Parenting can have profound effects on children’s mental health and behaviour. Harsh, cold and inconsistent parenting increases the risk that children will develop both externalising disorders (behavioural problems such as aggression)\(^1\) and internalising disorders (anxiety and depression).\(^2\) Both types of disorder can have serious, lifelong consequences for the individual, family and society, since they affect survival, ability to succeed at education, and employability.\(^3\) In light of the high levels of violence, HIV infection, substance misuse and skills shortages in South Africa, preventing these problems is critical.\(^4\)

Inconsistent discipline, poor monitoring and supervision, and harsh punishment (including corporal punishment) all increase the risk that children will develop a disorder:\(^5\)

- Inconsistent discipline has been linked to aggression and other problem behaviours.\(^6\)

When parents make and apply rules for...
children inconsistently, children find it difficult to understand the link between their behaviour and its consequences.7

- Failing to monitor a child’s or adolescent’s whereabouts, companions and activities is a very strong predictor of behavioural problems, probably because it removes the opportunity for parents to teach children how to manage their own behaviour and to choose friends wisely.8

- Corporal punishment has been shown in a number of studies to increase risk for behavioural problems.9 The specifics of these interactions are likely to change as children age. For instance, harsh parenting of a young child may be more likely to include spanking while harsh parenting of a teenager may include more psychological abuse – but harsh, inconsistent discipline at any age has been shown to promote bad outcomes.

On the other hand, positive parenting – when parents are warm and affectionate and have positive interactions with their children – promotes good outcomes for children.10 Many parents face a number of stressors that can undermine positive parenting. Single parenting, for instance, reduces social support for parents, and is likely to be associated with economic stress.11 Poverty affects parenting in a number of ways, largely through increasing the stress of parenting. Parents living in poverty are more likely to be depressed, which increases the likelihood of harsh, inconsistent parenting.12 They are also less likely to have the social support that may ease the stress of parenting,13 and are less likely to be warm towards their children or to monitor them sufficiently.14 Both single parenting and poverty are widespread in South Africa,15 as are other, related, problems – intimate partner violence, mental health problems and substance misuse16 – all of which make parenting more difficult. For instance, intimate partner violence increases the stress of managing parenting tasks, both because of the effect it has on the parent victim and because children’s behavioural problems may increase when they are exposed to violence in the home, as they may model the abuser’s behaviour.17 In addition, children of parents who are mentally ill may be affected both through direct exposure to distressing symptoms and through disruptions to parenting.18 Substance abuse also affects parenting, as it may reduce inhibitions in parents, making them more likely to be abusive to their children.19

Several studies have explored parenting and children’s related problems in South Africa. One study has found that violence at home is associated with both the severity and early age of onset of offending,20 and another identified inadequate parenting in populations of young South African offenders.21 Poor parental supervision has been found to be associated with adolescent antisocial behaviour, while parental support has been found to protect against such behaviour.22

A study of a Johannesburg birth cohort found that corporal punishment was associated with children’s behavioural difficulties, and contextual stressors were affecting parenting of young children.23 Finally, conflict between parents has been identified as affecting both externalising and internalising symptoms in South African children, both directly and via parenting.24

However, these studies either focus on young offenders, or have not been replicated elsewhere in South Africa, or do not examine both contextual stressors and parenting, or only examine one outcome in children (typically aggression). We sought, therefore, to explore parenting, and its association with children’s externalising and internalising disorders, in an entire South African community.

**Methods**

This study was conducted in a small township in the rural Western Cape. The research process consisted of four phases: a door-to-door community audit conducted in June/July 2012; two surveys of all households in which there were children aged six to 18; and focus group discussions with community members after Survey 2. The community audit showed that there were 304 households in the township with children between the ages of six and 18. This age group was chosen as the measures of parenting and of child behaviour that we were using were all valid for this group.

Survey 1 was conducted in August 2012 and Survey 2 in March 2013. In this article, we report only on
Survey 2, as focus group data indicated that it had greater validity.

Participants

We surveyed one caregiver in each household. Each caregiver was asked to answer questions only about the youngest child in the home aged between six and 18.

The study was approved by the Research Ethics Committee of the Faculty of Humanities at the University of Cape Town. Each caregiver gave informed consent for participation. Provision was made for participants to get help from local child protection agencies in the event that we identified a parent as abusive.

