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The Role of Psychopathy and Exposure to Violence in Rape Myth

Acceptance

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Abstract

The main aim of the present study was to specify and test a structural model to examine the relationships between four psychopathy dimensions (Interpersonal Manipulation, Callous Affect, Erratic Lifestyle and Antisocial Behaviour), childhood exposure to violence, and rape myth acceptance while controlling for gender, age, sample type (prisoner vs. non-prisoner), and relationship status. Participants were a sample of non-offending adults ($n = 319$) recruited from the University of Security in Poznan, and a sample of prisoners ($n = 129$) incarcerated in Stargard Szczecinski Prison. Results indicated that the model provided a good fit for the data, and that Callous Affect and childhood exposure to violence had a significant positive effect on attitudes towards rape and rape victims. Theoretical and practical implications of our findings are discussed.

Keywords: Psychopathy, Rape Myth Acceptance, Exposure to Violence, Self-Report Psychopathy Scale (SRP-III), Prisoners.

The Role of Psychopathy and Exposure to Violence in Rape Myth Acceptance

The pervasiveness of rape

Limited data are available on the prevalence of rape and sexual assaults in Poland. However, the 2013 Crime and Safety Report on crime in Poland recorded the investigation of 1,786 rape cases in 2012 (“Raport Statystyczny”, 2013). Women are sexually victimised at significantly higher rates than men (Ministry of Justice, 2010). Some of the difference in rates may be explained by men’s greater reluctance to report sexual victimization due to increased stigma and embarrassment (Tjaden & Thoennes, 2006). However, it seems that both genders tend to underreport sexual abuse (Basile, Chen, Black, & Salzman, 2007). One explanation for the low reporting rates may be the prevalence of attitudes, sometimes called myths, which minimise the seriousness of rape and may contribute toward the pervasiveness of rape (Burt, 1980; Lonsway & Fitzgerald, 1994).

Rape myths

Rape myths— stereotypical or false beliefs about the culpability of victims, the innocence of rapists, and the illegitimacy of rape as a serious crime - may act as “psychological neutralizers” that allow men to turn off social prohibitions against hurting others when they *want* to use force in sexual interactions (Bohner, Reinhard, Rutz, Sturm, Kerschenbaum, & Effler, 1998; Burt, 1980). This view is reminiscent of Bandura’s (1978) more general exposition of the cognitive mechanisms through which aggressive behaviour is disinhibited (i.e., cognitive disengagement). Research has consistently found a relationship between rape myth acceptance (RMA) and both self-reported sexual aggression and self-reported rape proclivity, among college and community males (e.g., Bohner, Pina, Viki, & Siebler, 2010; Byers & Eno, 1991; Hersh & Gray-Little, 1998; Lonsway & Fitzgerald, 1994; Malamuth, 1981; Muehlenhard & Falcon, 1990). Despite the fact that Ward, Polaschek, and Beech (2006) considered rape myth acceptance to be the most prominent, best researched, and

theoretically most developed individual component in the aetiology of sexual offending, factors which lead to increased RMA are still unclear.

Rape Myth Acceptance, Gender, Age, and Exposure to Violence

Attitudes toward rape have consistently been found to vary by gender, with men more likely to support rape myths, using a variety of research methodologies and populations (Burt, 1980; Ewoldt, Monson, & Langhinrichsen-Rohling, 2000; Koss, 1988; Lundberg-Love & Geffner, 1989; Muehlenhard & Linton, 1987; Rapaport & Burkhart, 1984; Simonson & Subich, 1999). Research evidence of the relationship between age and RMA is inconsistent (e.g., Kassing, Beesley, & Frey, 2005; Lonsway & Fitzgerald, 1994). The results of a recent meta-analytic study did, however, indicate that age was not significantly related to RMA (Suarez & Gadalla, 2010).

Although one might expect that an individual's RMA might be influenced by their own victimisation experiences, this does not appear to be the case (e.g., Carmody & Washington, 2001; Mason, Riger, & Foley, 2004). Jenkins and Dambrot (1987), for instance, in a study investigating the impact of individual experience with sexual victimization on rape attributions among male and female college students found no significant differences between victims and non-victims. However, it might be the case that victims of other forms of childhood abuse may be more likely than non-victims to support rape myths, consistent with the "cycle of abuse" theory. Offering tentative support for this, some studies have found a relationship between child maltreatment experiences and adult rape convictions and aggression towards women (Dhawan & Marshall, 1996; Fagan & Wexler, 1988), suggesting that childhood maltreatment may increase an individual's risk for future sexual aggression. Furthermore, a large-scale study by Malamuth, Sockloskie, Koss, and Tanaka (1991) identified childhood maltreatment as a critical distal factor in the development of sexually violent behaviour towards women.

Psychopathy and sexual coercion

Psychopathy is characterised by a distinct cluster of interpersonal (e.g., deceitfulness and manipulation), affective (e.g., lack of empathy, remorse, or guilt), lifestyle (e.g., impulsivity, irresponsibility), and behavioural (e.g., social deviance, criminality) features (Hare, 2003; Hare & Neumann, 2008). Psychopaths are noted for their criminal versatility (Dhingra & Boduszek, 2013; Hare, 1991), and sexual coercion has consistently been listed or implied among the variety of crimes they are hypothesised to commit (e.g., Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001; Kosson, Kelly & White, 1997; Porter, Fairweather, Drugge, Hervé, Birst, & Boer, 2000).

Previous research has typically grouped rape together with other violent crimes or crimes against person in prior research (e.g., Skeem & Mulvey, 2001). Consequently, the comparative frequency of rape in psychopathic and non-psychopathic individuals and the strength of the specific association between psychopathy and sexually coercive behaviour are unclear. Coid (1992) in a study directly comparing the frequency of sexual assault convictions in male psychopathic and non-psychopathic offenders found that 30% of psychopathic offenders had an index offense of rape, buggery, or indecent offence, compared to 13% of non-psychopathic offenders, supporting the hypothesis that psychopaths are at increased risk for sexual coercion (see also Hare, Clark, Grann, & Thornton, 2000; Knight & Guay, 2007; Porter, Campbell, Woodworth, & Birt, 2002).

