Adversarial Sexual Beliefs and Rejection Sensitivity as Risk Factors of Sexual Aggression

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Abstract

Sexual aggression within the UK and western societies is wide-spread and has extremely negative consequences for its victims. The aim of the current research was to explore rejection sensitivity as an independent risk factor for sexual aggression. Additionally, adversarial sexual beliefs (ASB) is a particularly salient risk factor that has been included in some of the most prominent models of sexual aggression. Therefore, this study also furthered research in the area by investigating a possible moderating effect of ASB on the relationship between rejection sensitivity and sexual aggression. The association between ASB and sexual aggression was also looked at independently. Forty-nine male participants aged between 18 and 30 were gathered using opportunity sampling. Participants were required to answer three questionnaires; sexual experiences survey, adversarial sexual beliefs scale and the interpersonal sensitivity measure. Results showed no significant correlation between ASB and sexual aggression or rejection sensitivity and sexual aggression and no moderating effect of ASB. Very low levels of ASB and sexual aggression were found in the sample and there was very little variation between participants' scores on both ASB and sexual aggression as well. This study's findings do not support ASB as an established risk factor, nor do they support rejection sensitivity as a new risk factor for sexual aggression. It is concluded that a possible explanation for not finding a correlation between ASB and sexual aggression is because ASB is an outdated belief systems that is no longer prevalent within young samples, this would also account for the lack of moderating effect of ASB on rejection sensitivity as a risk factor. Future research should re-examine whether ASB is still a commonly held belief in young populations to answer the questions raised by this study about its salience with a modern-day sample.

Key Words: *Sexual aggression, risk factors; adversarial sexual beliefs; rejection sensitivity*

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Introduction

Sexual aggression has been a growing field of research since the beginning of the 1970s, it is considered a continuum ranging from sexual activity achieved through verbal coercion, including the threat of force, to rape achieved through physical force (Koss & Oros, 1982b). The high prevalence of sexual aggression within western societies has been well established, in the UK statistics show more than 1 in 20 women have experienced sexual aggression (rape or attempted rape) since the age of 16 (Office for National Statistics, 2020). Statistics from the USA show 18-20 year olds are responsible for 9% of sexual offences committed, with this rising to 25% for 21-29 year olds (Department of Justice, 2013). In research particular attention is given to non-criminal populations where sexual aggression is most commonly perpetrated against acquaintances and partners (Belknap et al., 1999; Carr & VanDeusen, 2004). Koss (1998) reported the most at risk group for rape and other forms of sexual aggression to be women at college, with 15-25% of college men (a large proportion of this study's sample) admitting to some form of sexual aggression in surveys (Koss et al., 1987). Due to the prevalence and diverse nature of sexual aggression in the younger non-criminal population, it is important to identify common risk factors that may be able to aid in the prediction, understanding and prevention of sexual violence (Boduszek et al., 2017). Research conducted with male undergraduates has shown preventative programmes targeting risk factors such as rape myth acceptance, adversarial sexual beliefs (ASB), acceptance of interpersonal violence and low victim empathy can significantly reduce proclivity to engage in sexual aggression (O'Donohue et al., 2003; Willmott & Boduszek, 2016). This study focuses on whether rejection sensitivity is a risk factor for sexual aggression and if certain conditions (the presence of ASB) impacts the strength of its predictive ability.

Risk Factors

Originally there were two main theoretical perspectives on the perpetration of sexual aggression (Malamuth, 1981). The traditional perspective proposed that sexual aggression arises from individual psychopathology known as abnormal or disordered mental states (Groth & Burgess, 1977), whilst the feminist sociocultural perspective contended that sexual aggression is rooted in misogynistic views and negative sex role stereotypes in society (Brownmiller, 2005). Subsequently, a large body of research has emerged identifying risk factors aligned with both perspectives. Findings in line with the traditional perspective show a range of personality characteristics common to sexually aggressive males, including hostile

masculinity, impulsivity, lack of empathy, antisociality, aggressive and dominant personalities and anger issues (Berkowitz, 1992; Koss & Leonard, 1984; Lalumière et al., 2005; Lisak & Roth, 1990; Rapaport & Burkhart, 1984; Zinzow & Thompson, 2015). Rapaport and Burkhart (1984) administered scales on responsibility, socialisation and empathy to 201 participants assessing key aspects of their personality, as well as a coercive sexuality scale to measure levels of sexual aggression. Their findings indicated irresponsibility and a lack of social conscience and empathy to be the most important personality predictors for sexual aggression. Lisak and Roth (1990) used a qualitative method to investigate the psychodynamics behind personality characteristics related to sexual aggression, finding that it is often domineering mothers and absent fathers that lead to overly dominant personalities and a need to exert power in adult relationships.

