Psychosocial Profiles of Children Referred for Treatment for Sexual Behavior Problems or for Having Been Sexually Abused

Isabelle Boisvert¹, Marc Tourigny¹, Nadine Lanctôt¹, Mélanie M. Gagnon², Claudia Tremblay³
¹ Department of Psychoeducation, University of Sherbrooke, 150, place Charles-Le Moyne, Room 200, Longueuil, Quebec, Canada, J4K 0A8
² Centre d'expertise Marie-Vincent, 4689, Av. Papineau, 3rd floor, Montreal, Quebec, Canada, H2V 1V4
³ Centres jeunesse de Lanaudière, 260, rue Lavaltrie Sud, Joliette, Quebec, Canada, J6E 5X7

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Abstract

Aim/Background: Both children with sexual behavior problems and children who have been sexually abused have a variety of psychosocial profiles, and the treatments offered to these two groups of clients overlap considerably. The question arises whether it makes sense to offer treatments tailored to each of these two groups. To investigate this question, this study attempted: 1) to identify the various psychosocial profiles of children referred for services either because they had displayed sexual behavior problems or because they had been sexually abused, and 2) to compare the proportion of children from each of these two client groups among children with each of the profiles identified.

Material/Methods: The participants in this study consisted of 147 children living in Quebec and their parents or other adults significant in their lives. The children's ages ranged from 6 to 12 years (M = 9.3), and the gender ratio was 62% male, 38% female. Out of these 147 children, 117 had been referred for a specific course of treatment for children with SBPs, while 30 had been referred to children's protection services because they had been sexually abused. Semi-structured interviews and standardized questionnaires were used to measure indicators of the children's psychosocial profiles (individual characteristics predisposing them to behavior problems, stressors affecting their parents' ability to provide optimal care, coercive parenting practices, and disruptions in psychosexual development).

Results: By means of a latent-class analysis, the children in the sample were classified as presenting three different psychosocial profiles: 1) resilient children, 2) children involved in an intergenerational cycle of abuse, and 3) children whose functioning was highly impaired. Within each of these three classes, the proportions of children referred for sexual behavior problems and children referred for having been sexually abused were about equal.

Conclusions: The results support the hypothesis that children referred for sexual behavior problems and children who have been sexually abused can benefit from the same treatments, provided that these treatments are tailored to the specific characteristics of the three psychosocial profiles identified in this study.
Introduction

Children with sexual behavior problems (SBPs) and children who have been sexually abused have several things in common. The two phenomena often occur in the same individual, the theoretical models used to explain them are similar, and the treatments provided to deal with them overlap considerably. Although these commonalities suggest that these two groups of children may share certain needs, past studies have often dealt with the two groups separately. For example, in order to refer children to treatments appropriate for their psychosocial profiles, various typologies have been proposed, but always either for children with SBPs or for children who had been sexually abused, rather than for both. In this study, using a sample comprising both children who had been referred for SBPs and children who had been referred for having been sexually abused, we attempted to determine whether any particular psychosocial profiles could be identified among children from these two groups and, if so, whether any of these profiles was associated more with one than with the other.

Similarities Between Children with SBPs and Children Who Have Been Sexually Abused

The vast majority of children go through the various stages of their sexual development in a healthy fashion, but some children deviate from this path and display SBPs: they initiate behaviors that involve sexual body parts and that are developmentally inappropriate or potentially harmful to themselves or others (Chaffin et al., 2006). Historically, having been sexually abused has long been identified as the main factor that causes a child to develop SBPs. In trauma-focused theoretical models (for example, Finkelhor & Browne, 1985), SBPs in children are conceptualized as a reaction to sexual abuse or to other traumatic events. Wolfe (2007) regards SBPs as one of the specific symptoms of child sexual abuse (along with post-traumatic stress symptoms, dissociation, and depression). There is also a substantial co-occurrence of these two problems. According to the literature, 20%-77% of all children who have been sexually abused display SBPs, while 15%-84% of all children who display SBPs have been sexually abused (Boisvert, Tourigny, Lanctôt, & Lemieux, accepted).

As research on SBPs in children intensified in the late 1990s, understanding of the origins of these problems improved, and new theoretical models were developed that were more complex and less focused on sexual abuse alone. One of these was Friedrich's model (2007), adapted from the model proposed by Greenberg, Speltz, & DeKlyen (1993) to describe the early development of disruptive behavior problems in general. Friedrich's model incorporated a set of developmental and familial determinants that play a role in the emergence of SBPs in children. Boisvert et al. (accepted) revised Friedrich's model to better match the premises of the model originally proposed by Greenberg et al. (1994). This revised version of Friedrich's model explains the development of SBPs in children through the interactions among five risk domains: 1) individual factors predisposing children toward behavior problems, 2) stressors affecting parents’ ability to give their children optimal care, 3) coercive parenting practices (physical abuse, psychological abuse, neglect), 4) disruptions in children's psychosexual development, and 5) parent-child attachment issues. This model posits that an accumulation of these risk factors increases the likelihood of a child's having SBPs and that it is the interactions among these factors that cause SBPs to emerge. This model does not eliminate the role of sexual abuse, but does show the heterogeneity of the factors that explain the emergence of SBPs, both in children who have been sexually abused and in children who have not. Hence this model also highlights the diversity in the profiles of children who have
SBPs. This model has several similarities with the theoretical models used to explain the development of symptoms following sexual abuse, including the importance ascribed to the interactions between children and their environment (Spaccarelli, 1994).

