Predictors of Child Pornography Offenses and Child Sexual Abuse in a Community Sample of Pedophiles and Hebephiles

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Abstract

Little is known about factors that distinguish men who act upon their self-identified sexual interest in prepubescent or pubescent children from those who do not. Even less is known about pedophiles or hebephiles who are not involved with the criminal justice system. In this study, a sample of 155 self-referred pedophiles and hebephiles was recruited from the community. All participants met DSM-IV-TR criteria for pedophilia (or paraphilia not otherwise specified for those who were sexually attracted to pubescent children).Two sets of group comparisons were conducted on sociodemographic variables and measures of dynamic risk factors. The first set was based on recent activity and compared men who had committed child pornography only or child sexual abuse offenses in the past six months with men who remained offense-free during the same period. The second set was based on lifetime offense history (excluding the most recent six months) and compared child pornography offenders with child sexual abuse offenders and men who had committed both kinds of offenses. Overall, there were more similarities than differences between groups.

Introduction

There is international concern about the problem of child sexual abuse.1 A representative American survey of minors between the ages of 12 and 17 years found that approximately 1 in 12 of the minors were sexually abused in the study year, with sexual abuse defined in this survey as acts involving physical contact, attempted contact, indecent exposure, and sexual harassment (Finkelhor, Ormrod, Turner, & Hamby, 2005). Finkelhor (1994) reviewed international retrospective surveys of adults in 19 countries, with 10 national probability samples from Europe and the United States. The average rate of recalled childhood sexual abuse was approximately 20% for women and 10% for men.

There is also increasing concern about offenses related to the production, possession, and distribution of child pornography (for a discussion of the definition of child pornography see e.g., Beech, Elliot, Birgden, & Findlater, 2008; Gillespie, 2005; Taylor & Quayle, 2003). Child pornography offending can be viewed as a form of child sexual exploitation because the production of child pornography involves the

sexual exploitation and, in many cases, the sexual abuse of a child. Child pornography offenders may not directly interact with a child themselves, but their use of child pornography creates a demand for the production of this content. Though they continue to represent only a small proportion of all child sexual exploitation crimes, the number of arrests for child pornography offenses has increased greatly in the past 10 years (Motivans & Kyckelhahn, 2007; Wolak, Finkelhor, & Mitchell, 2005).

Child Pornography and Child Sexual Abuse

The association between child pornography and child sexual abuse offending and knowledge of factors associated with recidivism are of particular interest. A recent meta-analysis of 21 samples suggests that approximately one in eight child pornography offenders have an official history of contact sexual offending (Seto, Hanson, & Babchishin, in press). For the six samples with information about self-reported offenses, approximately half of the child pornography offenders had a history of contact sexual offending. At the same time, a review of nine follow-up studies of child pornography offenders suggest that only a small proportion go on to commit new contact sexual offenses (Seto et al., in press); those who had previously commit- ted a contact sexual offense have been found to be the most likely to have offended (Seto & Eke, 2005).

In addition to historical factors such as offense history, sexual preferences are among the strongest predictors of long-term recidivism among sexual offenders (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). The majority of child pornography offenders seem to be motivated by a sexual interest in prepubescent and/ or pubescent children and, therefore, showed greater sexual arousal to children than adults when assessed in the laboratory (Seto, Cantor, & Blanchard, 2006).

Dynamic Risk Factors

The likelihood that someone will sexually reoffend is not uniformly distributed over time. Even if a pedophilic sexual preference represents an important motivation for sexual offending, psychological factors influence when someone acts upon this sexual motivation. These

factors have been described as dynamic risk factors because they are assumed to be associated with the likelihood of reoffending and potentially responsive to treatment and supervision. Thus, dynamic risk factors are considered to be important treatment targets (see Andrews & Bonta, 2006; Marshall, Marshall, & Serran, 2006) and many are included in contemporary theories of sexual offending against children or pathological Internet use (Davis, 2001; Finkelhor, 1994; Hall & Hirschman, 1992; Marshall & Barbaree, 1990; Ward & Beech, 2006; Ward & Siegert, 2002; Quayle & Taylor, 2003).

However, the extent to which these dynamic factors are relevant for child pornography offenders has not been established. To help professionals to improve clinical practices, this study aims to advance our understanding of factors associated with the imminence of child sexual abuse and child pornography offending by focusing on a set of dynamic factors identified in past research with child sexual abuse offenders (Hanson & Harris, 2000; Hanson, Harris, Scott, & Helmus, 2007; Whitaker et al., 2008). These results suggest that sexual reoffending is predicted by three major types of dynamic risk factors: (1) emotional or intimacy deficits; (2) offense-supportive cognitions such as the belief that children benefit from sex with adults; and (3) problems with sexual and general self-regulation (e.g., sexual preoccupation, poor cognitive problem-solving skills, impulsivity).

Emotional or intimacy deficits. It has been suggested that child sexual abuse offenders experience more loneliness and intimacy deficits than other offenders or community controls (e.g., Bumby & Hansen, 1997; Marsa, O'Reilly, & Carr, 2004; Seidman, Marshall, & Hudson, 1994). In particular, higher emotional identification with children (Wilson, 1999) has been found to be an important predictor of sexual recidivism (Hanson et al., 2007; Hanson & Morton-Bourgon, 2004). Child sexual abuse offenders also tend to show high levels of depressive symptoms (Laulik, Allam, & Sheridan, 2007; Raymond, Coleman, Ohlerking, Christenson, & Miner, 1999; Stinson, Becker, & Tromp, 2005) and score higher in neuroticism compared to controls (Dennison, Stough, & Birgden, 2001; Fagan et al., 1991; Wilson & Cox, 1983). Depressed mood, however, does not predict sexual recidivism (Hanson & Morton-Bourgon, 2004).

Offense-supportive cognitions. Offense-supportive attitudes and beliefs about sex with children (e.g., the belief that children benefit from sexual

contacts with adults) and empathy deficits have distinguished sexual abuse offenders from controls in previous comparison studies (Arkowitz & Vess, 2003; Feelgood, Cortoni, & Thompson, 2005; Hanson & Harris, 2000; Marshall, Hamilton, & Fernandez, 2001). Both factors have also been identified as concerns among child pornography offenders (Laulik et al., 2007; O'Brien & Webster, 2007). Quantitative reviews confirmed offense- supportive attitudes as an important dynamic risk factor of sexual reoffending, though not victim empathy deficits or denial (Hanson & Morton-Bourgon, 2004, 2005). Marshall (2000) has argued that child pornography use leads to the objectification of the children depicted in the pictures and thereby enhances offense-supportive attitudes or beliefs.

Sexual self-regulation problems. Comparison studies suggest that offenders who have difficulty controlling their sexual urges or sexual preoccupations are more likely to reoffend than those who do not have these difficulties (Hanson et al., 2007; Hanson & Harris, 2000). Factors that might additionally hinder successful sexual self-regulation are problematic appraisals. These include the awareness of the potential risk a person may pose, or unrealistic perceptions of one's risk to reoffend (Hanson & Harris, 2000; Marques, Nelson, West, & Day 1994; Marques, Wiederanders, & Day, 2005). The relapse prevention approach to sex offender treatment—still a common treatment for- mat offered in Canada and the United States—is predicated on the assumption that offenders can be taught strategies to improve their sexual self-regulation by emphasizing a training of various specific coping skills to effectively cope with high-risk situations (see McGrath, Cumming, & Livingston, 2003). Within the last years, how- ever, the influence of the relapse prevention model has decreased and most treatment providers now identify themselves with a broader cognitive-behavioral approach (McGrath, Cumming, Burchard, Zeoli, & Ellerby, 2010).