Socio-cultural factors identified as predictors of sexual aggression are: hostility towards women, acceptance of rape myths, acceptance of interpersonal violence, rigid sex role stereotyping and ASB (Burt, 1980; Booth et al., 2017; 2018; Carr & VanDeusen, 2004; Franz et al., 2018; Malamuth, 1986; Murmen et al., 2002; Rosenthal et al., 1995; Willmott, 2016; Zinzow & Thompson; 2015). ASB originally coined by Burt (1980) was hypothesised as an attitudinal variable that would vary directly with perceptions of rape and sexual violence. Holding ASB results in the expectation that relationships between men and women are antagonistic, characterised by exploitation, manipulation and the need to exert power. Ryan (2004) suggests there is a cognitive component to sexual aggression in which these ASB lead to cognitive distortions that allow perpetrators to condone and justify their behaviour. Research on samples of sexually aggressive men find high rates of ASB, far higher than in the non-sexually aggressive groups, and the higher the level of sexual aggression perpetrated the more likely the participant was to hold ASB (DeGue & DiLillo, 2004; Koss et al., 1985; Muehlenhard & Linton, 1987). DeGue & DiLillo (2004) measured 304 male college students' attitudes and beliefs towards women using the Burt (1980) scales. Findings showed acceptance of interpersonal violence, mistrustful views of women and adversarial beliefs about women and relationships to be the most key etiological factors in the development of sexual aggression.

Whilst the majority of research in this area finds ASB and other socio-cultural risk factors to be significantly correlated with sexual aggression there are some anomalies within research. Davis et al. (2015), Forbes and Adams-Curtis (2001) and Martín et al. (2005) did not find a relationship between sexual coercion and ASB, rape myth acceptance or hostile attitudes

towards women, they suggest the relationship between attitudinal risk factors and sexual aggression may not be as robust as claimed by the majority of studies.

ASB and models of sexual aggression

Emerging from research on risk factors came two dominant models of sexual aggression in which ASB plays a pivotal role. Malamuth was the first to bring together all of these independent correlates into a coherent multifactorial model called the Confluence Model (CM). First, Malamuth suggested that an interactive risk factor model in which risk factors influence each other's effect on the dependent variable (sexual aggression), yielded better results than either a single factor model or an additive model where multiple risk factors have no influence on one another. He suggested motivational, disinhibitory and opportunity factors interact with one another to cause sexual aggression (Malamuth, 1986). This later grew into the CM, identifying two pathways made up of multiple risk factors that lead to sexual aggression: hostile masculinity (HM) and impersonal sex (IS). Men with high levels of hostile masculinity gain sexual gratification from dominating women (Bruera et al., 2022), further research by Abbey et al. (2011) concluded the basis and justification for this comes from distorted attitudes towards women such as ASB. The CM also posits that ASB and other hostile attitudes mediate the relationship between distal factors such as childhood abuse and sexual aggression, meaning childhood abuse does not have a direct effect on sexual aggression but rather an indirect effect through its relationship with ASB. Whilst this model is still prominent another version of the CM, the Hierarchical Mediation Confluence Model (HMCM), now co-exists for the purpose of integrating risk factors for both criminal and non-criminal samples (Malamuth, 2003). The most recent empirical support for both versions of the CM is Malamuth et al. (2021), which administered surveys testing the main components of the CM to 1,148 males. Both main pathways (HM and IS) were supported as well as the additional risk factor proposed in the HMCM relating to psychopathy e.g. lack of empathy, impulsivity and manipulation.

The second model is Berkowitz's integrative model, suggesting socialisation, personality and situational factors all play a part in the perpetration of sexual aggression. However, Berkowitz states the primary potential for sexual aggression comes from rape supportive attitudes and beliefs, including ASB (Carr & VanDeusen, 2004). Similarly to the theory put forward by Ryan (2004), this model suggests that ASB work as heuristics influencing how a perpetrator views sexual encounters and when they are willing to engage in sexual aggression (Berkowitz et al., 1994). Both the confluence model and the integrative

model demonstrate the importance and prominence of ASB in leading models of sexual aggression.

