Patterns of Denial in Sex Offenders: A Replication Study

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To assess whether a robust typology of sex offenders could be established based on the patterns of denial displayed, a previously developed semistructured interview method was used to assess denial in a mixed group of convicted rapists and child molesters. Cluster analysis was used to establish homogeneous groups of sex offenders based on the pattern of denial in each case, with a three-cluster solution emerging as the most appropriate, confirming previous research. The denial groups were compared in relation to objective offense characteristics to assess whether a consistent typology of offenders emerged. Each of the four groups of offenders identified (three groups emerging from the cluster analysis and an "absolute denier" group) corresponded closely with the previously identified typology. However, the authors failed to replicate previously identified differences between the denial groups in relation to independent variables such as offense type. Each group contained both rapists and child molesters and was found to differ quantitatively rather than qualitatively in the pattern of the denial expressed, with attributional style being the most consistent form of denial present in all groups. The authors conclude that denial consists of at least two continuous dimensions, rather than being a dichotomous phenomenon. Differences in the patterns of denial displayed by rapists and child molesters were found to be primarily quantitative rather than qualitative.

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In recent decades, research and treatment programs for sex offenders have focused on denial as a key factor in the precipitation and maintenance of sexually aggressive behavior. In some reports, denial has been conceptualized as a unidimensional phenomenon, with sex offenders described as being either "in denial" or "not in denial" (e.g., O'Donoghue and Letourneau[1]). Alternatively, denial may be viewed as a more complex phenomenon that encompasses up to 12 different dimensions, such as denial of ever having committed the offense, denial of fantasy and planning related to the offense, denial of harm to the victim, and so on.[2,3] Self-report instruments that have been used to measure denial, including the Marlowe-Crowne Social Desirability Scale[4] and the Blame Attribution Inventory,[5] have been criticized because of the transparency of the self-report method. The ease of manipulation of the questionnaire format by the offender can result in an underestimation of denial that is obvious to the experienced interviewer[6] and has caused disenchantment with the self-report questionnaire format among researchers and clinicians.[7] Kennedy and Grubin[8] were the first to describe a research method for assessing denial in sex offenders that was not solely reliant on self-report. They developed a semistructured interview method to elicit the offender's account of his or her offense, which was then cross-referenced with data from the legal files related to the case (including, for example, forensic evidence and medical and psychological reports). Participants were scored on seven dimensions of denial, each consisting of a three-point scale defined according to operationalized criteria. Cluster analysis of the denial scale data identified four distinct groups of sex offenders, called rationalizers, internalizers, externalizers, and absolute deniers. Each group was shown to be associated with a different pattern in relation to nondenial variables, such as the age and sex of the victim and level of psychological distress, providing a promising indication of the external validity of the interview method as a measure of denial.

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Objectives

The study by Kennedy and Grubin[8] was an innovative development in exploring the nature of denial

in sex offenders and the relationship between denial and the type of offense committed. For this reason, we wanted to replicate their methodology to: (1) assess the robustness of the cluster typology in convicted sex offenders; (2) assess the relationship between the denial clusters and the type of offense; (3) explore the interrelationship of the various dimensions measured in the denial scale; and (4) explore whether differences in the denial pattern between rapists and child molesters are primarily qualitative or quantitative in nature.

Methods

Subjects

To facilitate comparison with the study by Kennedy and Grubin,[8] we restricted the sample to convicted sex offenders incarcerated in the single prison which, at the time the field work was performed (1996–1997), housed most of the sex offenders in the Republic of Ireland. Of the total population of 108 sex offenders housed in the prison during this period, 9 refused to be interviewed and a further 3 had participated in a sex offender treatment program, for which reason they were excluded from the study, leaving 96 participants. In each case, the offender was given a detailed written and verbal description of the study before being asked to sign a consent form. Each was then assessed using the same semistructured interview format as used in the original study. This study was approved by the Health Research Board of Ireland and the Irish Department of Justice.

The mean age of the men in the sample was 36 ± 11 years (SD, range 20–71 years). Forty-nine of the participants had been convicted of sexually assaulting an adult (in 2 cases, the victim was male), and 47 of the subjects had assaulted a minor (in 12 of these cases, at least one of the victims was male). All of the participants were ethnically of Irish origin.