Blair's (Blair, 1995; James, Blair, Jones, Clark, & Smith, 1997) conceptualisation of the Affective/Interpersonal factor of psychopathy (Factor 1) provides an alternative hypothesis about how psychopathy might function to increase the probability of sexually coercive behaviour. Blair hypothesised that psychopaths suffer from a lack of responsiveness to non-verbal communications of distress (e.g., sad facial expressions, the sight and sound of crying) because of a deficit in the violence inhibition mechanism (VIM), a cognitive

mechanism that is deemed necessary for the experience of moral emotions (e.g., sympathy, guilt, remorse, and empathy). He argued further that it is the fostering of empathy (Blackburn, 1988; Blair & Morton, 1995; Hoffman, 1994) that leads to the inhibition of aggressive behaviour. Support for Blair's theory was provided by Bernat, Calhoun and Adams (1999). In their study, descriptions of foreplay were presented to self-identified sexually aggressive and non-aggressive college men. Results indicated that the introduction of force leading to victim pain and distress resulted in the inhibition of non-coercive participants' sexual arousal. Males with more callous characteristics were less affected by the coercive scripts. Affective/Interpersonal factor of psychopathy was also found to be related with the use of force in sexual aggression in a sample of 378 college men (Kosson et al., 1997).

Psychopathy and rape myth acceptance

As noted above, psychopathy has been identified to be a risk factor for sexual violence. Mouliso and Calhoun (2013) argued that RMA is a cognitive distortion which constitutes a crucial link between psychopathy and rape perpetration, and listed a number of similarities between psychopathic traits and certain widely held beliefs about rape. For example, psychopaths' deceptiveness and manipulativeness were linked with the myth that women lie about being raped, while psychopaths' lack of empathy and arrogance were linked with the belief that women secretly want to be raped.

Few empirical studies examining the above suppositions have been conducted. Using a sample of 369 incarcerated males to investigate the shared and unique risk factors for non-physical sexual coercion and sexual coercion, DeGue, DiLillo, and Scalora (2010) reported that some components of psychopathy (e.g., Machiavellian egocentricity, empathetic concern, perspective taking, cold-heartedness, carefree nonplanfulness, blame externalisation, and impulsive nonconformity) correlated negatively with RMA, whereas others (e.g., stress

immunity) correlated positively. Furthermore, findings revealed that sexual aggressors and coercers form two distinct groups characterised by different risk factors. Unfortunately, however, rather than using a well-established measure of rape myth acceptance, the authors employed a less accepted instrument to “assess concepts similar to Burt’s (1980) scale” (DeGue et al., 2010, p. 408). Similarly, using a sample of male college students, DeGue and DiLillo (2004) found that sexually aggressive college men endorsed a stronger belief in rape myths than coercive men. However, these two groups did not differ from one another on any other risk factors assessed, including psychopathic traits.

Mouilso and Calhoun’s (2013) study of 308 male students found that total psychopathy scores (as indexed by the Self-Report Psychopathy Scale III (*SRP-III*; Paulhus, Neumann, & Hare, in press) were significantly positively correlated with total rape myth acceptance scores (measured by the Illinois Rape Myth Acceptance Scale (IRMA; Payne, Lonsway & Fitzgerald, 1999). Furthermore, the Interpersonal Manipulation and Callous Affect *SRP-III* subscales were significantly positively correlated with IRMA total scores and six of the seven IRMA subscale scores. The Antisocial Behaviour subscale was significantly positively correlated with IRMA total score, and further significantly positively associated with five of the seven IRMA subscales. Victim blaming and denial of harm appear related to the callous and manipulative core of psychopathy as well as serving to excuse aggressive and antisocial behaviour.

Current study

Previous studies have indicated correlations between psychopathy, exposure to violence and sexual coercion as well as psychopathy and rape myth acceptance. However, what is missing in the literature is a structural model incorporating the relationships between psychopathy dimensions, childhood experiences of violence, and rape myth acceptance. Therefore, the main objective of the current study is to verify whether exposure to violence and different

aspects of psychopathy have a significant direct correlation with stereotypical thinking about sexual aggression. It is hypothesised that Callous Affect and Interpersonal Manipulation, i.e. subscales pertaining to personality features rather than lifestyle and behavioural expressions of psychopathy, have a direct effect on rape attitudes. Moreover, it is suggested that childhood exposure to violence has a significant correlation with rape myth acceptance. Additionally, it is predicted that males and prisoners will score significantly higher on rape myth acceptance than females and non-prisoners respectively. These hypotheses are tested within a sample of non-offending adults and prisoners using data incorporated in a single structural model.

Method

Participants

Two samples of participants were used for the present study. Sample one consisted of 319 adults recruited from the University of Security in Poznan, Poland. Participants ranged in age from 19 to 51 years ($M = 25.16$, $SD = 6.24$). The sample consisted of 175 males and 144 females.

Sample two consisted of 129 male prisoners incarcerated in Stargard Szczecinski Prison in Poland. Prisoners ranged in age from 17 to 59 years ($M = 27.08$, $SD = 9.08$). There were 59 (45.7%) offenders who reported committing a robbery, 37 (28.7%) who reported committing assault/battery, 12 (9.3%) who reported committing a murder, 8 (6.2%) who reported committing financial crimes, 2 (1.6%) who reported committing offences of sexual nature, and 54 (41.9%) who reported committing other offences. Duration of imprisonment ranged from 1 to 17 years ($M = 2.46$, $SD = 2.33$).

