its relation to mental health. Qualitative information is in full support of the salutary effect of the intervention on social capital\textsuperscript{12,13}. Our quantitative data indicate a positive impact of sociotherapy on one specific element of social capital, namely civic participation.

Although no indication was found that the outcomes on mental health and civic participation were related, earlier studies indicate that links between social capital and mental health may exist. Whether or not this is the case, from our work it may be concluded that community interventions aiming to raise the level of social capital may also positively impact mental health, and therefore be most appropriate to implement in post-conflict situations.

As yet, it may be appropriate in any post-conflict setting to identify the elements of social capital which correlate with mental health, and subsequently target community interventions particularly at these elements.

The sociotherapy program in Rwanda may serve as an example of a successful psychosocial intervention; it is the first such intervention reaching thousands of beneficiaries, with proven effectiveness on mental health and social capital. These outcomes may have major implications for future mental health policy making and program planning in post-conflict situations.
REFERENCES

1 www.undp.org
10 (http://www.who.int/social_determinants/en/)