Assessments

We used the same semistructured interview format described by Kennedy and Grubin[8] which uses operationalized criteria to measure variables related to the subjects' family history and early adjustment, adult psychiatric history and social functioning, previous criminality and sexual and relationship history. Probe questions were used to elicit the subjects' account of their sexual offense(s) and their attitude toward treatment, which was then compared with data from the individual's legal files to permit the subject to be scored on the following seven denial scales: (1) denial of the charges; (2) denial of responsibility for the offense; (3) internal attribution of blame; (4) external attribution of blame; (5) denial of an anomalous sexual preference; (6) denial of a negative effect on the victim; and (7) denial of the need for a social sanction.

Each component was scored on a three-point scale, with no denial being assigned a score of 0, partial denial a score of 1, and total denial a score of 2, according to operationalized criteria that have been described in the original report by Kennedy and Grubin.[8] Attitude toward the risk of relapse and the need for treatment were also measured, but were excluded from the cluster analysis, according to the method of Kennedy and Grubin. The value of the inter-rater reliability of the variables measured in the interview was greater than 0.7 for all items, and test-retest reliability was greater than 0.8 for all of the denial scales. All subjects completed the 28-item version of the General Health Questionnaire (the GHQ-28[9]), a general measure of current psychopathology, as well as the Eysenck Personality Questionnaire,[10] a measure of personality characteristics.

Interviewers

Prior to performing the field work, one of the researchers (J.deV., who completed most of the interviews), traveled to the United Kingdom to clarify details in relation to the application of the interview method with Dr. Kennedy, and a subject was co-interviewed, to improve comparability of the results between the two studies. Inter-rater reliability was measured by the simultaneous scoring of 10 interviews by two of the authors (J.deV. and P.G.).

Statistics

Data were analyzed with SPSS software (ver. 7.5, SPSS Sciences). Ward's method of cluster analysis was applied to denial scale data to divide the sample into groups of subjects with similar patterns of denial. This procedure is a statistical technique for grouping cases according to their similarity in relation to specified variables (in this case, denial scale scores), so as to maximize the within-cluster homogeneity and to maximize heterogeneity between

Table 1 Correlation Matrix (Spearman's ρ) of Denial Scales, Attitude Toward Therapy and Psychological Distress

	Effect of Offense	Responsibility for Offense	Motivation For Treatment	Social Sanction	Anomalous Preference	Internal Attribution	External Attribution
Effect of offense	—						
Responsibility for offense	0.64***	—					
Motivation for treatment	0.53***	0.41***	—				
Social sanction	0.35**	0.44**	0.30**	—			
Anomalous preference	0.12	0.11	0.30*	0.26*	—		
Internal attribution	0.20*	0.20	0.33**	0.11	0.40**	—	
External attribution	0.00	−0.12	−0.11	−0.06	−0.34**	−0.24*	—
Mean GHQ score	−0.09	−0.11	−0.35**	−0.13	−0.24*	−0.13	0.22

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

groups.[11] The stopping point or number of clusters to emerge from the analysis is not defined by a single statistical method and is partly based on the conceptualization of theoretical relationships arising from existing research in the field,[11] in this case, the existing data of Kennedy and Grubin.[8] In general, the ideal outcome would be to provide the most economical solution (in terms of the number of clusters) that at the same time minimizes the within-group heterogeneity. We also used the agglomeration coefficient method, described by Hair *et al.*,[11] to confirm whether a three-cluster solution was most appropriate for our own data. This method examines the stepwise percentage increase in the agglomeration coefficient between levels in the cluster analysis which indicates a dramatic increase in the within-group heterogeneity between specific levels and suggests that the cluster solution preceding the shift in heterogeneity may be the most appropriate.

It is important to note that subjects who completely denied the offense (which we have called absolute deniers, in accordance with Kennedy and Grubin) were excluded from the cluster analysis of necessity, because they could not be scored on the denial scales (for example, the attribution scales). However, although not derived from the cluster analysis, the absolute denier group constitutes a clearly defined and conceptually valid group that can be compared on independent variables with the groups arising from the cluster analysis.

