



Less than human: psychopathy, dehumanization, and sexist and violent attitudes towards women

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ABSTRACT

Psychopathy is associated with a variety of negative attitudes and behaviours towards women; however, the mechanisms that underlie these associations have yet to be fully examined. The current work examined dehumanization, a social-psychological construct, as a potential mechanism facilitating the association between sub-clinical psychopathy and negative attitudes towards women. Two online studies with all-male samples were conducted to examine whether dehumanization helps to explain the association between psychopathy and sexist and violent attitudes towards women. In Study 1 ($n = 514$), path analyses indicated that psychopathy was indirectly related to sexist and violent attitudes towards women through dehumanization. Study 2 ($n = 265$) replicated the findings of Study 1 regarding sexism. It also included a date rape analogue measure of violent attitudes and was able to expand on the findings of Study 1, though only for the interpersonal and affective components of psychopathy. These results may suggest that individuals high in psychopathic traits see women as sub-human, this dehumanizing appraisal may be facilitating attitudes and behaviours that are consistent with the idea that women are less than human and deserve to be treated as such. Our results suggest that dehumanization may be an important mechanism for understanding, and potentially mitigating, the association between psychopathy and negative attitudes towards women.

1. Introduction

Theodor (Ted) Bundy, the prolific serial killer, often referred to his female victims as “cargo” or “damaged goods” (Simon, 1999, p.23). He discussed being driven to possess women as one would be driven to “possess a potted plant, a painting, or a Porsche” (Bearak, 1989, p.2). This dehumanizing attitude culminated in the murder, rape, and mutilation of as many as 50 female victims (Bearak, 1989). Dr. Hervey Cleckley, a seminal psychopathy researcher, considered Bundy to be a self-absorbed psychopath (Ramsland, 2013). Though this example is anecdotal, it could suggest that dehumanizing attitudes may help to explain how psychopaths treat women. Consequently, we were interested in examining the role dehumanization plays in the association between psychopathy and negative attitudes towards women. The current work was focused on replicating previous findings which suggested that psychopathy is positively related to negative and violent attitudes towards women, and then determining if dehumanization may be an explanatory pathway which connects psychopathy to these attitudes (Study 1). The current work then examined if these findings were evident when examining behaviour, rather than self-reported attitudes (Study 2).

1.1. Psychopathy and negative attitudes towards women

Psychopathy is an antisocial personality type often characterized as having two higher-order factors (Hare & Neumann, 2008). Factor 1 is comprised of characteristics reflecting interpersonal manipulation and shallow affect: glibness, charm, deception, manipulative tendencies, shallow affect, a lack of empathy and remorse, and the inability to accept responsibility. Factor 2 is characterized by antisocial behaviour and an erratic lifestyle: stimulation seeking, impulsivity, irresponsibility, a parasitic lifestyle, a lack of realistic goals, poor behavioural controls, early behavioural problems, juvenile delinquency, revocation of conditional release, and criminal versatility. Psychopathy can be diagnosed at a clinical level in offender samples using tools such as the Psychopathy Checklist-Revised (PCL-R; Hare, 1991, 2003), but it is also commonly studied in non-criminal populations as an individual difference variable (Williams, Paulhus, & Hare, 2007). As mentioned previously, psychopathy is consistently associated with violent attitudes towards women, such as the endorsement of rape myths (false and stereotypical beliefs regarding the culpability of rape victims and the innocence of the perpetrator; Burt, 1980) (Debowski, Boduszek, Dhingra, Kola, & Meller-Pruniska, 2015; Mouilso & Calhoun, 2013) and

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negative attitudes about rape victims (Watts, Bowes, Latzman, & Lilienfeld, 2017). What has not been established in the literature is the potential role dehumanizing attitudes may play in these associations.

1.2. Dehumanization and negative attitude towards women

Hodson, MacInnis, and Costello (2014) defined dehumanization as the perception or belief that a person (or group of people), is less human than the self (or person's in-group). Indeed, dehumanization is often measured by examining how qualities perceived to be either uniquely human or non-uniquely human are attributed to members of both in-groups and out-groups. Individuals will often fail to attribute uniquely human qualities to members of an out-group, while attributing more uniquely human qualities to members of their in-group (Haslam, 2006).

Different forms of dehumanization have been examined in the literature, but they can often be categorized as belonging to one of three over-arching categories; Animalistic, Mechanistic, and Mind Perception dehumanization (Haslam, 2006; Haslam & Loughnan, 2014; Haslam, Loughnan, Reynolds, & Wilson, 2007). Animalistic dehumanization involves a contrast between animals and humans, and it often involves the ways in which people ascribe uniquely-human and non-uniquely-human characteristics to others (Haslam, 2006; Haslam et al., 2007). This form of dehumanization is characterized by the belief that certain people are uncultured, childlike, coarse, irrational, amoral, and lacking in self-control. Mechanistic dehumanization involves a contrast between humans and machines or automatons. Unlike animalistic dehumanization which focuses on the attribution of uniquely-human qualities, mechanistic dehumanization focuses on human nature (Haslam, 2006; Haslam et al., 2007). Characteristics that describe human nature do not necessarily involve qualities that differentiate humans from animals, rather they involve qualities that are fundamental or central to humans. These characteristics embody human nature and they are closely tied to emotions; as such, mechanistic dehumanization involves seeing others as inert, cold, passive, rigid, superficial, or as a collection of parts (Haslam, 2006; Haslam et al., 2007). Animalistic and mechanistic dehumanization are generally thought of as being two distinct constructs; however, objectification presents a unique case, such that this form of dehumanization can manifest as both Animalistic and Mechanistic (Haslam et al., 2007). In the context of sexual behaviour, a woman could be objectified in terms of the belief that she is a slave to her hormones or sex drive (Animalistic) or reduced to her parts and seen as an inert object whose worth is calculated by its ability to be utilized by others (Mechanistic). A third type of dehumanization was outlined by Haslam and Loughnan (2014) it was referred to as Mind Perception dehumanization, which involves denying the sense of mind or mental states of others (see Kozak, Marsh, & Wegner, 2006).

Though the body of literature is not large, research has established that dehumanization is associated with negative and violent attitudes towards women. Specifically, dehumanization is positively associated with sexism (Pacilli et al., 2017; Viki & Abrams, 2003) the acceptance of rape myths (Custers & McNallie, 2017; Papp & Erchull, 2017), rape proclivity (the propensity towards sexual aggression) (Galdi, Maass, & Cadinu, 2014; Rudman & Mescher, 2012), as well as general physical aggression towards women (Vasquez, Ball, Loughnan, & Pina, 2018). Furthermore, dehumanization (specifically objectification) is associated with negative attitudes towards the female victims of rape (Bernard, Loughnan, Marchal, Godart, & Klein, 2015; Loughnan, Pina, Vasquez, & Puvia, 2013) and the victims of intimate partner violence (Pacilli et al., 2017). Essentially, when a female victim is objectified participants attribute more blame to her, express less concern for her (Loughnan et al., 2010), attribute less blame to her aggressor (Bernard et al., 2015), are less willing to help her, view her as less moral, and ascribe to her less psychological and physiological pain (Pacilli et al., 2017).

