Rebuilding the social fabric: community counselling groups for Rwandan women with children born as a result of genocide rape

Jemma Hogwood, Carl Auerbach, Sam Munderere & Emilienne Kambibi

The 1994 Rwandan genocide subjected thousands of women to rape, many of whom became pregnant as a result. Although mothers and their children born as a result of those rapes are an at risk population, there is very little research or reported programmes addressing their needs. This paper describes a pilot community group counselling programme for these mothers. Quantitative and qualitative data show the groups to be effective. The results suggest that the groups helped the mothers connect with others in a similar situation. The mothers also report an increase in confidence and positive emotions, and a reduction in shame. They further describe an improved relationship with their children. It is hypothesised that the groups helped to restore the social fabric destroyed by the genocide.

Keywords: community counselling, genocide rape, Rwanda, social fabric

Introduction

Rape has been declared as both ‘a weapon of war’, (United Nations, n.d.; Milillo, 2006) and a crime against humanity. Mollica (2006, p.66) states that cultural annihilation is most effective ‘not through physical destruction but through sexual violence’. Rape and sexual violence during armed conflict are used to terrorise and destroy communities, and to intentionally infect women with HIV (United Nations, 2013). During the 1994 Rwandan genocide against the Tutsi thousands of women were systematically raped. Throughout the genocide, individual rape, gang rape, rape with objects, sexual slavery and sexual mutilation of women resulted in degradation and humiliation for victims, and the destruction of the Rwandan community (Mullins, 2009; Nowrojee, 1996; Reid-Cunningham, 2008).

The genocide left a legacy of sexual violence that continues to impact the life of survivors 20 years later. Female rape victims have described the horrors of their experiences and the overwhelming effects on their physical and psychological health, poverty and social connection (Mukamana & Brysiewicz, 2008; Mukangendo, 2007).

In addition to traumatising individual Rwandans, the genocide also destroyed the social fabric of country (Summerfield, 1997). As will be argued later in more detail in the results section, this destruction of the social fabric deprived these women of the social connections necessary to rebuild their lives and deal with the trauma.

The impact of rape is multiplied when women become pregnant. Thousands of children have been born as a result of genocide rape in Rwanda, and their mothers were often stigmatised and isolated (Torgovnik, 2009). Reminded by the pregnancy of their traumatic experiences, some women chose to self-induce an abortion, to abandon the child at birth, or to commit infanticide or suicide. However, other women chose to keep the child, despite expectations that their families would reject
them for having given birth to an offspring of the ‘enemy’ (Mukangendo, 2007; Wax, 2004).

Much of the current research focuses on the impact of war rape on the women themselves and the evaluation of psychosocial interventions for them (Tol et al., 2013). There are few studies that examine their children and/or take into account the relationship between mother and child. This lack is particularly significant, as the attachment relationship between mother and child under conditions of adversity is important for mental health outcomes in the developing world (Tomlinson, Murray, & Cooper, 2010). Carpenter (2007) describes the long term effects of war time rape on children born from rape. When children grow up with a traumatised mother, who has experienced war, death, destruction and sexual violence, the experience has been shown to interfere with the psychological development of the child (Van Ee, Kleber & Mooren, 2012). In addition, they are often stigmatised as illegitimate and a child of the enemy, making it difficult for them to develop a positive identity. This is particularly true in patriarchal cultures where the identity of the father is important to the identity of the child (Weitsman, 2008).

Van Ee and Kleber (2013), in a recent review of the literature, characterise children born as a result of war rape as an understudied and under served population, as if there were a social taboo against acknowledging or dealing with their existence. They describe these children as ‘secondary victims’ of war, subject to multiple perpetrators including the father, the mother with whom they may have an ambivalent relationship, and the community who may stigmatise or ostracise them. As a result, these children are at risk of negative mental health outcomes. The authors, therefore, call for further research aimed at understanding the needs of these children throughout their lifespan and developing interventions to promote their well-being.