Measures

Self-Report Psychopathy Scale (SRP-III; Paulhus et al., in press). The SRP-III was used to assess self-reported psychopathic traits. Based on the ‘gold standard’ of clinical psychopathy assessment, the Psychopathy Checklist-Revised (PCL-R; Hare, 1991), the SRP-III is a 64-item measure that yields a total score as well as four sub-scale scores. The factor structure and construct validity of the Polish version of the SRP-III was evaluated using confirmatory factor analysis. Statistical findings indicated that the data was best explained by a bifactor model of psychopathy with two hidden general factors (Affective/Interpersonal, Lifestyle/Antisocial) and four meaningful grouping factors (Interpersonal Manipulation, Callous Affect, Erratic Lifestyle, and Antisocial Behaviour), which formed the basis for creating the SRP-III subscales:

- (1) Interpersonal Manipulation (IPM), 16 items, (e.g. “I think I could "beat" a lie detector”; “I purposely flatter people to get them on my side”);
- (2) Callous Affect (CA), 16 items, (e.g. “It tortures me to see an injured animal”; “I don’t bother to keep in touch with my family anymore);
- (3) Erratic Lifestyle (ELS), 16 items, (e.g. “I’ve often done something dangerous just for the thrill of it”);
- (4) Antisocial Behaviour (ASB), 16 items, (e.g. “I have never stolen a car, motorcycle or a bicycle”).

Items are scored on a five-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). In the present sample, Cronbach’s alphas were all acceptable: .92 for the full scale; .81 for IPM; .73 for CA; .73 for ELS; .86 for ASB.

Updated Illinois Rape Myth Acceptance Scale (IRMA; McMahon & Farmer, 2011). The IRMA is a 19-item measured designed to assess general rape myth acceptance rated on a 5-

point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). Higher scores indicate greater rape myth acceptance. Four of the original subcategories developed by Payne et al. (1999) were used: *She asked for it*; *It wasn't really rape*; *He didn't mean to*; *She lied* and a new subscale: *Alcohol*, was added as it has been suggested that the subscale 'He didn't mean to' comprises two factors (excusing male perpetrator behaviour generally and specific focus on alcohol intoxication; McMahon & Farmer, 2011). The alpha coefficient for the total scale was .87. In the present sample, Cronbach's alphas were all acceptable: .89 for the full scale; .76 for *She asked for it*; .80 for *It wasn't really rape*; .70 for *He didn't mean to*; .87 for *She lied*; .68 for *Alcohol*.

The Recent Exposure to Violence Scale (REVS; Flannery, Singer, van Dulmen, Kretschmar, & Belliston, 2007). The REVS is a 22-item scale measuring children's experiences of violent and threatening events using a 4-point Likert scale (1 = *never*, 4 = *almost every day*).

Originally, the scale was divided into five subcategories: threats, slapping/punching/hitting, beatings, knife attacks, and shootings. For the purpose of the present study, the shooting subcategory of the inventory was omitted. Given that the scale was administered to adult participants and the focus was on their exposure to violence in childhood, all items were re-written in the past tense and the prompting phrase was changed from "How often in the past year...?" to "How often in your childhood...?".

In the present sample, Cronbach's alphas were .89 for the total scale, and .77 for *Threats*; .73 for *Slapping, hitting, punching*; .72 for *Beatings*; .72 for *Knife attacks*.

All questionnaires used in the current study were translated to Polish by a professional translator. In order to ensure that the meaning of the original inventories has been retained, the Polish versions were translated back to English. Both original translations and back-translations were then shown to three experts in translation who suggested minor changes.

Procedure

Ethical approval was granted by the relevant institutional ethical review board. Measures were administered in groups of up to 40 individuals, in the general population sample, by lecturers working at the University of Security in Poznan. Prisoners were asked by the prison psychologist to complete the questionnaires in their living units. Participants gave informed consent to take part in the study and completed anonymous, paper and pencil questionnaires which were compiled into a booklet along with an instruction sheet and a consent form attached to the front of the booklet. Each participant was provided with a brief description of the study, how to complete the questionnaire, and the general expected completion time. Participants were assured about the confidentiality of their participation and informed that they could withdraw from the study at any time. Participation was voluntary without any form of reward. Participants were debriefed upon completion of the questionnaire.