1.3. Psychopathic traits and dehumanization

Research has established that psychopathic traits are associated with violent attitudes towards women, it is also evident that the dehumanization of women is associated with sexist and violent attitudes towards women. What has yet to be investigated is any role dehumanization may play in the association between psychopathic traits and violent attitudes towards women. Although the conceptualization of psychopathy includes characteristics such as a grandiose sense of self-worth, suggesting that they value their own worth above others, research does suggest that they do tend to treat individual groups of people (of different races and sexual orientations) worse than others (Hodson, Hogg, & MacInnis, 2009; Jones, 2013; Parrot & Zeichner, 2006). This suggests that although individuals high in psychopathic traits may tend to value themselves above all, they may dehumanize specific groups more than others.

The current work was focused on filling this gap in the literature by investigating the possibility that dehumanization is a mechanism that may explain the association between psychopathic traits and sexist and violent attitudes towards women. A link between psychopathic traits and dehumanization has not been investigated in the literature, but it would not be unexpected. Bandura (1999) suggested that empathy develops into a tendency to humanize others. As children develop empathy they are able to experience the joys and pains of others, in doing so they see that others experience the same feelings and pains that they themselves experience, thus humanizing them. This tendency to see others as human, through an empathetic response, facilitates cooperative behaviour, such that understanding that others are as human as oneself and being able to experience their pains and emotions would mean that inflicting undue pain on others would cause self-condemnation and discomfort (Bandura, 1999). Psychopathic traits are characterized by a lack of empathy (Hare, 1996), and as such psychopaths may never see others as being as human as they are or as experiencing the same feelings and pains that they do. Consequently, individuals high in psychopathic traits may be predisposed to dehumanizing others, and may never develop a moral sense of responsibility to protect other human beings from the pains that they themselves may have experienced.

It has also been suggested that dehumanization represents a delegitimizing belief (Bar-Tal, 2000; see also Opatow, 1990). A delegitimizing belief is a negative appraisal of a person (or group of people), which is accompanied by the belief that the delegitimized persons do not deserve humane treatment, and indeed that they should be treated negatively. As such, the presence of a delegitimizing belief may facilitate inhumane treatment of the delegitimized group. Consistent with this, Hodson and MacInnis (2016) argue that delegitimization can rule out targets as being deserving of moral concern. They suggest that dehumanization and other forms of delegitimization can facilitate differential treatment towards the target group, such as trivializing their rights and decreasing concerns regarding that group's protection (Hodson & MacInnis, 2016). Consequently, if individuals high in psychopathic traits are predisposed to engage in the dehumanization of women, it may suggest that this dehumanization is accompanied by the belief that women should be treated in inhumane and negative ways.

1.4. The current work

Research to date has not examined whether sub-clinical psychopathy is associated with the dehumanization of women, and any indirect role dehumanization may play in the association between psychopathic traits and negative and violent attitudes towards women. We conducted two studies to address this gap in the literature. Study 1 investigated whether psychopathic traits were indirectly associated with measures of sexist and violent attitudes towards women through dehumanization. As the association between psychopathic traits and dehumanization has not been established in the literature, Study 1

employed multiple forms of dehumanization to determine which form of dehumanization might have indirectly linked psychopathic traits to sexist and violent attitudes towards women. Study 2 included the same measures of sub-clinical psychopathy, dehumanization and sexism, but a b date rape analogue measure of violent attitudes towards women was added to build off of Study 1 and increase the generalizability of the findings of Study 1.

We examined Factor 1 and 2 of psychopathy separately in each of our proposed models. This decision is based on the evidence that the two factors of psychopathy can be differently related to constructs within their nomologic network (Neal & Sellbom, 2012). For example, although psychopathy in general is associated with both instrumental and reactive violence, meta-analytic evidence suggests that the strength of association varies by factor (Blais, Solodukhin, & Forth, 2014). Aspects of Factor 1 share a stronger association with instrumental violence than the other characteristics of psychopathy. Conversely, aspects of Factor 2 share the strongest association with reactive violence (Blais et al., 2014). Because the associations between the Factors of psychopathy and dehumanization are unknown it is unclear whether they will relate to the same dehumanization constructs, as such both Factors of psychopathy were entered in the path models tested.

2. Study 1 hypotheses

It was expected that sub-clinical psychopathy (both Factor 1 and Factor 2) would be:

- 1) Positively and directly associated with all of the measures of dehumanization, sexism, and violent attitudes towards women.
- 2) Positively and indirectly related to our measures of violent and sexist attitudes towards women through dehumanization.

Specifically, we predicted that higher psychopathy scores would be associated with higher dehumanization scores, which, in turn, would be associated with more sexist and violent attitudes towards women. As the association between psychopathy and dehumanization had not been clarified in the literature we did not have any specific hypotheses regarding the different forms of dehumanization.

3. Study 1 method

3.1. Participants

Two hundred and twenty-seven men were recruited from the undergraduate subject pool at a Canadian university, 265 men were recruited from Amazon's Mechanical Turk (Mturk) (a popular means of quickly recruiting community samples in social science (Bohannon, 2016), and 22 men were recruited from the website www.kijiji.ca (which advertises opportunities for volunteers) for a total of $n = 514$. The sample collected from Mturk were compensated with \$2.50 USD, participants from the university sample were given course credit, and participation for the www.kijiji.ca sample was entirely voluntary. All participants provided informed consent according to Research Ethics Board approved protocols. The sample was predominately Caucasian (53.7%) with a mean age of 29.31 ($SD = 11.36$). All measures were completed online through the website www.qualtrics.com.

3.2. Materials

3.2.1. Demographics

Participants filled out a simple demographics questionnaire where they provided information about their race (coded as White, Black, Latino, Asian, or other) and age (in years).

3.2.2. Sub-clinical psychopathy

To assess psychopathy The Self-Report Psychopathy Scale: Version

IV was employed (Paulhus, Neumann, & Hare, 2017). The SRP-IV is a reliable and well validated measure of sub-clinical psychopathic traits (Paulhus et al., 2017). The SRP-IV is a 64-item scale which measures the two factors of psychopathy. The reliability of the Factor 1 and Factor 2 subscales in our sample were $\alpha = 0.90$ & 0.89 respectively. Responses on the SRP-IV are on a five-point Likert scale (1 = Disagree Strongly and 5 = Agree Strongly) and includes items such as "I have cheated on a school test" and "I have shoplifted."