The National Population Office of Rwanda estimates the number of Rwandan children born as a result of genocidal rape as between 2000 and 5000 (Nowrojee, 1996), but Wax (2004) reports that survivor groups believe the number to be much higher, between 10,000 and 25,000. This difference in numbers may well be a result of under reporting due to shame and stigma associated with rape. Mukagendo (2007) discusses the challenges facing these children and young people. They are at risk for all the reasons described by Van Ee & Kleber (2013), namely strained relationships with their mother and their mother’s family, as well as being stigmatised and ostracised as ‘little killers’, or ‘children of the enemy’. They are also at risk for factors that increase vulnerability in Rwandan children and youth, most of these relating to their mother’s poverty. In addition, as young adults, they face difficulties in obtaining identity papers necessary for adult legal status in Rwanda due to the uncertain identity of their fathers. There are currently no reports of psychosocial programmes in Rwanda supporting these young people and their mothers. In order to begin to fill that gap, this paper reports on a preliminary programme primarily supporting the mothers, but also indirectly supporting the children of those mothers by focussing on the relationship between them. It also reports on the author’s hypotheses on how the programme works to restore the destroyed social fabric of the country.

Background

The initial impetus for this programme was a qualitative research study investigating the experience of Rwandan women with children born as a result of rape (Sandole & Auerbach, 2013). The study showed that most of the women had not talked to anyone about their experiences, and felt isolated and without support. Their burden of silence was expressed by one participant as follows:
'I am alone with my problems, I do not share with anyone what I go through. It's my son and me. For me, that it is the biggest challenge.’ The women called for support groups, access to specialised medical treatment, employment opportunities, education for their children and recognition for their suffering and survival. Many also asked for help in disclosing to their child the circumstances of their conception. This led the present authors to further investigate the needs of these women and the interventions that would best meet these needs.

Further investigation was focused on disclosure issues. The authors conducted focus group interviews with groups of mothers who had, and had not, disclosed rape. Both groups of mothers believed that disclosure of the rape was desirable for both themselves and their children because it would give their children a definite social and personal identity, and prevent accidental discovery.

The results of the focus group interviews also showed that disclosure was a complex process. For example, after the genocide, these mothers were burdened with physical and psychological scars, and were deprived of the social and economic resources they had before the genocide. The group of mothers who had not disclosed rape feared that dealing with the negative consequences of disclosure would require more resources than they possessed, as well as disrupt their already precarious adjustment to daily life.

Methods
A pilot community counselling programme
A pilot community counselling programme was designed to provide this group of mothers with the environment and social resources that could support managing disclosure of rape possible. The programme was designed by an international non-governmental organisation (NGO), Foundation Rwanda and Survivors Fund, that facilitated the initial focus groups and provided funding and expertise for the project as a whole. The data presented in this paper were collected as part of the in-house evaluation and quality improvement of these NGOs. The project was implemented in partnership with Kanyarwanda, a local NGO with strong connections to the women within the communities. The programme consisted of four community counselling groups with 10 members each, all of whom were women raped during the genocide and had children born as a result of rape.

The women were selected through Kanyarwanda, who knew this group of women as they had supported their children with regard to school fees. The women were selected mainly due to geographical location. Two of the groups took place in the south of Rwanda and two in the east of the country. The groups met twice a month at a mutually convenient place (often a local government authority office well known within the community and frequently used by community groups). The groups were facilitated by female Rwandese counsellors with graduate level training in counselling or psychology and previous work experience with women and genocide survivors within group settings. The group discussions all took place using the national language of Kinyarwanda.

As many of the mothers were socially isolated they also lacked the major resources of social support, connection, and caring. Therefore, groups were structured to allow the women to provide these resources for each other; to offer each other mutual support and to build their social networks. The groups aimed to provide the women with a supportive, safe place to share experiences, and to help the women learn psychological strategies for dealing with painful emotional events. They also aimed to equip the women with knowledge about disclosure and to assist them in their decisions around this painful subject, as well as to help the women realise their responsibilities as a mother.
and help to strengthen the relationship with their child.
Although disclosure of their child's identity and birth circumstances was an important aspect of the groups, it became clear that the focus needed to be broadened as many women were continuing to struggle with their own traumatic experiences and their difficulties coping with everyday life circumstances. As the initial focus group research showed, disclosure occurs within a wide context, therefore, the counselling groups also needed to provide the women with the opportunity to address broader issues that create stress and trauma in their lives. Participation in the groups was voluntary, and gave mothers a choice about whether or not to disclose the rape, thus empowering them to make their own informed decisions. The groups provided psycho-education, delivered by a counsellor, and included questions, discussion and involvement of the group members. In this way, the groups provided space for women to share their personal experiences, related to the psycho-educational material or to a current life stressor or event, and were facilitated in a supportive and constructive way by a counsellor. Groups often began or ended with relaxation exercises drawn from Capacitar (Rebmann Condon & Mathes Cane, 2011). The topics discussed in the groups included signs, triggers and consequences of trauma, prevention of traumatic crisis, responsibilities of parenting, child rights, identity and adolescence, and managing conflict and disclosure.