Aggression and Rejection Sensitivity

Sexual aggression and physical/non-sexual aggression are highly related to one another, it is argued that rape has an aggressive rather than sexual motive, therefore ASB along with other risk factors for sexual aggression contain non-sexually aggressive components (Briere & Malamuth, 1983). Additionally, research shows physical aggression can be predicted using the HM pathway of the CM (Malamuth, 2003), indicating the two forms of aggression do share common characteristics. Rejection sensitivity has been conceptualised as a "cognitive-affective processing disposition" creating a bias towards one's perception of rejection and heightened reactivity to rejection. It has been identified as an important risk factor for aggression, correlating to reactive aggression, hostility and interpersonal violence (Downey et al., 2000; Leary et al., 2006;Romero-Canyas et al., 2010). Furthermore, it is believed to be a risk factor for sexual victimisation (Young & Furman, 2008). Despite this, research has yet to investigate whether rejection sensitivity is correlated to sexual aggression. Research examining the role entitlement and power issues play in sexual aggression strengthens the rationale for a link to rejection sensitivity (Bouffard, 2010; Franz et al., 2018; Lisak & Roth, 1990). This study is based on the supposition that entitlement and power issues go hand in hand with rejection sensitivity, those who feel a sense of entitlement towards women are likely to be sensitive to rejection from them and overreact to real or perceived rejection with violence/aggression. Furthermore, research on the HMCM found feelings of inadequacy and vulnerability, common components of rejection sensitivity scales, to also be composites making up the HM pathway (Malamuth, 2003). However, conflicting findings by Martín et al. (2005) suggest high confidence and feelings of competency are associated with sexual aggression. Regardless, rejection sensitivity can be linked to both possible personality types, that is, individuals who either demonstrate feelings of inadequacy and vulnerability, or high confidence and competency. Rejection is hypothesised to damage male ego and self-esteem, it is concluded that the threat and fear of such damage to a man's ego can cause physical aggression (Baumeister et al., 1996). If one is vulnerable to feelings of inadequacy affecting already low self-esteem or is confident in themselves forming a large ego then both personality types will likely be sensitive to rejection for fear of damage to these self-perceptions. Due to this believed

link between rejection sensitivity and factors associated with sexual aggression, this study aims to fill the gap in this area of research by investigating the potential predictive effect of rejection sensitivity on sexual aggression.

Rejection sensitivity and Adversarial Sexual Beliefs

Rejection sensitivity would be considered a general risk factor for sexual aggression, therefore on its own I believe it will only have a small effect on sexual aggression and its predictive ability may be influenced by the presence of more specialised risk factors such as ASB (Vega & Malamuth, 2007). Consequently, this study will also extend existing research on ASB and sexual aggression by seeing what impact this established risk factor has on the relationship between rejection sensitivity and sexual aggression. ABS was chosen as the other risk factor not only for its prominence in existing sexual aggression models but also because it has been theoretically and empirically linked to entitlement (Bouffard, 2010). Therefore, rejection sensitivity and ASB share a common denominator, potentially producing an interactive relationship. I predict ASB will be a moderator between rejection sensitivity and sexual aggression and not the reverse because as was mentioned earlier the CM posits that there must be motivational and disinhibitory factors contributing to sexual aggression. ASB can be considered a motivational factor by creating the potential for sexual aggression (Carr & VanDeusen, 2004) as well as a disinhibitory factor as it is believed to disinhibit sexual arousal in response to sexually aggressive stimuli (D. Hall, 2013). I propose rejection sensitivity is simply a motivational factor, therefore the disinhibitory component of ASB will strengthen the effect rejection sensitivity has on sexual aggression.

A similar investigation was conducted by Vega and Malamuth (2007) investigating the effect of pornography on sexual aggression. Increased exposure to pornography is believed to elevate acceptance of general violence and aggression towards women, making it a general risk factor for sexual aggression. Similarly to my rationale for rejection sensitivity, it seems pornography requires more specialised risk factors to have a large effect on sexual aggression, though in contrast to rejection sensitivity, this is because they are needed to create the specific motivation for sexual aggression rather than the inhibition. Vega and Malamuth (2007) found pornography use to have a main effect as well as an interactive effect with other risk factors for sexual aggression. Variance in pornography use had a small but significant effect on sexual

aggression levels when other risk factors were low but a large effect when these risk factors were high.

