Are Pedophiles with Aggressive Tendencies More Sexually Violent?

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Pedophiles use varying degrees of persuasion, coercion, and physical force in their sexual assaults. Pedophiles may also display aggressiveness and characteristics of hostility in nonsexual areas of their behavior. This study (N = 263) investigates the relationship between pedophiles with aggressive tendencies and the degree of sexual violence in their pedophilic acts. The degree of sexual violence was rated subjectively after a comprehensive psychiatric and psychosexual assessment and obtaining collateral information from police reports and witness statements. The degree of sexual violence was also rated more objectively using the penile plethysmography. Strict DSM-IV pedophilic disorder criteria were adopted for this study. The authors discuss whether sexual violence in a pedophilic population is focused to sexual areas or tends to be more generalized in other physically aggressive and hostile areas.

Child molesters are a heterogeneous population group of which pedophiles are considered to be a major subgroup.[1] The DSM-IV diagnostic criteria for pedophilic disorder includes "recurrent intense sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with prepubescent children."[2] The DSM-IV has also incorporated three dimensions to distinguish various subcategories of pedophilia. These include gender of victim (homosexual, heterosexual, and bisexual), exclusivity of the preference for children, and whether this involved familial or nonfamilial children. These dimensions have not yet been fully validated and remain to be tested as to the efficacy of their use in clinical decisions with treatment, management, and disposition.[3] The relevance of these and other dimensions is vital to the understanding of the parameters and motives of child molesters. Clarifying these dimensions would improve the precision, distinctiveness, and reliability of diagnostic entities. In the absence of well-defined groups, accurate decision-making and development and implementation of management strategies for these different diagnostic groups remain unreliable.

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Knight *et al.*[4] reported the use of aggression as a discriminator in child molester typologies. They reported that a subgroup of sadistic child molesters could be discriminated from other child molesters by the amount of violence in their assaults. Cohen *et al.*[5] delineated a subgroup of aggressive child molesters whose crimes contain both sexual and aggressive features. They reported that aggression and violence tend to be focused on sexual areas. Groth and Birnbaum[6] distinguished a group of sadistic child molesters for whom force and aggression had become eroticized and who, therefore, were likely to become brutal in their offenses. This led some authors to hypothesize that pedophiles who use force in molesting children may evidence more hostile and/or aggressive personality traits.[7] The interrelationship of physical aggression and pedophilic behavior lacks clarification in the literature.

Penile plethysmography measurements have been reported to discriminate sexual offenders against children from a normal population and from other sexual offenders.[8–10] Use of penile tumescence measurements in distinguishing various DSM subcategories has also been investigated.[9, 11–14] It has also been reported that penile plethysmographic measurements of physically aggressive child molesters are significantly elevated as compared with a less coercive group of perpetrators.[14, 15] However, both Fedora *et al.*[16] and Hall *et al.*[17] reported that sexually aggressive child molesters did not exhibit different physiological arousal patterns from a group of child sexual offenders who did not use physical force in their sexual assaults. This has led some authors to question the validity of penile plethysmography.[18] Some authors have criticized the usefulness of penile plethysmography because of problems with dissimulation by subjects.[19] Others have highlighted that researchers have made the assumption of an operational link between laboratory assessment and overt pedophilic acts.[20] Critics have also questioned the validity and ethics of penile circumference measurements as they pertain to the legal processes of sexual offenders who molest children.[21] Despite these concerns, penile plethysmography still remains the most reliable objective measure of male sexual arousal.[22] Denial of molestation is commonly encountered among self-reporting child sex offenders, who are known to be notoriously unreliable.[14] There is now an extensive body of literature, spanning a history of over 25 years, that has been developed to substantiate the clinical utility of this instrument in the assessment of child molesters.[23] The potential for falsification of pedophilic sexual arousal is considered substantially less than that with self-reports of child molesters. Freund *et al.*[24] reported that in a group of admitted pedophiles, 95 percent of the subjects showed pedophilic sexual arousal with penile plethysmography. Likewise, Traven *et al.*[20] reported that 93.6 percent of admitted child molesters responded to audiopedophilic cues with tumescence studies. They reported that one-half of their nonadmitting group of child molesters who tested positive with penile plethysmograph later acknowledged their offenses on being confronted with the results of

the physiological studies. Barbaree and Marshall[25] reported that incest offenders tended to be less responsive with pedophilic stimuli as compared with an extrafamilial group of offenders.