A review of the treatment programs offered to children with SBPs and those offered to children who have been sexually abused also shows the substantial overlap between these two clienteles. The meta-analysis by St-Amand, Bard, & Silovsky (2008) identified a number of specialized treatment programs offered to these two groups with the objective of reducing SBPs. The authors report that many of these treatments: 1) teach children methods of relaxation, rules about interpersonal boundaries, and ways of managing negative emotions, as well as educating children about sexuality and developing their ability to protect themselves and prevent sexual abuse; 2) use cognitive-behavioral strategies; and 3) require the children’s parents to participate so that they can learn how to better support their children and develop skills for managing their children's behavior (St-Amand et al., 2008).

**Diversity of Profiles Among Children with SBPs and Among Children Who Have Been Sexually Abused**

The overlap between the domains of SBPs and sexual abuse suggests that some proportions of children with SBPs and children who have been sexually abused may have common psychosocial characteristics and common treatment needs. But until now, this hypothesis could not be tested, because there had been no typological study that included both groups of clients in the same sample.

A review of past typological studies of each of these groups separately does provide some sense of whether they have common needs. Two studies of samples of children with SBPs (Burton, Nesmith, & Badten, 1997; Silovsky & Niec, 2002) compared the characteristics of those children who also had histories of sexual abuse with the characteristics of those who did not. Burton et al. (1997) found that those children who had SBPs and who were also reported to have been sexually abused were younger at the time of their first episode of SBPs, displayed more aggressive sexual behaviors, and had abused more victims than the children with SBPs who had not experienced sexual abuse themselves. Interestingly, these two groups did not differ significantly in the proportion of their members who considered their SBPs to be normal behavior. Silovsky & Niec (2002) found that those children with SBPs who had been sexually abused showed no significant differences from those who had not with regard to such indicators as symptoms of post-traumatic stress, symptoms of depression, aggressive or intrusive sexual behaviors, and parents’ stress. Though the results of both of these studies still need to be replicated, they do suggest that children with SBPs, whether or not they have been sexually abused, may have certain needs in common.

In another set of typological studies, the authors examined the similarities and differences within populations of child victims of sexual abuse, according to whether or not they displayed SBPs (Allen, Thorn, & Gully, 2015; Buchta, 2009; Chromy, 2007; Hall, Mathews, & Pearce, 1998; Hershkowitz, 2014; Kulesz & Wyse, 2007). Overall, these studies found that children who had been sexually abused and did have SBPs also had more internalized and externalized behavior problems of other kinds than children who had been sexually abused but did not have SBPs. However, these two groups of children showed no differences in prosocial interpersonal behaviors (Buchta, 2009), post-traumatic stress symptoms (Buchta, 2009; Hall et al., 1998), or certain parental and familial variables, such as stress in parents, post-traumatic stress symptoms in parents, and sexualized attitudes in the family setting (Hall et al., 1998).

Other typological studies have shown that the profiles of children with SBPs vary widely, both in the
kinds of SBPs that they display and in their sociodemographic, individual, and family characteristics (Chaffin et al., 2006). A number of studies have attempted to identify distinct subgroups among children with SBPs (for example, Bonner, Walker, & Berliner, 1999; Hall, Mathews, & Pearce, 2002; Johnson & Feldmeth, 1993; Pithers, Gray, Busconi, & Houchens, 1998; Rasmussen, Burton, & Christopherson, 1992). But only the typology used by Pithers et al. (1998) included a set of demographic, individual, and family values (and not just variables related to sexual behavior) to classify the children with SBPs. These authors performed a cluster analysis on a sample of 127 children with SBPs who had been referred to child-protection service. This analysis identified five subgroups of children with SBPs: 1) sexually aggressive, 2) non-symptomatic 3) highly traumatized, 4) rule breakers, and 5) abuse-reactive. These subgroups differed in their sociodemographic characteristics (age and gender), their maltreatment history (number of abusers, type of abuse), the characteristics of the SBPs that they displayed (nature of their actions, number of children involved, etc.), their other behavior problems (externalized behaviors, internalized behaviors), and the stress experienced by their parents.

Only a few authors have attempted to empirically identify distinct subgroups of sexually abused school-age children on the basis of their symptoms and their intensity (Daignault & Hébert, 2009; Hébert, Parent, Daignault, & Tourigny, 2006; Sawyer & Hansen, 2014). Among these authors, only Sawyer & Hanson (2014) have used abuse-specific symptoms (SBPs and post-traumatic stress symptoms) as clustering variables. The resulting typology, obtained with a sample of 107 child victims of sexual abuse, revealed four distinct profiles: 1) highly distressed, 2) problem behaviors, 3) subclinical, and 4) self-reported distress. The children in the Highly Distressed group were characterized by high scores for all of the domains measured (depression, anxiety, fears related to victimization, post-traumatic stress symptoms, externalizing behaviors, internalizing behaviors, and sexual behaviors). The children in the Problem Behaviors group showed a high frequency of externalizing, internalizing, and sexual behaviors. The children in the Subclinical group did not seem to have any problems of a clinical nature, but the children in the Self-Reported Distress group reported moderate levels of depression and anxiety.

To sum up, the results of this small number of studies that have explored the characteristics of children with SBPs and children who have been sexually abused suggest that some proportion of the children in these two groups may have some common characteristics and common needs with regard to treatment.

**Objectives of This Study**

The first objective of this study was to explore whether we could identify subgroups of children with similar psychosocial profiles within two different groups of child clients of psychosocial services: children who had been referred for SBPs and children who had been referred for having been sexually abused. The second objective was to examine whether the proportions of children from these two groups were similar from one profile to another - in other words, to see whether certain profiles were more associated with one of these groups than with the other.

**Analytical Approach**

In this study, we used a person-oriented approach (for a description, see Bergman & Trost, 2006 and von Eye & Bogat, 2006) rather than a variable-oriented approach, so as to reflect the heterogeneity of the children referred for SBPs and of the children referred for sexual abuse and to identify the various profiles of children who might benefit from similar treatments. By constituting a sample that included both children who had been sexually abused and children who had SBPs, we would be able to determine whether any particular psychosocial profile was associated more with...
one of these two client groups than with the other.