Participants
All 40 members of the group were caring for their child born of rape (two women have more than one child born from rape). The women’s ages ranged from 30 to 56 years, with the average age of 43 years. Forty percent of group members were widows, 30% married, 22.5% did not have a husband and 7.5% were divorced or separated. The women were mothers to an average of four children (with numbers ranging from one to nine) although they also look after other children (with a maximum number of six), bringing the average number of children in their households to five (ranging from 1–11 children). Regarding work, 77.5% of group member’s main occupation was cultivating, with 12.5% selling produce. Other work included sewing and working for the local government. The majority of the young people born of rape were aged 19 or 20 years, with three being slightly younger at 17 and 18 years. Fifty-eight percent were male and 42% female. At the time the programme took place, they were all enrolled in secondary school education.

Evaluation tools
A simple evaluation tool was developed to assess the aims of the programme. The questions were developed in the national language of Kinyarwanda, in consultation with a Rwandese counsellor and social worker, so as to be culturally sensitive and relevant to the participants' experience. The evaluation tool was administered to all group members during the first session (time one). As many participants had limited literacy skills, the counsellor introduced the tool to the group, reading through each question and giving explanations where necessary. The participants then answered the questions individually and privately, and were encouraged not to discuss their answers with others in the group. An additional counsellor was also present who was able to provide more detailed literacy assistance if necessary. The tool asked the women to rate their life on a scale of 0–10 where 0 is the worst possible life they can imagine and 10 the best. It then asked them whether they had other people they could talk to about their problems, how much they accept their child and are happy to be his or her parent, and how well they get on with their child. It also asked whether or not they had disclosed to their child the circumstances of their conception. This evaluation was
repeated at the half way point (time two) and again at the end (time three), in the same way as described above. In addition, qualitative open ended questions were asked about aspects of the group they appreciated and aspects that were less important or could be improved. The counsellors filled in a short report form at the end of each session to document successes, challenges and topics discussed. Three months after the counselling groups ended, a follow-up group was organised, and the evaluation was repeated (time four).

**Ethical considerations**

The purpose of the evaluation tool was explained to the women, and verbal consent was received. The women's participation in the groups and evaluation study was entirely voluntary and they were aware that withdrawal from the programme would not in any way affect the availability of other services offered to them. They were also made aware that participation would be anonymous in order to preserve confidentiality. Because the aim of this work was in-house quality improvement for Survivors Fund and Foundation Rwanda, the sponsoring organisations, it did not fit the definition of research with human subjects, and thus the study was not submitted to an ethics committee.

**Methods of analysis**

This study employs a mixed methods approach collecting both quantitative and qualitative data. The quantitative data from the questionnaire responses was entered into the Statistical Package for the Social Sciences (SPSS) software v20 (IBM, 2011) and analysed statistically. The qualitative data collected from the open ended questions was compiled together, translated into English and analysed using qualitative methods where repeating themes and ideas are grouped together. In order to examine the reliability and validity of the qualitative results, the data analysis was conducted by the first and second authors, and then reviewed by the third and fourth authors, who had direct contact with the groups.

**Results**

**Quantitative data**

**Helpfulness of the group.** Participants rated the helpfulness of the group on a scale from 0 to 10. These ratings give a broad overview of how the participants perceived the counselling. Results showed that the helpfulness of the counselling groups was rated highly, and that this helpfulness increased over time. At time two (mid-point) the group was rated on average 7 out of 10 and at time three (end), as 9 out of 10.

**Life satisfaction.** One hundred percent of participants reported an improvement in their life over the time period the counselling groups took place. At time one, the responses ranged from a rating of 0 to 6, with an average rating of 2.8. Eighty-five percent of women responded that their life was below a 5, at time one. Of those, 88% of women responded with a rating of 3 or less. At time two, the responses ranged from 3 to 9, with an average rating of 5.7. At this stage, 84% of women rated their life as 5 or above. At the end of the counselling sessions, the responses ranged from 6 to 10, with an average rating of 8.6, with all women rating their life above 5. Eighty-three percent of women at this last session rated their life as 8 or above (see Figure 1). At follow-up three months later, the responses ranged from 4 to 10, with the average rating dropping slightly by 0.7 to 7.9. However, 77% of women continued to rate their life as 8 or above (see Table 1).