McMurran (2004) has argued that an offender's motivation to control his sexual behavior will predict recidivism, too. Current social cognition models or models of health-related behavior may help to understand how offenders become motivated to initiate and maintain control of sexual behavior (see Ajzen, 2005; Prochaska & Velicer, 1997). The health action process approach (Schwarzer, 2001) suggests that there is a distinction between an initial motivation phase, in which an intention

to act is developed, and a self-regulation phase, in which successfully moving from one stage to the next is facilitated by an optimistic sense of control over the next stage. For example, an offender may wish to refrain from child pornography offending (initial motivation) but may expect to fail because he has tried unsuccessfully in the past (lack of optimistic sense of control). Shingler and Mann (2006) suggested that such a lack of perceived self-efficacy could contribute to treatment noncompliance and dropout. Those who drop out of treatment have been found to reoffend more often than untreated controls (Hanson & Bussière, 1998).

General Self-Regulation Problems and Additional Factors

Child sexual abuse offenses are predicted by difficulties in general self-regulation such as impulsivity or poor cognitive problem-solving skills. For example, child sexual abuse offenders have been found to score higher than child pornography offenders on cognitive (but not motor) impulsivity, were more likely to have an external locus of control, and thus were more likely to view themselves as unable to control their own behavior (Elliott, Beech, Mandeville-Norden, & Hayes, 2009). Likewise, individuals with low levels of conscientiousness—one of the "Big Five" personality factors (Costa & McCrae, 1985)—are more likely to violate rules or to engage in criminal behavior and several studies have shown that child sexual abuse offenders score lower in conscientiousness compared to non-offending controls (Dennison et al., 2001; Fagan et al., 1991; Wilson & Cox, 1983).

Conscientiousness has also been found to be related to a task-oriented coping style in both clinical and community samples (Cohan, Lang, & Stein, 2006; Cosway, Endler, Sadler, & Deary, 2000; McWilliams, Cox, & Enns, 2003). Child sexual abuse offenders are more likely than other groups to respond to stress with a problematic emotion- oriented (instead of a task-oriented) coping style (Feelgood et al., 2005; Marshall, Serran, & Cortoni, 2000). The latter, however, is viewed as the most effective strategy as it involves an active approach to deal directly with a problem; task-oriented coping may increase after attending a general cognitive-behavioral sexual offender treatment program (Serran, Moulden, Firestone, & Marshall, 2007).

Finally, child sexual abuse offenders seem to exhibit a tendency to

portray them- selves in a favorable light (Gudjonsson & Sigurdsson, 2000; Nugent & Kroner, 1996; Tierney & McCabe, 2001). Mills and Kroner (2006) demonstrated that offenders scoring high on impression management as measured by the Balanced Inventory of Desirable Responding (Paulhus, 1991) score lower on antisocial attitudes and beliefs. Likewise, a tendency to portray oneself in a favorable light may reflect a tendency to behave according to cultural norms, because it is empirically related with conscientiousness (Borkenau & Zaltauskas, 2009). Zerbe and Paulhus (1987) concluded that individuals low on impression management report less control over decisions and are less likely to expect rewards resulting from personal effort. Thus, a lack of socially desirable responding may be viewed as a trait-like characteristic associated with problematic coping and personality styles. Because this view is debated, it seems reason- able to take this response tendency into account for statistical analyses (for a review, see Tan & Grace, 2008).

Previous Comparisons of Child Pornography and Child Sexual Abuse Offenders

Studies comparing child pornography offenders and child sexual abuse offenders have begun to appear in the past few years. Seto et al. (2006) compared the sexual arousal patterns of 57 child-pornography-only offenders with 178 child sexual abuse offenders and 43 men who had committed both child pornography and child sexual abuse offenses. Both groups of men who had ever committed child pornography offenses were significantly more likely than the child sexual abuse offender group to show greater sexual arousal to children than to adults when assessed in the laboratory; the two child pornography offender groups did not differ significantly from each other.

Bates and Metcalf (2007) compared 39 child pornography offenders (2 had also committed child sexual abuse offenses) to 39 contact sex offenders, some of whom had victimized adults. Child pornography offenders scored higher in emotional loneliness, lower in emotional identification with children, lower in empathy deficits for children, and lower in offense-supportive attitudes and beliefs. Child pornography offenders also scored higher on impression management, suggesting that they may have a stronger tendency to portray themselves in a

socially desirable manner (and to score higher in conscientiousness).

Webb, Craissati, and Keen (2007) compared 90 child pornography offenders to 120 sexual abuse offenders on measures related to risk. Child pornography offenders were younger, had fewer previous sexual convictions, and were rated as more likely to have problems with sexual self-regulation than child sexual abuse offenders, but were less likely to express offense-supportive attitudes about children and sex, and less likely to be involved in an intimate relationship. Child pornography offenders also scored lower than child sexual abuse offenders on a measure of psychopathy.

Sheldon and Howitt (2008) compared 16 convicted child-pornography-only offenders to 25 child-sexual-abuse-only offenders and 10 offenders with both child pornography and child sexual abuse offenses on measures of offense-supportive cognitions and sexual fantasies. Child sexual abuse offenders were more likely to admit offense-supportive cognitions, though they scored lower specifically on beliefs about children as sexual beings. Child sexual abuse offenders were less likely to be professionally employed and had more previous criminal convictions.

Finally, Elliott and colleagues reported on a comparison of 505 Internet sex offenders and 526 contact sex offenders on measures of emotional self-regulation, offense- supportive cognitions, empathy, interpersonal functioning, and personality (Elliott et al., 2009). Group differences were found on 7 of the 15 study measures, with contact sex offenders scoring higher than Internet offenders in offense-supportive cognitions and victim empathy deficits but lower in perspective-taking deficits, lower in fantasy, higher in cognitive impulsivity, and displaying more external locus of control.

Detection Status

Almost all of the research we have cited has relied on clinical or correctional samples of sex offenders and much of it has focused on sexual behavior rather than sexual preference. Thus, only some of these offenders meet formal diagnostic criteria for pedophilia or hebephilia (i.e., intense sexually arousing fantasies involving prepubescent or pubescent children). Likewise, previous studies have rarely assessed formal criteria for pedophilia or hebephilia. In addition,

many child pornography and child sexual abuse offenses are never detected and detection may not lead to criminal convictions. Consequently, relatively little is known about offenders or pedophiles and hebephiles who are not formally involved with the criminal justice system (e.g., Bernard, 1975; Durkin & Bryant, 1999; Malesky & Ennis, 2004; Riegel, 2004).

It is possible that the importance of the factors we have described depends on detection status and/or sexual preference. For example, a greater frequency or seriousness of offending may increase the likelihood of detection. Consequently, using only detected offenders to study pedophilia, hebephilia, and predictors for sexual offenses may result in underestimation of offense rates and identifying risk factors associated with more frequent and serious offenses. In addition, the factors associated with lifetime offending may differ from those associated with recent offending activity.