The Current Study

The current study intends to establish whether rejection sensitivity is a risk factor for sexual aggression and if there is an interaction effect between ASB and rejection sensitivity whereby ASB moderates the relationship between rejection sensitivity and sexual aggression, three questionnaires were administered assessing the levels of sexual aggression, ASB and rejection sensitivity of the participants. Men aged between 18-30 were chosen as the target population as statistics show that together this age range makes up 34% of sexual offenders, with college-aged men posing a significant risk. A potential link between economic status and sexual aggression is also briefly investigated for exploratory purposes. In line with the research discussed I make the following hypotheses:

1. Individuals engaging in sexually aggressive behaviour are more likely to hold adversarial sexual beliefs than individuals not engaging in sexually aggressive behaviour;

2. Individuals engaging in sexually aggressive behaviour are more likely to be sensitive to rejection than individuals not engaging in sexually aggressive behaviour; and

3. Sexual aggression levels will be higher for those who are sensitive to rejection **and** have high adversarial sexual beliefs compared to those who are sensitive to rejection with low adversarial sexual beliefs **or** are only rejection sensitivity.

Method

Sampling

This study gathered 49 male participants using an opportunity sampling method. Members of the target population were recruited in four ways; asking friends and acquaintances to participate, posting the study on the participant pool for students at the University of Portsmouth to participate in exchange for 0.5 credits, posting the study on 3 Facebook psychology research sites (Psychology Research, Criminal and Forensic Psychology Research

and Research in Psychology) and approaching males in university buildings such as the library and asking them to take part. Participants ages ranged from 18 to 30 years old (M = 19.86, SD = 2.25). A restriction of 30 years of age was thought to be appropriate for this study as generational differences could have acted as a confounding variable effecting sexual aggression. Males of all sexual orientations were included in the sample, however previous research within the field seems to only include heterosexual males within their sample, therefore in order to make this research comparable only the data of heterosexual and bisexual males will be analysed.

Design

This study is non-experimental, looking at quantitative data. It uses a correlational design to look at the correlation between males' level of sexual aggression, adversarial sexual beliefs and rejection sensitivity.

Materials

This study took the form of an online survey, created using the Qualtrics platform. Included in this survey was a digital participant information sheet (appendix B) providing participants with all the salient information they needed for the study, a digital participant consent form (appendix C), four demographic questions on age, gender, sexual orientation and economic status, a digital debrief form found at the end of the survey explaining to participants the full aims of the study and relevant background research (appendix D) and three questionnaire measures that will be discussed in the next section. The demographic question on economic status were assessed using five parental income levels: £20,800 - £25,999, £26,000 - £36,399, £36,400 - £51,999, £52,000 - £77,999, £78,000 or more.

Measures

Three separate questionnaires were used in this online survey. The main measure looking at levels of sexual aggression, the behaviour being investigated, and the other two which are measures of risk factors for sexual aggression.

Sexual Experiences Survey

To measure men's level of sexual aggression the Sexual Experiences Survey (Koss & Oros, 1982b) was used, as it is one of the most common measures for sexual aggression in research (appendix E). Originally this measure contained 13 questions asking about males perpetration/females experience of sexually coercive behaviour, sexual assault and rape. For the purposes of this study only the first six questions were included, one ascertaining engagement in sexual intercourse and the rest identifying sexual coercion, as these were considered the most appropriate and ethical questions to include. Additionally, only the wording applying to men was used. An example of a question in this scale is: "Have you ever obtained sexual intercourse by saying things you didn't really mean". This scale has a dichotomous response system, participants respond either yes or no. Scores for participants were calculated by adding up the number of questions participants answered 'yes' to, providing a total. This provides participants scores in the range of 0-6 which was considered a better method than using a cut off and assigning participants to either a sexually aggressive or non-sexually aggressive group as research tells us sexual aggression is a broad continuum and variability in attitudes predict different levels of sexual aggression along this continuum (Briere & Malamuth, 1983).

Adversarial Sexual Beliefs Scale

This scale developed by Burt (1980) measures levels of adversarial sexual beliefs which are attitudes/beliefs supporting aggression and sexual violence towards women. This 7 point Likert scale containing 9 questions was used in full. An example of a question in this scale is: "A woman will only respect a man who will lay down the law to her". Responses ranged from 1-7, 1 being 'Strongly agree' and 7 'Strongly Disagree', participants scores were calculated by adding the numbers corresponding to their Likert scale response, therefore the higher the score the higher the level of adversarial sexual beliefs. Burt (1980) reports a Cronbach's Alpha score of .800 for this scale (appendix F).