3.2.3. Dehumanization

Dehumanization was assessed in four different ways. Trait and emotional dehumanization were assessed using the method employed by Costello and Hodson (2010). Participants rated the extent to which both uniquely human (conscientiousness and openness to experience) and non-uniquely human (neuroticism and agreeableness) personality traits, and non-uniquely human emotions (joy, fear, excitement, etc.) and uniquely human emotions (guilt, admiration, compassion, etc.) applied to both men and women. Consequently, these are measures of animalistic dehumanization. Participants rated the extent to which they agree with statements such as "Men are Extraverted, enthusiastic" and "Women experience Joy" on a 7-point Likert scale where 1 = Disagree Strongly and 7 = Agree Strongly. To compute dehumanization scores the items assessing the attribution of uniquely-human qualities to women were reversed scored, so that higher scores reflected lower levels of uniquely human qualities attributed to women, and then summed. In our sample the emotional dehumanization measure was very reliable ($\alpha = 0.91$), though the personality trait dehumanization measure had fairly low reliability ($\alpha = 0.51$).

To assess mind perception dehumanization a portion of the Mental State Attribution (MSA) task was employed (Haslam, Kashima, Loughnan, Junqi, & Suitner, 2008). Participants responded to the question "How much 'sense of mind' do women have?" on a 7-point Likert scale (1 = Not Much Mind at All, 7 = A Lot of Mind).

Finally, the objectification of women (a mechanistic form of dehumanization) was assessed using the Men's Objectification of Women Scale¹ (Zolot, 2003). This is a 25-item scale which assesses objectifying behaviours and attitudes towards women on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) ($\alpha = 0.90$ in our sample). This scale includes items such as "I frequently give women a rating based on attractiveness" and "I like it when a thin woman wears tight clothing."

3.2.4. Sexist and violent attitudes towards women

The Ambivalent Sexism Inventory (Glick & Fiske, 1996) was employed to assess Hostile sexism. The Ambivalent Sexism Inventory measures both benevolent and hostile sexism (Glick & Fiske, 1996). Benevolent sexism refers to the endorsement of subjectively positive, but restricted and stereotypical beliefs about women. Conversely, hostile sexism refers to the typical antipathetic feelings towards women that have been traditionally referred to as sexism. The current work only employed the 11-item hostile sexism subscale because of its focus on antipathetic feelings towards women, and the assessment of women as being inferior to men. This measure was found to be highly reliable in our sample ($\alpha = 0.91$).

To assess attitudes supportive of violence against women we implemented the technique employed by Wright and Tokunaga (2016), which involved having the participants indicate how strongly they agreed with five statements, including "Being roughed up is sexually

¹ This measure was constructed as part of a thesis, as such it has not been empirically tested. However, measures of Objectification are relatively scarce, so the decision was made to keep it. However, we did conduct a factor analysis to confirm the existence of a one-factor structure, and the scree plot did indicate that Objectification was comprised of all 25 items 69% of the variance with factor loadings from 0.486 to 0.871.

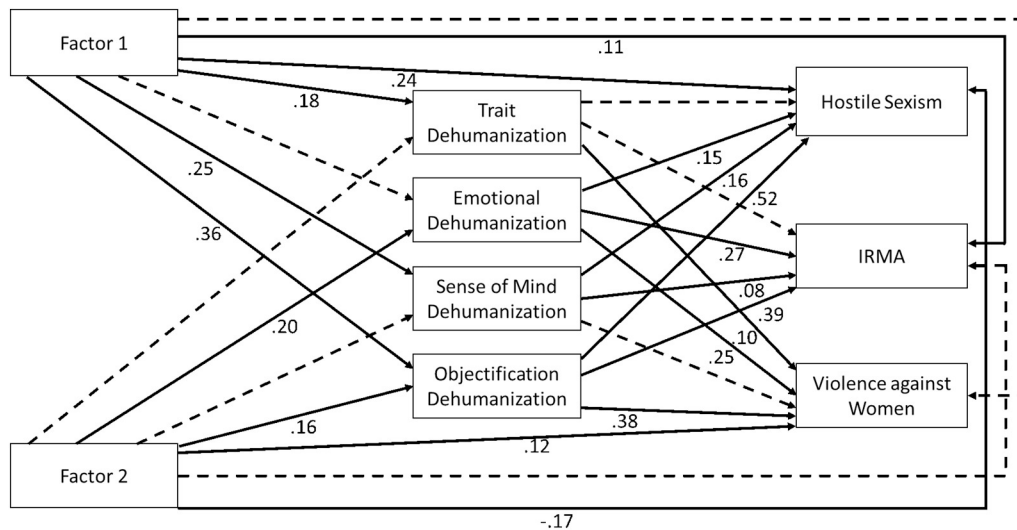


Fig. 1. Path Model and direct effects results for Study 1. Solid lines indicate significant path coefficients, perforated lines are indicative of non-significant path coefficients. IRMA = the Illinois Rape Myth Acceptance Scale. Standardized coefficients are represented below the path they correspond to.

Table 1
Study 1 descriptive statistics and bivariate correlations.

Variable	1	2	3	4	5	6	7	8	9	10	M	SD
1) Factor 1	–	0.64***	0.23***	0.22***	0.25***	0.47***	0.46***	0.37***	0.43***	–0.27***	84.64	17.64
2) Factor 2		–	0.20***	0.25***	0.15***	0.39***	0.26***	0.27***	0.41***	–0.23***	72.28	17.42
3) Trait D.			–	0.12*	0.25***	0.10*	0.09*	0.12**	0.22***	–0.10*	13.27	3.29
4) Emotion D.				–	0.27***	0.20***	0.29***	0.41***	0.42***	–0.07	11.67	6.22
5) SOM D.					–	0.17***	0.31***	0.26***	0.23***	–0.10*	2.35	1.24
6) Object.						–	0.61***	0.52***	0.55***	–0.11*	73.52	15.74
7) Hostile							–	0.65**	0.58**	–0.21***	27.95	11.79
8) RMA								–	0.74***	–0.13**	51.45	17.68
9) ASVAW									–	–0.23**	13.64	7.02
10) Age										–	29.31	11.36

Factor 1 = Factor 1 psychopathy, Factor 2 = Factor 2 psychopathy, Trait D. = personality dehumanization, Emotion D. = emotional dehumanization, SOM D. = sense of mind dehumanization, object. = objectification dehumanization, hostile = hostile sexism, RMA = rape myth acceptance, ASVAW = attitudes supportive of violence against women. n = 438–514.

* p < .05.
** p < .01.
*** p < .001.

stimulating to many women” on a five-point Likert Scale (1 = Strongly Disagree to 7 = Strongly Agree). This measure demonstrated adequate reliability in our sample ($\alpha = 0.87$).