For comparisons between the resulting denial groups, both parametric and nonparametric tests were used in the data analysis as described in the text, although, because the data were largely ordinal in nature, nonparametric tests were the most frequently used.

Results

Correlation of the Denial Scales

Visual examination of the correlation matrix (Spearman's ρ) allowed us to examine the relationship between the scales (Table 1). Two groups of intercorrelated variables emerge from the matrix. The first group included denial of a negative effect on the victim, of responsibility for the offense, of the need for social sanction, and of the need for treatment, all of which scales show significant positive intercorrelations (mean $r = 0.45$). The second group of variables (denial of an anomalous sexual preference, internal and external attribution of blame) shows a somewhat weaker relationship (mean $r = 0.33$), and in this case, the correlation between internal and external attribution of blame is negative. There are few intercorrelations between the individual scales of the first and second groups of variables (mean $r = 0.16$). Psychological distress, as measured by the mean GHQ score, is negatively correlated with denial of an anomalous sexual preference and with denial of a need for treatment.

Cluster Analysis of the Denial Data

Using Ward's method, we performed a cluster analysis of the denial scale data from those subjects who had not completely denied the offense ($n = 76$). We selected a three-cluster solution on the basis of the agglomeration coefficient method, which clearly shows that the greatest percentage increase in within-group heterogeneity occurs in going from a three-cluster to a two-cluster solution (Table 2). The three-cluster solution is perfectly consistent with the method of Kennedy and Grubin.[8] In Tables 3 and 4, we compare the pattern of denial in the corresponding groups from both studies. In Table 3, we present

Table 2 Percentage Change in Agglomeration Coefficients Between Cluster Levels

Clusters (*n*)	Agglomeration Coefficient	Percentage Change in Coefficient to Next Level
6	106.3	14.0
5	121.2	14.1
4	138.3	15.9
3	160.4	38.2
2	221.7	38.6
1	307.3	—

Table 4 Comparison of the Mean Denial Scale Scores Between Rapists and Child Molesters

Denial Scale	Rapists	Child Molesters	*t*-Statistic	*p*
Offense	0.8	0.6	1.3	0.21
Responsibility	0.8	0.6	0.8	0.40
Internal attribution	1.7	1.2	2.9	<0.01
External attribution	0.7	0.9	−1.4	0.16
Preference	1.6	0.7	4.1	<0.001
Effect	0.7	0.7	−0.24	0.81
Social sanction	0.9	0.8	0.7	0.49

the mean denial scale scores and standard deviations for the three groups that emerge from the cluster analysis. The mean denial scale scores of rapists and child molesters are compared in Table 4. The only significant differences between the two groups are the higher scores of rapists on the "internal attribution" scale ($p < .01$) and "denial of an abnormal sexual preference" scale ($p < .001$). These findings suggest that rapists tend to display more pervasive denial than child molesters, given that in at least one study in which great efforts were made to guarantee anonymity, rapists reported the same mean number of paraphilias as child molesters (Abel *et al.*[12]). Overall, one is more impressed by the similarity in the pattern of denial displayed by the two groups than by the relatively minor differences between them.

The data in Table 5 refer to the proportion of offenders in each group who exhibited at least some denial for each scale, again to allow comparison with the published data of Kennedy and Grubin. While the pattern of denial can be seen to correspond well between the denial groups that emerge from each study, we have relabeled the groups according to the pervasiveness of denial displayed (i.e., the extent to which the group displays denial across a large number of denial scales).

Relationship of Victim Characteristics and Denial Type

A comparison of differences of the age and sex of the victims between the denial groups, as described in the legal files of each offender, is presented in Table 6. The only significant difference found in the distribution of rapists and child molesters between the denial groups is that the least pervasive denial group contained a disproportionate number of child molesters and the moderately pervasive group, of rapists ($\chi^2 = 9.3, p < .01$). The two groups with a high rate of denial were evenly divided between offenders against adults and minors.