Rejection Sensitivity Measure

Rejection Sensitivity was measured using the Interpersonal Sensitivity Measure (Boyce & Parker, 1989) (appendix G). This scale has 36 questions with a 4 point Likert response ranging

from 1 'Very Unlike' to 4 'Very Like'. An overall score for this scale was worked out by adding the numbers correlating to the participant's response, the higher the number the higher their rejection sensitivity level. This scale also contains 5 sub-scales: Interpersonal awareness, Need for approval, Separation anxiety, Timidity and Fragile inner self. Scores in different sub-scales are worked out by adding the relevant questions numbers included in each sub-scale. An example of a question from this scale is: "I feel happy when someone compliments me". This scale has a Cronbach's Alpha score of 0.85 (Boyce & Parker, 1989)

Procedures

Before gathering participants this study gained ethical approval from the University of Portsmouth's Psychology Department Ethics Committee. This study was conducted online therefore depending on the way participants were recruited they were either directly sent a link to the study or followed a link on the University of Portsmouth participant pool website. Participants were first presented with a PIS to read through, following this they had to read the consent form and click 'yes' to confirm they understood what the study would involve and what was expected of them. If participants did not consent the survey automatically took them to the end page of the survey. Those who did consent were presented with 4 demographic questions asking them to provide their age, gender, sexual orientation and pick a parental income bracket. Subsequently, the first of the three questionnaires were presented to participants. These questionnaires were randomised so the order in which they were viewed would be different for participants. Participants were not forced to answer all the questionnaire questions, however a request response message appeared if participants tried to continue without answering all questions. Once participants answered all three questionnaires they were given a chance to read the digital debrief form to learn more about the study and its aims. Finally they were thanked for their participation.

Results

The present study investigated the effects two independent variables (ASB and rejection sensitivity) had on levels of sexual aggression and the potential moderating effect of ASB on rejection sensitivity and sexual aggression. The mean score of sexual aggression within the sample was 7.41 (SD = 1.15). With the lowest possible sexual aggression score being six and

the highest 12, these results indicate very low levels of sexual aggression within the sample. Additionally, as can be seen from the standard deviation, the variation of sexual aggression scores within the sample is very small. The mean score for ASB was 27.92 (SD = 10.42), the possible range on this scale was 9-63, again showing very low levels and little variability of ASB within the sample. The mean rejection sensitivity score was 95.98 (SD = 16.20), with a possible range of 36-144. Adversarial sexual beliefs and rejection sensitivity were tested as independent predictors of sexual aggression using simple linear regression analyses, followed by a moderation regression analysis to test if ASB has a moderating effect on the relationship between rejection sensitivity and sexual aggression. A final short analysis was performed comparing the levels of sexual aggression in individuals with different economic backgrounds.

Linear Regression Analysis

Two initial linear regression analyses were done to examine the effects of ASB and rejection sensitivity on sexual aggression (see Table 1). It was found that ASB had a non-significant relationship with sexual aggression ($F(1,47)=2.04$, $p=.160$). This indicates sexual aggression does not increase with higher levels of ASB. Similarly, the second initial regression analysis between rejection sensitivity and sexual aggression found rejection sensitivity to have no significant predictive effect on sexual aggression ($F(1,47)=3.10$, $p=.580$). These results do not support hypotheses 1 and 2 from this paper.

Table 1

Coefficients of Determination and Beta Coefficients for Adversarial Sexual Beliefs and Rejection Sensitivity

	R	R^2	β
ASB	.204	.042	.204
RS	.081	.007	.081

Note. R^2 represents the percentage of sexual aggression variation that can be explained by the independent variable. The beta coefficient represents the degree of change of sexual aggression for every unit of change in the independent variable.

Moderation Regression Analysis

Subsequent to the initial regression a moderation regression analysis was performed (see Table 2). Using a similar regression technique to the one above ASB and rejection sensitivity were first entered together in model 1, showing no correlation between the two variables ($F(2,46)=1.013$, $p=.371$). Following this the interaction term ASB_RS was also entered to test for a moderating effect of ASB on rejection sensitivity. The interaction term was calculated by multiplying the overall scores for ASB and rejection sensitivity together. Results for model 2 showed no correlation between all three variables ($F(3,45)=.694$, $p=.561$). However, most importantly are the results on the contribution of the interaction term ASB_RS on its own, which was found to be non-significant. This means that the effect of rejection sensitivity on sexual aggression does not depend on the presence of ASB. This findings goes against hypothesis 3 of this paper.