Finally, to assess the endorsement of rape myths the current work employed the Illinois Rape Myth Acceptance Scale (IRMA: Payne, Lonsway, & Fitzgerald, 1999; McMahon & Farmer, 2011). The IRMA is a 22-item measure which assesses the extent to which participants endorse false or stereotypical beliefs about rape, including beliefs that the victim somehow asked to be raped, or lied about being raped, beliefs that the perpetrator did not mean to do it, or that the rape was not truly a rape at all. The endorsement of rape myths was measured using statements such as “If a guy is drunk, he might rape someone unintentionally” on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The IRMA was a reliable measure in our sample ($\alpha = 0.95$).

4. Study 1 results and discussion

To test our hypotheses a path model was conducted using Mplus 7.2 statistical software (Muthen & Muthen, 2013) using ML-R estimation (see Fig. 1). The decision to employ ML-R estimation was made because most of the measures employed in Study 1 (excluding the psychopathy and rape myth acceptance measures) did not meet the assumptions of univariate normality and ML-R estimation is robust against such

violations. The primary focus of the analysis was the decomposition of the total effect of psychopathy on sexist and violent attitudes into direct and indirect effects via dehumanization. Indirect effects were tested using the biased-corrected bootstrap method (which has demonstrated an adequate balance between Type 1 and Type 2 errors) (MacKinnon, Lockwood, & Williams, 2004). Ten thousand bootstrap samples and 95% bias-corrected confidence intervals (CIs) were employed to determine the significance levels of the indirect effects. We examined demographic variables to determine if they were significantly associated with the other variables in the model; if the variable was significantly associated with the other variables in the model it was included in the final model as an independent variable predicting all dehumanization and outcome variables. Age, race, and sample type (student, Mturk, or Kijiji) were all tested. Age was significantly associated with the variables in our model, and scores on the variables in our model did vary as a function of sample type as such both were included in the final analyses as control variables. Of note, fit indices were uninformative as the path model was fully saturated (i.e., $df = 0$).

At the bivariate level Factor 1 and Factor 2 of psychopathy were significantly and positively related to all dehumanization variables and dependant variables (see Table 1). Generally, the model accounted for 48.9% of the variability in hostile sexism, 40.1% of the variability in rape myth acceptance, and 47.1% of the variability in attitudes supportive of violence against women (See Fig. 1).

Table 2
Study 1 direct effects of negative and violent attitudes towards women on psychopathy and dehumanization.

Dependant variable		B	SE	95% CI		B
				LL	UL	
Hostile sexism	Factor 1	0.16***	0.03	0.10	0.23	0.24
	Factor 2	-0.12***	0.03	-0.18	-0.06	-0.17
	Personality D.	-0.18	0.13	-0.45	0.07	-0.05
	Emotional D.	0.28**	0.06	0.16	0.41	0.15
	SOM D.	1.53***	0.34	0.85	2.20	0.16
	Objectification	0.39**	0.03	0.32	0.45	0.52
IRMA	Factor 1	0.11*	0.05	0.02	0.21	0.11
	Factor 2	-0.05	0.05	-0.14	0.04	-0.05
	Personality D.	0.05	0.21	-0.38	0.47	0.01
	Emotional D.	0.75***	0.11	0.53	0.97	0.27
	SOM D.	1.21*	0.54	0.13	2.24	0.08
	Objectification	0.44***	0.05	0.35	0.53	0.39
ASVAW	Factor 1	0.02	0.02	-0.02	0.05	0.05
	Factor 2	0.05**	0.02	0.01	0.08	0.12
	Personality D.	0.21**	0.08	0.07	0.36	0.10
	Emotional D.	0.28***	0.04	0.20	0.37	0.25
	SOM D.	0.16	0.21	-0.27	0.55	0.03
	Objectification	0.17***	0.02	0.14	0.20	0.38
Personality D.	Factor 1	0.03*	0.01	0.01	0.06	0.18
	Factor 2	0.02	0.01	-0.05	0.03	0.08
Emotional D.	Factor 1	0.03	0.02	-0.01	0.07	0.08
	Factor 2	0.07**	0.02	0.03	0.11	0.20
SOM D.	Factor 1	0.02**	0.01	0.01	0.03	0.25
	Factor 2	-0.00	0.01	-0.01	0.01	-0.01
Objectification	Factor 1	0.32***	0.06	0.21	0.42	0.36
	Factor 2	0.15**	0.06	0.05	0.25	0.16

Factor 1 = Factor 1 psychopathy, Factor 2 = Factor 2 psychopathy, Personality D. = personality dehumanization, Emotional D. = emotional dehumanization, SOM D. = sense of mind dehumanization, objectification = objectification dehumanization, IRMA = the Illinois Rape Myth Acceptance Scale, ASVAW = attitudes supportive of violence against women. n = 514.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

As the bivariate results were in the desired direction we then tested the model represented in Fig. 1. With the effects of all variables in the model accounted for, both direct paths to hostile sexism were significant (positively for Factor 1: $B = 1.16$, $SE = 0.03$, 95% CI [0.10, 0.23] and negatively for Factor 2: $B = -0.12$, $SE = 0.03$, 95% CI [-0.18, -0.06]) (see Table 2). Factor 1 was also positively and indirectly related to hostile sexism through sense of mind ($B = 0.03$, $SE = 0.01$, 95% CI [0.01, 0.05]) and objectification dehumanization ($B = .12$, $SE = .03$, 95% CI [.07, .17]) (see Table 3).

Factor 2 was positively and indirectly related to hostile sexism through emotional ($B = 0.02$, $SE = 0.01$, 95% CI [0.01, 0.04]) and objectification dehumanization ($B = 0.06$, $SE = 0.02$, 95% CI [0.02, 0.10]) (see Table 3).

Factor 1 was positively and directly related to rape myth acceptance ($B = 0.11$, $SE = 0.05$, 95% CI [0.02, 0.21]) (see Table 2). Factor 1 was also positively and indirectly related to rape myth acceptance through objectification dehumanization ($B = 0.14$, $SE = 0.03$, 95% CI [0.09, 0.21]) (see Table 3). Factor 2 was not directly related to rape myth acceptance after accounting for the other variables in the model (see Table 2). However, it was positively and indirectly related to rape myth acceptance through emotional ($B = 0.05$, $SE = 0.02$, 95% CI [0.02, 0.09]) and objectification dehumanization ($B = 0.07$, $SE = 0.03$, 95% CI [0.02, 0.11]) (see Table 3).

Finally, after accounting for the other variables in the model, Factor 2 was positively and directly associated with attitudes supportive of violence against women ($B = 0.05$, $SE = 0.02$, 95% CI [0.01, 0.08]) (see Table 2) and was also positively and indirectly related to attitudes supportive of violence against women through emotional ($B = 0.02$, $SE = 0.02$, 95% CI [0.01, 0.04]) and objectification dehumanization

($B = 0.03$, $SE = 0.01$, 95% CI [0.01, 0.05]) (see Table 3). Factor 1 was not directly related to attitudes supportive of violence against women after accounting for the other variables in the model (see Table 2). However, it was positively and indirectly associated with attitudes supportive of violence against women through objectification dehumanization ($B = 0.05$, $SE = 0.01$, 95% CI [0.04, 0.08]) (see Table 3). This indicates that once all the variables in the model were accounted for, the direct associations between Factor 2 and rape myth acceptance, and Factor 1 and attitudes supportive of violence against women were no longer significant; indeed, these associations were completely indirect.