Measures

Parenting was assessed using the Alabama Parenting Questionnaire, designed to assess the kinds of parenting that can either reduce or increase the risk of aggression in children. Each response was assessed on a 5-point scale, so that parents were able to choose one of the answers ‘never’, ‘seldom’, ‘sometimes’, ‘often’, or ‘always’. The Parenting Stress Index was used to assess how stressful the caregiver found the task of parenting. This scale has clinical cut-offs for the total score and one of the three subscales, Parent-Child Dysfunctional Interactions; the latter cut-off allows one to identify parents at risk of abusing their children.

Children’s externalising (aggressive and rule-breaking behaviour) and internalising (anxiety and depression) were assessed using the Child Behavior Checklist. Parents were asked to respond to a statement about their child’s behaviour (e.g., ‘argues a lot’) by choosing one of three options: ‘not true’, ‘somewhat or sometimes true’, or ‘very true or often true’. Children’s behaviour could then be assessed to determine whether it fell into a clinical range (a range that indicates that the attention of a mental health professional is necessary). The Child Behavior Checklist has been found to be reliable in a wide range of countries.

Contextual variables that might affect parenting were also explored. These included the 28-item version of the General Health Questionnaire, an assessment of the caregiver’s own anxiety and depression, which was used as a continuous score in the analyses but which also allows identification of clinical cases (i.e., that a mental health professional would be very likely to diagnose the respondent with a psychiatric disorder). The Alcohol, Smoking and Substance Involvement Test (ASSIST) assessed caregivers’ substance misuse; scores were used as a continuous variable in the analysis, but the ASSIST allows categorisation of scores into low- or no-risk, moderate risk or high-risk use of a particular substance; these scores correspond, respectively, to those who need no intervention for substance misuse, those for whom a brief intervention is appropriate, and those who need an intensive intervention. Thirty-two items from the Revised Conflict Tactics Scale (CTS-2) were used to assess the caregiver’s experience of intimate partner violence, and used as a continuous variable in the analysis. A variable indicating whether the caregiver was a single parent was also included.

Poverty was measured using a modified asset index approach, constructed using multiple correspondence analysis. In addition to a household inventory of assets, the following were included: sources of household income, employment status of respondent, and a hunger scale that explored whether family members had ever gone to bed hungry through lack of food. The first dimension of the multiple correspondence analysis was used as the poverty variable, explaining 51% of the variability in the data. Higher values of the composite measurement are indicative of greater wealth.

Other demographic variables included in the analysis were the child’s age and gender, the caregiver’s relationship to the child, and how many other children there were in the household. Questionnaires were translated into Afrikaans and isiXhosa, with translations checked by back-translation.

Procedure

To conduct the survey, we selected as fieldworkers community members associated with a respected non-profit organisation that provides youth development activities to the community’s children. Fieldworkers were trained in ethics and in interviewing skills. All questionnaires were administered as
interviews by fieldworkers because we expected a low level of literacy among caregivers. Interviews took about two hours, and were conducted in private. A small incentive (some biscuits) was provided to each caregiver interviewed. Fieldworkers provided respondents with a list of local organisations that provide support around parenting, intimate partner violence and substance misuse.

Five focus group discussions were held with 20 caregivers who had also completed the survey. Community members were recruited to participate in these through an announcement at a public meeting, and flyers were distributed throughout the community, inviting anyone who had been interviewed to attend. Only women volunteered to participate. A small incentive was offered: all participants were given a R50 voucher for a local clothing store. Three themes were explored in these discussions: what it had been like to complete the questionnaires; what methods of discipline were primarily used in the community; and what stressors affected parenting in the township. Participants gave separate informed consent to participate in the focus group discussions.