**Method**

**Sample and Study Design**

The sample consisted of 147 children living in the Canadian province of Quebec. Their ages ranged from 6 to 12 years (M = 9.3, SD = 1.9), their gender ratio was 61.9% male to 38.1% female, and the majority of them were white (Table 1). At the time of their clinical assessment, 70% of these children were accompanied by a biological or adoptive parent, while 30% were accompanied by a foster parent or case worker. Over half of these children (55%) came from families with annual incomes of less than $25,000.

Out of the total sample, 117 individuals were children with SBPs who had been referred by workers from a community agency or from Quebec's provincial child-protection system to participate in a treatment program for children with SBPs (Tremblay & Gagnon, 2000). To be eligible for this program, at the time of referral the children had to meet three criteria: 1) they had to be 6 to 12 years old, 2) they had to have SBPs, as determined by a clinical assessment and as defined by the following criteria: the repetitive nature of their problem behaviors, their inability to cease these behaviors even with adult supervision, the persistence of these behaviors over time and in different settings, and the extent to which these children engaged in sexual acts normally engaged in by adults, and 3) these children had to be accompanied by a parent or other significant adult who would participate in their treatment. Once the written consent of their parents or guardians had been obtained, but before they began the treatment program, all of these children with SBPs and their accompanying adults received a clinical assessment. Among these 117 children who had been referred to be treated for SBPs, 46.1% were reported by their parents to have been sexually abused as well.

The remaining 30 children in the sample had reported histories of sexual abuse that were deemed to be well founded by the provincial child-protection system, but did not have any SBPs that required specific treatment. These children were receiving the regular services offered by this system and were recruited by professionals who worked for it.

This study was approved by the Research Ethics Committee of the Centres jeunesse de Québec-Institut universitaire, a university-affiliated center in Quebec City, Quebec that provides psychosocial services to children and youth while also conducting research and providing training.

<p>| Table 1: Psychosocial Profile Indicators and Other Characteristics of the Sample (percentages and raw scores) |</p>
<table>
<thead>
<tr>
<th>Children referred for SBPs (n=117)</th>
<th>Children referred as sexually abused (n=30)</th>
<th>Total sample (n=147)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of males(^{a})</td>
<td>70.9%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Mean age (years)(^{b})</td>
<td>9.08</td>
<td>9.93</td>
</tr>
<tr>
<td>White ethnicity (n=123)</td>
<td>96.0%</td>
<td>95.7%</td>
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</tbody>
</table>
### Accompanying adult

<table>
<thead>
<tr>
<th></th>
<th>Biological or adoptive parent</th>
<th>Foster parent or case worker</th>
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<tbody>
<tr>
<td></td>
<td>66.7%</td>
<td>83.3%</td>
</tr>
<tr>
<td></td>
<td>83.3%</td>
<td>70.1%</td>
</tr>
</tbody>
</table>

### Annual family income (n=109)

<table>
<thead>
<tr>
<th></th>
<th>Less than $25,000</th>
<th>$25,001 to $45,000</th>
<th>$45,001 or more</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>59.5%</td>
<td>23.8%</td>
<td>16.7%</td>
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<tr>
<td></td>
<td>40.0%</td>
<td>32.0%</td>
<td>28.0%</td>
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<tr>
<td></td>
<td>55.0%</td>
<td>25.7%</td>
<td>19.3%</td>
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### Domain 1: Individual factors predisposing children to behavior problems

#### Externalizing behaviors

<table>
<thead>
<tr>
<th></th>
<th>(n=132)</th>
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<tbody>
<tr>
<td>Delinquent and aggressive behaviors</td>
<td>23.54</td>
<td>17.40</td>
<td>22.14</td>
</tr>
<tr>
<td>Sexual behaviors (n=128)</td>
<td>17.21</td>
<td>7.83</td>
<td>15.02</td>
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#### Trauma-related symptoms (n=116)

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<tbody>
<tr>
<td>Anxiety</td>
<td>9.39</td>
<td>10.85</td>
</tr>
<tr>
<td>Depression</td>
<td>9.15</td>
<td>10.48</td>
</tr>
<tr>
<td>Post-traumatic stress</td>
<td>11.24</td>
<td>13.85</td>
</tr>
<tr>
<td>Dissociation</td>
<td>9.90</td>
<td>10.52</td>
</tr>
<tr>
<td>Sexual concerns</td>
<td>8.16</td>
<td>7.11</td>
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#### Social skills (n=133)

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<tbody>
<tr>
<td></td>
<td>52.47</td>
<td>56.03</td>
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</table>

### Domain 2: Stressors affecting parents' ability to give their children optimal care

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<tbody>
<tr>
<td>Parent sexually abused in childhood (n=142)</td>
<td>41.6%</td>
<td>58.6%</td>
</tr>
<tr>
<td>Parent experienced other forms of abuse in childhood (score from 0 to 3) (n=142)</td>
<td>.68</td>
<td>.76</td>
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</table>

### Domain 3: Coercive parenting practices (maltreatment)

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<tbody>
<tr>
<td>Physical abuse (n=146)</td>
<td>57.3%</td>
<td>44.8%</td>
</tr>
<tr>
<td>Neglect (n=145)</td>
<td>53.4%</td>
<td>44.8%</td>
</tr>
<tr>
<td>Psychological abuse (n=146)</td>
<td>56.4%</td>
<td>65.5%</td>
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### Domain 4: Disruption of child's psychosexual development

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<tbody>
<tr>
<td>Exposure to sexuality (n=112)</td>
<td>1.41</td>
<td>1.17</td>
</tr>
</tbody>
</table>

Most of the children in the group referred for SBPs were boys (χ² = 19.846, df=1, p<.001). This group was significantly younger (t=-2.276 df=145, p<.05) than the group who were referred because they had been sexually abused. The members of the two groups did not differ significantly, however, in their ethnic origin, the identity of their accompanying adult, or their family’s annual income.