The primary purpose of the present study was to assess the hypothesis that there is a significant relationship between groups of pedophiles with aggressive and hostile traits (nonsexual) and the degree of violence in their pedophilic (sexual) acts. This poses an interesting question: are pedophiles with more physically aggressive tendencies more sexually violent?

Methodology

Collection of Data. *Collection of Data During Interviews* Demographic data collected included age, marital status, education and employment status. The number and gender of their victims, history of suicidal behavior, number of past criminal convictions, and previous history of physical violence was also collected. The perpetrator's self-report of the degree of violence of their pedophilic acts, urges, or fantasies was recorded. This was also corroborated by information obtained from police reports and witness statements. The degree of (pedophilic) sexual violence was then rated by the clinician on an incremental six-point scale (hereafter called Sexually Aggressive Scale (SAS)): 1, minor assault—no physical force or injury (fondling, masturbation, kissing); 2, serious assault (penetration of anus or genitals); 3, serious assault with weapon or physical force; 4, serious assault with beating; 5, potential homicide; and 6, homicide.

Questionnaire Subjects were also administered the Buss-Durkee Hostility Inventory (BDHI).[26] The BDHI consists of five assault subscales—assault (ASS), indirect aggression (IA), irritability (I), negativism (NE), and verbal aggression (VA)—designed to measure aggressiveness; and two hostility subscales, resentment (R) and suspicion (S). There is a substantial body of construct validational evidence to support this widely used inventory.[26–29] Edmonds and Kendrick[30] reported on the construct validity of the two personality dimensions, namely aggressiveness and hostility. They assessed these dimensions by analytical techniques and by predictive correlations between aggressiveness and hostility scores. They reported that factor analytic studies of aggressive and hostility factors are stable despite changes in the subject samples. They also reported that concurrent validation studies showed that aggressive ratings differentiated delinquent from nondelinquent schoolboys and that the inventory could discriminate between violent and nonviolent offenders. These studies tend to support the earlier work of Buss,[27] which supported the concurrent validity of the aggressive factor of this inventory (BDHI) and the appreciable degree of the consistency with the ratings.

Penile Plethysmography Penile tumescence was measured using an indium-gallium strain gauge manufactured by Farrell Instruments. A CAT 200 (Farrell Instruments) monitors the conductance changes of the indium-gallium loop corresponding to changes in penile circumference. Data from the CAT 200 are fed

into IBM-compatible computers for printout and storage. Galvanic skin response was monitored simultaneously, also through the CAT 200, using surface electrodes. Stimuli presentation was programmed using software provided by Farrell Instruments (MPV-Fourth, version 3.05). Videotapes were run on a VHS videocassette recorder and viewed on a 14-inch color television. Audiotapes were played to subjects on a portable cassette recorder through stereo headphones.

The order of presentation of stimulus material was the same for all subjects. The videotape was the first stimulus presented, followed by two different series of audiotape narratives designed to assess sexual arousal combined with degrees of aggression/hostility toward children. Because of the "warm-up" effect commonly observed during tests of sexual arousal,[31] stimuli presented first during the session often produce unreliable responses. To mitigate this effect, subjects initially viewed an explicit videotape depicting sex between consenting adults (heterosexual; and possibly homosexual, depending on the subject's sexual orientation). The videotape also facilitated the subjects' attainment of full erection, which was used as a measure of comparison for the responses to the other relevant stimuli. The use of a powerful erotic stimulus as a warm-up effect also serves to prime the subject for the relevant stimuli. Viewing of the videotape serves to diminish some of the subjects' anxieties and heightens their overall arousability.