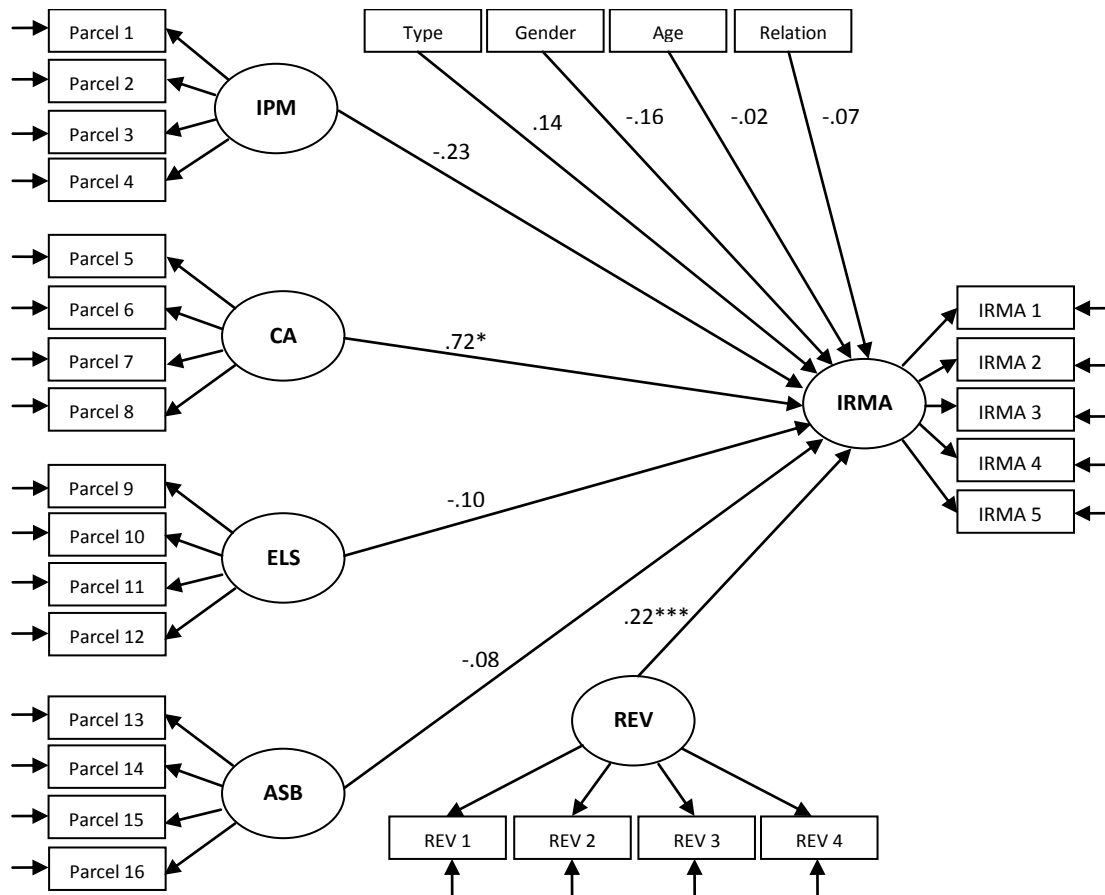
Statistical analysis

Preliminary analysis was carried out in SPSS 20 to ensure that the data were suitable for structural equation modelling (SEM). Pearson product-moment correlation coefficients were used to examine relationships between rape myth acceptance, interpersonal manipulation, callous affect, erratic lifestyle, antisocial behaviour, exposure to violence in childhood, and age. The structural model of rape myth acceptance (Figure 1) was specified and tested using AMOS version 20. SEM is a method for testing theoretical constructs through analysing multivariate data. It is a combination of path analysis (PA) and factor analysis (FA) (Boduszek, Adamson, Shevlin, Hyland & Dhingra, 2013). PA tests associations among observed variables which are displayed in a path diagram (Cohen & Cohen, 1983). The aim of FA, on the other hand, is to simplify a complex data set by combining related observed variables into latent factors. The benefit of SEM, therefore, is that it allows theory testing by verifying correlations between both observed and latent variables. For the purpose of the

current research, six latent factors were identified: rape myth acceptance, callous affect, interpersonal manipulation, erratic lifestyle, antisocial behaviour (as indicated by research by Boduszek & Dhingra, in press), and childhood exposure to violence (measured by respondents' scores on four different subscales). Observed covariates included in the model are: type of data (prisoners vs. non-prisoners), gender, age and relationship status (single vs. in a relationship).

The following statistics were used to assess model fit: chi-square (χ^2), Root Mean-Square Residual (RMSR), Root-Mean-Square Error of Approximation (RMSEA; Steiger 1990) with 90 % confidence interval (90 % CI), the Incremental Fit Index (IFI; Bollen, 1989), and Comparative Fit Index (CFI; Bentler, 1990). A non-significant chi-square (Kline, 2005) and values above 0.95 for the IFI and CFI are considered to reflect a good model fit (Hu & Bentler 1999; Vandenberg & Lance, 2000). However, for CFI and IFI, values above 0.90 indicate adequate fit (Bentler, 1990; Hu & Bentler, 1999). RMSEA and RMSR values less than 0.05 suggest good fit and values of up to 0.08 indicate reasonable errors of approximation in the population (Browne & Cudeck, 1989).

Figure 1: Structural model of rape myth acceptance



IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Lifestyle; ASB = Antisocial Behaviour; Parcels 1-4 = items from Interpersonal Manipulation subscale; Parcels 5-8 = items from Callous Affect subscale; Parcels 9-12 = items from Erratic Lifestyle subscale; Parcels 13-16 = items from Antisocial Behaviour subscale; IRMA = Illinois Rape Myth Acceptance; IRMA 1 = items from *She asked for it* subscale; IRMA 2 = items from *It wasn't really rape* subscale; IRMA 3 = items from *He didn't mean to* subscale; IRMA 4 = items from *She lied* subscale; IRMA 5 = items from *Alcohol* subscale; REV = Recent Exposure to Violence; REV 1 = items from *Threats* subscale; REV 2 = items from *Slapping, hitting, punching* subscale; REV 3 = items from *Beatings* subscale; REV 4 = items from *Knife attacks* subscale; Type = type of data (prisoners vs. non-prisoners); Relation = relationship status (single vs. in a relationship). * $p < .05$. ** $p < .01$. *** $p < .001$.

Results

Descriptive statistics and correlations

Descriptive statistics, including means (*M*) and standard deviations (*SD*) for all measures are presented in Table 1, along with correlations between scores of rape myth acceptance, interpersonal manipulation, callous affect, erratic lifestyle, antisocial behaviour, exposure to violence in childhood and age. Weak to moderate positive correlations were found between rape myth acceptance and Interpersonal Manipulation ($r = .20$), Callous Affect ($r = .29$), Erratic Lifestyle ($r = .25$), Antisocial Behaviour ($r = .16$) and exposure to violence ($r = .20$). A weak negative association between rape myth acceptance and age was found ($r = -.10$).

Table 1

Descriptive Statistics and correlations between Rape Myth Acceptance, Interpersonal Manipulation, Callous Affect, Erratic Lifestyle, Antisocial Behaviour, Recent Exposure to Violence and age

Variables	IRMA	IPM	CA	ELS	ASB	REV	Age
IRMA	-						
IPM	.29***	-					
CA	.29***	.69***	-				
ELS	.25***	.64***	.57***	-			
ASB	.16**	.45***	.47***	.55***	-		
REV	.20***	.22***	.18***	.23***	.27***	-	
Age	-.10*	-.08	-.10*	-.20***	-.00	.034	-
Mean	31.6	26.61	25.57	29.85	15.58	7.71	25.69
Standard deviation	14.03	10.12	8.99	9.76	11.97	7.52	7.19

Note. IRMA = Illinois Rape Myth Acceptance Scale; IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Lifestyle; ASB = Antisocial

Behaviour; REV = Recent Exposure to Violence Scale. * $p < .05$. ** $p < .01$. *** $p < .001$

Model Testing - Structural Equation Modelling

In order to test the model of rape myth acceptance proposed in the current research, a two-step procedure was adopted. The first step was to analyse the overall model fit which includes all direct paths from predictors and covariates to rape myth acceptance (Figure 1). The fit of the proposed model indicated a good model fit ($\chi^2_{(336)} = 930.06, p < .001, IFI = .91, CFI = .91, RMSEA = .06$ (90% CI = .06/.07) and explained 22% of variance in rape myth acceptance.