The Present Study

The present study aims to identify dynamic factors that distinguish those who act upon their sexual urges by using child pornography from those who both use child pornography and have sexual contacts with children. This study is novel because we examined a group of help-seeking men who were not involved with the criminal justice system at the time of assessment; it turned out that many had not been detected for prior child pornography or child sexual abuse offenses. Thus, we were able to examine the generalizability of factors identified in research with detected child sexual abuse offenders to a sample that contained many undetected child sexual abuse offenders and child pornography offenders. All participants were subsequently diagnosed with pedophilia or hebephilia (paraphilia not otherwise specified), so we were also able to examine whether the relevance of these factors depended on whether someone had a pedophilic and/or hebephilic sexual preference.

Finally, we examined the relevance of when offending occurred by conducting two sets of comparisons on demographic characteristics and measures of dynamic factors identified in research using detected sexual offenders against children: The first comparison distinguished participants into one of three groups according to their self- reported

lifetime offense history, excluding the most recent 6 months: (1) child pornography only; (2) child sexual abuse only; and (3) both kinds of offenses. The second comparison distinguished participants according to their offending activity in the past 6 months: (1) participants who reported no sexual offending in the past 6 months (recently inactive); (2) participants who only acknowledged using child pornography in the past 6 months (recent child-pornography-only offenders); and (3) participants who acknowledged committing one or more acts of child sexual abuse in the past 6 months, with or without the concomitant use of child pornography (recent child sexual abuse offenders).

With respect to lifetime offense history, we hypothesized that individuals who had previously only committed child pornography offenses would score lower than individuals who had prior child sexual abuse offenses on measures of emotional deficits, general self-regulation problems and offense-supportive cognitions, but higher on sexual self-regulation problems and impression management. We predicted that recently active offenders would score higher than recently inactive participants on these measures of dynamic risk factors. We also predicted that recent child pornography offenders would score lower on many dynamic risk factors, except for emotional deficits and sexual self-regulation problems, and that recent child sexual abuse offenders would score higher on other risk factors such as criminal history and unemployment.

Ethical Concerns

Another distinctive feature of this study is that participants could report officially unknown sexual offenses against children without fear of legal sanction because there is no mandatory child abuse reporting law in Germany. Therapist–client confidentiality is guaranteed in Germany, with federal law specifying that even criminal acts do not have to be reported (German Criminal Code, §203 StGB), unless there is evidence of an imminent risk of child sexual abuse in conjunction with the extremely unlikely risk of homicide (German Criminal Code, §138 StGB). Thus, breaching confidentiality regarding a plan to commit a child sexual abuse offense would be penalized unless it clearly served to prevent imminent danger (i.e., the potential child victim could be identified based on the information the client provided).

We realize that this situation raises an ethical debate: Some might argue that it is an ethical imperative to report officially unknown offenses, especially if the individual lives or works with children or otherwise poses a risk to identifiable children. At the same time, we believe undetected, self-identified pedophiles and hebephiles are much less likely to seek professional services if they fear being reported to authorities. Moreover, any individuals who do seek help would be expected to deny any undetected offenses if they feared being reported, which would mean the clinicians have incomplete and inaccurate information upon which to make decisions regarding treatment and risk management. Our view is that the potential benefits of recruiting self- identified pedophiles or hebephiles who are concerned about their sexual interests in children—by potentially reducing the incidence of child sexual abuse and by improving the quality of life for help-seeking individuals—outweighs the costs of not reporting officially unknown offenses. Many individuals who commit sexual offenses remain undetected, or if detected by authorities, refuse treatment or other assistance while involved with forensic mental health or criminal justice systems. Reporting unknown sexual offenses creates an environment where at-risk individuals are less likely to ever be seen voluntarily, either for treatment or research.

Method

Participants

All of the data presented here are self-reported and were collected as part of an ongoing treatment project. The current study investigated participants who entered the intake assessment of the project between June 2005 and May 2007. Further data from the project and particular phases of the intake assessment are reported elsewhere (Beier et al., 2009; Schaefer et al., 2010).

Of the 206 men who were initially diagnosed as either pedophilic or hebephilic (paraphilia not otherwise specified) and who did not meet either of the other two exclusion criteria (not currently facing legal charges for child pornography or child sexual abuse offenses, and not having any untreated major mental disorders), only those who completed the full assessment battery were included in this study,

comprising a total sample of 155 men. The 51 men not included in this study had entered the project at a later point in time, after the battery of questionnaires had been revised. There were no significant demographic differences between participants who were included versus excluded from this study.

The mean age of the sample was 40.0 years (SD = 11.7). Almost three quarters (70%) of the participants met DSM-IV-TR (APA, 2000) criteria of pedophilia, and approximately half of these pedophiles preferred boys (48%). A little less than a third (30%) of the sample reported being sexually attracted to pubescent children, with 60% of these hebephiles preferring girls. The remaining participants were pedophiles (13%) or hebephiles (4%) who were attracted to both male and female minors. Only 10% of the study participants reported that they were not at all or slightly distressed by their sexual fantasies, but these participants were still impaired in one or more important areas of personal functioning. Sixteen percent experienced fair distress and more than two thirds (69%) reported strong or very strong feelings of distress. Ten participants did not respond to this question.

Measures

Measures will be presented in the same order as the dynamic factors have been out- lined in the introduction. German scales were developed for the clinical program to assess cognitive appraisals and sexual behaviors. Sample sizes ranged from 152 to 155 across these scales. All reliabilities refer to the German versions of the scales administered to the present sample. Information on psychometric properties is only provided for newly developed scales, as some measures are well established.

Emotional Deficits

UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980; German version: Bilsky & Hosser, 1998). This scale assesses intimacy and loneliness problems using 20 items, rated on a 4-point Likert-type scale. Higher scores indicate greater feelings of loneliness (Cronbach's α = .98). Russel et al. (1980) reported normative data for males in a sample of college students (M = 37.06, SD = 10.91). Schwab (1997) reported a mean score of 45.2 (SD = 10.9) for a German sample of 514 adults;

loneliness scores of males and females did not differ significantly. Bumby and Hansen (1997) reported an average loneliness score of 58.8 (SD = 13.3) in a forensic sample of 33 child molesters. Allan, Grace, Rutherford, and Hudson (2007) reported an average loneliness score of 46.13 (SD = 10.15) for a sample of 383 child molesters assessed prior to treatment. In a sample of 422 Internet offenders, mean scores ranged between 30.98 (SD = 5.70) for offenders clustered as normal and 51.55 (SD = 9.0) clustered as inadequate (Henry, Mandeville-Norden, Hayes, & Egan, 2010).

Child Identification Scale-Revised (Wilson, 1999). This 40-item scale assesses emotional identification with children. Higher scores indicate greater identification with children in terms of cognitive and emotional connectedness (Cronbach's α = .80). Wilson reported mean scores of 18.98 (SD = 8.11) for 38 homosexual pedophiles and 15.23 (SD = 7.56) for 27 heterosexual pedophiles.

Allgemeine Depressionsskala (Hautzinger & Bailer, 1993). This measure is a modified German version of the Center for Epidemiological Studies Depression Scale (Radloff, 1977) and assesses depressive symptoms via 15 items, rated on a 4-point Likert-type scale. A higher score on the Allgemeine Depressionsskala indicates a more depressed mood, with a score higher than 17 justifying a diagnosis of depressive disorder (Cronbach's α = .92). Population-based normative data of 634 German males are available (M = 9.88, SD = 7.05).