The audiotapes are based on transcripts provided by Abel *et al.*[14] They consist of two-minute segments of vignettes, each describing sexual activity with a child. The sexual scenarios vary with degree of "consent," coercion, and violence involved in the sexual scenario. The female child series consists of eight categories, and the male child series has nine categories. For each series, there are two equivalent scenarios for each category. The following incrementally forceful or coercive categories are included in both series: child initiates, child mutual, nonphysical coercion of the child, physical coercion of the child, sadistic sex with a child, nonsexual assault of the child, consenting sex with adult females, and sex with a female (male) child relative (incest). The additional category in the homosexual series involves consenting sex with an adult male. One full set (one vignette from each category) is presented with the standard instructions, "allow yourself to become aroused if you feel it." Following this presentation, a comparable set of audiotapes is presented with instructions to the subject to try to suppress his sexual arousal. A separate response for arouse and suppress instructions is recorded for each audiotape category.

Subjects Subjects were all 18 years of age or older and had at least one victim 13 years old or younger. Only those subjects who admitted to their sexual offense or pedophilic problem were included in this study. Strict DSM-IV criteria of pedophilic disorder were adopted as the inclusion criteria for this study. Offenders who were judged to be psychotic or organically brain damaged were excluded from the sample. Subjects with a penile tumescence response of less than five percent of the calibrated full erection on all

of the stimuli were also excluded from the sample. Voluntary participation and written informed consent was obtained from each subject. A total of 284 subjects met these criteria. Twenty-one subjects were excluded from the analysis because of extreme scores, giving a final sample of N = 263.

Procedure

Each subject underwent a comprehensive psychiatric assessment consisting of several interviews of 60 to 90 minutes in duration; self-reports were collaborated with police reports and witness statements. At the conclusion of this assessment, various investigations were requested depending on the individual needs, including neuropsychological assessment, electroencephalogram and computed tomography (CT) scan of the head among others. Following this assessment procedure, subjects were rated by the physician according to the degree of sexual violence. Subjects were then administered the BDHI. On completion of this inventory, subjects underwent penile plethysmography testing.

Data Analysis

Groups of pedophiles were divided into three equal subgroups (low, medium, and high) based on their total BDHI scores. This was also done with the aggregate aggressive and hostility BDHI scores. The series of audiotapes consist of seven pedophilic scenarios for both male and female children depending on the gender orientation of the pedophile. The homosexual audiotapes were used for subjects who assaulted male children, whereas the heterosexual audiotapes were used to calculate assaults on female children. The audiotape series (heterosexual or homosexual) for bisexual child molesters was chosen for use in the analyses by selecting the series with the highest sum of all scores. Within subject, *z* scores were calculated using the 16 audiotape responses (eight tape categories tested under "arouse" and "suppress" instructions). The highest score between the arouse or the suppress instructions was used in the analyses (Table 1). The relationship of these indices and the SAS scores was then compared with subgroups of pedophiles based on their hostility, aggressive, and total BDHI scores.

Table 1
Audiotape Means and Standard Deviations

Tape	Mean *z* Score	Standard Deviation
Child initiate	0.946	0.956
Child mutual	0.800	0.927
Incest	0.323	0.823
Nonphysical coercion	0.265	0.730
Physical coercion	0.150	0.695
Assault	0.059	0.769
Sexual sadism	0.000	0.796
Adult, mutually consenting	1.234	1.239

Results

The total BDHI score was used to divide the sample into low (mean = 13.75; SD = 4.68), medium (mean = 25.38; SD = 3.14), and high (mean = 40.29; SD = 6.91) total hostility groups; approximately one-third of the sample was in each group. Further analyses were also

conducted using groups of low (mean = 2.36; SD = 1.30), medium (mean = 6.46; SD = 1.04), and high (mean = 11.86; SD = 2.26) Hostility (HST), which was calculated by taking the sum of the resentment and suspicion subscales. The sum of the assault, indirect hostility, irritability, negativism, and verbal hostility subscales was used to calculate the low (mean = 10.38; SD = 3.75), medium (mean = 19.41; SD = 2.43), and high (mean = 29.87; SD = 4.91) aggressiveness (AGG) groups, which were also analyzed in this study.