Table 2 presents the standardised and unstandardised regression weights for the specified structural model of rape myth acceptance. As can be seen, all observed variables are significantly correlated with the latent factors they form a part of. Table 3 displays the relationships between rape myth acceptance and the four factors of psychopathy, while controlling for covariates. As can be seen, a strong positive significant relationship exists between rape myth acceptance and Callous Affect ($\beta = .72, p < .05$). Associations with the remaining three psychopathy dimensions, Interpersonal Manipulation ($\beta = -.23, p > .05$), Erratic Lifestyle ($\beta = -.10, p > .05$) and Antisocial Behaviour ($\beta = -.08, p > .05$), were negative yet statistically non-significant. Furthermore, a weak positive relationship between exposure to violence in childhood and rape myth acceptance ($\beta = .22, p < .001$) was observed. None of the observed variables included in the model yielded significant results: type of data ($\beta = .14, p > .05$), gender ($\beta = -.16, p > .05$), age ($\beta = -.07, p > .05$), relationship ($\beta = -.07, p > .05$).

Table 2

Measurement level of the structural model of rape myth acceptance

Variables	β	<i>B</i>	<i>SE</i>
IRMA by			
She lied	.72***	1.00	-
It wasn't really rape	.63***	.68	.05
He didn't mean to	.83***	.90	.05
She asked for it	.72***	.79	.05
Alcohol	.91***	.78	.04
IPM by			
Parcel 1		1.00	-
Parcel 2	.71***	1.14	.07
Parcel 3	.80***	1.05	.07
Parcel 4	.77***	1.09	.07
CA by			
Parcel 1		1.00	-
Parcel 2	.76***	.97	.06
Parcel 3	.78***	.88	.06
Parcel 4	.72***	.66	.06
ELS by			
Parcel 1		1.00	-
Parcel 2	.69***	1.55	.12
Parcel 3	.69***	1.12	.09
Parcel 4	.67***	1.50	.10
ASB by			
Parcel 1		1.00	-
Parcel 2	.87***	.93	.04
Parcel 3	.84***	.94	.04
Parcel 4	.85***	.66	.05
REV by			
Threats		1.00	-
Slapping, hitting, punching	.76***	1.05	.06
Beatings	.77***	1.03	.06
Knife attacks	.92***	.31	.03
	.59***		

Note. IRMA = Illinois Rape Myth Acceptance Scale; IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Lifestyle; ASB = Antisocial Behaviour; REV = Recent Exposure to Violence Scale. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3

Relationship between IRMA and four factors of psychopathy while controlling for covariates

Variables	β	<i>B</i>	<i>SE</i>
IPM	-.23	-.35	.45
CA	.72*	1.06	.50
ELS	-.10	-.19	.41
ASB	-.08	-.09	.14
REV	.22***	.39	.10
Type	.14	1.11	.76
Gender			
Age	-.16	-1.21	.78
Relation	-.02	-.01	.03
	-.07	-.68	.54

Note. IRMA = Illinois Rape Myth Acceptance Scale; IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Lifestyle; ASB = Antisocial Behaviour; REV = Recent Exposure to Violence Scale; Type = Type of data (prisoners vs. non-prisoners) Relation = Relationship status (single vs. in a relationship). * $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

Previous research has revealed that psychopathic traits and childhood exposure to violence have a significant impact on sexual coercion. However, few studies have examined rape myth acceptance, which is theorised to play an important role in sexual aggression, and its relationship with psychopathy; and no known study to date has examined the relationship between rape myth acceptance and exposure to violence. The main purpose of the present study, therefore, was to specify and test a structural model examining the relationships between rape myth acceptance, psychopathy, and exposure to violence, while controlling for gender, age, type (prisoner vs. non-prisoner), and relationship status.

Of the four psychopathy dimensions examined, only Callous Affect was significantly related with rape myth acceptance. Specifically, participants scoring higher on the Callous Affect subscale endorsed significantly greater rape myth acceptance. This finding is in line

with previous research which found that individuals with more callous characteristics are more sexually aggressive (Bernat et al., 1999; Caputo, Frick, & Brodsky, 1999; DeGue & DiLillo, 2004; Knight & Sims-Knight, 2003; Kosson et al., 1997) and Blair's (1995) violence inhibition mechanism which suggests social emotions inhibit aggressive behaviour. The direct effect of Callous Affect on the readiness to accept rape myths also supports research by Mouliso and Calhoun (2013). Individuals displaying increased callous/unemotional traits are not constrained by guilt or remorse in interpersonal relations (Helfgott, 2008). Their processing of negative emotional stimuli was found to be significantly hindered (Blair, 1999). Moral socialization and incorporation of societal norms is contingent on emotional responsiveness to negative material (Fowles & Kochanska, 2000). Therefore, the lack of emotional responsiveness may result in the inability to relate with and attach to others. Consequently, stereotypical perceptions of victim culpability in the context of rape are likely to be formed.

A significant association between childhood exposure to violence and rape myth acceptance was also found in the present study. As mentioned earlier, although a significant effect of exposure to violence on sexual coercion has been previously reported (Caputo et al., 1999; Knight & Sims-Knight, 2003; Simons, Wurtele, & Heil, 2002), prior research has not explored the relationship between exposure to abusive childhood experiences and acceptance of rape myths. One possible explanation of the significant association between experiences of violence and rape myth acceptance is that individuals who have been victimized might evidence a tendency towards self-blame (Graham & Juvonen, 1998) which suggests that victims of violence may begin to think that violence is morally right (because they or other victims did something wrong) and consequently show greater acceptance of rape myths. Individuals that witness violence in their environment might also learn that it is not against

moral standards to obtain goals, and to expect positive outcomes of using aggression (Bandura, 1999; Farrington, 1991; Ng-Mak, Stueve, Salzinger, & Feldman, 2002).