Characteristics of the Assault

Other aspects of the offense noted in the legal files of the subjects are described in Table 7. Of note is that the least pervasive denial group had a greater number of victims than any of the other groups, as shown in the results of the one-way analysis of variance (ANOVA) and confirmed by a *post hoc* Tukey test. This group also tended to be more likely to have assaulted the victim on more than one occasion and to have committed a nonpenetrative assault. These differences are explained by the greater relative num-

Table 3 Mean Scores of the Denial Clusters for the Seven Denial Scales

	Least Pervasive (n = 28)		Moderately Pervasive (n = 30)		Highly Pervasive (n = 18)	
Denial Scale	Mean	SD	Mean	SD	Mean	SD
Offense	0.2	0.4	0.2	0.4	0.8	0.4
Responsibility	0.2	0.5	0.4	0.6	1.9	0.3
Internal attribution	0.9	0.9	1.8	0.4	1.8	0.5
External attribution	1.2	0.7	0.5	0.5	0.8	0.4
Preference	0.2	0.5	2.0	0.0	1.1	1.0
Effect	0.3	0.7	0.5	0.6	1.6	0.6
Social sanction	0.4	0.6	0.8	0.8	1.7	0.5

Table 5 Pattern of Denial in Offenders Who Did Not Completely Deny the Offense: Comparison With the Study of Kennedy and Grubin[8]

	Least Pervasive		Moderately Pervasive		Highly Pervasive	
Denial Scale	Gibbons *et al.* (n = 28)	Kennedy and Grubin Rationalisers (n = 18)	Gibbons *et al.* (n = 30)	Kennedy and Grubin Internalisers (n = 26)	Gibbons *et al.* (n = 18)	Kennedy and Grubin Externalisers (n = 20)
Offense*	6 (21%)	5 (28%)	7 (23%)	3 (12%)	14 (78%)	7 (35%)
Responsibility	5 (28%)	5 (28%)	7 (23%)	8 (31%)	18 (100%)	17 (85%)
Internal attribution	16 (57%)	3 (17%)	30 (100%)	13 (50%)	17 (94%)	10 (50%)
External attribution	23 (82%)	4 (22%)	19 (58%)	17 (57%)	15 (83%)	19 (95%)
Preference	3 (18%)	1 (6%)	30 (100%)	25 (96%)	11 (61%)	13 (65%)
Effect	5 (28%)	13 (72%)	14 (47%)	9 (35%)	17 (94%)	19 (95%)
Social sanction	6 (33%)	10 (56%)	17 (57%)	7 (27%)	18 (100%)	14 (70%)

Data refer to individuals who had been scored as showing at least some denial in each category.
* Subjects who completely denied the offense (absolute deniers) are excluded, as they could not be scored on the remaining scales.

ber of child molesters in the low pervasiveness denial group.

Offender Characteristics

In terms of general offender characteristics, there are significant differences between the two studies, as outlined in Table 8. We failed to replicate the differences reported by Kennedy and Grubin[8] in relation to the proportion of victims known to the offender or in the mean GHQ score between the offender denial groups. The excess of offenders in the low denial group reporting a paraphilia was much lower in our study. We found motivation to accept treatment to be clearly and inversely related to the extent of denial, while no such pattern emerges from the Kennedy and Grubin data.

Discussion

Limitations of the Methodology

There are some important differences in the samples used in the two studies that should be taken into account in interpreting the discrepancies in the findings. First, Kennedy and Grubin[8] do not clarify whether any of their subjects had received psychotherapy in relation to their offenses, which might have significantly altered the pattern of denial encountered in these cases. We managed this problem by excluding from the analysis all subjects who had participated in a sex offender treatment program. Second, the tags used by Kennedy and Grubin to describe the denial clusters are somewhat misleading. For example, examination of their original data suggests that their internalizer group actually appeared to rely somewhat less heavily on an internal attributional style than did the externalizers, and both attributed blame for their behavior to both internal and external causes. Similarly, the clusters that emerge from our data do not fall into distinct internalizer or externalizer groups, and we feel that the use of a descriptive tag related to the general pervasiveness of denial more accurately reflects the differences between groups. Furthermore, our sample was evenly balanced between rapists and child molesters, whereas the sample in their study contained relatively more child molesters, which theoretically could affect the pattern of denial emerging from the cluster analysis and could potentially confound the interpretation of the distribution of rapists and child molesters between the denial groups. Their group was ethnically mixed, introducing cultural heterogeneity as a further potential confounding factor that was absent from our study. Given that the impact of cultural background on denial has received little research attention to date, the study of a culturally homogeneous group controls for culture as a source of variance, making the results somewhat easier to interpret, though this in turn has implications for the generalizability of the results, pending replication of the study in other cultural contexts.