The mean age of the entire sample was 38.5 years (SD = 11.66). The mean age for the total BDHI ($F(2,260) = 15.71$; $p < .0001$), HST ($F(2,260) = 13.24$; $p < .0001$) and AGG ($F(2,260) = 11.46$; $p < .0001$) groups were significantly different. Using Scheffe's test at the .016 level of significance, the low total BDHI group (mean = 43.9; SD = 12.43) was significantly older than the medium (mean = 36.8; SD = 11.15), and the high (mean = 35.0; SD = 9.43) total BDHI groups. The low HST group (mean = 43.0; SD = 12.76) was significantly older than the high HST group (mean = 34.5; SD = 9.91). The low AGG group (mean = 42.8; SD = 13.03) was older than both the medium (mean = 36.8; SD = 11.12) and the high (mean = 35.3; SD = 8.93) AGG groups. Age was not significantly correlated with any of the dependent variables. The mean number of years of education for the sample was 10.9 years (SD = 3.45 years). Additionally, 41.1 percent were married or living in common-law marriages, 21.2 percent were widowed, separated, or divorced, and 37.6 percent were single.

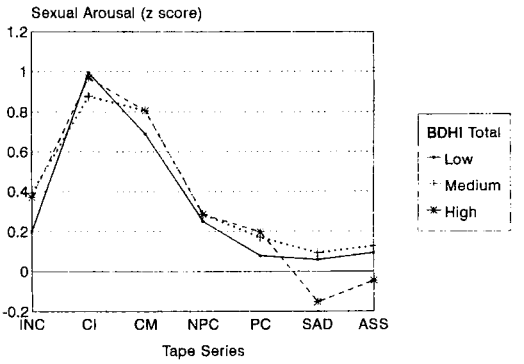

Figure 1. BDHI total and sexual arousal.

Twenty-three subjects were rated as aggressive on the SAS (score of ≥ 2), while the remaining 238 were rated as nonaggressive (SAS score = 1). The proportions of aggressive subjects (SAS ≥ 2) and nonaggressive subjects (SAS = 1) did not differ across total BDHI groups ($\chi^2 = 2.92$; $p > .05$), AGG groups ($\chi^2 = 1.37$; $p > .05$), or HST groups ($\chi^2 = 2.24$; $p > .05$).

A multivariate analysis of variance (MANOVA) was conducted on the z score-transformed penile tumescence responses to the audiotapes in a 3 (TBDHI group, between subject) by 7 (tape, within subject) design. There was a significant effect for tape, but no significant group by tape interaction (Figure 1). The same analysis was conducted using the AGG groups; again there was a tape main effect, but no group by tape interaction (Figure 2).

The same 3 by 7 design was used for the HST groups. There was a significant group by tape interaction ($F(12,1560) = 1.84$, $p = .037$). Tests of simple effects

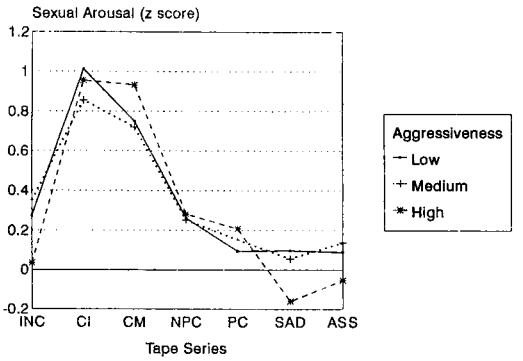

Figure 2. Aggressiveness and sexual arousal.

within the interaction using a .007 significance level yielded a significant effect for the HST group within the physical coercion tape ($F(2,260) = 5.27$; $p = .006$). The high HST group responded significantly more (mean = 0.33; SD = 0.81) to the physical coercion tape than the low HST group (mean = 0.02; SD = 0.60) at the .016 level using Scheffe's test (Figure 3).