Data analysis

The focus group discussions were transcribed and analysed using thematic analysis. Thematic analysis involves identifying, analysing and reporting specific patterns (themes) across participants, where a theme refers to a coherent pattern that captures something important in relation to the research questions of the study. Before embarking on the quantitative analyses, the data was checked to see whether it met the requirements for regression. Cronbach’s alphas for the Alabama Parenting Questionnaire subscales were very low, and Rasch analysis of the Alabama Parenting Questionnaire data (using the eRm module in R) revealed that the 5-point response options appeared to have been confusing for parents. For instance, it appeared that the distinctions between ‘never’ and ‘seldom’ had been difficult to make. We therefore collapsed the scores so that ‘never’ and ‘seldom’ became one response, and ‘often’ or ‘always’. Cronbach’s alphas for the recoded parental involvement and positive parenting subscales were 0.860 and 0.873 respectively. However, Cronbach’s alphas for poor monitoring and supervision, inconsistent discipline, and corporal punishment all remained below 0.7. For this reason, the first of these two subscales were not used in analyses and we treated corporal punishment as individual items. Mild forms of corporal punishment – spanking and slapping – were grouped separately from the third corporal punishment item, which dealt with beating a child with an object. For the purposes of regression analyses, these were recoded as dummy variables – ‘always spanks or slaps’ and ‘sometimes spansk or slaps’, as a form of punishment.

Cronbach’s alphas for all other scales were above 0.8. Both scales representing children’s behaviour (internalising and externalising) were very skewed, so logarithmic transformations were used to improve the normality of the distributions. All the variables (except the two corporal punishment variables) were centred before being entered into the analysis. In all cases, except corporal punishment and gender, variables were used in their continuous form in the analyses.

Model building was done as follows (using SPSS v22): first the bivariate relationships between each variable and each of the children’s behaviour were investigated, using Pearson correlations. Once relationships had been identified in significant bivariate models, regression was used to explore, in separate models, the relationships between parenting (the subscales of the Alabama Parenting Questionnaire) and child behaviour (internalising or externalising), as well as the effects of the contextual variables (poverty, the stress of parenting, parental mental health, parents’ experiences of intimate partner violence, and parents’ substance misuse). In each case, the child’s age and gender were retained in the models, as these typically have strong relationships to children’s externalising or internalising behaviour.

In terms of the parenting variables, positive parenting, parental involvement and harsh corporal punishment (‘You hit your child with an object’) were not found to
be significantly associated with either child externalising or internalising behaviour and so were excluded from the final models. We then ran a model with only the contextual variables (keeping child age and gender as constants) to see whether they were predictive of child outcomes: poverty, parental substance use and single parenthood were not significant predictors of child externalising and internalising behaviour and so were also excluded from the final models. At each stage where variables were removed from the models, models with and without those variables were compared using appropriate statistics (AIC, BIC and adjusted R-squared).

Next, the enter method of regression was used to develop a final model that explored relationships between all the variables that had been significantly associated with children’s outcomes in the earlier models. Variables were entered into the regression model in the following blocks: first child age and gender, followed by parenting, followed by the contextual variables. Since 64 of the 220 respondents did not answer the questions about intimate partner violence, we ran one model for externalising behaviour that included intimate partner violence (and therefore reflected the subsample that answered these questions), and another that did not (and therefore reflected the full sample). Only one model was used to explore internalising behaviour, as bivariate analyses showed no relationship between intimate partner violence and internalising disorders.

The total number of cases included in each model was 220, and missing data were excluded, using listwise deletion. Influential outliers were excluded from all models. Influential outliers were identified by plotting Cook’s distance against the standardised residual; this identified those cases that may influence models so much that the models then apply only to those individuals, rather than to most people in the township. In the externalising model that included intimate partner violence, one outlier was excluded; in the externalising model that excluded intimate partner violence two were excluded; and in the model for internalising disorders four cases were excluded.

**Results**

**Description of the sample**

In 71 homes we did not find a child in the age group 6–18, and in those cases the household was excluded. Fifteen caregivers surveyed in Survey 1 could not be followed in Survey 2 (six refused to participate and nine were not available), and two new caregivers were identified, leaving us with a sample of 220 caregivers and their children. The sample included 217 Afrikaans- and three isiXhosa-speaking caregivers.