Using an analysis of variance (ANOVA)\(^1\) with repeated measures with a Greenhouse–Geisser correction\(^2\), the mean scores for life satisfaction significantly increased over time \(F(2.345, 75.050) = 147.173, \ P < 0.0005\). Post hoc tests using the Bonferroni correction\(^3\) revealed that there is a statistically significant difference in the mean scores for life satisfaction between time
one and time two (p < 0.0005), and between time two and time three (p < 0.0005). The analysis also showed that the scores decreased significantly between time 3 and 4 (p = 0.0005), after the groups had finished. However, the scores continued to be significantly higher than time one and time two. It is expected that some gains will decrease over time, as the structured support is no longer being offered. Partial Eta Squared\(^4\) shows that the effect size of the difference is large (0.920).

**Social support.** Results also showed that social support, i.e. the number of people the participants reported they had available to talk to about everyday problems, increased over time: the number of women reporting they had ‘many’ people to talk to increasing by 62.5% (see Table 2). There is an overall statistically significant difference between the mean ranks of the three time points for the ratings of social support, \(\chi^2\) (2) = 46.419, p < 0.0005. Post hoc analysis with Wilcoxon signed ranks tests\(^5\) was conducted with a Bonferroni correction applied, resulting in a significance level of p < 0.017. This showed that there is a statistically significant increase in social support between the beginning and end of the counselling groups, \(Z = -5.029\), p < 0.0005. There is no significant change between the end of the counselling groups and the follow-up, \(Z = -0.500\), p = 0.617.

**Acceptance of parental role.** There was an increase in acceptance of being a parent of a child born from rape and an improvement in parents’ relationship with their child. The number of women who said they were ‘very happy’ to be the parent of their child increased by 47%, and the number who

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**Table 1. Life satisfaction measured over time (scored from 0 to 10)**

<table>
<thead>
<tr>
<th></th>
<th>Time one</th>
<th>Time two</th>
<th>Time three</th>
<th>Time four</th>
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<tbody>
<tr>
<td><strong>Average life rating</strong></td>
<td>2.8</td>
<td>5.7</td>
<td>8.6</td>
<td>7.9</td>
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</tbody>
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"Figure 1: Life satisfaction ratings measured over time."
reported a ‘very good’ relationship with their child increased by 33% (see Table 3 and Table 4.
A Wilcoxon signed rank’s test showed that the counselling groups produced a statistically significant increase in acceptance of being a parent to their child ($Z = -4.021, p < 0.0005$). Data on acceptance of parental role were not collected at follow-up. Additionally, there is an overall statistically significant difference between the mean ranks of the three time points for the ratings of their relationship with their child ($\chi^2(2) = 20.475, p < 0.0005$).
Post hoc analysis with Wilcoxon signed ranks tests was conducted with a Bonferroni correction applied, resulting in a significance level of $p < 0.017$. This showed that for the relationship with their child, there is a statistically significant change between the beginning and end of the counselling groups, $Z = -2.712, p = 0.007$. There is no significant change between the end of the counselling groups and the follow-up, $Z = -2.065, p = 0.039$.

**Disclosure.** Although quantitative data on disclosure was collected, it was not considered valid enough to analyse. At time one, many participants had said they had disclosed the fact of rape, but later revealed that they had not been truthful as they feared they would be pushed to disclose when they were not ready. Others said they had disclosed, but after participating in the groups, realised their child would benefit from further conversations or information. The available data do not, therefore, fully capture the depth of the issue and the evaluation tool was not sensitive enough to capture the concept of disclosure as an ongoing process, rather than as a single event. At the end of the counselling groups, the women were asked if they thought it was important for their child to know about their history and 100% responded positively. Counsellor reports suggest that nearly all women participating in the groups initiated further conversations with their children as a result of group discussions.

**Qualitative data**
Qualitative responses from all the participants were compiled, and repeating themes and ideas were grouped together in order to gain an overall understanding of the benefits of the groups. Representative quotes are used throughout this section to illustrate the meaning of the qualitative data. Quotes were selected that represent the main themes of the qualitative analysis and also represent the general view of the group. In the qualitative interviews, the participants described the positive aspects of the counselling groups and their reports begin an explanation process why there was an improvement in perceived life satisfaction.