Other limitations in the methodology common to both studies are apparent. First, the seven denial scales depend on face validity rather than factor anal-

Table 6 Age and Sex of the Victims for Different Denial Clusters

	Least Pervasive	Moderately Pervasive	Highly Pervasive	Absolute Deniers
Adult female	8 (29%)	20 (66%)	9 (50%)	10 (53%)
Female minor only	14 (46%)	7 (23%)	9 (50%)	6 (32%)
Male minor	6 (25%)	2 (7%)	0 (0%)	3 (16%)

Cramer's V for age and sex of victim = 0.50, p = 0.02. Four of the offenders against male minors had also offended against female minors. Of the two subjects who had assaulted an adult male, one was in the moderately pervasive cluster and the other in the absolute denial group.

Table 7 Description of Aspects of the Offense

	Least Pervasive	Moderately Pervasive	Highly Pervasive	Absolute Deniers	Statistical Test
Average number of victims	2.7	1.4	1.1	1.2	$F = 7.0$, $p < 0.001$
Alcohol use prior to assault	15 (54%)	20 (67%)	12 (66%)	9 (45%)	$\chi^2 = 3.1$, $p = 0.3$
Use of physical force	18 (64%)	23 (77%)	13 (72%)	14 (70%)	$\chi^2 = 5.2$, $p = 0.52$
Penetrative assault	20 (71%)	25 (83%)	17 (94%)	16 (80%)	$V = 0.21$, $p = 0.25$
More than one assault	15 (54%)	8 (27%)	7 (39%)	8 (40%)	$\chi^2 = 4.4$, $p = 0.22$

ysis or other objective statistical procedures. The scales are not comprehensive in addressing the full range of possible cognitive distortions in sex offenders. For example, attitude to risk of relapse and motivation for treatment might properly be included as independent denial scales, as described in the previously quoted studies by Happel and Auffrey[2] and Salter.[3] The inverse relationship that we report between motivation to accept treatment and the overall extent of denial supports the inclusion of these variables as valid denial scales in future studies. Furthermore, the relationship between the various aspects of denial and empathy for the victim and feelings of guilt and shame, areas of increasing clinical and research interest (e.g. Knopp *et al.*[13]), have not been explored. Finally, the denial scales provide data that are closer to being of an ordinal rather than a ratio scale, which may limit the reliability of the cluster analysis results and limits further multivariate analysis of the data. We are currently working to develop an interview checklist that seeks to provide a more comprehensive assessment of denial items that can be factor analyzed to give a more objective indication of the dimensions that make up denial, which may ultimately provide the basis for the design of clinically useful denial scales. Despite these limitations, we believe that many of the results of the current study provide useful pointers in understanding denial in this population.

Crime and Punishment versus Attributional Style

The denial scales converge into two groups from visual inspection of the correlation matrix (Table 1). The first group consists of the scales which measure minimization of the extent of and responsibility for the offense as well as denial of a negative effect on the victim and therefore of the need for legal sanction or for therapy. Acceptance of responsibility for the offense is particularly highly correlated with an acknowledgment of a negative effect on the victim and motivation to accept therapy to correct the offending behavior, which suggests that responsibility is being

Table 8 Comparison of Offender Characteristics in Current Study and in Kennedy and Grubin[8]