Of the children included in the sample, 106 (49.8%) were female and 107 (50.2%) male; in seven cases, caregivers did not report either age or gender. Because this data was missing, these cases were excluded from the analyses. In terms of ages reported, children included in the study covered the full possible age range, from six to 18, with a mean reported age of 10.5 (standard deviation 3.2). Of the 216 caregivers who reported their relationship to the child, the majority (195; 90.3%) were the biological parent of the child. The remaining 21 caregivers were step-parents, grandparents and adoptive or foster parents. Most (187; 86.6%) households included one, two or three children, although some reported up to six children. The majority of caregivers (163; 75.5%) reported that another adult in the household assisted with childcare, although 59 (25.7%) households included one, two or three children, although some reported up to six children. The majority of caregivers (163; 75.5%) reported that another adult in the household assisted with childcare, although 59 (25.7%) reported that they were single. Nearly half (87; 40.3%) of the children’s fathers were unemployed, and of those who were employed the majority (63; 54.3%) did unskilled manual labour. Similarly, 123 (56.9%) of the children’s mothers were employed, 70 (59.3%) as domestic workers.

In Survey 2 we had 213 children for whom we were able to collect data on the Child Behavior Checklist. The possible range for scores on the externalising subscales was 0–64, and on the internalising subscales 0–74. Parents reported a maximum score of 56 for externalising (with a mean of 7.6 and a standard deviation of 8.4), and a maximum score of 47 for internalising (mean of 5.5, standard deviation of 6.4). These scores were broken down by gender, and by whether children were in need of attention from a mental health professional (Table 1). In total,
13 (6.1%) of the children fell into the borderline clinical range for internalising disorders (a range where the attention of a mental health professional may be helpful) and 26 (12.2%) of the children into the clinical range (a range that indicates that a mental health professional is likely to diagnose a formal mental health disorder). Slightly more children suffered from externalising disorders: 20 (9.4%) fell into the borderline clinical range, and 27 (12.7%) into the clinical range. Some children met criteria for the borderline or clinical range for both internalising and externalising disorders, so that a total of 21 children (9.9%) were identified as falling into either the borderline or clinical ranges for both disorders.

If attention was restricted only to those who met the narrow criterion of being in the clinical range for either externalising or internalising disorders, 44 children (20.7%) were likely to have diagnosable mental health problems.

Table 1: Children’s internalising and externalising symptoms, as assessed by the Child Behavior Checklist, by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Range</th>
<th>Mean (std. dev)</th>
<th>Number (%) in borderline clinical or clinical ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Externalising:</td>
</tr>
<tr>
<td>Girls</td>
<td>0-33</td>
<td>6.4 (7.0)</td>
<td>Borderline clinical: 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(8.4% of girls)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical: 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(8.4% of girls)</td>
</tr>
<tr>
<td>Boys</td>
<td>0-56</td>
<td>8.8 (9.5)</td>
<td>Borderline clinical: 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(10.4% of boys)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical: 18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(17.0% of boys)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internalising:</td>
</tr>
<tr>
<td>Girls</td>
<td>0-35</td>
<td>5.5 (6.0)</td>
<td>Borderline clinical: 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2.8% of girls)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical: 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(10.3% of girls)</td>
</tr>
<tr>
<td>Boys</td>
<td>0-47</td>
<td>5.5 (6.8)</td>
<td>Borderline clinical: 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(9.4% of boys)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical: 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(14.2% of boys)</td>
</tr>
</tbody>
</table>

On the Alabama Parenting Questionnaire, parents reported, on average, involvement with their children a little more than ‘sometimes’; positive parenting ‘often’; and corporal punishment between ‘never’ and ‘sometimes’ (see Table 2 for details). Parents’ reports on the Parenting Stress Index indicated that most parents did not find parenting particularly stressful (see Table 2 for details). However, over one-fifth of parents reported that they found dealing with their child difficult, and almost one-fifth that they were very stressed by parenting their child. Over one-fifth of parents reported such high levels of stress that they were in the clinical range for this; and one-fifth reported such high levels of dysfunctional interactions with their children that they could be regarded as being at risk of abusing their children. However, 68 (32.2%) of parents reported never spanking their children as a punishment, while 58 (27.5%) reported always using spanking or slapping as a punishment.

Contextual variables that could affect parenting – parents’ mental health, experiences of intimate partner violence, and substance misuse – are
reported in Table 3. Most parents reported good mental health, but using the clinical cut-off of a score of 5, as suggested by the developers of the 28-item General Health Questionnaire for identifying those with a diagnosable mental health problem,37 19 parents (8.6%) fall into this category.