<table>
<thead>
<tr>
<th>Table 2. Social support measured over time</th>
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<tbody>
<tr>
<td>Number of people in support network to talk to about problems</td>
</tr>
<tr>
<td>Many people</td>
</tr>
<tr>
<td>One person</td>
</tr>
<tr>
<td>No one</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3. Acceptance of parental role measured over time</th>
</tr>
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<tbody>
<tr>
<td>Acceptance</td>
</tr>
<tr>
<td>Very happy</td>
</tr>
<tr>
<td>Happy</td>
</tr>
<tr>
<td>Total % of women feeling happy</td>
</tr>
</tbody>
</table>
The women stated that the groups were helpful to them in that they provided them with an opportunity to increase their knowledge. One of the most important benefits of the counselling groups was reducing their social isolation by connecting them with others in a similar situation. As a consequence of these two factors, the women reported an increase in positive emotions. Overall, it appears that the groups facilitated the mothers in rebuilding their resources and improving their family relationships.

**Reduced isolation and connecting with similar others.** The women reported that they felt free to share experiences and challenges within the group. Although some members had found it very difficult to talk about rape before attending the group, through the group process they felt more able to talk openly with others. This, in turn, helped them to realise they are not alone. They reported that having the opportunity to talk about what they feel, and to be listened to by others was beneficial.

> ‘I always thought that I was the only one suffering from having a child that was born out of rape, but after our group discussion, I got to know that it is no longer my concern as an individual but our concern as a group. Sharing our experiences gave me more hope and strength.’

> ‘We now have people who listen to us and understand our problems which heals our wounds.’

**Enhancing positive emotions and reducing shame.** The women described many positive emotions they experienced as a result of participating in the counselling groups. On leaving the groups, they reported feeling ‘relieved’, ‘happy’ and ‘positive’. They also described feelings of ‘peace’, as if they were ‘set free’. Additionally, they reported feelings of ‘acceptance’ and ‘love’ towards themselves, their child and their situation, and an increase in ‘hope for life’. They also reported a reduction of negative emotions related to stress and stigma, such as shame.

> ‘The groups helped take the shame away from the fact I gave birth to a child from rape and helped me accept my child.’

**Building confidence and self-esteem.** The women reported that the counselling groups helped to build their confidence and self-esteem, so that they were more able to cope with problems that arose in their life. Specifically, mothers reported an increased confidence in their ability to tell their children about the nature of their conception, as well as an increased knowledge about how to tell them. The counselling groups increased their feelings of responsibility as a parent and their confidence in their ability to manage their child in adolescence. Helping others within the group allowed many women to realise they have a positive contribution to make in society and are not just a ‘victim’.

> ‘The group gave me confidence to tell my child about his birth.’

**Improving relationships with children and family.** All of the above positively impacted the relationship between the mothers and their children born of rape. The women described many positive impacts on their relationship with their child, as measured over time in Table 4.

<table>
<thead>
<tr>
<th>Relationship with child measured over time</th>
<th>Time one</th>
<th>Time three</th>
<th>Time four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
<td>18%</td>
<td>51%</td>
<td>64.7%</td>
</tr>
<tr>
<td>Good</td>
<td>69%</td>
<td>41%</td>
<td>35.3%</td>
</tr>
<tr>
<td>Total % of women reporting positive relationship</td>
<td>87%</td>
<td>92%</td>
<td>100%</td>
</tr>
</tbody>
</table>
‘I like the groups because they helped me, then they helped me love my child.’

‘I became able to forgive my family for hating my child.’

**Increasing knowledge.** The women stated that the knowledge they had gained in the group sessions helped them to solve their problems and improve their life situation. Many women noted that what they learnt about trauma was particularly important in helping them understand more about themselves, and the everyday challenges they face. Others appreciated acquiring knowledge about parenting and adolescence.

‘The knowledge we get here will help us to live peacefully and understand our children’s behaviour.’

**Discussion**

The qualitative results confirm the quantitative data and also illuminate the women’s subjective experience. In terms of the quantitative ratings of social support, the mothers stated explicitly that the groups reduced their isolation and helped them connect with other women in a similar situation, so no longer felt alone with their problems. The mothers’ descriptions of their emotions help explain the positive effects of the programme and reported an increase in confidence, self esteem and positive emotions and a reduction in shame. Additionally, the mothers specifically attributed their improved relationship with their children to the support and knowledge provided by the group. The combined qualitative and quantitative data lead the authors to hypothesise a mechanism by which the group programme had had a positive effect. We hypothesised that the groups restored the social fabric destroyed by the genocide, thus restoring the resources the women had lost as a result of the genocide. These renewed resources increased the women’s positive emotions and these positive emotions gave them the strength and confidence to improve their lives and their relationship with their children. The following paragraphs state our hypothesis in more detail.