### Psychosocial Profile Measurements

Each of the children and adults in the sample individually completed the interview protocol developed by Gagnon (1999), which comprises a semi-structured interview and various standardized measuring instruments, based on a review of the literature on the factors associated
with SBPs in children and the consequences of child sexual abuse. This protocol was administered by a research assistant in the family home. The variables used to document the children's psychosocial profiles will now be described according to four of the five risk domains of the revised theoretical model of Friedrich (2007), described earlier in this article. Unfortunately, we could not include the fifth domain, parent-child attachment, because our source database did not contain any indicators for it.

1. Individual factors predisposing children to behavior problems. The French-language version of the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2001) was used to collect data on the child's behavioral and emotional problems during the preceding six months, as reported by the accompanying parent or other significant adult. This instrument contains 113 items rated by frequency, where 0 = not true, 1 = somewhat or sometimes true, and 2 = very true or often true. For the present study, we used the ASEBA externalizing scale, which comprises delinquent and aggressive behaviors and for which we obtained a Cronbach's alpha of .92.

To measure the frequency of the children's normal and problematic sexual behaviors during the preceding six months, we used the French-language version of the Child Sexual Behavior Inventory (CSBI; Friedrich et al., 1992), as translated by Wright, Sabourin, & Lussier (1994). This inventory was completed by the child's accompanying adult. It comprises 38 items rated on a four-point scale ranging from 0 (never) to 3 (at least once per week). The scale that we used in this study to capture sexualized behaviors (CSBI Total scale) had a high Cronbach's alpha (.91).

To assess the presence of trauma-related symptoms, we had the children complete the French-language version of the Trauma Symptom Checklist for Children (TSCC; Briere, 1996), translated from the English by Philippe-Labbé, Lachance, & Saintonge (1999). This instrument consists of 54 items rated on a four-point scale, where 0 = never and 3 = almost all of the time. It measures the frequency of children's symptoms associated with traumatic events on six subscales: Depression, Anxiety, Post-Traumatic Stress, Dissociation, Anger and Sexual Concerns. However, the Anger subscale showed a high correlation with delinquent and aggressive behaviors as measured by the ASEBA and so was removed from the analyses. In the present study, the internal consistency of the remaining subscales ranged from .79 to .82.

To measure the children's skills in cooperation, self-assertion, self-control, and empathy, we used the French-language version of the Social Skills Rating System (SSRS; Gresham & Elliott, 1990), as translated by Gagné (1993). This instrument comprises 34 items that the children rated on a three-point scale where 0 = never and 2 = very often and that are grouped into a total scale of social skills. The Cronbach's alpha for this scale was .90 in the present sample.

2. Stressors affecting parents' ability to give their children optimal care. In the semi-structured interviews, the accompanying adults reported whether they had been victims of sexual, physical or emotional abuse or neglect when they were children. The percentage of these accompanying adults who reported that they had been sexually abused as children was defined as a separate variable, while a combined score on a scale of 0 to 3 was calculated for physical abuse, emotional abuse and neglect.

3. Coercive parenting practices. The indicators for coercive parenting practices as a risk domain were represented by the known or suspected presence of three types of maltreatment of the child: physical abuse, psychological abuse and neglect. This information was obtained from the accompanying adults in the semi-structured interview.

4. Disruption of child's psychosexual development. In the semi-structured interviews, the
accompanying adults indicated whether the children had witnessed: 1) nudity on television or in a
movie, 2) sexual relations on television or in a movie, and/or 3) sexual activity between their
parents. These indicators of disruption of children's psychosocial development come from the Child
Sexual Behavior Inventory (Friedrich et al., 1992), described earlier. They are scored Yes or No and
grouped so as to obtain a score for exposure to sexuality, on a scale from 0 to 3.

**Analytical Strategy**

To identify the children's various psychosocial profiles, we performed a latent-class analysis using
Mplus software, Version 7.2 (Muthen & Muthen, 2007). This type of analysis is used to identify
subgroups of individuals with similar characteristics and to distinguish them from individuals with
different characteristics. It tends to determine the model with the smallest number of classes that
can explain all of the variance among the variables. To select the model that achieves the greatest
homogeneity within the classes and the greatest heterogeneity among them, we compared models
with two to five classes, applying traditional measures of classification quality: the log likelihood
ratio, Akaike Information Criterion (AIC; Akaike, 1987), Bayesian Information Criterion (BIC;
Schwartz, 1978), entropy (Grant, Scherrer, Neuman, Todorow, Price, & Bucholz, 2006) and
interpretability of the latent classes. Smaller values for the log likelihood ratio, AIC and BIC indicate
a better fit between the model and the data (Hagenaars & McCutcheon, 2002), while a higher
entropy value indicates better differentiation among the subgroups (Kline, 2005). The
Lo-Mendell-Rubin likelihood ratio test (LMR LRT) (Lo, Mendell, & Rubin, 2001) indicates the
improvement in the fit from one model to the next when the p value is significant.

The continuous indicators for the psychosocial profiles were standardized for the sample as a whole
using Z scores. By reducing the mean for the sample to a score of 0, this standardization makes it
possible to situate the members of one class with respect to all of the individuals in the sample.
Scores of 1 and -1 correspond respectively to one standard deviation above and one standard
deviation below the mean, and there is general consensus that scores above 0.3 or below -0.3
identify the indicators that characterize the class (Brennan, Breitenbach, Dietrich, Salisbury, & van
Voorhis, 2012). We treated the dichotomous indicators as categorical variables in the analyses. On
the basis of our analytical results, we assigned to each of the profiles that we identified a name
describing the characteristics that distinguished the children with that profile from the sample as a
whole. Lastly, we performed a chi-square test to determine whether the proportions of children
referred for SBPs and children referred for having been sexually abused differed significantly from
one profile group to another.