Only 169 parents answered the questions about intimate partner violence. On average, reported rates were very low, with the majority of parents (111; 47.6%) reporting no violence between them and their partners. The most frequent forms of violence that were reported included shouting and yelling between partners, partners insulting or swearing at each other, stomping out of the house during an argument, and pushing, shoving or slapping each other. However, some experiences of extreme violence were reported, in each case by only one person. These included one partner choking the other, one partner threatening the other with a knife or a gun, or one partner beating the other up.

In terms of substance misuse, tobacco was the most frequently reported substance used, followed by alcohol. Of the 215 parents who reported alcohol use, 49 (22.8%) reported using it at risky levels. Two parents (1%) also reported risky levels of use of sleeping pills, and 97 parents (45.2%) reported using tobacco at moderate or highly risky levels. Of the drugs that parents reported using, only alcohol is likely to be associated with difficulties in parenting,38 and so only their reported alcohol use was used in further analyses.

**Focus group results**

The focus group discussions explored three areas: stressors affecting parenting in the township; what is was like to complete the questionnaires; and methods of discipline used in the community. Data from these discussions showed that several stressors appeared to affect parenting in the township community, including low income, infidelity of intimate partners, and feeling unsupported (both emotionally and financially) by one’s partner. For instance, one participant noted that in the community there were ‘vaders wat nie support wil betaal nie. Hier is baie single moeders’ [fathers that do not want to pay child support. Here there are a lot of single mothers]. The participants felt that this lack of emotional and financial support from fathers had a negative effect on their parenting.

The discussions also showed that some community members were concerned about how their personal information would be used after being surveyed. For example, one participant noted: ‘Ek was ‘n bietjie bekommend’ [I was a bit worried]. This concern may have contributed to higher reports of positive parenting and parental involvement – community members who feared what would be done with their survey information may have wished to create a good impression through emphasising their parenting abilities. It also may have inhibited some participants in answering certain questions, particularly those pertaining to their use of corporal punishment, their experiences with domestic violence, and their substance use and misuse. Indeed, participants from several groups reported that these questions could have made community members feel uncomfortable. As one participant said: ‘Hulle sal nie daai vrae
beantwoord nie, ek glo nie. Hulle sal stil bly’ [They would not answer those questions, I don’t believe. They would keep quiet].

This discomfort, coupled with the concern about what would be done with personal information, may have contributed to the under-reporting in the survey of corporal punishment, substance use and domestic violence in this community. The discussion by the focus group participants seemed to indicate that there were far more parents who used corporal punishment when disciplining their children, who used substances, and who experienced domestic violence, than might have been reported in the survey. When discussing forms of discipline one focus group participant said: ‘Hier is hope wat die kinders slaan’ [Here there are many who hit their children]. When talking about drinking and drug use one community member noted: ‘Hier is baie mense wat drink’ [there are many people who drink], and another reported: ‘Die plek is besmet van dwelms’ [This place is infested with drugs]. And when discussing domestic violence, one participant noted: ‘Dit gebeur maar baie’ [It happens a lot].

Parenting and contextual variables and their effects on children

Bivariate relationships between the variables and children’s behaviour are presented in Table 4. Relationships reported here are Pearson’s correlations, with the exception of the corporal punishment variables where we used regressions that included only one variable as a predictor. Corporal punishment (slapping, spanking or hitting the child with an object), stress of parenting, intimate partner violence and parents’ alcohol misuse were all positively associated with externalising symptoms. Positive parenting, slapping or spanking, stress of parenting, and parental mental health were all positively associated with internalising symptoms. With the exception of intimate partner violence, the same variables were associated with children’s internalising symptoms.

Table 4: Bivariate relationships between risk variables and children’s behaviour

<table>
<thead>
<tr>
<th></th>
<th>Externalising symptoms</th>
<th>Internalising symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive parenting</td>
<td>r=.016, p=.822</td>
<td>r=.178, p=.010</td>
</tr>
<tr>
<td>Parental involvement</td>
<td>r=-.121, p=.08</td>
<td>r=.026, p=.704</td>
</tr>
<tr>
<td>Hits child with an object</td>
<td>F=4.158, p=.170</td>
<td>F=1.624, p=.200</td>
</tr>
<tr>
<td>Slaps or spansks child with a hand</td>
<td>F=21.114, p=.000</td>
<td>F=17.445, p=.000</td>
</tr>
<tr>
<td>Stress of parenting</td>
<td>r=.483, p=.000</td>
<td>r=.507, p=.000</td>
</tr>
<tr>
<td>Parents’ mental health</td>
<td>r=.595, p=.000</td>
<td>r=.465, p=.000</td>
</tr>
<tr>
<td>Parents’ exposure to intimate partner violence</td>
<td>r=.395, p=.000</td>
<td>r=.283, p=.000</td>
</tr>
<tr>
<td>Parents’ alcohol misuse</td>
<td>r=.163, p=.018</td>
<td>r=.135, p=.052</td>
</tr>
</tbody>
</table>