	Least Pervasive		Moderately Pervasive		Highly Pervasive		Absolute Deniers		Statistical Test	
	Gibbons *et al.*	Kennedy and Grubin	Gibbons *et al.*	Kennedy and Grubin	Gibbons *et al.*	Kennedy and Grubin	Gibbons *et al.*	Kennedy and Grubin	Gibbons *et al.*	Kennedy and Grubin
Mean age	38	40	33	36	36	40	37	37	$F = 1.3$ $p = .5$	$F = .8$ $p = .5$
Paraphilia	13 (46%)	16 (89%)	7 (23%)	6 (23%)	2 (11%)	9 (45%)	4 (20%)	5 (15%)	$\chi^2 = 8.4$ $p = .04$	$\chi^2 = 30.8$ $p < .001$
Unknown to victim	11 (39%)	15 (83%)	10 (33%)	8 (31%)	7 (39%)	10 (50%)	8 (40%)	17 (50%)	$\chi^2 = .3$ $p = .95$	$\chi^2 = 11.8$ $p < .01$
Accept treatment	18 (64%)	11 (61%)	13 (43%)	21 (81%)	2 (11%)	15 (75%)	3 (15%)	12 (35%)	$\chi^2 = 23.6$ $p = .001$	$\chi^2 = 15.2$ $p = .02$
Mean GHQ	12	5	9	11	8	6	8	7	$F = 1.6$ $p = .19$	$F = 2.9$ $p = .04$
EPQ Lie scale	9	9	10	8	9	8	11	9	$F = .7$ $p = .55$	$F = .03$ $p = .8$

interpreted as a moral responsibility for the offense. We suggest that this group of denial scales appears to describe a valid factor that we have called "crime and punishment."

The second group of denial scales, related to attributional style, appears to be relatively independent of the crime and punishment scales and reflect the search by the offender for a rational explanation as to why he offended in the first place, rather than a moral judgment as to the correctness of the behavior. The low correlations between the crime and punishment aspects of denial and attributional style suggest that the respondents successfully differentiate between these concepts. Attributional style appears to follow one of two distinct patterns, consisting of either a denial of an anomalous sexual preference and attribution of blame principally to transient abnormal internal factors, or alternatively, an acceptance of an anomalous sexual preference but with attribution principally to external or environmental pressures (for example, the offender may explain their abnormal sexual orientation by reference to their own previous abuse). The negative correlation between internal and external attribution has been reported by Gudjónnson and Pétursson[14] in a study of a mixed group of sexual and nonsexual offenders, though this has not been a consistent finding (e.g., Gudjónnson and Singh,[5] and Dolan[15]). In fact, all three denial groups that emerge from the cluster analysis show a high reliance on both internal and external attribution, which undermines the rather simplistic relationship reported by Blumenthal *et al.*[16] and McKay *et al.*[17] between rapists and external attribution on the one hand and child molesters and internal attribution on the other. In fact, our results suggest that rapists display greater internal attribution than child molesters. It appears that internal and external attribution coexist in untreated sex offenders against both adults and children, though in both groups the negative correlation between internal and external attribution suggests that in individuals who otherwise share the same pattern of denial, heavy reliance on one attributional style limits the degree of reliance on the other.

Interpreting the Significance of the Denial Clusters

Our results correspond to those of Kennedy and Grubin[8] in some fundamental aspects. First, examination of the cluster analysis data suggests that three groups can be identified among men who admit at least some aspects of their sexual offending. The group profiles are also very similar in both studies (Table 4). Our high and medium pervasive denial groups correspond closely to the externalizer and internalizer groups, respectively, both in terms of the spread and specific patterns of denial identified, and in fact, our "moderately pervasive" group shows a much clearer reliance on internal attribution of blame than the corresponding internalizer group in the Kennedy and Grubin study. The rationalizer group also corresponds well to the least pervasive group in showing the most limited spread of denial, but differs in that the rationalizers rely on denial of negative effect on the victim and of a need for legal sanction, while our least pervasive group attributes blame to a combination of internal and especially external factors and in which denial related to the crime and punishment scales is minimal. The absolute denial groups have been identified using the same criteria in both studies and correspond closely. The consistency in the number of clusters and the denial profiles of the groups that emerge from the two studies, despite differences in the offender type and ethnic makeup of the samples, provides an indication of the external validity of the interview method as a measure of denial.