**Results**

Table 1 shows the values of all the indicators measured to establish the psychosocial profiles of the
children referred for SBPs, the children referred for having been sexually abused, and the two
combined. These results show that the two groups of children were similar for all indicators except
for externalizing behaviors: the children referred for SBPs scored significantly higher for delinquent
and aggressive behaviors (23.5 versus 17.4) and for sexual behaviors (17.2 versus 7.8,
respectively). Note that the children in this sample came from a clinical population and were
characterized by high rates of maltreatment: more than half had been victims of at least one of the
three forms of maltreatment that we measured, and 45% of the parents in the sample reported
having been sexually abused during their own childhoods.
Model Selected

After comparing the models with two, three, four, and five latent classes, we selected the one with three as providing the best fit (Table 2), according to a number of criteria. Although the AIC and BIC decreased gradually as the number of classes increased, the rate of decrease slowed considerably starting with the three-class model. Also, although adding a third class did not significantly improve the quality of the classification (p = .59) compared with the two-class model, we selected the three-class model because it provided better entropy and because, from a clinical standpoint, it reflected three psychosocial profiles that were recognizable from the clinical and scientific literature on children with SBPs and children who have been sexually abused.

Table 2: Goodness of fit of four models from latent-class analysis

<table>
<thead>
<tr>
<th></th>
<th>2-class model</th>
<th>3-class model</th>
<th>4-class model</th>
<th>5-classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 classes vs 1</td>
<td>3 classes vs 2</td>
<td>4 classes vs 3</td>
<td>5 classes vs 4</td>
</tr>
<tr>
<td>Log likelihood (c+1 classes)</td>
<td>-2log likelihood</td>
<td>95.976</td>
<td>81.372</td>
<td>67.641</td>
</tr>
<tr>
<td>p-value</td>
<td>.0064</td>
<td>.5899</td>
<td>.4136</td>
<td>.5207</td>
</tr>
<tr>
<td>Model fit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIC</td>
<td>4073.56</td>
<td>4007.584</td>
<td>3956.211</td>
<td>3918.57</td>
</tr>
<tr>
<td>BIC</td>
<td>4190.187</td>
<td>4169.067</td>
<td>4162.551</td>
<td>4169.766</td>
</tr>
<tr>
<td>Adjusted BIC</td>
<td>4066.77</td>
<td>3998.182</td>
<td>3944.198</td>
<td>3903.945</td>
</tr>
<tr>
<td>N for each class in model</td>
<td>94, 53</td>
<td>80, 44, 23</td>
<td>40, 6, 80, 21</td>
<td>37, 46, 38, 6, 20</td>
</tr>
<tr>
<td>Entropy</td>
<td>.791</td>
<td>.820</td>
<td>.865</td>
<td>.826</td>
</tr>
</tbody>
</table>

LMR-LRT: Lo-Mendell-Rubin likelihood ratio test; AIC: Akaike Information Criterion; BIC: Bayesian Information Criterion

The Three Psychosocial Profiles in the Selected Model

Table 3 shows the characteristics of the children with the three psychosocial profiles defined by our three-class model. These three profiles are as follows: 1) resilient children (n=80); 2) children involved in an intergenerational cycle of abuse (n=44); and 3) children with highly impaired functioning (n=23). We assigned these names to these profiles on the basis of the indicators that had the highest values in each. Hence these profiles are not impressionistic observations but rather empirical constructs based on analytical results. The children's average age and gender ratio did not vary significantly from one profile to the next (F=1.158, p≥.05; $\chi^2=11.235$, df=2, p≥.05).

The resilient children displayed fewer individual factors that predisposed them to behavior problems and were less likely to have been subjected to coercive parenting practices (maltreatment). More specifically, these children displayed fewer delinquent and aggressive behaviors (Z=-0.397) and
fewer trauma-related symptoms (Z scores of -0.481 to -0.706) than the children in the two other groups, and the percentages who had experienced neglect, psychological abuse, or physical abuse were also lower (40.5% to 46.2%).

Compared with the children in the two other groups, a higher percentage of the children involved in an intergenerational cycle of abuse had been subjected to maltreatment by their parents, and especially to psychological abuse (86.4%) and physical abuse (72.7%). Also, more of their parents reported having been victims of abuse as children (57.1% of these parents said that they had been sexually abused in childhood; the Z score for parents in this group who had experienced other forms of abuse was 0.300). These children also scored higher for trauma-related symptoms (Z scores of 0.355 to 0.378), except for sexual concerns, and also had a higher frequency of delinquent and aggressive behaviors (Z=0.355).

We have described the third group of children as having highly impaired functioning because they showed a number of problems in all four of the risk domains in the model. Among the three groups, these children had the highest Z scores for delinquent and aggressive behaviors (0.704), sexual behaviors (0.585), and trauma-related symptoms (1.021 to 1.573). Interestingly, however, these children also had better social skills (Z=0.362) than the two other groups. The children in this third group were also more likely to have been victims of neglect (72.7%) and had been more exposed to sexuality (Z=0.718) than the rest of the children in the sample.