Neither child age nor child gender was significantly associated with externalising or internalising symptoms. In the model that included intimate partner violence, it was significantly associated with externalising symptoms. In both the models that included and excluded intimate partner violence, spanking or slapping (whether always or sometimes), stress of parenting, and parental mental health were all associated with externalising symptoms. With the exception of intimate partner violence, the same variables were associated with children’s internalising symptoms.

Discussion

In summary, our community-wide survey found that spanking and slapping, stress of parenting, and parental mental health are significantly associated with both children’s internalising and externalising symptoms. In addition, intimate partner violence in the home was associated with externalising symptoms in the subsample that responded to this question. The child’s age and gender, positive parenting, parents’ involvement with their children, the caregiver’s status as a single parent, poverty and parental substance misuse were not significantly
Table 5: Final model showing the relationship of parenting and contextual variables to children’s externalising symptoms

<table>
<thead>
<tr>
<th>Model 1, including intimate partner violence ($R^2=0.385$)</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>$t$</th>
<th>$p$</th>
<th>95% confidence interval for unstandardised Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.531</td>
<td>0.058</td>
<td></td>
<td>9.091</td>
<td>0.000</td>
</tr>
<tr>
<td>Child’s gender</td>
<td>0.110</td>
<td>0.060</td>
<td>0.120</td>
<td>1.835</td>
<td>0.068</td>
</tr>
<tr>
<td>Child’s age</td>
<td>0.010</td>
<td>0.009</td>
<td>0.072</td>
<td>1.079</td>
<td>0.282</td>
</tr>
<tr>
<td>Always spans or slaps when child does something wrong</td>
<td>0.288</td>
<td>0.077</td>
<td>0.281</td>
<td>3.752*</td>
<td>0.000</td>
</tr>
<tr>
<td>Sometimes spans or slaps when child does something wrong</td>
<td>0.182</td>
<td>0.071</td>
<td>0.196</td>
<td>2.566*</td>
<td>0.011</td>
</tr>
<tr>
<td>Stress of parenting</td>
<td>0.09</td>
<td>0.002</td>
<td>0.318</td>
<td>4.404*</td>
<td>0.000</td>
</tr>
<tr>
<td>Intimate partner violence</td>
<td>0.023</td>
<td>0.006</td>
<td>0.136</td>
<td>2.197*</td>
<td>0.029</td>
</tr>
<tr>
<td>Parent’s mental health</td>
<td>0.034</td>
<td>0.016</td>
<td>0.148</td>
<td>2.110*</td>
<td>0.037</td>
</tr>
</tbody>
</table>

*Significantly associated with externalising symptoms

Table 6: Final model showing the relationship of parenting and contextual variables to children’s internalising symptoms ($R^2=0.408$)

<table>
<thead>
<tr>
<th>Model 2, excluding intimate partner violence ($R^2=0.374$)</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>$t$</th>
<th>$p$</th>
<th>95% confidence interval for unstandardised Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.527</td>
<td>0.051</td>
<td></td>
<td>10.317</td>
<td>0.000</td>
</tr>
<tr>
<td>Child’s gender</td>
<td>0.050</td>
<td>0.051</td>
<td>0.056</td>
<td>0.994</td>
<td>0.322</td>
</tr>
<tr>
<td>Child’s age</td>
<td>0.010</td>
<td>0.008</td>
<td>0.074</td>
<td>1.298</td>
<td>0.196</td>
</tr>
<tr>
<td>Always spans or slaps when child does something wrong</td>
<td>0.333</td>
<td>0.065</td>
<td>0.334</td>
<td>5.095*</td>
<td>0.000</td>
</tr>
<tr>
<td>Sometimes spans or slaps when child does something wrong</td>
<td>0.213</td>
<td>0.061</td>
<td>0.233</td>
<td>3.477*</td>
<td>0.001</td>
</tr>
<tr>
<td>Stress of parenting</td>
<td>0.010</td>
<td>0.002</td>
<td>0.366</td>
<td>5.742*</td>
<td>0.000</td>
</tr>
<tr>
<td>Parent’s mental health</td>
<td>0.036</td>
<td>0.012</td>
<td>0.186</td>
<td>2.998*</td>
<td>0.003</td>
</tr>
</tbody>
</table>