It should be noted that suppression was evident in the association between Factor 2 and hostile sexism. At the bivariate level the association between these two variables was statistically significant and positive. Yet, when the effects of the other variables were accounted for in the model the direct association between Factor 2 and hostile sexism was statistically significant and negative. To investigate the source of the suppression, variables were removed from the model one at a time and the path from Factor 2 to hostile sexism was investigated. This process revealed that it was Factor 1 which was acting as the suppressor variable in this situation. Indeed, the tendency of Factor 1 and Factor 2 to act as suppressor variables of one another is not uncommon (Lynam, Hoyle, & Newman, 2006). However, it should be noted that the indirect paths between Factor 2 and hostile sexism through emotional and objectification dehumanization were consistently positive.

4.1. Summary

Regarding our hypotheses, we found mixed support. Support was not found for the predicted direct paths between Factor 1 and attitudes supportive of violence against women, or the direct path between Factor 2 and rape myth support, however all other hypotheses were supported. We erred on the side of caution and predicted both indirect and direct effects because we were not able to determine from previous literature the strength of the indirect association. Results suggested that dehumanization does represent a significant indirect pathway linking psychopathic traits to sexist and violent attitudes towards women. More importantly, after accounting for the variables in the model our results suggest that the association was entirely indirect for the association between Factor 1 and attitudes supportive of violence towards women, and Factor 2 and rape myth acceptance. Taken together, this study provided evidence that dehumanization may represent a mechanism that can explain the association between psychopathic traits and violent and sexist attitudes towards women.

5. Study 2

Study 2 was designed to replicate the findings regarding the direct and indirect associations between Factors 1 and 2 of sub-clinical psychopathy and hostile sexism. Study 2 was also meant to build on the results of Study 1 in that Study 1 was based entirely on self-report measures, and Study 2 included a behavioural measure of violent attitudes towards women. This is paramount because evidence suggest that individuals may not have full insight into their own attitudes, biases, and stereotypes (Banaji, Hardin, & Rothman, 1993). This implicit lack of awareness has been found in men regarding their attitudes and biases towards women (Banaji et al., 1993). As such, using a more behavioural measure (a date rape analogue) may allow us to tap into attitudes that are not consciously available to the men in our sample. Additionally, there is the problem of socially-desirable responding, such that participants may be responding in such a way as to maximize social desirability (Fisher, 1993). This could be especially pronounced because some of the behaviours and attitudes examined in the current work are extremely sexist and violent. However, it is important to note that there is meta-analytic evidence to suggest that individuals high in psychopathic traits are not prone to positive impression management (Ray

Table 3
Study 1 indirect effects from psychopathy to negative and violent attitudes towards women variables.

Dependant variable	Independent variable	B	SE	95% CI		B	
				LL	UL		
Hostile sexism	Personality D.	Factor 1	-0.01	0.01	-0.02	0.00	-0.01
	Emotional D.		0.01	0.01	-0.00	0.02	0.01
	SOM D.		0.03**	0.01	0.01	0.05	0.04
	Objectification		0.12***	0.03	0.07	0.17	0.18
IRMA	Personality D.	Factor 2	-0.00	0.00	-0.01	0.00	-0.00
	Emotional D.		0.02*	0.01	0.01	0.04	0.03
	SOM D.		-0.00	0.01	-0.02	0.01	-0.00
	Objectification		0.06**	0.02	0.02	0.10	0.09
ASVAW	Personality D.	Factor 1	0.00	0.01	-0.01	0.02	0.00
	Emotional D.		0.02	0.02	-0.01	0.05	0.02
	SOM D.		0.02	0.01	-0.00	0.05	0.02
	Objectification		0.14***	0.03	0.09	0.21	0.14
ASVAW	Personality D.	Factor 2	0.00	0.00	-0.01	0.01	0.00
	Emotional D.		0.05**	0.02	0.02	0.09	0.05
	SOM D.		-0.00	0.01	-0.02	0.01	-0.00
	Objectification		0.07**	0.03	0.02	0.11	0.06
ASVAW	Personality D.	Factor 1	0.01	0.00	0.00	0.02	0.02
	Emotional D.		0.01	0.01	-0.00	0.02	0.02
	SOM D.		0.00	0.00	-0.00	0.01	0.01
	Objectification		0.05***	0.01	0.04	0.08	0.14
ASVAW	Personality D.	Factor 2	0.00	0.00	-0.00	0.01	0.01
	Emotional D.		0.02**	0.02	0.01	0.04	0.05
	SOM D.		0.00	0.00	-0.00	0.00	0.00
	Objectification		0.03**	0.01	0.01	0.05	0.06

Factor 1 = Factor 1 psychopathy, Factor 2 = Factor 2 psychopathy, Personality D. = personality dehumanization, Emotional D. = emotional dehumanization, SOM D. = sense of mind dehumanization, objectification = objectification dehumanization, IRMA = the Illinois Rape Myth Acceptance Scale, ASVAW = attitudes supportive of violence against women. n = 199–203.

* p < .05.
** p < .01.
*** p < .001.

et al., 2013). Employing a date rape analogue measure of violent attitudes towards women may allow us to examine more directly how men engage with women. Therefore, Study 2 employed a date rape decision latency measure which had our male participants listen to an auditory rendition of a coercive sexual encounter, after listening participants indicated when they would have ended the interaction. This measure provided Study 2 with a more behavioural means of assessing violent attitudes and intentions towards women.

5.1. Hypotheses

Consistent with Study 1, we predicted that both factors of psychopathy would be:

- 1) Significantly, positively, and directly associated with sexism.
- 2) Positively and indirectly related to hostile sexism through dehumanization. Specifically, as was found in Study 1, after the effects of the other variables have been accounted for in the model we expected both direct and indirect associations.
 - a. Consistent with Study 1, we predicted that Factor 1 would be indirectly and positively associated with hostile sexism through sense of mind dehumanization and objectification dehumanization.
 - b. Furthermore that, Factor 2 would be indirectly and positively related through emotional dehumanization and objectification dehumanization.

Both the date rape decision latency measure employed in Study 2 and the endorsement of rape myth measure in Study 1 measured attitudes and behaviour regarding rape, as such we predicted the same pattern of results for the date rape decision latency measure as was found for the endorsement of rape myths in Study 1.

- 3) Specifically, we expected that Factor 1 would be positively and directly related to date rape decision latency
 - a. Factor 1 would also be indirectly and positively related to date rape latency through objectification dehumanization.
- 4) Factor 2 would be indirectly and positively related to date rape latency through emotional and objectification dehumanization. We did not predict a direct path, because Factor 2 was not directly related to rape myth acceptance in Study 1.