NEO-FFI Neuroticism. Neuroticism is a subscale of the NEO-FFI Personality Inventory- Form S (Original version: Costa & McCrae, 1985; German version: Borkenau & Ostendorf, 1993) and reflects emotional instability (Cronbach's α = .88). The scale uses 12 items rated on a 5-point Likert-type scale. The average item score ranges from 0 to 4. Persons with high scores are more likely to experience unstable and negative emotions. Normative data for neuroticism are available from a population-based sample of 966 German males (M = 1.66, SD = 0.67). Reliability and factor structure of the NEO-FFI have been replicated in a forensic sample of sexual offenders (Kunst & Hoyer, 2003).

Offense-supportive cognitions

Bumby MOLEST scale (Bumby, 1996). This 38-item scale is a measure

of offense- supportive cognitions about children and sex with children (Cronbach's α = .95). Higher scores indicate more offense-supportive attitudes and a greater tendency to justify offending. Bumby (1996) found that intrafamilial child sexual abuse offenders could be distinguished from rapists by their responses to the MOLEST scale. Also, in a sample of incarcerated sexual offenders, 33 child molesters revealed significantly higher scores on the German version of the MOLEST scale (M = 76.79, SD = 18.97) than did rapists (Rambow, Elsner, Feelgood, & Hoyer, 2008). In contrast, Arkowitz and Vess (2003) reported that the MOLEST scale did not distinguish between rapists and child sexual abuse offenders adequately, though the offenders did differ from non-offending controls. They reported a mean score of 68.9 (SD = 18.6) for their sub- group of 86 child molesters.

Empathy for Children Scale (Schaefer & Feelgood, 2006). The scale is a modified version of the Child Molester Empathy Measure (Fernandez & Marshall, 2003; Fernandez, Marshall, Lightbody, & O'Sullivan, 1999) that uses scenarios to assess both cognitive and emotional empathy of child sexual abuse offenders with respect to a "stranger child sexual abuse victim", and "own child sexual abuse victim". For men with no contact victims, such as child pornography only offenders, the "own child sexual abuse victim" scenario in the Empathy for Children Scale is changed to a scenario describing an imagined child against whom the person sexually offends. The scale has 50 items and is approximately half the length of the Child Molester Empathy Measure. The present study adds the scores of the emotional victim empathy subscales only. Higher scores indicate more emotional victim empathy deficits (Cronbach's α =.96). No normative data for the German version of the Empathy for Children Scale are available. Mean and standard deviation for the emotional victim empathy deficit subscale are only available for a German sample of 33 imprisoned child molesters (M = 39.18, SD = 21.19; Feelgood & Hoyer, 2008, unpublished raw data).

Sexual Self-regulation Problems

Sexual Behavior Involving Minors Scale (SBIMS). This measure consists of eight items regarding the frequency of the specified sexual behavior within the past 6 months (see Appendix A), rated on a 5-point Likert-type scale ranging from 1 (never) to 5 (daily). Higher scores

indicate a greater frequency of the specified behavior. Three items pertain to child sexual abuse (Cronbach's α = .65). Four items pertain to sexual preoccupation in terms of frequency of masturbation to different kinds of sexual fantasies involving minors (Cronbach's α = .72), and one item assesses frequency of child pornography use. There was a positive correlation between the four sexual preoccupation items and the child sexual abuse subscale of the Coping Using Sex Inventory (Cortoni & Marshall, 2001; $r(153) = .47$, $p < .01$).

High Risk Situations Test (Marques, Day, Nelson, Miner, & West,1991). This mea- sure evaluates knowledge of potentially risky situations with regard to sexual offending, with 58 items rated on a 5-point Likert-type scale (Cronbach's α = .97). Individuals with higher scores perceive themselves at higher risk to (re)offend, because they recognize more risky situations they need to avoid or cope with appropriately in order to avoid offending. No normative data for the High Risk Situations Test are known to the authors.

Self-efficacy Scale Related to Minors (SESM). This 30-item scale consists of two sub- scales (see Appendix B), rated on a 4-point Likert-type scale ranging from 1 (not at all true) to 4 (exactly true). According to the health action process approach (Schwarzer, 2001), this scale assesses an optimistic sense to control, which becomes important both before and after a person has formulated an intention to control his sexual behavior. The 10-item Initial Self-Efficacy subscale assesses the self-perceived ability of the respondent to implement sexual self-control regarding prepubescent or pubescent children and is assumed to predict an intention to control sexual urges. Higher scores indicate greater deficits in the perceived ability to implement sexual self-regulation (Cronbach's α = .85).

The 20-item Coping Self-Efficacy subscale assesses beliefs about one's ability to cope with challenges to control of sexual urges regarding prepubescent or pubescent children, and is assumed to predict the degree of therapeutic change. Higher scores indicate greater deficits in the perceived ability to maintain sexual self-control (Cronbach's α = .94). There is a positive correlation between the Coping Self-Efficacy subscale and the child sexual abuse subscale of the Coping Using Sex Inventory (Cortoni & Marshall, 2001; $r(153) = .47$, $p < .01$).

General Self-regulation Problems

NEO-FFI Conscientiousness (from NEO-PI Personality Inventory-Form S; Original version: Costa & McCrae, 1985; German version: Borkenau & Ostendorf, 1993). The Conscientiousness subscale (Cronbach's α = .87) reflects a need for achievement, discipline, and dutifulness and is included as a measure of general self-regulation. The scale uses 12 items rated on a 5-point Likert-type scale, with an average item score ranging from 0 to 4. In the present study all item scores have been reversed, so higher scores indicate less conscientiousness and, therefore, a greater willingness to violate rules and engage in undisciplined or nonconforming behavior. In the population-based sample of 966 German males reported by Borkenau and Ostendorf (1993), the reversed average item score on conscientiousness was 1.44 (SD = 0.62).

Additional Factors

Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1999; German version: Kaelin, 1995). The 24-item inventory assesses emotional, avoidance, and task- oriented coping styles in response to stress, with 24 Likert-type items rated on a 5-point scale. The present study focused on the "task oriented coping style" (8 items) subscale. All item scores have been reversed. Higher scores indicate less task-oriented, less active approaches to deal directly with a problem (Cronbach's α = .92). Kaelin (1995) reported normative data for "task-oriented coping style deficits" for a sample of 505 Swiss job starters with a mean of 11.76 (SD = 4.64).

Balanced Inventory of Desirable Responding (Paulhus, 1991; German version: Musch, Brockhaus, & Bröder, 2002). The measure consists of two 10-item subscales rated on a 7-point Likert-type scale, with higher scores reflecting a greater tendency to desirable responses. The first subscale reflects positive self-deception, which is a tendency to think more positively of oneself than is realistic. The second subscale reflects impression management, which is a measure of socially desirable responding (Cronbach's α = .62). We analyzed the reversed scores of the impression management subscale for this study. Higher scores indicated a lower tendency to present oneself in a more positive light to others. Musch et al. (2002) reported norms for a gender-mixed sample

of students (160 ≤ N ≤ 166) with a mean score of 47.8 (SD = 8.6) for a lack of impression management. No differences were found between scores for males and females. Mean and standard deviation for a lack of impression management are also available from a German sample of 33 imprisoned child molesters (M = 38.70, SD = 10.85; Feelgood & Hoyer, 2008, unpublished raw data).