| Table 3: Z scores of indicators for three psychosocial profiles of children in sample |
|-----------------------------------------------|----------------|----------------|
| Resilient children n=80 | Children in intergenerational cycle of abuse n=44 | Children with highly impaired functioning n=23 |
| **Domain 1: Individual factors predisposing children to behavior problems** | **Externalizing behaviors** | **Trauma-related symptoms** | **** |
| Delinquent and aggressive behaviors | -.397 | .355 | .704 |
| Sexual behaviors | -.236 | .175 | .585 |
| **Anxiety** | **-**.697 | **.378** | **1.483** |
| **Depression** | **-**.680 | **.357** | **1.418** |
| **Post-traumatic stress** | **-**.679 | **.355** | **1.573** |
| **Dissociation** | **-**.706 | **.358** | **1.486** |
| **Sexual concerns** | **-**.481 | **.198** | **1.021** |
| Social skills | .094 | -.253 | .362 |
| **Domain 2: Stressors affecting parents’ ability to give their children optimal care** | **Parent sexually abused in childhood** | 43.6% | 57.1% | 27.3% |
| **Parent experienced other forms of abuse in childhood** | .197 | .300 | .137 |
| **Domain 3: Coercive parenting practices** | **Physical abuse** | 46.2% | 72.7% | 50.0% |
To gain a better understanding of these three psychosocial profiles once we had identified them, we performed some additional analyses (Table 4). These analyses showed that higher percentages of the children with highly impaired functioning scored above the clinical thresholds for delinquent and aggressive behavior, sexual behavior, and trauma-related symptoms, while the resilient children were less likely to have problems that met clinical diagnostic criteria. All of the children whom we classified as being involved in an intergenerational cycle of abuse reported having experienced at least one of the three forms of parental maltreatment that we considered (physical abuse, psychological abuse, and neglect), which distinguishes these children from the two other groups. Among the three groups, this group also had the highest percentage of child victims of sexual abuse whose parents reported having been sexually abused as children themselves (40.9%, compared with 20.5% for the resilient children and 22.7% for the children with highly impaired functioning; \(\chi^2=6.175, \text{df}=2, \ p\leq.05\)). Lastly, the children with highly impaired functioning were more likely to have experienced one or more out-of-home placements (73.9%, compared with 39.2% and 52.3%; \(\chi^2=8.907, \text{df}=2, \ p\leq.01\)).

Table 4: Proportion of children with scores above clinical thresholds for predisposing individual factors and trauma-related symptoms, and other characteristics, for each of the three psychosocial profiles identified

<table>
<thead>
<tr>
<th></th>
<th>Resilient children</th>
<th>Children in intergenerational cycle of abuse</th>
<th>Children with highly impaired functioning</th>
<th>Total</th>
<th>Chi-square (df=2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEBA Delinquent and aggressive behaviors</td>
<td>55.4%</td>
<td>84.6%</td>
<td>94.7%</td>
<td>69.7%</td>
<td>16.907***</td>
</tr>
<tr>
<td>CSBI Sexual behaviors</td>
<td>54.9%</td>
<td>74.4%</td>
<td>88.9%</td>
<td>65.6%</td>
<td>9.238*</td>
</tr>
<tr>
<td>TSCC Anxiety</td>
<td>4.8%</td>
<td>52.6%</td>
<td>100.0%</td>
<td>33.3%</td>
<td>61.511***</td>
</tr>
<tr>
<td>TSCC Depression</td>
<td>4.8%</td>
<td>26.3%</td>
<td>87.5%</td>
<td>23.1%</td>
<td>49.538***</td>
</tr>
<tr>
<td>TSCC Post-traumatic stress</td>
<td>1.6%</td>
<td>28.9%</td>
<td>93.8%</td>
<td>23.1%</td>
<td>62.146***</td>
</tr>
<tr>
<td>TSCC Dissociation</td>
<td>1.6%</td>
<td>39.5%</td>
<td>100.0%</td>
<td>27.4%</td>
<td>66.355***</td>
</tr>
<tr>
<td>TSCC Sexual concerns</td>
<td>28.6%</td>
<td>57.9%</td>
<td>81.3%</td>
<td>45.3%</td>
<td>17.893***</td>
</tr>
<tr>
<td>Child subjected to at least one form of maltreatment (coercive)</td>
<td>83.8%</td>
<td>100.0%</td>
<td>915%</td>
<td>89.8%</td>
<td>8.249**</td>
</tr>
</tbody>
</table>
Table 5 shows the proportion of children who were referred for treatment for SBPs and the proportion who were referred for having been sexually abused, within the groups defined by each of the three psychosocial profiles in our sample. These proportions did not differ significantly among these three groups ($\chi^2=1.013$, df=2; $p=.603$). In other words, none of these three psychosocial profiles was associated more with children referred for SBPs than with children referred for having been sexually abused.

**Table 5: Proportions of children referred for SBPs and children referred for having been sexually abused, for each of the three psychosocial profiles**

<table>
<thead>
<tr>
<th>Resilient children</th>
<th>Children in intergenerational cycle of abuse</th>
<th>Children with highly impaired functioning</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children referred for SBPs</td>
<td>82.5%</td>
<td>75.0%</td>
<td>78.3%</td>
</tr>
<tr>
<td>Children referred for having been sexually abused</td>
<td>17.5%</td>
<td>25.0%</td>
<td>21.7%</td>
</tr>
</tbody>
</table>

$\chi^2=1.013$ (df=2; $p>.603$)