Table 2

Coefficients of Determination and Beta Coefficients for Adversarial Sexual Beliefs, Rejection Sensitivity and Interaction Term ASB_RS

		R	R^2	β	p-value
Model 1	Overall	.205	.042		.371
	ASB			.197	.197
	RS			-.025	.871
Model 2	Overall	.210	.044		.561
	ASB			-.079	.931
	RS			-.142	.730
	Interaction (ASB_RS)			.271	.759

Comparison of Sexual Aggression Based on Economic Status

This analysis was conducted to explore the possibility of levels of sexual aggression varying based on economic status. The original five parental income options were grouped together to

create two main variables; the two lowest income options (£20,800 - £25,999 and £26,000 - £36,399) and the two highest income options (£52,000 - £77,999 and £78,000 or more) were combined. The low income group ended up containing 19 participants whilst the higher income group contained 18. An independent groups t-test was conducted revealing no statistically significant difference in sexual aggression levels for the lower income group (M= 7.26, SD= 1.05) compared to the higher income group (M= 7.78, SD= 1.44), t(35) = -1.25, p= .210.

Discussion

Summary of Findings

The current study assessed the relationship between sexual aggression and ASB and sexual aggression and rejection sensitivity with the aim of establishing them as risk factors for sexual aggression. The possible moderating effect of ASB on the relationship between rejection sensitivity and sexual aggression was also investigated. In the present study ASB and rejection sensitivity were found to not be significant predictors of sexual aggression on their own nor was ASB found to moderate the relationship between rejection sensitivity and sexual aggression in any way. These results do not support any of my original hypotheses which predicted both ASB and rejection sensitivity to be independent predictors of sexual aggression but also that the presence of ASB would have a moderating effect on rejection sensitivity and sexual aggression by way of increasing the strength of the relationship. Despite this, the results do appear to answer the main research question intended to investigate the new theory that rejection sensitivity is a risk factor for sexual aggression.

Adversarial sexual beliefs

These results are inconsistent with the majority of previous research investigating socio-cultural risk factors for sexual aggression, which not only report higher and more varied levels of ASB within the target population (not found in this study) but also report ASB along with hostility towards women, acceptance of rape myths and acceptance of interpersonal violence to be significantly correlated to sexual aggression and therefore highly predictive of sexually aggressive behaviour (Burt, 1980; Carr & VanDeusen, 2004; Franz et al., 2018; Malamuth, 1986; Murmen et al., 2002; Rosenthal et al., 1995; Zinzow & Thompson; 2015). This discrepancy could potentially be due to ASB being an outdated attitude. The Burt (1980) scale

that was used to measure ASB in this study was developed in 1980 and has not been altered since, it is possible that such adversarial attitudes towards women are not very prevalent within society anymore, certainly not within the young and modern age group that my study used. This brings into question not only the ASB scale but the hostile masculinity pathway of the CM upon which a large proportion of modern research in this area is based. If ABS are generally low in modern society then such attitudes, which are believed to significantly contribute to the hostile masculinity pathway of the CM, would no longer serve as meaningful risk factors for sexual aggression. It could be concluded that sexual aggression may not be best understood within common models such as the CM anymore and that more updated theories need to be investigated to incorporate changes in societal attitudes. In addition to theoretical implications, the findings of this study may suggest a need to shift intervention tactics. Targeting attitudes such as ASB and rape myth acceptance has been common in previous preventative programmes (O'Donohue et al., 2003), however a shift towards not only focusing on different attitudinal factors more relevant to modern society but also towards non-attitudinal factors, such as building victim empathy, could be more effective with modern undergraduate and college age samples.