Procedure

The study was approved by the Institutional Review Board of the university clinic where participants were assessed and treated. Data were collected as part of an ongoing treatment project aimed at preventing child sexual abuse by offering 1-year cognitive-behavioral treatment, including sex-drive-reducing medication, to help- seeking pedophiles and hebephiles at risk to offend (see Beier et al., 2009). All participants responded to an extensive German media campaign targeting men living in the community who were both aware that they were sexually attracted to prepubescent or pubescent minors and concerned about this attraction (see Beier, Schaefer, Goecker, Neutze, & Ahlers, 2007). Respondents were screened using a structured telephone interview, then participated in a 90-min, semi-structured clinical interview, and finally completed a battery of paper-and-pencil questionnaires. Information on sexual history and sexual preference was obtained in the clinical interview. Criminal history was assessed both during the screening and the clinical interviews. A case conference was held by three to six staff members to reach decisions regarding admission to the program, based on information from the screening and clinical interviews.

Pedophilia was diagnosed if, over a period of at least 6 months, the person reported recurrent and intense sexual thoughts, fantasies, or urges involving prepubescent children, as well as clinically significant distress or impairment as a result of this sexual interest in children; thus, all pedophiles in this sample met the diagnostic criteria of the most recent Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR: American Psychiatric Association [APA], 2000). A growing body of research suggests hebephilia as a sexual attraction to pubescent children may be a distinct sexual preference from pedophilia (Blanchard & Barbaree, 2005; Blanchard et al., 2009; Cantor,

Blanchard, Robichaud, & Christensen, 2005). Hebephilia is not specifically recognized in the DSM-IV-TR, however, but could meet the criteria for the diagnosis of "paraphilia not otherwise specified." Blanchard (2010) has proposed pedohebe- philia as a single diagnostic category for DSM-V, further specifiable into a "pedophilic type" or a "hebephilic type."

Thus, hebephilia was diagnosed if the participant reported that pubescent children rather than prepubescent children were the focus of sexual thoughts, fantasies, or urges, and concomitant distress or impairment. A history of sexual interactions with children without admission of concomitant sexual thoughts, fantasies, or urges was not considered to be sufficient for the diagnosis of pedophilia or hebephilia. Sexual gender preference was coded according to the gender of persons that figured predominantly in the participant's sexual fantasies during masturbation, irrespective of age.

Results

Group Classification

All 155 participants were classified into groups based on their self-reported lifetime offense history, excluding the most recent 6 months. The 18 individuals who provided only partial information on lifetime offending were excluded from the following group comparison. The remaining 137 participants were classified based on their prior use of child pornography only (n = 42), prior child sexual abuse only (n = 45), or prior involvement in both kinds of offending (n = 50). Based on their offending activity in the past 6 months, the same 155 participants were additionally classified into one of three groups: recently inactive participants (n = 40), recent child-pornography-only offenders (n = 64), and recent child sexual abuse offenders (n = 51). For the 51 men who had committed a child sexual abuse offense, 39 had had direct sexual contact with a child, 7 exposed themselves or masturbated in the presence of a child, and the remaining 5 had sexual interactions with a child involving sexual conversations, showing pornography, or taking porno- graphic photos. Some of the child sexual abuse offenders also used child pornography. In total, approximately one fifth (21.9%) of the sample had viewed child pornography seldom or monthly,   while

another third (36.7%) had viewed child pornography daily or weekly.

Statistical Analysis

To confirm the assignment of our variables to their respective domains, a principal components analysis was conducted. Factors were identified according to two criteria:

(1) the Kaiser criterion of dropping factors with Eigenvalues under 1 (Kaiser, 1960); and (2) examination of the Cattell scree plot (Cattell, 1966). Inspection of the scree plot and Eigenvalues suggested that a 4-factor solution was optimal, explaining 61.3% of the total variance. Examination of the variable loadings suggested the following labels: Factor 1 "emotional deficits"; Factor 2 "offense-supportive cognitions"; Factor 3 "sexual self-regulation problems"; and Factor 4 "nonconformity". Table 1 shows the six largest Eigenvalues of the factor analysis, explained variances, and variable loadings on the 4-factor solution. The self-efficacy subscales loaded onto different factors, with Initial Self-Efficacy loading more strongly on offense-supportive cognitions, while Coping Self-efficacy loaded onto sexual self-regulation. With the exception of Impression Management, which loaded on both Factors 3 and 4, the variables loaded differentially on the four factors.

Pearson correlations revealed that a lack of desire to impress others in a socially desirable manner correlated with risk awareness (r (155) = .248, $p < .01$) and, as expected, with low conscientiousness (r (155) = .244, $p < .01$). There were, however, no significant correlations between a lack of impression management and total life- time child pornography (r (145) = .159, $p = .057$) or child sexual abuse offense history (r (147) = .063, $p = .45$) or any other outcome variables. Nonetheless, the social desirability scores were covaried in the analyses and made no difference to the outcome. Therefore, analyses are reported without this covariate.

The three lifetime history groups and three recent behavior groups, respectively, were compared on the variables of the four factors using multivariate analysis of variance, with Scheffé post hoc comparisons set at the .01 level of significance. Using Hotelling's trace statistic, the full-factorial MANOVA revealed that there was a significant multivariate difference between the three lifetime history groups (T2 = 0.770, F (28,

3.298), p < .001, η2 = .278) and the three recent behavior groups (T2 = 0.592, F (28, 2.917), p < .001, η2 = .228).

Group Comparisons

The results of the comparisons of the three lifetime offense history groups and the three recent offending groups are reported in Table 2. No group differences were found for the groups defined by lifetime offense history. The groups did differ in age, with child-sexual-abuse-only offenders being significantly older than child-pornography-only offenders. Overall, lifetime offenders in the present sample showed elevated scores (i.e., indicating higher psychological problems) compared to reported norms or mean scores obtained from other offender samples, except for child identification, lack of conscientiousness, lack of impression management, and offense supportive cognitions as measured by the Bumby MOLEST scale.

With respect to recent offending, the groups only differed with respect to risk awareness, with recent child sexual abuse offenders demonstrating significantly more awareness of risky situations than recent child pornography offenders or recently inactive participants. Of the demographic and sexual interest variables listed in Table 3, three comparisons were statistically significant: As predicted, recent child sexual abuse offenders were more likely to be unemployed than recent child pornography offenders or recently inactive participants. Also, the vast majority of recent child sexual abuse offenders admitted prior child sexual abuse offenses, with or without additional child pornography offenses. Of the recently inactive participants, more than three quarters admitted previous offenses, with the majority having committed child sexual abuse offenses; the remaining quarter, however, did not provide any information about their prior offense history. Finally, recent child sexual abuse offenders were more likely to be previously known to the criminal justice system for sexual offenses. Three quarters of the child-pornography-only offenders reported being officially undetected and 51% of the recent child sexual abuse offenders had no criminal record. In order to examine the influence of sexual age preference, the recent activity group comparisons were repeated separately for pedophiles (n = 110) and hebephiles (n = 45). These data are not presented in the tables. The three groups of pedophiles did not differ with respect to

dynamic risk factors. Though the group sizes were small, hebephiles who committed recent child sexual abuse offenses, however, scored lower on Initial Self-Efficacy deficits than recently inactive hebephiles (p = .007).