Using a .0024 level of significance, the tape main effect for all three MANOVAs was examined using Hotelling's T^2 statistic. The response to the child initiate tape was not higher than the child mutual tape, but it was higher than the other five tapes. The response to the child mutual tape was higher than the other five more coercive tapes. The responses to the incest tape and the non-physical coercion tape were higher than the responses to the assault and sadistic tapes. There were no other differences between the tapes at the .0024 level.

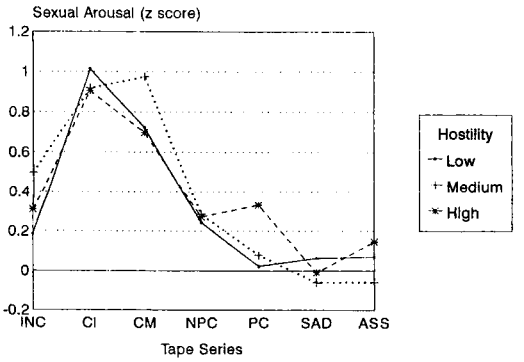

Figure 3. Hostility and sexual arousal.

The total BDHI groups did not differ on the number of reported victims, number of past convictions, history of suicidal behavior, or employment status at time of assessment. They were different on previous history of violence ($\chi^2 = 9.66$; $p < .01$), with a larger proportion of the high total BDHI reporting previous violence (27.1%) compared with the low and medium groups (6.9%, 14.3%).

The AGG groups did not differ on the number of reported victims, number of past convictions, history of suicidal behavior, employment status at time of assessment, or previous history of violence.

The HST groups did not differ on number of victims, history of suicidal behavior, or employment status at time of assessment. They did differ on the number of past convictions. The high HST group had significantly more past convictions (median = 1) than the low (median = 2; Mann-Whitney $U = 1296$, $p < .002$) and medium (median = 0; Mann-Whitney $U = 1147$, $p < .005$) HST groups. They also differed on previous history of violence. Only 7.7 percent of the low HST group had a previous history compared with 20.0 percent of the medium and 23.7 percent of the high HST groups ($\chi^2 = 6.31$; $p < .05$).

Discussion

The degree of violence was rated by self-reports in conjunction with police occurrence reports and witness statements. Denial of sexual behavior is often encountered in pedophiles, and therefore their self-reports are known to be notoriously unreliable. We thus excluded nonadmitters from our sample. Subjects were also rated with more objective physiological arousal measurements using incrementally coercive and forceful pedophilic stimuli. Only subjects who met DSM-IV pedophilic criteria, who by definition were erotically aroused to stimuli involving children, and who had physiological tumescence of greater than 10 percent of estimated full erection were included in the sample. Neither of these two possible measurements of sexual violence bore any relationship to aggressive and hostile tendencies (nonsexual) in our sample.

This study found that pedophiles with aggressive tendencies, based on the five subscale assault scores on the BDHI, showed no significant relationship to the degree of violence in their pedophilic (sex) acts. While one simple effect was significant for the hostility score within the physical coercion tape, this is considered a chance result given that this was the only significant one among so many tests. The overall pattern of arousal (Figs. 1, 2, and 3) does not support the hypothesis of a relationship between hostility group and pattern of sexual response to pedophilic stimuli. Pedophiles with higher aggregate aggressive tendencies or hostility scores on the BDHI showed no greater association to act out in a more sexually violent manner when compared with those pedophiles with low aggressive or hostile tendencies. As expected, analyses of the various measures included in the study revealed that there was a significant association between aggressiveness, based on BDHI scores, and a history of nonsexual violence and number of past convictions. Furthermore, there was no significant association between a history of nonsexual violence or number of past convictions and the degree of sexual violence.

