Running head: Rape-supportive cognitions and rape judgements

Excusing and justifying rape cognitions in judgements of sexually-coercive dating scenarios

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Abstract

According to recent analyses, Bumby's RAPE scale of rape-supportive cognitions about

women and sexual assault is comprised of two factors. Excusing rape serves to reduce

abusers' culpability for their offending, and ascribing blame to victims, while justifying rape

is associated with a sense of sexual entitlement. The distinct effects of these factors on rape

judgements have not yet been investigated. We examined whether these belief clusters

differentially explained judgements of perpetrator innocence after priming cues related to

each of them. We used a cross-sectional design (N = 217) to test our hypotheses. As

predicted, we found that excusing rape cognitions contributed to exaggerated innocence

judgements when the victim paid the bill on a first date (potentially indicative of romantic or

sexual interest). However, contrary to expectations there was no evidence that participants

justified rape when the perpetrator paid the bill. Implications for conceptualising the

functions of rape-supportive cognitions are discussed.

Keywords: rape-supportive cognitions, rape, excusing rape, justifying rape, IAT

2

Excusing and justifying rape cognitions in judgements of sexually-coercive dating scenarios

Rape-supportive cognition, broadly defined as incorrect or maladaptive attitudes about women and/or sexual relationships, have been implicated as key drivers of coercive sexual behaviour (Gannon, 2009; Malamuth, 1981, 1986; Marshall & Barbaree, 1980; Ward & Beech, 2006; Ward & Siegert, 2002). In recent times, however, there have been increasing levels of social discussion about the role of such attitudes in the general community, particularly in relation to claims that particular aspects of our society can be deemed 'rape cultures'. This notion assumes that there are large swathes of the population who endorse myths about rape, rapists, women, and the victims of rape offenders (Burt, 1980; Suarez & Gadalla, 2010), and that these beliefs lead to low conviction rates for rape offences (Burt & Albin, 1981; Hammond, Berry, & Rodriguez, 2011; Temkin, Gray, & Barrett, 2018).

A range of theoretical and conceptual models have outlined the various ways in which rape-supportive cognitions may be expressed. In early work, Scully and Marolla (1984) interviewed a large sample of convicted rapists and identified cognitions which clustered into five themes: women as seductresses, women mean yes when they say no, most women eventually relax and enjoy it, nice girls don't get raped, and guilty of a minor wrongdoing. These models are typically based around the idea of implicit theories, which operate as mental schemas about the world, and the relationships between people within it. Ward (2000) theorised that specific implicit theories that guide these interactions in sexual offenders. In rapists, Polaschek and Ward (2002) proposed the following implicit theories by examining standardised questionnaire measures of rape-supportive cognitions: women are unknowable/dangerous, women as sex objects, entitlement, the male sex drive is uncontrollable, and dangerous world. Polaschek and Gannon (2004) subsequently analysed interviews with rapists and found empirical support for each of these in their transcripts.

Explicit (i.e., self-report) measures of rape-supportive cognitions support the idea that these beliefs are multidimensional in nature (for a review, see Maruna & Mann, 2006). The Illinois Rape Myth Acceptance scale (IRMA; Payne, Lonsway, & Fitzgerald, 1999), for example, is a 45-item measure comprised of seven themes: she asked for it, it wasn't really rape, he didn't mean to, she wanted it, she lied, rape is a trivial event, and rape is a deviant event). Similarly, Feild's (1976) Attitudes Towards Rape (ATR) scale was found to be comprised of eight underlying factors/themes: woman's responsibility in rape prevention, sex as a motivator for rape, severe punishment for rape, victim precipitation for rape, normality of rapists, power as a motivator for rape, favourable perception of women after rape, and resistance as a woman's role during rape. Despite this, the three most commonly used measures of rape-supportive cognitions are typically used in a manner that suggests unidimensionality. Burt's (1980) Rape Myth Acceptance (RMA) scale is comprised of 19 items (e.g., "In the majority of rapes, the victim is promiscuous or has a bad reputation"). Items from the RMA scale have been adapted by a range of researchers, and subsequently summed or averaged to produce a single composite score for RMA (e.g., Fox & Potocki, 2016; Hammond et al., 2011; Vonderhaar & Carmody, 2015).

Bumby's (1996) RAPE scale is a 36-item questionnaire (e.g., "If a woman gets drunk at a party, it is really her own fault if someone takes advantage of her sexually"), which has been used to measure rape-supportive cognition in convicted samples of rapists and non-convicted community samples. Until recently, the unidimensional use of the RAPE scale was generally unchallenged within the literature. However, Hermann, Babchishin, Nunes, Leth-Steensen, and Cortoni (2012) undertook to examine the underlying factor structure of the RAPE scale, finding it to by underpinned by two distinct factors. The first – *excusing rape* – comprised of items that appeared to shift blame away from rape perpetrators and placed responsibility onto their victims (e.g., "The reason a lot of women say 'no' to sex is because

they don't want to seem loose"). The second factor – *justifying rape* – comprised of items that minimises the negative effects or wrongfulness of rape (e.g., "I believe that if a woman lets a man kiss her and touch her sexually, she should be willing to go all the way").