The genocide tore apart the social fabric of Rwanda, destroying the family relations and social institutions on which the mothers had depended (Bronfenbrenner, 1979). This destruction of the social fabric compounded the individual trauma that they experienced. We hypothesise that the counselling group created a new set of relations and connections on which these mothers could rely. These new connections and relations replaced the social fabric destroyed by the genocide, effectively restoring the social fabric.

The function of the social fabric can be understood in terms of Hobfoll’s conservation of resources theory. Hobfoll postulates that individuals ‘strive to retain, protect, and build resources’ (Hobfoll, 1989, p.516), where resources are defined as anything that people value including objects, conditions, personal characteristics and energies. Hobfoll proposes that trauma exerts its effect by destroying the resources that people need to function effectively, and that recovery from trauma involves restoring the resources that the trauma destroyed (Hobfoll, 1991). We hypothesise that the social connection, support and information that the groups offered were resources that these mothers used to rebuild their lives. Both the quantitative data and the mothers’ qualitative reports are consistent with this hypothesis.

To explain how the resources are helpful, the authors drew on Fredrickson’s positive emotions theory (Fredrickson, 2000). Fredrickson’s research shows that positive emotions buffer against trauma by increasing resilience and coping ability. The mothers’ qualitative reports state that the counselling groups increased their positive emotions of confidence and hope, and reduced their negative emotion of shame. This is consistent with both Fredrickson’s research and the mothers’ reports that the
groups gave them the confidence to improve their relationship with their child. Our results suggest that group interventions can have positive effects for victims of sexual violence, even long after the event has happened. The results also show the benefit of including work with interpersonal relationships, such as mother/child relationships, as part of the intervention. More broadly, the results can tentatively be applied to a global mental health context. They suggest that interventions in situations of mass trauma should consider helping reconstruct the social fabric of the community as a condition for achieving the intervention’s specific aims. This point has also been made by Bass, Bolton and Murray (2007) who suggest the importance of group level interventions, and by Somasundaram (2007) who suggests that community level interventions and programmes are needed to address collective trauma.

Limitations and further research
This study was a small, grassroots pilot project involving a relatively small number of women, making it hard to generalise the findings to other women from other communities in Rwanda, or elsewhere. As these mothers had already received support from Foundation Rwanda, they were likely to have preconceived, positive perceptions of the organisation, which may have biased their reports in the direction of positive, socially desirable responses. The quantitative evaluation tool was very simple, with unknown psychometric properties. To further understand the mechanism of change that took place during the group counselling it would be necessary to conduct more detailed evaluation with standardised quantitative measures and more focused qualitative analysis of in-depth interviews. These interviews should also examine whether there were aspects of the women’s lives that did not improve. Finally, this study highlights the need for continued support for women who have children born as a result of rape, as well as the importance of involving the young people in future programmes and exploring the possibility of supporting them through therapeutic groups. Note that work with the mothers precedes work with the children, as groups for young people can only occur after the mothers have disclosed to their children.

References


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ANOVA is a statistical technique to test for overall difference between related means, in this case changes in scores at different time periods. See Field (2013, Chapter 14).

The Greenhouse–Geisser correction is a statistical procedure used to correct for conditions when the standard statistical assumptions in repeated measures ANOVA are not met. See Field (2013, Chapter 14).

The Bonferroni correction is used when comparing several different means to assure that making several comparisons does not lead to statistical significance by chance. See Field (2013, Chapter 11).

The Partial Eta squared technique is used to evaluate how large the difference is, otherwise known as the effect size. It gives an indication of the amount of variance explained by a given variable (i.e. life satisfaction) after adjusting for the other variables in the model. An effect size of 0.92 is considered to be large, and therefore is of clinical significance in addition to being statistically significant. See Field (2013, Chapter 14).

The Wilcoxon signed rank test is a statistical test used to compare two groups when the statistical assumption of a normal distribution may not be met (non-parametric). It is used in this study to test whether the population mean ranks of the repeated measures of social support differ (i.e. it is a paired difference test). See Field (2013, Chapter 6).

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