The hypothesis that Interpersonal Manipulation would be significantly associated with greater rape myth acceptance, based on the results of Mouilso and Calhoun's (2013) study, was not confirmed by the present findings. A possible reason for this disparity may be that Mouilso and Calhoun failed to control for any covariates in their study. The differential relationship between the two psychopathy factors (Callous Affect and Interpersonal Manipulation) and rape myth acceptance suggests that these factors measure two distinct constructs.

The lack of direct effect of Erratic Lifestyle and Antisocial Behaviour factors of psychopathy on rape myth acceptance in the present study is also inconsistent with research by Mouilso & Calhoun (2013), and the frequently documented association between Lifestyle/Antisocial traits and sexual coercion (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005; Lalumière & Quinsey, 1996; Serin, Mailloux & Malcolm, 2001). This latter disparity, however, can be accounted for by looking at what the variables represent. Specifically, both Lifestyle/Antisocial facet of psychopathy and sexual coercion are behavioural concepts, whereas rape myth acceptance refers to attitudes and beliefs. These results, therefore, suggest that it is the emotional (i.e. callousness) rather than behavioural aspect of psychopathy that has the power to affect a person's cognition.

The results of the present study should be interpreted in light of several limitations. First, the sample consisted of male prisoners and both male and female non-offenders. Therefore, even though prisoners were found to score significantly higher on rape myth acceptance, this could be influenced by the inclusion of female participants in the general population sample. Control for selection bias in future research is therefore needed. Second, the use of self-report data within a sample of prisoners whose command of language is poor

may have introduced several well-known limitations, such as response bias. Therefore, the concern is that the participants could not fully understand the questions posed to them. However, this aspect of the study could not be controlled by the researchers. Third, the present study used a sample of Polish adults and hence it cannot be certain that the findings can be generalised to other populations. Research with more diverse samples (i.e., participants from other cultural and linguistic backgrounds, and more diverse and extensive prison samples) is, therefore, needed in order to exclude the possibility that the effects reported in the model were due solely to cross-cultural differences. Moreover, the present research utilized a cross-sectional design and hence causality could not be inferred. The present findings, however, can prove useful in generating hypotheses for future longitudinal studies. Finally, a question inquiring into participants' history of sexual aggression was not included in the present questionnaire. Consequently, it is not possible to determine whether greater rape myth acceptance precedes sexual offending, or is a consequence of sexual aggression (i.e., greater acceptance is developed to reduce guilt and shame following perpetration). The specified model could be extended by introducing sexual aggression as an additional outcome variable. This would add an important behavioural dimension to the solution.

Previous research on rape myth acceptance has focused on college students or sexual offenders, thus, despite the aforementioned limitations, the results of the present study represent a contribution to the existing literature through the use of a sample of prisoners and a sample of members of the general population in order to identify the factors predicting greater rape myth acceptance. Additionally, most previous studies were conducted with North American and Western European samples and hence an advantage of the present study is that it provides information on the phenomenon of rape myth acceptance among Eastern European participants. Moreover, the present research used a sophisticated analytic technique

(SEM) which allowed for the inclusion of several latent variables in one analysis and hence a model of rape myth acceptance could be specified and tested.

The results of the present study suggest that policy makers seeking to reduce violence against women should focus resources on specially designed educational programmes directed towards reducing stereotypes pertaining to rape, as well empathic engagement with others. The findings of this study also suggest that children who were exposed to violence (either as witnesses or victims), particularly males, should be the main target of such educational programmes. Strayer and Roberts' (1989) study demonstrated a significant association between empathy, role-taking and imaginative thinking. Therefore, teaching children how to feel for others and understand others' emotions, whilst incorporating all the correlated elements into one comprehensive intervention programme could prevent the development of dysfunctional beliefs and attitudes about interpersonal violence against women.

Overall, the findings of the present research suggest that Callous Affect and childhood exposure to violence may serve to increase individual's rape myth acceptance. Consequently, this study adds to the growing body of literature documenting the importance of personality variables in explaining sexual aggression (e.g., Kosson et al., 1997; Mouilso & Calhoun, 2012; Voller & Long, 2010).

References

- Bandura, A. (1978). Reflections on self-efficacy. *Advances in Behavior Research and Therapy, 1*, 237-269.
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review (Special Issue on Evil and Violence), 3*, 193–209.

Basile, K. C., Chen, J., Black, M. C., & Saltzman, L. E. (2007). Prevalence and characteristics of sexual violence victimization among U.S. adults, 2001-2003. *Violence and Victims, 22*, 437-448.

Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238–246.

Bernat, J.A., Calhoun, K.S., & Adams, H.E. (1999). Sexually aggressive and nonaggressive men: Sexual arousal and judgements in response to acquaintance rape and consensual analogues. *Journal of Abnormal Psychology, 108*, 662-673.

Blackburn, R. (1988). On moral judgments and personality disorders: the myth of psychopathic personality revisited. *British Journal of Psychiatry, 153*, 505 – 512.

Blair, R.J.R. (1995). A cognitive developmental approach to morality: Investigating the psychopath. *Cognition, 57*, 1-29.

Blair, R.J.R. (1999). Responsiveness to distress cues in the child with psychopathic tendencies. *Personality and Individual Differences, 27*, 135-145.

Blair, R.J.R., & Morton, J. (1995). Putting cognition into sociopathy. *Brain and Behavioral Science, 18*, 548.

Boduszek, D., Adamson, G., Shevlin, M., Hyland, P. & Dhingra, K. (2013). Psychosociological investigation of criminal behaviour within a prison sample using retrospective data. *The Howard Journal of Criminal Justice, 53*(1), 31-48.

Boduszek, D., & Dhingra, K. (in press). Bifactorial solution of the Psychopathy Checklist Revised Screening Version in a sample of civic psychiatric patients. *Personality and Individual Differences*.