Contrary to our predictions, the overall pattern of findings was characterized much more by similarities across the groups than by differences. There were no significant differences on any of the dynamic risk factors. There were some group comparisons, however, that we consider to be trends (.01 < p < .05) to be examined in further research. Lifetime history groups tended to differ in sexual preoccupation, with child sexual abuse only offenders scoring lower than the other two groups (p = .018). Prior child-pornography-only offenders also scored lower than child-sexual-abuse-only offenders on offense supportive cognitions as measured by the Bumby MOLEST scale (p = .019). Recent child sexual abuse offenders tended to score lower on Initial Self-Efficacy deficits (p = .018) and higher on Coping Self-efficacy deficits (p = .025) than recently inactive participants. Pedophiles who committed recent child sexual abuse offenses tend to be older (p = .026) and display higher risk-awareness (p = .026), than recently inactive pedophiles.

Discussion

In line with previous comparison studies, child sexual abuse offenders were older, more often known to the criminal justice system in the past, and less often employed than child-pornography-only offenders (Bates & Metcalf, 2007; Elliot et al., 2009; Webb et al., 2007). We found high levels of psychological problems in all offender subgroups in this sample. Overall, however, our findings were characterized more by similarities across the groups than by differences, and some of these findings were not consistent with our predictions or results of previous comparison studies. The results will be further dis- cussed along the four empirically identified dimensions: emotional deficits, offense- supportive cognitions, sexual self-regulation problems, and nonconformity.

Emotional deficits. Comparisons based on either lifetime offense history or recent offending activity did not reveal any group differences in emotional deficits. Thus, our data are not consistent with arguments that emotional deficits are crucial factors in child pornography offending (see Davis, 2001; Middleton, Elliot, Mandeville-Norden, & Beech, 2006) and

not consistent with previous studies that found child sexual abuse offenders score higher on emotional deficits than child pornography offenders (Bates & Metcalf, 2007; Webb et al., 2007). Compared to a normative sample of German males, our sample of predominantly undetected offenders had elevated levels of depressed mood. This finding is consistent with several studies which found elevated scores of depression in convicted child pornography and/or child sexual abuse offenders compared to norms (Laulik et al., 2007; Raymond et al., 1999; Stinson et al., 2005).

Offense-supportive cognitions. Group comparisons based on either recent activity or lifetime offense history failed to distinguish offenders with respect to maladaptive cognitions, perceived ability to control sexual urges, or victim empathy. Previous comparison studies, in contrast, have found that child pornography offenders score lower in offense-supportive attitudes and victim empathy deficits, than child sexual abuse offenders (Bates & Metcalf, 2007; Elliott et al., 2009; Webb et al., 2007). Recent child sexual abuse offenders in the present study tended to perceive less deficits in their ability to initiate sexual self-control than recently inactive participants. Thus, recent child sexual abuse offenders are assumed to have a greater intention to control their sexual urges, but this comparison was statistically significant only when examining the subgroup of hebephilic participants.

One possible explanation of the similarity across groups in the present study is the measure we used. Different types of offending may involve different types of cognitions. For example, Howitt and Sheldon (2007) found that child sexual abuse and child pornography offenders differed only on cognitions pertaining to children as being sexual beings; no group differences were found for offense justifications. The MOLEST scale that we used may measure justifications more than it does other kinds of offense-related cognitions (Arkowitz & Vess, 2003).

With respect to victim empathy deficits, our results may reflect differences in sample composition. Bates and Metcalf (2007) compared detected child pornography offenders to a mixed group of sexual offenders who had sexually offended against children, sexually assaulted adults, or committed noncontact offenses such as indecent exposure. Thus, the comparison group most likely included fewer pedophiles or hebephiles, and the findings reported by Bates and Metcalf may reflect the empathy deficits of detected sex offenders who

are not sexually interested in children.

Sexual self-regulation problems. No measures of sexual self-regulation problems dis- tinguished lifetime offender groups or recent child pornography only offenders from recently inactive participants. These findings are inconsistent with previous studies that found child pornography offenders show more sexual self-regulation problems, greater sexual arousal to children, and more sexual fantasies than child sexual abuse offenders (Elliot et al., 2009; Seto et al., 2006; Webb et al., 2007). Our results may reflect the fact that all of our study participants were self-referred for treatment, suggesting that they were genuinely motivated to refrain from offending. Recent child sexual abuse offenders in the present study perceived themselves to be at significantly greater risk to reoffend than recent child pornography offenders or recently inactive participants. This likely reflects the fact that they recently offended against a child and thus their risk was quite salient.

Nonconformity. There were no significant differences on measures of lack of conscientiousness, lack of task-oriented coping, or lack of impression management for either comparison. In contrast, Webb et al. (2007) found child pornography only offenders scored higher on impression management than child sexual abuse offenders.

Task-oriented coping style and impression management were correlated with conscientiousness scores. Individuals who scored high on impression management also tended to see themselves to be at lower risk to reoffend. One explanation for this finding is that participants who tended to present themselves in a socially desired manner also tended to present themselves as higher in conscientiousness and more task-oriented in coping style than they actually were. As the impression management scale is suggested to be particularly responsive to situational demands, results could reflect an overall tendency of self-referred individuals to perform well in the situational context of a selection setting for a treatment   program.

The Importance of Sample Composition

The similarities across groups defined by offending behavior in our sample of help- seeking paraphilic individuals suggest that the relevance of dynamic risk factors identified in previous research may depend on whether an individual is detected at the time of assessment. In particular,

results for sexual self-regulation and offense-supportive cognitions may reflect differences between self-referred individuals who contacted our outpatient program compared to convicted sex offenders completing prescribed treatment. Self-referred individuals are likely to be highly motivated to change, whereas at least some of the convicted offenders may be participating in treatment solely in order to win transfer to a lower-security setting or to improve their chances of parole. Risk awareness and self-efficacy are suggested to be important motivational factors in many different models of behavioral change (Ajzen, 2005; Bandura, 1997; Schwarzer, 2001).

Differences in sample composition with respect to sexual age preference may also explain the similarities across our comparison groups. As previously mentioned, Bates and Metcalf (2007) compared child pornography offenders to a mixed group of offenders, only some of whom would qualify for a diagnosis of pedophilia or paraphilia not otherwise specified. Webb et al. (2007), Sheldon and Howitt (2008) as well as Elliot et al. (2009) recruited offenders who had victims up to the age of 16 years, and thus were less likely to include pedophiles or hebephiles. Some of the differences observed in previous studies may reflect differences between pedophilic and non-pedophilic offenders rather than between different types of offenders.

Study Limitations

As it turned out, our lifetime history comparisons did not include a group who had never committed child pornography or child sexual abuse offenses, so we could not identify any factors that distinguish pedophiles or hebephiles who have ever acted upon their sexual interests by committing sexual offenses from those who did not. Because the sample was help-seeking, one might have expected few self-identified pedophiles or hebephiles to come forward if they had never engaged in any behavior that put them at risk of criminal prosecution.

A second limitation is that some of our study variables may have been conflated with group membership. For example, sexual preoccupation was assessed in terms of frequency of masturbation to different kinds of sexual fantasies. If sexual fantasy content is associated with viewing pornography, then masturbation, sexual fantasies, and pornography use

would be expected to be inter-related, and we would, therefore, not be surprised that child pornography offenders scored higher on this variable than other men.