These two RAPE scale factors were found to be differentially related to static (Static-99; Hanson & Thornton, 2000) and dynamic (Stable-2000; Hanson, Harris, Scott, & Helmus, 2007) risk of sexual offending. For example, excusing rape cognitions were unrelated to either of this risk assessment instruments. Likewise, justifying rape cognitions were unrelated to static risk but strongly associated with dynamic risk. These different correlation trends support the distinctiveness of the two factors, both theoretically and from the perspective of their practical implications.

In spite of this established knowledge, Hermann et al.'s (2012) two-factor structure of the RAPE scale has not been explored in relation to its ability to explain judgements of rape in non-custodial or non-offending samples. As such, we sought to build upon Hermann et al.'s (2012) work by extending it into the social domain by examining judgements of rape scenarios (rather than investigating the links between rape-supportive cognition and risk of rape perpetration). This is of particular importance given some established work examining the potential effects of rape-supportive cognitions in these contexts. Our focus on the RAPE scale is driven by this new factor analysis of the measure, as well as its widespread use within this area of research, and its apparent resistance to socially-desirable responding (Hermann et al., 2012).

In non-offending populations, rape-supportive cognitions have been associated with future sexual aggression (Thompson, Koss, Kingree, Goree, & Rice, 2011). More relevant to the present study, rape-supportive cognitions have also been implicated in leniency being shown towards the perpetrators of sexual aggressions. The endorsement of rape myths (e.g., that victims are responsible if they have consumed alcohol, or attractive women cannot be

assaulted, or are in some way responsible for their victimisation) is associated with higher levels of victim blame and lesser perceptions of perpetrator responsibility (Gerger, Kley, Bohner, & Siebler, 2007; Suarez & Gadalla, 2010; Süssenbach, 2016; Temkin & Krahé, 2008). Not only has this effect been observed in explicit (self-report) judgements, but the acceptance of such rape myths has also been found to lead to more severe judgements of cases that concur to the 'real rape' stereotype at the implicit level (Süssenbach, Albrecht, & Bohner, 2017). Further, two papers by Süssenbach and colleagues have reported how participants high on RMA (1) selectively attend to information that focuses on a rape victim (vs. a defendant), (2) and pay more attention (using eye-tracking methods) to victims than defendants, and (3) attended to 'real rape' cues in an image of an alleged crime scene quicker and with greater ease than cues not associated with this stereotype (Süssenbach, Bohner, & Eyssel, 2012; Süssenbach, Eyssel, Rees, & Bohner, 2017).

The present study set out to examine whether Hermann et al.'s (2012) two-factor RAPE scale structure could account for differences about specific date rape scenarios. We used a psychometrically-guided online experimental design by assigning male and female participants to one of two date rape vignettes with one key manipulation differentiating these — who paid the bill? In line with the two-factor view of the RAPE scale, we predicted that participants who endorse 'excusing rape' cognitions to a greater degree will suggest that a rapist is less guilty in a date rape scenario if the female victim paid for the bill. This is because participants who endorse these beliefs may infer her paying as an expression of sexual or romantic interest in her date. In contrast, we predicted that participants who endorse 'justifying rape' cognitions to a greater degree will suggest that a rapist is less guilty if the male perpetrator paid for the bill. This is because participants who endorse these beliefs may view the perpetrator as being entitled to sexual recompense following his gesture of paying on their date.

Methods

Design

To examine the effects of participants' sex, age, and rape-supportive cognitions in judgements of a date rape scenario, this study adopted a pseudo-experimental method and a between-subjects design. To the participants, it took the form of an anonymous online survey using the *Qualtrics* system, which sought to understand "views of sexual relations on a first date".

Two vignettes were used to gather judgements of date rape. In the first, the male paid for the bill on the date (the 'Perpetrator Paid' condition), while in the second, the female paid for the bill (the 'Victim Paid' condition). We ran two linear multiple regression analyses for each scenario. In each of these, the first four assessed variables (sex, age, excusing rape cognitions, and justifying rape cognitions) were entered as predictors, with judgements of the vignettes as the criterion. The first model was directed towards explaining the variance in judgements made at the explicit level using a self-report method. The second model was directed towards explaining judgements made at the implicit level using an IAT.