6. Method study 2

6.1. Participants

Twenty-four male undergraduate students and 178 men from Amazon's Mechanical Turk (Mturk) participated in Study 2, for a total of 202 participants. The sample collected from Mturk were compensated with \$2.50 USD, and the student sample was given course credit. Restrictions were placed on recruitment to ensure that no participants who participated in Study 1 could participate in Study 2. All participants provided informed consent according to Research Ethics Board approved protocols. The sample was predominately Caucasian (69.3%) with a mean age of 34.00 years (SD = 10.38). All measures were completed online through the website www.qualtrics.com.

6.2. Materials

Demographics, psychopathic traits, dehumanization, and hostile sexism were assessed using the same measures as in Study 1. The SRP IV again showed high internal consistency (α = 0.92 & 0.92 for Factor 1 and Factor 2). Similarly, emotional dehumanization, objectification dehumanization, and hostile sexism evidenced high internal consistency (α = 0.88, 0.93, and 0.94 respectively), while the internal consistency of trait dehumanization was relatively low (α = 0.57).

6.2.1. Date rape decision latency

To assess violent attitudes towards women we employed a date rape decision latency task. This is a measure based on the task created by Marx and Gross (1995). Participants were required to listen to an auditory account of a coercive sexual encounter which was 4 min and 5 s long. This was a scripted dialog between a man and a woman, the encounter progressed from the couple having returned from a date at the movies to the man later perpetrating date rape. After having listened to the auditory account the participants were provided with a line-by-line script of the encounter and were asked to indicate the scripted line where they would have “stopped the encounter” by selecting a line that corresponded to where they would have ceased all sexual advances. Higher scores reflected that the participant took longer to indicate that he would have stopped the encounter.

7. Study 2 results and discussion

The data analytic strategy for Study 2 was identical to the strategy employed in Study 1 (employing Mplus 7.2 statistical software (Muthen & Muthen, 2013), ML-R estimation, and the biased-corrected bootstrap method for indirect effects (MacKinnon et al., 2004)). The primary focus of the analysis was, again, the decomposition of the total effect of psychopathy on sexist and violent attitudes into direct and indirect effects via dehumanization. Demographic variables were tested in the same way as they were tested in Study 1, and only age was significant, and as such was the only demographic variable included in the final analyses. Fit indices were uninformative as the path model was fully saturated (i.e., $df = 0$).

Consistent with the results of Study 1, at the bivariate level Factor 1 and Factor 2 of psychopathy were significantly and positively related to all dehumanization and dependent variables (see Table 4). Generally, the model accounted for 50.4% of the variability in hostile sexism and 14.8% of the variability in responses to the date rape decision latency measure. For a visual depiction of the results of study 2 see Fig. 2.

As the bivariate results were in the desired direction we then tested the model represented in Fig. 2. Both psychopathy factors were directly related to hostile sexism after accounting for all model variables ($B = 0.36, SE = 0.06, 95\% CI [0.24, 0.48]$ and negatively for Factor 2: $B = -0.19, SE = 0.05, 95\% CI [-0.30, -0.09]$) (see Table 5). Factor 1 was also positively and indirectly related to hostile sexism through objectification dehumanization ($B = 0.17, SE = 0.04, 95\% CI [0.10, 0.26]$). Factor 2 was not indirectly associated with hostile sexism via any dehumanization measure (see Table 6).

Factor 2 was not directly or indirectly related to the decision latency measure through any dehumanization measure (see Tables 5 and 6). Once all the variables in the model were accounted for, Factor 1 was not directly related to date rape decision latency (see Table 5). However, Factor 1 was positively and indirectly related to date rape decision

latency through objectification dehumanization ($B = 0.06, SE = 0.02, 95\% CI [0.02, 0.10]$) (see Table 6).

As with Study 1 there was an issue with suppression in the association between Factor 2 and hostile sexism. Again, the bivariate association between these two variables was significant and positive, but when entered into the model Factor 2 and hostile sexism shared a negative residual direct association. Employing the same method as was used in Study 1 it was revealed that it was Factor 1 which was acting as a suppressor variable, which again is not uncommon in the literature (Lynam et al., 2006).

7.1. Summary

Consistent with our hypotheses, the association between Factor 1 and hostile sexism was both direct and indirect through objectification dehumanization. Contrary to our hypotheses, Factor 1 did not share an indirect association with sexism through sense of mind dehumanization. Also contrary to our hypotheses the association between Factor 1 and date rape decision latency was fully indirect through objectification dehumanization, and there was not a significant direct path. The results regarding Factor 2 provided mixed support for our hypotheses. Factor 2 was only directly related to hostile sexism and, contrary to our hypotheses, was unrelated to date rape decision latency. Some of the results of Study 2 were consistent with Study 1, but overall results do suggest that dehumanization does represent a significant indirect pathway linking psychopathic traits to sexist and violent attitudes towards women, though perhaps more consistently for Factor 1.

8. General discussion

The current work was focused on investigating whether dehumanization may indirectly link psychopathic traits to various measures of sexist and violent attitudes towards women. Specifically, we aimed to investigate whether individuals high in psychopathic traits engage in the dehumanization of women, and whether this dehumanization would, in turn, be associated with sexist and violent attitudes towards women. Across studies results indicated that both factors of psychopathy were significantly and positively associated with all measures of dehumanization and sexist and violent attitudes towards women at the bivariate level. This supports previous research which suggests that psychopathic traits are significantly and positively associated with violent attitudes towards women (Debowska et al., 2015; Mouilso & Calhoun, 2013; Watts et al., 2017). This research also adds to the scant literature examining the association between psychopathic traits and sexism (Pina, Holland, & James, 2017).

The results of Study 1 revealed that once the effects of the variables in the model were accounted for Factor 1 was directly associated with hostile sexism and rape myth acceptance, and Factor 2 was directly

Table 4
Study 2 descriptive statistics and bivariate correlations.