Furthermore, whilst my results are in opposition to the majority of research on sexual aggression, there are some outliers with which my study aligned. Through their disagreement with key aspects of the hostile masculinity pathway Davis et al. (2015), Forbes & Adams-Curtis (2001) and Martín et al. (2005) have already suggested that the confluence model may not be as robust as previously reported. My study has similar findings to that of Davis et al. (2015) who found that ASB did not significantly predict sexual aggression and instead what they consider to be proximal factors such as anger and impulsivity were emphasised. The findings of this study could be explained by their theory that ASB as well as other attitudinal factors (hostility towards women) are not actually predictive of specific incidents of sexual aggression but instead associated with the likelihood to perpetrate sexual aggression when looked at with behaviour holistically over time. Although the CM does state that an interactive relationship between risk factors is best for predicting sexual aggression, it considers attitudinal variables taken by themselves to be significant predictors within the hostile masculinity pathway, which neither this study nor Davis et al. (2015) support.

Similarly to the present findings, Forbes and Adams-Curtis (2001) found that ASB was not a significant factor in the prediction of sexual aggression, both I and Forbes and Adams-Curtis propose these findings stem from the overall low levels of ASB found in our samples which precluded ASB from acting as a meaningful risk factor. However, our studies differ in the believed reasons behind such low levels of ASB. Forbes and Adam-Curtis (2001) postulate that their low levels are a consequence of the youth of their sample (only just college age), as participants would not have had the dating experience or exposure to college culture that most likely fosters attitudes such as rape myth support and ASB. Whilst my study's sample had a mean age of 19 years old, which is younger than some of the previous research supporting the presence of ASB, it is not necessarily young enough to also face this restriction. Therefore, I instead propose the low level of ASB found in my sample may reflect generally low levels of ASB within modern society.

Rejection sensitivity

The proposed link between rejection sensitivity and sexual aggression and the moderating effect of ASB is novel to this study, and therefore the failure to attain these effects is not in direct disagreement with previous research. However the rationale for these hypotheses came from research linking rejection sensitivity to general aggression (Downey et al., 2000; Leary et al., 2006 and Romero-Canyas et al., 2010) and the perceived link between rejection sensitivity and correlates of sexual aggression (entitlement, power issues, feelings of inadequacy and high competency.). This perceived link came from the logical reasoning that rejection sensitivity will likely accompany and potentially be the by-product of feelings such as entitlement, inadequacy and high competency. Consequently, the results of this study conflict with my rationale and the research used to support it (Bouffard, 2010; Lisak & Roth, 1990; Malamuth, 2003). In terms of the lack of a moderating effect of ASB on rejection sensitivity, the mere fact that there was no real prevalence of ASB in the sample can explain the absence of a moderating effect on rejection sensitivity as this effect could only occur with more variation of ASB levels. This was hypothesised to be because the disinhibitory qualities of ASB would be required for rejection sensitivity to have a large effect on sexual aggression.

Although, it was expected that even without ASB rejection sensitivity would still have had a small but significant effect on sexual aggression, I propose that the absence of this

relationship stems from using an overly broad measure of rejection sensitivity. There is research that suggests two distinct types of rejection sensitivity exist that result in different behavioural manifestations: anxious rejection sensitivity and angry rejection sensitivity. Anxious rejection sensitivity is associated with withdrawal whereas angry rejection sensitivity is associated with retribution or reactive aggression (Zimmer-Gembeck & Nesdale, 2013). I believe that a link between rejection sensitivity and sexual aggression will only be found in those that have an angry form of rejection sensitivity. Not only do the subscales within the Interpersonal Sensitivity Measure used in this study suggest a leaning towards an anxious style of rejection sensitivity but as Zimmer-Gembeck and Nesdale (2013) point out, a far more sophisticated measure that assesses individuals' cognitive, emotional and behavioural reactions is needed.

Limitations

Some of the explanations above for the inconsistency of present findings with prior research can be disputed, for example, there are relatively recent studies that do show support for the ongoing presence of ASB in young samples and its role as a significant predictor of sexual aggression (Bouffard, 2010; Emmers-Sommer, 2018; Klement et al., 2019; Malamuth et al., 2021), therefore we must look to other explanations for these insignificant results such as limitations within the study. This study had a relatively small sample size (N=49) which potentially created two problems; low power reducing the chances of finding a true effect and restricted ranges for scores on both ASB and sexual aggression. The standardised beta from the correlation between ASB and sexual aggression was .204 which is high enough to be significant if a large enough sample was gained, demonstrating the significant impact the low power of the study had on the results. From this perspective, the lack of evidence for ASB within the sampled population and consequently the lack of an association between ASB and sexual aggression may not be due to it being an outdated attitude but rather because not enough people were tested. Another possible explanation for both low levels of ASB and sexual aggression may be due to a social desirability bias, wherein participants avoided reporting high levels of both measures because they are known to be considered negatively by society (Latkin et al., 2017). This study could also be criticised for having too narrow a sample, the target population was males between the ages of 18 and 30 however the majority of the sample came from the University of Portsmouth and therefore lacks generalisability to the wider population