Participants

We sought to recruit a large sample of young people (inclusion criteria were that participants were aged between 18-35 years to reflect the ecological context of the scenarios used in the study, with a good command of written English). Two of the authors used their positions as undergraduate researchers to recruit appropriate-age participants through their personal and social networks. Advertisements were placed on various social networking sites, such as their personal Facebook and Twitter feeds, and UK pages of the microblogging website, Reddit. Volunteers were also sought through direct approach on the campus of a large city-centre university, where researchers used laptops to recruit participants in quiet public areas (e.g.,

cafés and private work spaces). Recruitment was also supplemented using an institutional research participation scheme, whereby undergraduate psychology students were able to take part in research projects in exchange for partial course credit (n = 16; all other participants received no incentives).

A total of 256 people started the online survey, though three of these were removed for being over the age of 35 years. Of the 253 eligible participants, 19 were removed from the sample for not fully completing the RAPE scale, and five participants were removed as they failed to complete the scenario judgement questions. These were both taken as an indication of study withdrawal, as per the instructions included on the first page of the study survey. Finally, twelve participants were excluded for failing the survey's attention checks (see Materials section, below). This left a total of 217 participants (51% female; $M_{\rm age} = 29.94$ years; SD = 3.93) in the sample for inclusion in the analyses. All participants were naïve to the aims of the study prior to taking part.

Measures

Demographic questions. In order to protect the anonymity of participants, only key demographic information (sex and age) was requested from participants.

Bumby RAPE scale. We used Bumby's (1996) RAPE scale as a measure of participants' rape-supportive cognitions about women and sex. As already described, the RAPE scale is comprised of 36 items designed to tap into attitudes and cognitions that serve to excuse, rationalise, justify, or minimise the effects of rape. Each item is posed as a statement, for which participants provide their level of agreement on using a four-point scale anchored from *strongly disagree* to *strongly agree*. We calculated average scores (range = 1-

4; high scores indicate greater levels of rape-supportive) for the RAPE scale in the present study.

Date rape scenarios. Two parallel versions of a date rape scenario were written for the purposes of this study. These scenarios depicted a first date between two people (Adam and Gemma) who met on the smartphone dating app *Tinder*. They went out to dinner and ended the night back in Gemma's apartment, where a coercive sexual interaction took place. Both scenarios were identical with the exception of who paid for the dinner bill. The exact wording was as follows (manipulated wording is presented in square brackets "[...]"):

Adam and Gemma met on the popular dating app Tinder, and felt there was a spark between them. After spending about a week chatting within the app, they arrange to meet up for a date so that they could get to know each other better in person.

Both Adam and Gemma were excited about the date, and dressed to impress. Adam wore a shirt and jacket, while Gemma bought a new dress specifically for the date. They mutually decided to go for a meal at a local upmarket restaurant, which was known for serving high quality food in a romantic setting. The conversation was flowing on the date, and they were getting on well. They both ordered an expensive meal. Adam had a steak, while Gemma ordered a lobster. After three courses and a bottle of wine between them, they decide to settle to bill and leave. Adam [Gemma] paid for the meal, which came to just under £150.

Gemma was walking home, and so to make sure she got there safely, Adam went with her. On the walk back, they discussed how much they both enjoyed the date, and that they should do it again soon.

Just before arriving at Gemma's house, it began to rain, so they both decided it would be a good idea for Adam to go inside until it stops. Whilst they wait for the rain to stop, Gemma made drinks for them to warm up.

They talked some more about their shared interests, and seemed to be getting on well. During the conversation, Adam touched Gemma's thigh. She giggled, and moved his hand away. After some more chatting, Adam started to move closer to Gemma, but she retracted to the edge of the sofa they were sharing. In one silence, Adam tried to kiss Gemma. In order to not look rude, she returned the kiss, thinking that this would signal the end of the date and Adam would leave. However, Adam then began to progress the interaction, and indicated that he wanted to have sex with Gemma. Gemma expressed that she did not want to have sex on the first date. Adam

continued to kiss Gemma, and she got tired of telling him she didn't want to go further. Eventually they had sex there on the sofa.

After finishing, Adam finished his drink, kissed Gemma on the forehead, and went home, as the rain had stopped. Before leaving, he said that he hoped to see her for another date.

Three free-text response questions were used as an attention check. These questions asked participants to confirm three pivotal details: (1) Where did Adam and Gemma meet?¹; (2) Who paid for the bill?; and (3) How much did the bill come to? Participants were retained in the study if they provided the correct answer to question two (our key manipulated detail) and at least one of the other questions.