*Significantly associated with internalising symptoms
associated with children’s symptoms. Based on the self-report of caregivers, the study also found that more than one-fifth of children living in the township would benefit from mental health treatment, as would more than one in 11 caregivers.

**Children’s mental health**

In a large study assessing children’s problems across 31 countries, including Ethiopia (the only African country included in the study), the means for both internalising and externalising were both 6.2, and did not differ significantly by age and gender. In the current study, children’s mental health appears to follow similar patterns. It is not unusual that there were children who were in the clinical range for both internalising and externalising disorders: depression, for instance, is strongly related to behavioural problems, particularly in boys.

The high rate of mental health problems among the township’s children is cause for concern. This township is rural, and rates of mental health disorders tend to be lower in rural settings. In 2012, 54.6% of South African children lived in urban areas and may therefore have higher rates of mental health symptoms than children in the township where the survey was conducted. What is most interesting about children in this township, and what is likely to generalise to other areas of South Africa, is the relationship between children’s symptoms, the parenting they receive, and the contextual stressors that also may affect those symptoms. This points the way both to interventions for those children who are currently suffering these problems and to interventions that may prevent them from occurring in other children.

**The effects of parenting on children’s mental health and behaviour**

Positive parenting and parental involvement are protective factors that are both consistently identified in the literature as reducing youth externalising and internalising disorders. It is therefore surprising that they were not identified as playing this role in the township where the survey was conducted. Parents did report high levels of positive parenting and involvement, alongside the use of corporal punishment. It may be that because most township parents reported using these positive strategies, these variables did not discriminate between children who had disorders and those who did not. This high rate of reporting of positive strategies may indeed reflect what parents were doing, or may reflect an element of social desirability in their responses to the questionnaire – that they gave answers they thought would show them in the best light, rather than accurate ones (as suggested by the focus group discussions). In addition, our difficulties with the psychometric properties of the Alabama Parenting Questionnaire may have meant that these variables did not accurately measure these strategies in the township. Future research should seek a measure that is robust for use in this context, seek methods that do not only rely on parent self-report (for instance, observational methods), and explore whether these parenting behaviours are protective in South African communities such as this township.

The strong association between slapping and spanking, and both externalising and internalising disorders, is also in line with the literature from around the world. Slapping and spanking are widely used in the township as a strategy for disciplining children. While it has been proposed in the literature that in such contexts corporal punishment may have weaker associations with children’s behaviour, our data suggest otherwise, as has been found in other contexts where it is also widespread, such as Tanzania and Colombia.

Our study reports on cross-sectional data, and as such we cannot infer that corporal punishment causes children’s mental health and behavioural symptoms. While that is likely, based on the empirical literature, it is also possible that children’s behaviour elicits corporal punishment from parents, and that corporal punishment increases as that behaviour becomes more difficult for parents. Nonetheless, corporal punishment is not an effective strategy for managing child behaviour, and whether elicited by children’s behaviour or not, only increases the risk that the child will develop either externalising or internalising symptoms. The findings do suggest that strategies to reduce the use of corporal punishment and increase the use of positive discipline could have a positive impact on child behaviour and mental health.
Our data identifies the stress of parenting as having a significant role to play in children’s symptoms, and this is underscored by one-fifth of the parents reporting that they had such dysfunctional interactions with their children that they were at risk of abusing their children. Together with the association between corporal punishment and child behaviour, this suggests that parents in the township who found parenting stressful may well have resorted to corporal punishment rather than more effective child management strategies. It also suggests that parenting programmes that teach effective parenting techniques may be helpful in reducing stress through changing parent behaviour and giving parents a sense of success in their parenting, hence reducing children’s symptoms.55

**Contextual factors, parenting and children’s behaviour**

Contextual factors influence whether parents find parenting stressful or not. Since our study found that neither being a single parent nor poverty was associated with children’s behaviour, it appears that these did not play a role in this context – possibly because the experiences in the township are quite normative.