Another issue is that we started with only one measure of general self-regulation problems (the reversed Conscientiousness subscale of the NEO-FFI), despite the importance of this domain in the dynamic risk factor literature. Another limitation of this study is its reliance on self-report. For example, we had no official records of the participants' criminal history to confirm that the lifetime or recent activity group classifications were correct. Inasmuch as it is more likely that a participant would deny sexual contacts with children that actually occurred rather than admit to sexual contacts that had not occurred, a tendency to minimize previous or recent offending would be expected to attenuate any group differences that were observed. We did not find, however, significant correlations between impression management scores and offense history.

The sample size was adequate for principal components analysis, but the factor structure that was revealed may not be robust upon cross-validation. Finally, this study was cross-sectional in design. Although group differences may suggest factors that explain child pornography or child sexual abuse offending, longitudinal designs involving multiple assessments of the study variables are needed to shed more light on the origins of offending.

Future Research

Being sexually interested in children does not necessarily lead to sexual abuse of children. Some men express their pedophilic or hebephilic interests by viewing and masturbating to child pornography or to sexual fantasies about children, but do not have sexual contacts with children. Other men, however, do express their interests by committing child sexual abuse offenses. Group comparisons can shed light on the factors that distinguish those who commit child sexual abuse from those who do not. Pedophilia and hebephilia are important motivations for sexual offending, but whether these motivations are acted upon depends on other factors, including opportunity (Smallbone, Marshall, & Wortley, 2008). For example, we found that child pornography offenders were younger and more likely to be employed than child sexual abuse

offenders. Our interpretation is that younger employees today are better educated, more often computer literate, accustomed to using the Internet, and are more likely to have easy access to computers at work and at home. In contrast, older and unemployed individuals would tend to be less educated, less knowledgeable about computers and the Internet, and, therefore, less able to access child pornography.

Our results suggest that factors identified in research with detected child sexual abuse and child pornography offenders may not generalize to undetected offenders. More studies comparing detected and undetected child pornography and child sexual abuse offenders could shed more light on the generalizability of dynamic risk factors identified in previous research using detected (and primarily child sexual abuse) offenders. It is noteworthy that child pornography offenders in this study were less likely to have been detected by the criminal justice system than child sexual abuse offenders, suggesting the possibility of an interaction between detection status and offender type on dynamic risk.

Acknowledgments

Note

Child sexual abuse can include a range of behaviors, including showing pornography to a child, engaging in sexual talks with a child, undressing or masturbating in the presence of a child, as well as more intrusive physical acts, such as fondling, oral sex, or penetration (APA, 2007).

Tables

Table 1. Principal Components Loadings from Measures of Dynamic Risk Factors

Variables[a]	Four-factor solution			
	Emotional deficits	Offense-supportive cognitions	Sexual self-regulation problems	Nonconformity
Neuroticism from NEO-FFI	**0.858**	−0.118	0.169	0.236
ADS Depression Scale	**0.785**	−0.218	−0.042	0.137
UCLA Loneliness Scale	**0.742**	0.196	0.017	0.268
CIS-R Child Identification Scale	**0.615**	0.350	0.354	0.041
Victim Empathy deficits from ECS	0.066	**0.838**	0.156	−0.002
Bumby MOLEST scale	0.183	**0.663**	0.360	−0.178
Lack of Initial Self-efficacy (SESM)	−0.136	**0.573**	−0.026	0.218
HRST High Risk Situation Test	0.083	−0.010	**0.821**	0.113
Lack of Coping Self-efficacy (SESM)	0.039	0.321	**0.743**	0.124
Sexual preoccupation[b] from SBIMS	0.244	0.239	**0.593**	−0.274
Lack of conscientiousness (NEO-FFI)	0.332	0.161	0.112	**0.773**
Task-oriented coping style deficits (CISS)	0.336	0.082	0.104	**0.753**
Lack of impression management (BIDR)	0.015	−0.277	**0.419**	**0.483**
Eigenvalue	3.11	2.17	1.43	1.26
% of variance	23.96	16.66	10.98	9.72

$N = 155$.

Note: Loadings of .40 or greater are bolded; Eigenvalue of Factor 5 = .992 (7.63% of variance), Eigenvalue of Factor 6 = .772 (5.93% of variance).

a. ECS = Empathy for Children Scale; SESM = Self Efficacy Scale related to Minors; SBIMS = Sexual Behavior Involving Minors Scale.

b. Sexual fantasies related to minors in terms of masturbation frequency; CISS = Coping Inventory for Stressful Situations; BIDR = Balanced Inventory of Desirable Responding.

Table 2. Group Comparisons on Dynamic Risk Factors for Recent (Past 6 Months) and Prior Lifetime Offense History

	Sexual offenses against children							
	Prior lifetime offense history[a] ($n = 137$)				Recent offense activity ($n = 155$)			
	Child pornography only ($n = 42$)	Child sexual abuse only ($n = 45$)	Mixed offenses[b] ($n = 50$)		Inactive ($n = 40$)	Child pornography only ($n = 64$)	Child sexual abuse[c] ($n = 51$)	
Risk factors[d]	M^e (SD)	M (SD)	M (SD)	F(2)	M^a (SD)	M (SD)	M (SD)	F(2)
Age	35.52 (10.21)	45.13 (13.02)	39.98 (8.56)	8.81*	38.10 (11.80)	38.90 (10.30)	42.84 (12.90)	2.36
Emotional deficits								
Neuroticism from NEO-FFI	2.22 (0.70)	2.28 (0.78)	2.24 (0.74)	0.08	2.28 (0.81)	2.30 (0.71)	2.21 (0.73)	0.21
ADS Depression Scale	18.81 (10.68)	19.71 (12.49)	16.84 (9.30)	0.88	17.70 (11.08)	17.39 (9.71)	19.45 (11.23)	0.59
UCLA Loneliness Scale	51.26 (11.36)	49.73 (11.91)	48.02 (12.82)	0.83	50.05 (11.00)	51.86 (11.87)	46.80 (12.36)	2.62
CIS-R Child Identification Scale	17.74 (6.01)	19.22 (5.78)	19.02 (7.20)	0.69	19.55 (6.45)	17.83 (5.83)	19.37 (6.33)	1.31
Offense-supportive cognitions								
Victim empathy deficits from ECS	51.76 (22.54)	48.82 (20.81)	41.46 (16.56)	3.31	45.43 (21.54)	47.86 (19.18)	45.43 (20.00)	0.28
Bumby MOLEST scale	71.64 (18.43)	83.36 (21.17)	77.42 (17.76)	4.07	71.80 (19.64)	76.86 (16.58)	82.31 (20.16)	3.61
Lack of Initial Self-efficacy (SESM)	18.60 (4.93)	19.18 (7.23)	17.50 (5.35)	0.99	20.18 (7.53)	18.95 (5.18)	16.78 (4.80)	4.13
Sexual self-regulation problems								
Risk awareness from HRST	96.81 (36.56)	96.42 (35.68)	108.20 (39.27)	1.54	89.45 (34.20)	95.03 (33.31)	114.51 (38.45)	6.73*

(continued)

Table 2. (continued)