Variable	1	2	4	5	6	7	8	9	10	M	SD
1) Factor 1	–	0.76***	0.31***	0.24**	0.30***	0.58***	0.59***	0.25***	–0.18*	83.44	19.02
2) Factor 2		–	0.27***	0.21**	0.28***	0.42***	0.36***	0.20**	–0.18*	70.92	19.76
4) Personality D.			–	0.14	0.34***	0.18*	0.25***	0.21**	–0.02	13.15	3.33
5) Emotional D.				–	0.27***	0.20**	0.27***	0.12	–0.03	12.30	5.64
6) SOM D.					–	0.25***	0.25***	0.25***	–0.13	2.36	1.09
7) Objectification						–	0.61***	0.33***	–0.05	72.67	17.73
8) Hostile							–	0.32***	–0.15*	23.82	14.10
9) DRDL								–	–0.03	23.22	7.50
10) Age									–	34.00	10.38

Factor 1 = Factor 1 psychopathy, Factor 2 = Factor 2 psychopathy, Personality D. = personality dehumanization, Emotional D. = emotional dehumanization, SOM D. = sense of mind dehumanization, objectification = objectification dehumanization, hostile = hostile sexism, DRDL = Date rape decision latency. n = 199–203.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

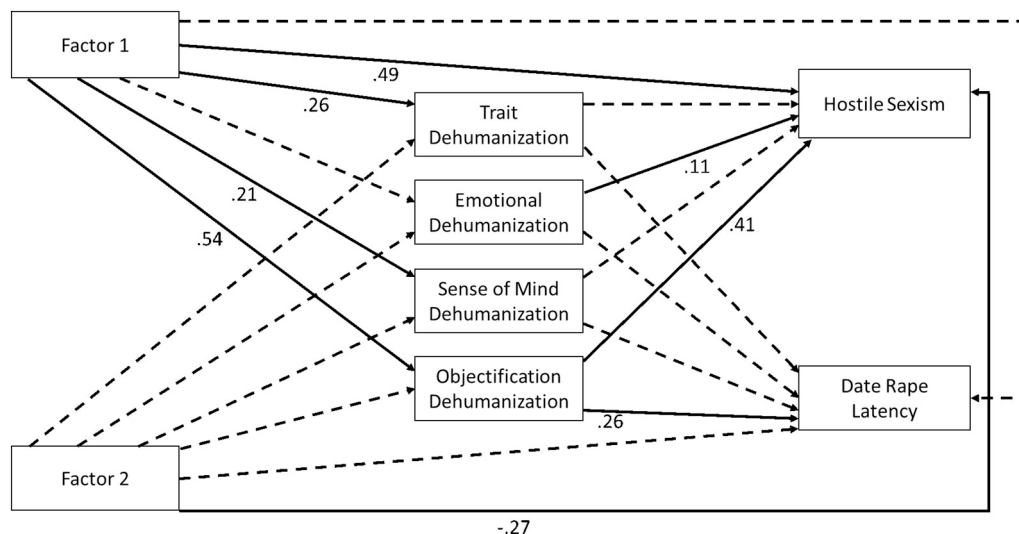


Fig. 2. Path Model and direct effects results for Study 2. Solid lines indicate significant path coefficients, perforated lines are indicative of non-significant path coefficients. Standardized coefficients are represented below the path they correspond to.

Table 5
Study 2 direct effects of negative and violent attitudes towards women on psychopathy and dehumanization.

Dependant variable		B	SE	95% CI		β
				LL	UL	
Hostile sexism	Factor 1	0.36***	0.06	0.24	0.48	0.49
	Factor 2	-0.19***	0.05	-0.30	-0.09	-0.27
	Personality D.	0.31	0.26	-0.24	0.83	0.07
	Emotional D.	0.28*	0.13	-0.02	0.53	0.11
	SOM D.	0.04	0.76	-1.48	1.58	0.00
DRDL	Objectification	0.33***	0.05	0.22	0.43	0.41
	Factor 1	0.01	0.03	-0.06	0.08	0.03
	Factor 2	-0.01	0.04	-0.08	0.06	-0.01
	Personality D.	0.24	0.17	-0.09	0.59	0.11
	Emotional D.	0.02	0.10	-0.17	0.22	0.02
Personality D.	SOM D.	0.91	0.54	-0.19	1.96	0.13
	Objectification	0.11**	0.03	0.05	0.18	0.26
	Factor 1	0.05*	0.02	0.01	0.08	0.26
	Factor 2	0.01	0.02	-0.02	0.05	0.08
	Emotional D.	0.06	0.03	-0.01	0.12	0.19
SOM D.	Factor 1	0.02	0.03	-0.04	0.08	0.08
	Factor 2	0.01*	0.01	0.00	0.02	0.21
Objectification	Factor 1	0.01	0.01	-0.02	0.01	0.11
	Factor 2	0.50**	0.09	0.33	0.68	0.54
	Factor 1	0.07	0.08	-0.09	0.21	0.07

Factor 1 = Factor 1 psychopathy, Factor 2 = Factor 2 psychopathy, Personality D. = personality dehumanization, Emotional D. = emotional dehumanization, SOM D. = sense of mind dehumanization, objectification = objectification dehumanization, DRDL = Date rape decision latency. n = 265.

* p < .05.
** p < .01.
*** p < .001.

related to hostile sexism and attitudes supportive of violence against women. Interestingly, the relationship between Factor 1 and attitudes supportive of violence against women was fully indirect through objectification dehumanization, and the relationship between Factor 2 and rape myth acceptance was fully indirect through emotional and objectification dehumanization, suggesting that for the association between psychopathic traits and these dependent variables dehumanization plays an important role.

The results of Study 2 regarding Factor 1 were largely consistent with the results of Study 1. Factor 1 was both directly and indirectly associated with hostile sexism, though in Study 2 it was only indirectly associated through objectification dehumanization and not through

sense of mind dehumanization. Furthermore, the pattern of associations between Factor 1 and the date rape latency measure in Study 2 was similar to the pattern of associations between Factor 1 and attitudes supportive of violence against women in Study 1. Specifically, in both studies Factor 1 was fully indirectly related to these dependent variables through objectification dehumanization. Conversely, once entered into the model Factor 2 was only directly related to hostile sexism and was not directly or indirectly associated with the date rape decision latency measure. The discrepancy between Studies 1 and 2 regarding Factor 2 and hostile sexism could be a function of the smaller sample size employed in Study 2.

Another explanation could be reflected by the association between Factors 1 and 2 and types of aggression. There is meta-analytic evidence which suggests that some aspects of Factor 1 are more strongly associated with instrumental violence compared with Factor 2; whereas, some aspects of Factor 2 are more strongly associated with reactive violence compared with Factor 1 (Blais et al., 2014). This could suggest that individuals high in Factor 1 may engaging in planned aggression against women based on premeditation regarding their sub-human qualities and lack of deservingness of humane treatment. Conversely, if individuals high in Factor 2 are aggressing against women it may be partly a function of impulsive and emotional responses rather than premeditated assessments of the qualities and deservingness of women.

Although at the bivariate level in the current work, and in previous findings, sub-clinical psychopathy is associated with a variety of violent attitudes towards women, the truly interesting finding of the current work is that almost consistently (except for the associations with Factor 2 in Study 2) psychopathic traits are either partially or fully indirectly related to these constructs through dehumanization. This suggests that dehumanization plays a part in the attitudes and behaviour men high in psychopathic traits express towards women. Our results are consistent with the supposition that dehumanization may be a delegitimising belief which facilitates negative attitudes and behaviour towards a group (Bar-Tal, 2000). Individuals high in psychopathic traits may endorse the idea that women are sub-human and as such they may endorse attitudes and behaviours towards women which are inhumane.