The Relationship of Denial to Victim and Offense Characteristics

The pattern of characteristics of the offender and of the offense itself is consistent with our hypothesis that the difference in denial between offender groups is quantitative rather than qualitative. In both studies, the proportion of each group reporting paraphilias was found to be in keeping with the pattern of denial, in that the increased number of reported paraphilias in the low pervasiveness denial group is consistent with denial style rather than indicating a true difference in anomalous arousal patterns, being a transparent self-report measure (Table 8). We were unable to replicate the other differences between the denial clusters described by Kennedy and Grubin.[8] There was no difference in the proportion of offenders who had assaulted a stranger, in contrast to the previous study, in which nearly all of the rationalizer group fell into this category. We found psychological distress, as measured by the GHQ score, to be inversely related to the extent of denial and positively associated with motivation to accept therapy and

with recognition of an anomalous sexual preference (Table 1). Furthermore, the low pervasiveness denial group shows the highest degree of psychological distress, which is consistent with the psychogenic model of denial articulated by Rogers and Dickey[18] as a defense against guilt, shame and associated psychological distress. We found no specific relationship between the level of psychological distress and internal attribution of blame or acceptance of harm to the victim, as suggested by Kennedy and Grubin.

The EPQ lie scale failed to differentiate between denial groups in either study (Table 8). This finding is consistent with previous studies that have used general measures of defensiveness to assess denial in sex offenders. Hanson *et al.*,[6] for example, were unable to differentiate between intrafamilial child molesters, male batterers, and community control subjects by using the Marlowe Crowne Social Desirability Scale.[4] As previously suggested, it appears that nonspecific self-report measures such as the EPQ lie scale have limited utility in measuring denial in this group of offenders and are probably best avoided.

Interpretation of Differences between the Two Studies

Despite the similarities of the group denial profiles in the two studies, the findings in relation to the offense details fail to show a pattern consistent with Kennedy and Grubin,[8] in that no consistent relationship emerges between the pattern of denial and offense type (Table 6). While our low denial group has a disproportionate number of child molesters, this is balanced by the over-representation of rapists in the moderately pervasive group, while the high and absolute denial groups are divided evenly between rapists and child molesters. If the denial groups are collapsed into high pervasiveness and low pervasiveness groups, no difference in the distribution of rapists and child molesters between the two groups can be detected ($\chi 2 = 0.06$, $df = 1$, $p = .81$).

Thus, while the patterns of denial that emerge from both studies are reasonably consistent, the group profiles in relation to independent variables (such as offense type) are not. The relationship between offense type and the pattern of denial appears to be quite variable, with no specific type of denial being characteristic of either rapists or child molesters. This lack of consistency somewhat undermines the description by Kennedy and Grubin of their denial groups as representing qualitatively different groups of offenders. As an alternative interpretation, we suggest that denial groups are distinguished by the degree of pervasiveness or spread of the cognitive distortions in each case. The crime and punishment scales show a graded decrease from the higher to lower pervasiveness denial groups, while the attributional style scales remain elevated even in the low denial group, suggesting that distortions in the attribution of blame for the sexual offense is more pervasive or persistent than crime and punishment issues. This impression is consistent with the description in the study by Marková and Berrios[19] of insight (and therefore its corollary, denial) as a dynamic phenomenon that varies with the interaction of individual personality with environmental and other factors, in that the denial groups can be seen as being on different points of a continuum between the poles of more pervasive and less pervasive denial, rather than belonging to qualitatively different groups, as suggested by Kennedy and Grubin.

We suggest a conceptualization of denial as a dynamic phenomenon, which appears to consist of the two principal attributional and crime and punishment dimensions and which can vary over time in the same individual, independent of offense type. The ways in which denial changes over time—for example, in response to the disclosure of the offense, in response to being found guilty of the offense, in response to different treatment approaches and so on—remain to be examined. The relationship of denial to prognosis in terms of recidivism is a further area in need of urgent research attention in view of the increasing numbers of cases that are being processed by the judicial system. The potential importance of these issues for initial evaluation, treatment planning and assessment of prognosis for individual offenders is clear. A prospective follow-up study is currently being performed by De Volder *et al.* to establish how the pattern of denial changes during therapy, which we hope will bring us a step closer to coming to grips with the dance of denial.

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