	Sexual offenses against children							
	Prior lifetime offense history[a] (*n* = 137)				Recent offense activity (*n* = 155)			
	Child pornography only (*n* = 42)	Child sexual abuse only (*n* = 45)	Mixed offenses[b] (*n* = 50)		Inactive (*n* = 40)	Child pornography only (*n* = 64)	Child sexual abuse[c] (*n* = 51)	
Lack of Coping Self-efficacy (SESM)	39.29 (13.32)	38.40 (14.51)	39.80 (12.03)	0.13	34.78 (11.91)	39.52 (12.17)	42.24 (14.39)	3.80
Sexual preoccupation from SBIMS	10.74 (4.12)	8.38 (3.83)	10.66 (3.63)	5.48	9.15 (4.39)	10.59 (3.64)	9.59 (3.69)	1.95
Nonconformity								
Lack of conscientiousness (NEO-FFI)	1.68 (0.62)	1.61 (0.58)	1.52 (0.58)	0.87	1.73 (0.61)	1.65 (0.61)	1.57 (0.61)	0.81
Lack of task-oriented coping (CISS)	19.86 (4.55)	22.42 (6.57)	19.78 (5.83)	3.12	21.42 (6.19)	19.98 (5.26)	21.73 (6.30)	1.45
Lack of impression management (BIDR)	42.91 (8.01)	40.87 (9.04)	45.28 (9.31)	2.97	40.60 (9.02)	44.07 (8.20)	43.80 (9.60)	2.13

a. Missing data for prior sexual offense history (*n* = 18).
b. Child sexual abuse with additional child pornography offending.
c. Child sexual abuse with or without child pornography offending.
d. ECS = Empathy for Children Scale; SESM = Self Efficacy Scale related to Minors; SBIMS = Sexual Behavior Involving Minors Scale; CISS = Coping Inventory for Stressful Situations; BIDR = Balanced Inventory of Desirable responding.
e. Mean score differences between two groups are significant at *$p < .01$ (Scheffé-test; post hoc).

Table 3. Comparisons on Descriptive Variables for Recent (Past 6 Months) Offense Activity (N = 155).

Demographic data	Recent sexual behavior related to minors				
	Inactive (n = 40)	Child pornography only (n = 64)	Child sexual abuse (n = 51)[a]	df	χ^2
Sociodemographic data (%)					
Years of education >10	14 (35.0)	28 (43.8)	20 (39.2)	2	0.92
Employed	27 (67.5)	51 (79.7)	25 (49.0)	2	12.0**
Single status	27 (67.5)	44 (68.8)	30 (58.8)	2	1.36
Has children	15 (37.5)	18 (28.1)	23 (45.1)	2	3.91
Sexual age preference (%)					
Pedophilia	30 (75.0)	47 (73.4)	33 (64.7)	2	1.48
Hebephilia	10 (25.0)	17 (26.6)	18 (35.3)		
Sexual orientation (%)					
Homosexual	19 (47.5)	26 (24.6)	24 (47.1)		
Heterosexual	14 (35.0)	34 (53.1)	22 (43.1)	4	5.27
Bisexual	7 (17.5)	4 (6.2)	5 (9.8)		
Prior lifetime sexual offenses (%)[b]					
Child sexual abuse only	15 (48.4)	8 (14.3)	22 (44.0)		
Child pornography use only	11 (35.5)	28 (50.0)	3 (6.0)	4	33.06**
Mixed offenses	5 (16.1)	20 (35.7)	25 (50.0)		
Previously known to justice (%)					
Child pornography offenses	2 (5.0)	7 (10.9)	2 (3.9)	4	15.72**
Child sexual abuse offenses	9 (22.5)	9 (14.1)	23 (45.1)		

a. Child sexual abuse with or without child pornography offending.
b. Missing data for prior sexual offense history (percentages are adjusted to N = 137).
*p < .05. **p < .01.

Appendix A: SBIMS Measure

Instruction:

The following questionnaire aims at your recent sexual behavior toward prepubescent and pubescent children within the past six months. In the questions you will find examples of sexual activities you may have experienced in real life or fantasized about during masturbation.

For each sexual activity described, please indicate the frequency of occurrence by circling the corresponding number. The scale ranges from 1 to 5 (1 = never; 2 = seldom; 3 = monthly; 4 = weekly; 5 = daily).

How frequently did you engage in…

1. *…sexual contact with a prepubescent/pubescent child such as sexual intercourse (vaginal, anal, oral), fondling or kissing of genitals or mutual masturbation?*
       in fantasies during masturbation
       in real life behavior
2. *…sexual activities such as indecent exposure or masturbating in the presence*
   of a prepubescent/pubescent child?
       in fantasies during masturbation
       in real life behavior
3. *…sexual interactions with a prepubescent/pubescent child, such as sexual talks, showing pornography, or recording pornographic images of children?*
       in fantasies during masturbation
       in real life behavior
4. *…non-sexual physical contact with a prepubescent/ pubescent child such as washing, caressing or help putting on cream?*
       in fantasies during masturbation
5. *How frequently did you use visual depictions of prepubescent/pubescent children engaged in sexual activities such as pornographic photographs, films,*
   Internet-links. . .?

Please note:

The term "prepubescent child" refers to a child before hitting puberty, identifiable by the absence of mature bodily features: absence of bust, no pubic or axillary hair, slender physique, voice yet to break, small, immature genitals, etc.

The term "pubescent child" refers to a child in puberty, showing development of mature sex specific bodily features: small, immature bust, little pubic and axillary hair, developing sex specific physique, gangly proportions, etc.

Appendix B: SESM Measure

Instruction:

You may have sexual urges toward minors, which you would like to control in your fantasies, during masturbation, and/or in your behavior. We are aware that controlling such urges (e.g., to consume child pornography, get involved sexually with a minor, etc.) can pose great difficulties.

In the following statements you will find typical examples of barriers you may encounter, and which you would have to overcome in order to initiate or maintain sexual self-control. Please indicate your level of agreement with these statements by circling that number that best describes your situation. The scale ranges from 1 to 4 (1 = not at all true; 2 = hardly true; 3 = somewhat true; 4 = absolutely true).

I am convinced that I can initiate control of my sexual urges toward minors

immediately…

    1….even if I have to enforce sexual self control.

    2….even if I have to take sex drive reducing drugs regularly.

    3….even if I have to participate in weekly psychological treatment sessions.

    4….even if I have to spend time daily.

    5….even if I have to disclose myself with respect to my past life and

problems.

6….even if I have to disclose my inner most feelings and fantasies.

7….even if I have to question my attitudes and beliefs.

8….even if I have to practice persistently.

9….even if I am criticized by other pedophiles.

10….even if I have to get involved with other people.

I am convinced that I can maintain control of my sexual urges toward minors permanently…

1….even if I have strong sexual desires.

2….even if I have worries and problems.

3….even if I feel lonely.

4….even if I need support urgently.

5….even if I am very busy.

6….even if I lack love and caring

7….even if I conflict with others (e.g., partner, family, colleagues.)

8….even if I have the opportunity to view images of minors.

9….even if I am alone with a minor.

10….even if minors are entrusted to me.

11….even if a minor wishes to be close to me.

12….even if I receive little support in my attempts to control my sexual urges.

13….even if other pedophiles try to convince me of the opposite.

14….even if I depend on sex drive reducing drugs for a long time.

15….even if I can only experience intimacy with an adult.

16….even if I have trouble getting an erection.

17….even if I need several attempts before succeeding.

18….even if I have to look for help proactively.

19….even if I am not accepted by anyone.

20….even if I feel insecure

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