The BDHI measures a variety of aggressive tendencies on the subscales of assault, indirect aggression, negativism, irritability, and verbal aggression. It also has hostility subscales encompassing suspicion and resentment. None of these seven subscales or their aggregate scores bore any significant relationship to the degree of sexual violence in this population group. Colloquially, the descriptive terms of violence, aggression, or aggressiveness hold a range of behaviors for different people (i.e., emotional, verbal, physical, sexual). To avoid these pitfalls, the authors used a structured measure that has documented validity in the literature. Interestingly, there was a lack of association between the assault subscale and the degree of sexual violence. However, this study concurred with previous authors' findings that there is an association between the BDHI and a history of violence (nonsexual).[30] Nevertheless, a limitation of the BDHI instrument becomes apparent in the attempt to quantify the acts, behavior, attitudes, and demeanors with the dimensions of aggressiveness and hostility of people in general.

Our study results tend to support the theory that pedophilic acts are not primarily motivated by aggressive tendencies. We hypothesize, therefore, that the majority of persons with pedophilic disorder do not appear to be primarily driven by needs for aggression or physical violence, but rather by sexual motives. Aggressive tendencies are usually focused with sexual acts and not generalized into other, nonsexual behaviors. Where a higher degree of (sexual) aggressiveness is present, it appears to have an erotic component. In contrast, some authors have hypothesized that most rapists are primarily motivated by the desire for control, aggression, and power, and to a lesser degree by sexual gratification.[32] This popular assumption, however, is not universally accepted.[33] Our results tend to support the DSM-IV assumption that sexual drives and not aggressive needs should be used as the primary diagnostic criterion for the pedophilic disorders. By this definition, pedophiles are primarily motivated by erotic needs for sexual gratification.

A limitation of our study is that only 11.2 percent (23) of our population under study were rated as having acted in a more sexually violent manner than mere touching, fondling, or masturbation. This, however, concurs with the Gebhard *et al.* study (1965)[34] which reported that only 12.2 percent of a group of institutionalized heterosexual pedophiles had significant aggression during their offense(s). Our sample of pedophiles was essentially not physically violent in their sexual acts and their primary *modus operandi* were similar to Abel's[14] scenarios of child initiates and child mutual consent acts of pedophilia. However, our smaller group of sexually violent pedophiles did not differ from the nonviolent group on any of the BDHI scores. Our subjects were primarily referred at the pretrial stage by the courts or their lawyers, and a few by their physicians, for assessment. This is in contrast to an institutionalized population sample of heterosexual child molesters in which it was reported that 58% of offenders had used excessive physical force against the children.[35] However, this Canadian study may reflect a unique sample of offenders who commit more serious crimes, as offenders with sentences greater than two years are disposed to Federal rather than Provincial institutions.

There was no attempt in this study to arrive at a characterological diagnosis of the subjects. Characterological profiles of pedophiles have been found to yield inconsistent results with no support to suggest a common psychological profile.[7, 36, 37] Psychopathy as a clinical entity has recently attracted research interest, but studies have generally found low rates in child molesters. Serin *et al.*[38] reported only 7.5 percent of their sample of child molesters were classified as psychopaths when measured by the Structured Psychopathy Checklist (Revised). Although both psychopaths and pedophiles are goal directed in their violence, which may or may not have a physical element, they differ in the motives or goals (i.e., aggressive versus sexual).[39] Our current study does not support a popular assumption that equates sexual violence with physical violence or places

them on a continuous dimension in this specific paraphilic population.

Construction of an adequate typology of child molesters remains an essential step in research on etiology and prognosis. Subcategories that have discriminating value in practice will provide a basis for more specific treatment and management interventions. Groth and Birnbaum[40] wrote that in the absence of a systematic inquiry of child molesters, stereotypes and myths pertaining to these offenders will continue to prevail. Scientific inquiry on pedophiles and their *modus operandi* in a rational, forceful, and effective manner will provide the basis for more effective assessment and treatment of these individuals. Without such a grounding and its cohesive constructs, the development of a scientific understanding of the domain is impossible.[41] Further research is needed to clarify the sexual motivations of pedophiles and the etiology of their sexual orientation toward children.

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