That substance misuse was not found to be associated with children’s behaviour is most likely because it was under-reported: our focus group data suggests that this is highly likely to be the case. Parental substance misuse is typically associated with poor behaviour in children,56 and future studies of parenting in similar contexts should investigate ways to improve reporting on this important matter.

There is a robust literature pointing to the associations between intimate partner violence and mental health, and parenting and child behaviour.57 Our data show that these relationships also hold in this South African township – and since intimate partner violence appears to have been under-reported in our work, the relationships may be even stronger than we were able to detect in this sample.

**Implications**

Our study has several limitations: it is cross-sectional, and therefore conclusions about the direction of causality cannot be drawn. It also appears that there was a strong social desirability bias that led to under-reporting of contextual factors such as substance misuse and intimate partner violence, which may well undermine parenting and affect children’s behaviour. However, it does establish that there is a connection between contexts of parenting, parenting behaviour, and children’s mental health and behaviour in this rural South African community, and that rates of children’s problems in this community are high.

In terms of parents’ mental health and experiences of intimate partner violence, our data implies that intimate partner violence and mental health interventions need to be made more widely available in communities. For instance, clinic visits (for children’s or parents’ illnesses or for other routine matters such as immunisation) should be used as an opportunity to screen parents for these problems, and refer them for help. Similar approaches have shown positive results for intimate partner violence in the developed world.58 In the mental health domain, recent analyses suggest that it is both possible and affordable to deliver services in rural areas, using a tiered model where mental health professionals supervise community health workers.59

One possible direct implication for parenting might be a ban on corporal punishment in all contexts, including the family, an approach which appears to have been successful in both Sweden60 and Germany.61 However, there are two reasons not to propose this approach for South Africa. Firstly, South Africa has many good violence prevention policies, but at present enforcement is wholly inadequate.62 While the Swedish ban on corporal punishment carries no criminal sanctions63 and was explicitly intended to change the norm around parenting in Sweden rather than to punish parents who hit their children, it is an open question as to whether such sanction-free legislation would have a similar effect in South Africa. Secondly, deeper examination of the context in which the ban was introduced in Sweden reveals that it was the culmination of a 70-year cultural shift towards making children’s rights to physical integrity more explicit in Swedish law and central in national life.64 While South Africa has been moving to protect children’s rights in policy, for instance, through the Children’s Act 2005 (Act No. 38
of 2005), many South Africans appear to hold patriarchal views that objectify children rather than prioritise their nurturance and development. A focus on achieving a cultural shift away from corporal punishment and towards the use of positive discipline is likely to have a better chance of success than a legislative ban on the use of corporal punishment.

Indeed, our data suggests an alternative approach: equipping parents with effective skills that reduce the stress of parenting, improve children’s behaviour and buffer children against adversity. Some parenting programmes have demonstrated effect in these areas, and although the data is equivocal about the relationship between parent training and parents’ mental health, some studies suggest that parent training can have positive effects on parents’ mental health. Several such programmes are currently in development in South Africa. In addition, the policy around child protection and family intervention seeks to enable an increase in parenting support and training; what is needed now is to ensure that programmes offered to parents work and are based on evidence; and to develop an effective strategy and system for reaching parents that need this support.

Acknowledgements

This project, and hence this publication, was supported by a grant from the Open Society Foundation for South Africa (OSF-SA), for which we are very grateful. We also thank the many fieldworkers who collected our data, and the residents of the township who so willingly answered our many questions.

Notes


5 In this article use of the term ‘parent’ refers to primary caregivers notwithstanding their biological relationship to the child, e.g. members of the extended family, foster parents or adoptive parents.


15 K Hall et al, South African child gauge, Cape Town: Children’s Institute, University of Cape Town, 2012.

29 P Goldberg and VF Hillier, A scaled version of the General Health Questionnaire, Psychological Medicine, 9:1, 1979, 139–45.
30 R Humeniuk et al, Validation of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), Addiction, 103:6, 2008, 1039–47.
37 DP Goldberg and VF Hillier, A scaled version of the General Health Questionnaire, Psychological Medicine, 9, 1979, 139–45.
40 Ibid.


54. Ibid.