Bohner, G., Pina, A., Viki, G. T., & Siebler, F. (2010). Using social norms to reduce men's rape proclivity: Perceived rape myth acceptance of out-groups may be more influential than that of in-groups. *Psychology, Crime and Law, 16*, 671-693.

Bohner, G., Reinhard, M. A., Rutz, S., Sturm, S., Kerschenbaum, B., & Effler, D. (1998). Rape myths as neutralizing cognitions: Evidence for a causal impact of anti-victim attitudes on men's self-reported likelihood of raping. *European Journal of Social Psychology, 28*, 257-268.

Bollen, K.A. (1989). *Structural Equations with Latent Variables*. New York: John Wiley & Sons, Inc.

Browne, M.W., & Cudeck, R (1989). Single sample cross-validation indices for covariance structures. *Multivariate Behavioral Research, 24*, 445-455.

Burt, M.R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology, 38*(2), 217-230.

Byers, E., & Eno, R. (1991). Predicting men's sexual coercion and aggression from attitudes, dating history, and sexual response. *Journal of Psychology and Human Sexuality, 4*(3), 55-69.

Caputo, A.A., Frick, P.J., & Brodsky, S.L. (1999). Family violence and juvenile sex offending: The potential mediating role of psychopathic traits and negative attitudes toward women. *Criminal Justice and Behavior, 26*, 338-356.

Carmody, D.C., & Washington, L.M. (2001). Racial differences in rape myth acceptance among college women. *The Journal of Interpersonal Violence, 16*(5), 424-436.

Cohen, J., & Cohen, P. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Coid, J.W. (1992). DSM—III diagnosis in criminal psychopaths: a way forward. *Criminal Behaviour and Mental Health*, 2, 78 -89.

DeGue, S., & DiLillo, D.K. (2004). Understanding perpetrators of nonphysical sexual coercion: Characteristics of those who cross the line. *Violence and Victims*, 19(6), 673-688.

DeGue, S., DiLillo, D.K., & Scalora, M.J. (2010). Are all perpetrators alike? Comparing risk factors for sexual coercion and aggression. *Sexual Abuse: A Journal of Research and Treatment*, 22(4), 402-426.

Dhawan, S., & Marshall, W. (1996). Sexual abuse histories of sexual offenders. *Sexual Abuse. A Journal of Research and Treatment*, 8, 7–15.

Dhingra, K., & Boduszek, D. (2013). Psychopathy and Criminal Behaviour: A Psychosocial Research Perspective. *Journal of Criminal Psychology*, 3(2), 83-107.

Ewoldt, C. E., Monson, C. M., & Langhinrichsen-Rohling, J. (2000). Attributions about rape in a continuum of dissolving marital relationships. *Journal of Interpersonal Violence*, 15, 1175-1182.

Fagan, J., & Wexler, S. (1988). Explanations of sexual assault among violent delinquents. *Journal of Adolescent Research*, 3, 363-385.

Farrington, D.P. (1991). Antisocial personality from childhood to adulthood. *The Psychologist*, 4, 389-394.

- Flannery, D.J., Singer, M.I., van Dulmen, M., Kretschmar, J.M., & Belliston, L.M. (2007). Exposure to violence, mental health, and violent behavior. In D.J. Flannery, A.T. Vazsonyi, & I.D. Waldman (Eds.), *The Cambridge Handbook of Violent Behavior and Aggression* (pp. 306-321). New York: Cambridge University Press.
- Fowles, D.C., & Kochanska, G. (2000). Temperament as a moderator of pathways to conscience in children: The contribution of electrodermal activity. *Psychophysiology*, *37*, 788-795.
- Graham, S. & Juvonen, J. (1998). Self-blame and peer victimization in middle school: An attributional analysis. *Developmental Psychology*, *34*, 587-599.
- Gretton, H.M., McBride, M., Hare, R.D., O'Shaughnessy, R., & Kumka, G. (2001). Psychopathy and recidivism in adolescent sex offenders. *Criminal Justice and Behavior*, *28*, 427-449.
- Hanson, R.P., & Bussière, M.T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, *66*(2), 348-362.
- Hanson, R.P., & Monton-Bourgon, K.E. (2005). The characteristics of persistent sexual offenders: A meta-analysis of recidivism studies. *Journal of Consulting and Clinical Psychology*, *73*(6), 1154-1163.
- Hare, R.D. (1991). *The Hare Psychopathy Checklist-Revised*. Toronto: Multi-Health Systems.
- Hare, R.D. (2003). *The Hare Psychopathy Checklist-Revised* (2nd ed). Toronto: Multi-Health Systems.

Hare, R.D., Clark, D., Grann, M., & Thornton, D. (2000). Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences and the Law, 18*, 623-645.

Hare, R.D., & Neumann, C.S. (2008). Psychopathy as a clinical and empirical construct. *The Annual Review of Clinical Psychology, 4*, 217-246.

Helfgott, J.B. (2008). *Criminal Behavior: Theories, typologies, and criminal justice*. Thousand Oaks, CA: Sage Publications Inc.

Hersh, K., & Gray-Little, B. (1998). Psychopathic traits and attitudes associated with self-reported sexual aggression in college men. *Journal of Interpersonal Violence 13*(4), 456–471.

Hoffman, M. L. (1994). Discipline and internalization. *Developmental Psychology, 30*, 26-28.

Hu, L., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55.

James, R., Blair, R., Jones, L., Clark, F., & Smith, M. (1997). The psychopathic individual: A lack of responsiveness to distress cues? *Psychophysiology, 34*(2), 192-198.

Jenkins, M.J., & Dambrot, F.H. (1987). The attribution of date rape: Observer's attitudes and sexual experiences and the dating situation. *Journal of Applied Social Psychology, 17*, 875–895.

Kassing, L., Beesley, D., & Frey, L. (2005). Gender role conflict, homophobia, age, and education as predictors of male rape myth acceptance. *Journal of Mental Health Counseling, 27*, 311–328.

Kline, R.B. (2005). *Principles and Practice of Structural Equation Modeling* (2nd ed.). New York: The Guilford Press.