**Discussion**

This typological study examined a sample drawn from two groups of clients: children referred for treatment for SBPs, and children referred to child-protection services because they had been sexually abused. This study produced two major findings. First, it identified three distinct psychosocial profiles among the children in the sample: resilient children, children involved in an intergenerational cycle of abuse, and children whose functioning was highly impaired. Second, this study found that none of these three profiles was more strongly associated with one of the two client groups than with the other. These findings indicate that these two groups of children have similar needs and might benefit from treatments specifically tailored to the individual and family characteristics of each profile, rather than being treated simply according to the reason for referral (having SBPs versus having been sexually abused).
The three-class typology that we have identified echoes certain findings in past studies that attempted to identify subgroups among children with SBPs or children who had been sexually abused. First of all, our study identified one group of children whom we describe as "resilient". These children were less likely to have been victims of physical abuse, psychological abuse, or neglect than the two other groups, but nevertheless, a full 83.8% had been victims of at least one of these three forms of maltreatment. And yet, compared with the two other groups, these children had substantially fewer externalized behavior problems and far fewer trauma-related symptoms. Also, for all of the indicators measured in this study, the percentage of children with scores above the clinical thresholds was lower in this group (ranging from 1.6% to 55.4%) than in the two others. The children in this group can thus fairly be described as victims of maltreatment who develop few symptoms as a result. In past studies reviewed by Webster (2001), the percentage of child victims of sexual abuse who were asymptomatic ranged from 21% to 49%. Other typological studies of child victims of sexual abuse who have also reported a subgroup who do not seem to have any particular problems (Daignault & Hébert, 2009; Hébert et al., 2006; Sawyer & Hanson, 2014). Similarly to our study, Sawyer & Hansen (2014) identified a subgroup of sexually abused children who were characterized by scores below the clinical thresholds on all of their indicators: externalized problems, internalized problems, sexual behaviors, post-traumatic stress symptoms, depression, anxiety, and fears following victimization (in the authors’ terminology, "Subclinical" children). Likewise, the typology of Pithers et al. (1998), developed for children with SBPs, identified a "nonsymptomatic" subgroup that did not display any clinical problems with regard to externalized or internalized behaviors and who were less likely to have received a psychiatric diagnosis.

Three frequently cited hypotheses as to why some children do not seem to show any problems after experiencing a trauma are as follows: 1) some children have been subjected to less severe forms of abuse and have not experienced it as disruptive; 2) some children are more resilient and cope better with traumatic events because of certain protective factors that are either intrinsic to themselves or present in their environment; 3) in some children, the consequences of the abuse emerge in later stages of development (Hébert, 2011).

In the second group of children that we identified - those who were involved in an intergenerational cycle of abuse - a high proportion had been victims of maltreatment by their parents, and especially physical and psychological abuse. The parents of these children were also the ones most likely to have experienced some form of abuse in childhood themselves. There also seems to have been more continuity of sexual victimization across the generations in this group; of the children in this group who had been sexually abused, 40.9% had a parent who reported having also been sexually abused as a child. For this group, we cannot point to any correspondences between our typology and those developed in past studies of children with SBPs and children who had been sexually abused, because those studies did not consider whether the parents had themselves been abused in childhood. However, according to the model of intergenerational transmission of sexual victimization developed by Baril & Tourigny (2015), when mothers of sexually abused children have themselves been sexually abused as children, the complex traumatic effects that they experience may affect their functioning as parents and have repercussions on their children's development and well-being. For example, compared with other mothers, mothers who have been sexually abused as children take a more negative view of themselves as parents, report less confidence in their relationships with their children, and more frequently report using physical punishment to resolve conflicts with their children (for a more detailed discussion, see Baril & Tourigny, 2015). Thus, mothers who are survivors of childhood sexual abuse are likely to face more challenges than mothers who are not, especially when it comes to communicating about sex and monitoring their children's activities (Cavanaugh & Classen, 2009).
These many problems in parents appear to increase the risk that their children will develop emotional, physical, social, behavioral, and relationship problems, as suggested by the externalized behaviors and trauma-related symptoms observed among the children in our "intergenerational cycle" group. The model of Friedrich (2007) suggests likewise, by recognizing how stressors on parents (such as having themselves been abused as children) can affect not only their ability to give their children optimal care but also the development of SBPs in their children. Mothers who have been victims of sexual abuse may be more permissive parents and have more difficulty in setting limits (both sexual and non-sexual) with their children (see Dillilo & Damashek, 2003 for a review). These mothers also display more liberal sexual attitudes than mothers who have not been abused (Meston, Heiman, & Trapnell, 1999), which might in turn disrupt their children's psychosexual development and lead to the emergence of SBPs (Friedrich, 2007).

The third group of children that we identified - those with highly impaired functioning - showed a higher frequency of behavioral problems and trauma-related symptoms than the other children (the vast majority of children in this third group scored above the clinical threshold on all of the associated measures). Higher proportions of these highly impaired children had been victims of neglect, and they had been more exposed to sexuality. Also, our supplementary analyses indicated that the proportion of these children who had experienced one or more placements outside the family home was much higher than in the two other groups (73.9%). This uprooting from the family setting can have serious consequences and may explain the high degree of impairment observed in these children, including the high frequency of symptoms of post-traumatic stress. In this regard, some authors say that placement outside the home is a trauma in itself and must be considered in addition to the parental abuse and neglect that led to it (Samuels & Pryce, 2008).

Our group of highly impaired children is similar to subgroups of children with severe problems in other typological studies of children with SBPs (such as the "rule breaker group" in Pithers et al., 1998) and of sexually abused children (such as the "severe distress group" in Hébert et al., 2006; the "highly distressed group" in Sawyer & Hanson, 2014; and the "polyclinal group" in Daignault & Hébert, 2009). Like our third group, these groups showed high scores for delinquent and aggressive behaviors, sexual behaviors, and symptoms of post-traumatic stress.

In addition to identifying three psychosocial profiles in both groups of clients composing our sample - children referred for SBPs and children referred because they had been sexually abused - this study found that none of these profiles was associated more with one of these groups than with the other. This finding further confirms that these two groups of children overlap greatly as regards the theoretical models that apply to them, the factors associated with their SBPs or experiences of sexual abuse, and their psychosocial profiles. It thus suggests that children with SBPs and children who have been sexually abused have a set of common characteristics and might benefit from similar treatments, based on their psychosocial profiles rather than on the reason that they have been referred. However, to confirm this finding, further studies must be conducted with samples comprising both groups of clients.