within this age group. It may be that the particular demographic found within the University of Portsmouth was the source of restricted scores on ASB and sexual aggression and with a broader sample from the UK higher levels of both would have been found and in turn a correlation between the two would be evident. If these methodological issues are the cause of my insignificant findings then it suggests existing models are only applicable when looking at a broader population of young people and do not necessarily apply to university students. However, this conclusion is in direct conflict with research which used solely college samples and still produced high levels of ASB and sexual aggression (Carr and VanDeusen, 2004; Koss and Dinero, 1988; Malamuth, 1981; Thompson and Cracco, 2008).

Future Research

The limitations of this study should be addressed in any future research. I propose that to solve the issue of social desirability bias an implicit rather than explicit measure of ASB should be used. An effective implicit measure that could be used in future research is the Implicit Association Test (Greenwald et al., 1998), this test works by measuring response times to see how associated a given attitude/concept is with either a pleasant or unpleasant attribute. Whilst disputes over its validity make this test quite controversial (Schimmack, 2021) it may still yield more accurate measures of ASB than explicit measures. Social desirability bias for sexual aggression would be harder to eliminate as you are not measuring an attitude but rather the presence or absence of particular behaviours. Although, a potentially promising option is using a laboratory paradigm which utilises distraction tasks to identify men inclined to sexually-impositional behaviour (Hall et al., 1994). However, despite this paradigm having been replicated (Franz et al., 2018) there is not a large body of research to supports its validity and should therefore be used with caution. As such, the best option may be to simply mitigate the effects of social desirability by taking steps that encourage honesty and full disclosure. This could be achieved by having participants complete the SES in person using pen and paper rather than on a computer, this might eliminate any worry participants have about their IP addresses being traceable, compromising their belief of anonymity. Future research should also try to gather both a larger and broader sample within the UK, this would make the results more generalisable to the target population (men aged 18-30). It may also be beneficial in future to widen the sample to include other cultures. Psychological research has a tendency to focus on western societies which means that the differences of other cultures are often neglected and

consequently findings are never completely generalisable around the world (Henrich et al., 2010). To my knowledge research on sexual aggression and attitudinal risk factors has not been conducted in eastern cultures, this means research has yet to investigate possible differences in attitudes surrounding sexual aggression in collectivist versus individualist cultures. It would be interesting to see if cultures that operate significantly differently to ours still have the same issues with socio-cultural risk factors for aggression as this would have implications for the CM's applicability.

Finally, future studies should re-investigate a possible link between rejection sensitivity and sexual aggression using a more adequate and inclusive measure. The strong difference between anxious rejection sensitivity and angry rejection sensitivity found in studies (Zimmer-Gembeck & Nesdale, 2013) warrants investigation by future research into how such differences may affect the link between sexual aggression. It would be prudent to investigate not only if angry rejection sensitivity specifically is a risk factor for sexual aggression but whether anxious rejection sensitivity would in fact be a protective factor. The behavioural reaction of withdrawal found to be common in those who experience anxious rejection sensitivity suggests a possible protective function, therefore it would be interesting to see if individuals who are high on common sexual aggression risk factors are less likely to perpetrate sexual aggression if they are also high in anxious rejection sensitivity. In general, research ignores protective factors for offending behaviour and instead focuses on risk factors, so it would be beneficial for research to give this topic more of a focus in the future.

Conclusion

To conclude, the main findings of this research are that ASB and rejection sensitivity are not correlated with sexual aggression and that ASB does not moderate the relationship between rejection sensitivity and sexual aggression. The low levels of ASB found does suggest that this attitude may be less prevalent within society today and I propose this is potentially the reason for no correlation being found. This would have implications for the validity of commonly used models for sexual aggression such as the CM. Additionally, my results indicate that using the Interpersonal Sensitivity Measure is not adequate to find a link between rejection sensitivity and sexual aggression. However, there are several methodological issues present in this study that could also have led to low scores for ASB and sexual aggression and consequently caused

insignificant results, these issues would need to be addressed in future research before statements questioning the validity of the CM could be made with confidence.

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