Knight, R.A., & Guay, J.P. (2007). The role of psychopathy in sexual coercion against women. In C.J. Patrick (Ed.), *Handbook of Psychopathy* (pp. 512-532). New York: The Guilford Press.

Knight, R.A., & Sims-Knight, J.E. (2003). The developmental antecedents of sexual coercion against women: Testing alternative hypotheses with structural equation modelling. In R.A. Prentky, E.S. Janus, & M.C. Seto (Eds.), *Sexually Coercive Behavior: Understanding and management* (Vol. 989, pp. 72 - 85). New York: Annals of the New York Academy of Sciences.

Koss, M.P. (1988). Hidden rape: Sexual aggression and victimization in a national sample of students in higher education. In A.W. Burgess (Ed.), *Rape and Sexual Assault II* (pp. 3-25). New York: Garland.

Kosson, D.S., Kelly, J.C., & White, J.W. (1997). Psychopathy-related traits predict self-reported sexual aggression among college men. *Journal of Interpersonal Violence*, *12*, 241-254.

Lalumière, M.L., & Quinsey, V.L. (1996). Sexual deviance, antisociality, mating effort, and the use of sexually coercive behaviors. *Personality and Individual Differences*, *21*(1), 33-48.

Lonsway, K.A., & Fitzgerald, L.F. (1994). Rape myths: In review. *Psychology of Women Quarterly*, *18*, 133-164.

- Lundberg-Love, P.K., & Geffner, R. (1989). Date rape: Prevalence, risk factors, and a proposed model. In M.A. Pirog-Good & J.E. Stets (Eds.), *Violence in dating relationships: Emerging social issues* (pp. 169-184). New York: Praeger.
- Malamuth, N.M. (1981). Rape proclivity among males. *Journal of Social Issues*, 37(4), 138–157.
- Malamuth, N.M., Sockloskie, R.J., Koss, M.P., & Tanaka, J.S. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology*, 59, 670-681.
- Mason, G.E., Riger, S., & Foley, L.A. (2004). The impact of past sexual experiences on attributions of responsibility for rape. *Journal of Interpersonal Violence*, 19, 1157–1171.
- McMahon, S., & Farmer, G.L. (2011). An updated measure for assessing subtle rape myths. *Social Work Research*, 35(2), 71-81.
- Ministry of Justice (2010). *Statistics on Women and the Criminal Justice System*. London: Ministry of Justice.
- Mouilso, E.R., & Calhoun, K.S. (2013). The role of rape myth acceptance and psychopathy in sexual assault perpetration. *Journal of Aggression, Maltreatment and Trauma*, 22, 159-174.
- Muehlenhard, C., & Falcon P. (1990). Men's heterosocial skill and attitudes toward women as predictors of verbal sexual coercion and forceful rape. *Sex Roles*, 23(5/6), 241–259.
- Muehlenhard, C. L., & Linton, M. A. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counselling Psychology*, 34, 186-196.

Ng-Mak, D.S., Stueve, A., Salzinger, S., & Feldman, R. (2002). Normalization of violence among inner-city youth: A formulation for research. *American Journal of Orthopsychiatry*, 72(1), 92-101.

Paulhus, D.L., Neumann, C.S., & Hare, R.D. (in press). *Manual for the Self-Report Psychopathy Scale*. Toronto: Multi-Health Systems.

Payne, D.L., Lonsway, K.A., & Fitzgerald, L.F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois Rape Myth Acceptance Scale. *Journal of Research in Personality*, 33, 27-68.

Porter, S., Campbell, M.A., Woodworth, M., & Birt, A. R. (2002). A new psychological conceptualization of the sexual psychopath. In F. Columbus (Ed.), *Advances in Psychology Research, Volume 7* (pp. 21-36). Nova Science: New York.

Porter, S., Fairweather, D., Drugge, J., Hervé, H., Birt, A., & Boer, D.P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behavior*, 27(2), 216.

Rapaport, K., & Burkhart, B. (1984). Personality and attitudinal characteristics of sexually coercive college males. *Journal of Abnormal Psychology*, 93, 216-221.

Raport Statystyczny. (2013). Retrieved from <http://www.policja.pl>

Serin, R.C., Mailloux, D.L., & Malcolm, P.B. (2001). Psychopathy, deviant sexual arousal, and recidivism among sexual offenders. *Journal of Interpersonal Violence*, 16, 234-246.

Simons, D., Wurtele, S.K., & Heil, P. (2002). Childhood victimization and lack of empathy as predictors of sexual offending against women and children. *Journal of Interpersonal Violence*, 17(12), 1291-1307.

- Simonson, K., & Subich, L. M. (1999). Rape perceptions as a function of gender-role traditionalism and victim–perpetrator association. *Sex Roles, 40*, 617–634.
- Skeem, J.L., & Mulvey, E.P. (2001). Psychopathy and community violence among civil psychiatric patients: Results from the MacArthur Violence Risk Assessment Study. *Journal of Consulting & Clinical Psychology, 69*, 358-374.
- Steiger, J.H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research, 25*(2), 173-180.
- Strayer, J., & Roberts, W. (1989). Children's empathy and role taking: Child and parental factors, and relations to prosocial behavior. *Journal of Applied Developmental Psychology, 10*, 227-239.
- Suarez, E., & Gadalla, T.M. (2010). Stop blaming the victim: A meta-analysis on rape myths. *Journal of Interpersonal Violence, 25*(11), 2010-2035.
- Tjaden, P., Thoennes, N. (January, 2006). *Extent, Nature, and Consequences of Rape Victimization: Findings from the National Violence Against Women Survey*. Retrieved from <http://www.ncjrs.gov>
- Vandenberg, R.J., & Lance, C.E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods, 3*(1), 4-69.
- Voller, E.K., & Long, P.J. (2010). Sexual assault and rape perpetration by college men: The role of the big five personality traits. *Journal of Interpersonal Violence, 25* (3), 457-480.
- Ward, T., Polaschek, D., & Beech, A. R. (2006). *Theories of Sexual Offending*. Chichester, UK: Wiley.