**Strengths and Limitations**

The typology presented in this study has the advantage of having been constructed using psychosocial factors from a number of recognized risk domains both for children with SBPs and for children who have been sexually abused. There have been other studies using individual and family factors to identify subgroups within populations of children who had been sexually abused, but rarely has the same been done for children with SBPs. Hence this study represents a considerable step forward. This study has the further advantage of having used a large enough sample to provide adequate statistical power.
The results of this study must still be interpreted in light of certain limitations. First, it contains no official data from police or child-protection services regarding certain information that respondents might have been denying, minimizing, or distorting. If, for example, we had used more than one respondent to document the various forms of maltreatment that the children were reported to have experienced, including sexual abuse of children referred for SBPs, we might have obtained a more complete picture of each child. Second, a high proportion of the children interviewed in this study were living away from their families of origin and so were accompanied not by their own parent, but instead by some other responsible adult, such as a foster parent, a case worker, or an educator from their group home or rehabilitation center. Such adults, though they may be significant in the children’s lives, have not known them for very long and may have limited information on subjects such as the children's history of being abused. In this situation, it can be very hard to develop a complete psychosocial profile for a child through the accompanying adult. Third, although we had hoped to document all five of the risk domains in Boisvert et al.’s model, we were unable to document one of them: the quality of the parent-child attachment. In future studies, this domain should be examined as well, to obtain a better understanding of the development of SBPs and of the problems that arise after a child has been sexually abused (Beaudoin, Hébert, & Bernier, 2013; Friedrich, 2007).

**Clinical Implications**

The recommendations for treatment of children with SBPs (Chaffin et al., 2006) and children who have been sexually abused (Saunders, Berliner, & Hanson, 2004; Silverman et al., 2008) stress that short-term cognitive-behavioral treatment in which the parents participate has been proven effective. However, these recommendations do not offer clinicians any guidance on how to take the children’s psychosocial profiles into account and how to adjust treatment to meet the specific needs associated with them.

It might therefore prove advantageous to adopt a treatment approach that could be modulated to better suit the risk domains most closely associated with each of the three profiles that we found. Such a component-based approach affords flexibility regarding both the treatment objectives and the sequence in which the various treatment procedures are used; it has been found effective for children with anxiety, or depression, or behavior problems (Chorpita et al., 2013). Also, as the resources available for providing treatment become increasingly scarce, it becomes increasingly important to distinguish among: 1) children whose parents simply need support and reassurance, 2) children whose behavior is disturbing enough to benefit from regular treatment, and 3) children who require immediate, continued assistance (Friedrich, 2007).

Best practices for both of the clienteles discussed in this article call for parents to participate as treatment partners to better support their children. But even those programs that are recognized as following best practices do very little to address stressors that affect parents' ability to give their children optimal care - in particular, having their own history of being abused. Measures to address the impact of parents’ having been abused would be especially beneficial for children who fit the profile of being involved in an intergenerational cycle of abuse. The Intergenerational Trauma Treatment Model (ITTM) seems to be the only one that attempts to help parents not only meet their traumatized children's needs more effectively, but also deal with the effects of the traumas that they themselves experienced as children (Lawson & Quinn, 2013). The ITTM includes not only measures to alleviate children's trauma-related symptoms, but also cognitive-behavioral treatments for the parents, with goals that include reducing their symptoms of post-traumatic stress, teaching them how to regulate their own emotions and behavior, and improving their ability to respond empathically to their children's needs (Scott & Copping, 2008). Another option would be to combine
recognized best treatment practices for children with treatments to help parents deal with the consequences of having been abused themselves, especially sexually (see Taylor & Harvey, 2010, for a meta-analysis of the effects of psychotherapy with adults who were sexually abused in childhood).

Children with highly impaired functioning obviously require immediate, sustained attention from the clinical community. But because of the severity of these children's trauma-related symptoms, some authors recommend measures to stabilize them before any treatment to reduce their externalizing behaviors begins (Foia, Keane, Friedman, & Cohen, 2008; Ford & Cloitre, 2009). The treatment priorities should be as follows: 1) identify and reduce the elements that threaten the safety of the child and his or her family, in particular self-mutilating and suicidal behavior and any form of maltreatment; 2) establish a working alliance among the child, his or her parents, and the therapist; and 3) increase the child's ability to self-regulate (Ford & Cloitre, 2009). Once the child has been stabilized, various individual or group cognitive-behavioral therapies of proven effectiveness can be used to reduce a wide range of disruptive behaviors and to support prosocial functioning (Eyberg, Nelson, & Boggs, 2008).

Lastly, because resilient children have fewer behavior problems, they could be offered a program whose main goal is to support their psychosexual development. The meta-analysis by St-Amand et al. (2008) suggests that certain topics, such as the child's sexual education and strategies for protecting the child and preventing child abuse, are worth discussing with the parents of children with SBPs and children who have been sexually abused, to increase the effectiveness of the treatment that they receive. If parents are taught how to quickly detect the latent consequences of sexual abuse that can emerge later in the child's development and are helped to develop certain skills for managing their children's behavior and supervising their activities, the ultimate outcome for the child will be more successful.

In conclusion, this study has shown that children referred for SBPs and children referred because they have been sexually abused have a similar set of psychosocial profiles and could benefit from the same treatments, tailored to each of these profiles. We hope that this knowledge may serve as the starting point for creating services adapted to the specific needs of these two groups of child clients so as to optimize their development.

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Author address

Isabelle Boisvert, Ph.D. (c), Ps.Ed.
Department of Psychoeducation
University of Sherbrooke
150, place Charles-Le Moyne, Room 200
Longueuil, Quebec, Canada, J4K 0A8
isabelle.boisvert2@usherbrooke.ca