Interestingly, the most consistently significant indirect path from psychopathic traits to sexist and violent attitudes towards women appears to be through objectification dehumanization. This tendency to value a woman as a commodity based on her body consistently connects psychopathic traits to sexist and violent attitudes towards women. Objectification dehumanization may act as a specific kind of delegitimizing belief, reducing women's worth to their bodies or body parts and

Table 6
Study 2 indirect effects from psychopathy to negative and violent attitudes towards women variables.

Dependant variable	Independent variable	B	SE	95% CI		β	
				LL	UL		
Hostile sexism	Personality D.	Factor 1	0.01	0.01	-0.01	0.05	0.02
		Emotional D.	0.02	0.01	-0.00	0.04	0.02
		SOM D.	0.00	0.01	-0.02	0.03	0.00
	Objectification	Factor 2	0.17***	0.04	0.10	0.26	0.22
		Personality D.	0.00	0.01	-0.00	0.03	0.01
		Emotional D.	0.01	0.01	-0.01	0.03	0.01
DRDL	SOM D.	Factor 1	0.00	0.01	-0.01	0.02	0.00
		Objectification	0.02	0.03	-0.03	0.08	0.03
		Personality D.	0.01	0.01	-0.00	0.04	0.03
	Personality D.	Factor 2	0.00	0.01	-0.00	0.02	0.01
		Emotional D.	-0.00	0.00	-0.01	0.01	0.00
		SOM D.	0.01	0.01	-0.00	0.03	0.01
	Objectification	Factor 1	0.06**	0.02	0.02	0.10	0.14
		Personality D.	0.00	0.01	-0.00	0.02	0.01
		Emotional D.	0.01	0.01	-0.00	0.03	0.01
		SOM D.	0.01	0.01	-0.01	0.03	0.02

Factor 1 = Factor 1 psychopathy, Factor 2 = Factor 2 psychopathy, Personality D. = personality dehumanization, Emotional D. = emotional dehumanization, SOM D. = sense of mind dehumanization, objectification = objectification dehumanization, DRDL = Date rape decision latency.

** $p < .01$.

*** $p < .001$.

facilitating inhumane attitudes and treatment of women which are consistent with the idea that women are sex objects. Delegitimization categorizes individuals into valued and devalued groups and denies the devalued group of humane treatment (Bar-Tal & Hammack, 2012). As such, if individuals high in psychopathic traits are categorizing women as sex objects for consumption they may then treat them in a manner fitting of that categorization. For example, studies have found that when primed with an image of a woman dressed in a bikini or lingerie (objectified) and then provided with a vignette where that same women was raped or physically assaulted, participants tend to endorse the idea that she was feeling less pain (Pacilli et al., 2017) and was more to blame for the assault than when the same woman was shown to participants fully clothed (Loughnan et al., 2013). This is consistent with the supposition that if a woman is dehumanized thus delegitimized than it should become acceptable to treat her in inhumane ways.

The results of Study 1 also suggest that, for Factor 2, emotional dehumanization may also play a role in facilitating sexist and violent attitudes towards women. Specifically, Factor 2, appears to be associated with a tendency to ascribe more non-uniquely human emotions to women, which was further associated with the dependant variables in that study. However, it is important to note that this indirect pattern was not found in Study 2, as such further replication is needed.

8.1. Limitations and future directions

One of the limitations of Study 2 may have been the sample size, although the results for Factor 1 were replicated, the results for Factor 2 were not as consistent across studies. The effect sizes for the associations between Factor 2 and dehumanization and sexist and violent attitudes towards women appear to be smaller than the effect sizes for Factor 1, as such the smaller sample size in Study 2 may not have provided enough power to produce significant results. The current work employed a self-report measure of psychopathy, as such the results cannot be generalized to clinical populations. It should also be note that the objectification measure was developed for a thesis, as such further validation is needed for this measure. It should be noted that it was associated with both the independent and dependent variables in our samples in the same way the other more established dehumanization measures were, which does suggest a level of validation, but more is needed.

A further limitation of the current work was the consistent finding

of suppression effects between Factor 2 and hostile sexism. We found positive associations between these constructs at the bivariate level; however, when the joint variance between Factor 1 and Factor 2 were accounted for in the analyses, the association between Factor 2 and hostile sexism became negative. Suppression between psychopathy factors is often an issue faced when examining differences between bivariate and partial correlation results in the literature (Lynam et al., 2006). These results could indicate that once any manipulative and callous aspects are accounted for in Factor 2, it is no longer associated with negative appraisals of women. Factor 1 is characterized by a grandiose sense of self worth, as such psychopathic individuals evaluate their worth as being superior to others. Once this sense of superiority is removed from Factor 2 it could result in fewer, or less extreme, evaluations that women are inferior to men.

Additionally, the current work employed cross-sectional designs and consequently it was not possible to make causal claims or establish temporal precedence. Though the models put forth suggests that psychopathic traits lead to dehumanization which leads to sexist and violent attitudes towards women, without longitudinal or experimental designs temporal precedence and causation cannot be established. However, employing dehumanization as an indirect link between individual difference factors and outcome variables was consistent with previous work completed on dehumanization (Costello & Hodson, 2010; Costello & Hodson, 2011; Esses, Veenvliet, Hodson, & Mihic, 2008; Wright & Tokunaga, 2016). Future studies should examine these associations by employing longitudinal designs to establish temporal precedence, and experimental designs to establish causation.

The current work is the first of its kind to investigate dehumanization as a potential mechanism facilitating the link between psychopathic traits and sexist and violent attitudes towards women. Future studies can investigate the role of dehumanization in other negative attitudes and behaviour towards women, but also expand beyond women as a target group. Psychopathic traits are associated with a variety of different forms of prejudice (Hodson et al., 2009; Jones, 2013; Parrot & Zeichner, 2006), the results of the current work could suggest that those relationships may be facilitated by dehumanizing attitudes towards those groups. Consequently, future work should examine the indirect effect of dehumanization on the association between psychopathic traits and other forms of prejudice.

Psychopathic traits are not only associated with negative attitudes, it is also associated with actual violence perpetrated against women

(Kiire, 2017; Okano, Langille, & Walsh, 2016). The inclusion of a date rape analogue measure was an important step in the literature, but future research should examine the indirect role dehumanization plays in the perpetration of violence against women, as it may present a viable target for intervention.

8.2. Conclusions

Though Ted Bundy provides an extreme example of psychopathy and psychopathic behaviour, the current work does support the notion that his tendency to view and treat women as objects may not be an isolated occurrence. Our results indicate that sub-clinical psychopathy is consistently related to measures of dehumanization, and that dehumanization does appear to indirectly link psychopathic traits to measures of sexist and violent attitudes towards women. Individuals high in psychopathic traits may be more inclined to endorse sexist and violent attitudes and behaviour towards women because they see them as being less human, and as such deserving of treatment that is less than humane.

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