Explicit scenario judgements. Consistent with Süssenbach et al. (2017) we used four questions to gather information about participants' explicit (self-reported) judgements of the date rape scenarios. We asked: "How responsible is Adam for what happened?", "How responsible is Gemma for what happened?", "Is Adam guilty of rape?", and "If he was convicted, how severe a sentence should Adam receive?". Each question was rated using an 11-point scale anchored from 0 (not at all responsible/absolutely no/lightest possible punishment) to 10 (completely responsible/absolutely yes/harshest possible punishment). We reverse-coded questions one, three, and four, such that high scores indicated judgements of innocence. All items were highly and significantly correlated ($rs \ge .40$, ps < .001). As such, we averaged participants' responses across all four items to compute a single 'explicit innocence judgement' score (possible range = 0-10; $\alpha = 0.83$).

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¹ During the analysis of our data, we found that a combination of "Tinder" (the intended response) and "a restaurant" (where the couple actually met up in person) were provided. We decided to count both of these responses as correct.

Implicit scenario judgements. In addition to self-reported judgements, we also assessed implicit judgements of the date rape scenarios using an IAT run from within the survey software using iatgen (Carpenter et al., 2018). This software uses HTML code to embed an IAT into an online survey built using *Qualtrics*. Iatgen runs the IAT procedure (and data cleaning/scoring) in accordance with Greenwald, Nosek, and Banaji's (2003) guidelines. The IAT contains stimuli related to both targets (here, "Adam" and "Gemma") and evaluations (here, "innocent" and "guilty"). Stimuli in the present study were words that correspond to our targets and evaluations (see Table 1 for full word lists). The aim of an IAT is to examine how quickly participants can classify a target with a given evaluation when they share response keys (here, the "E" and "I" keyboard keys). During the IAT, stimuli are presented in the centre of the screen, one at a time, and classified by participants as quickly and accurately as possible using the appropriate response keys.

Table 1. IAT stimuli

<u>Targets</u>		Evaluations			
Adam	Gemma	Innocent	Guilty		
Male	Female	Honest	Criminal		
Man	Her	Blameless	Culpable		
Him	Lady	Faultless	Wrong		
Bloke	Woman	Virtuous	Responsible		
Adam	Gemma	Innocent	Guilty		

Note. Words were presented in a random order in each block until the required number of trials was reached.

In the present study, the IAT was made up of seven blocks. The first two blocks allow participants to practice classifying targets (Block 1; 20 trials) and evaluations (Block 2; 20 trials) in isolation. These blocks familiarise participants to the stimuli to be used later in the task. Next come two combined blocks, one of which is a practice (Block 3; 20 trials) and one in which data contributes to the scoring of the IAT (Block 4; 40 trials). In these combined

blocks, evaluation categories are linked with target categories (e.g., "Adam OR Innocent" and "Gemma OR Guilty"), with each pair sharing a response key. After this, the evaluation categories switch sides. Following a practice of this new position in isolation (Block 5; 20 trials), before Blocks 6 and 7 follow the same format as Blocks 3 and 4 with the evaluation terms being paired with the other targets.

Participants were instructed to respond as quickly and accurately as possible for each stimulus word. Errors were met with a red cross, with participants having to correct their response before moving on to the next stimulus. The order of target/evaluation pairings (and the initial left/right position of the target names) was counterbalanced between participants.

Procedure

After being recruited via the methods described previously, participants clicked a URL link to the online survey containing the project questions. They first read an information sheet detailing the general aims of the project ("investigating judgements of sexual relations on a first date") and were required to give affirmative consent to participate by selecting a box and accepting the inclusion criteria. Next, participants provided their demographic information, before completing the RAPE scale. After this, participants were randomly allocated to one of the date rape scenarios. The button required to move on to the next page of the survey was disabled for 60 seconds in order to further control the levels of attention paid to these stories. Participants then answered the attention check questions, before providing their judgements of the scenario they read. The order of the explicit and implicit judgement tasks was counterbalanced between participants.

All participants received a comprehensive debrief (along with information about rape support services) upon completion. This procedure was approved by an institutional ethical review committee prior to data collection.

Results

Bumby RAPE scale factors

Given that no attempts to replicate Hermann et al.'s (2012) two-factor structure of the RAPE scale have previously been made, we sought to interrogate this model using a confirmatory factor analysis before undertaking our planned analyses.² We conducted this analysis in *Amos* for SPSS, using Hermann et al.'s (2012) 36-item structure as the default model. This model was a poor fit to the data provided by our sample, χ^2 (463) = 1806.84, p < .001, CFI = .65, RMSEA = .10.

Following from this poor fit, we ran a principal components analysis on our RAPE scale data. The sample size here equates to approximately seven observations per scale item, exceeding Costello and Osborne's (2005) recommended minimum of five observations. The scree plot suggested 2-3 components should be retained in the model. Looking for the most parsimonious model, and in line with Hermann et al. (2012), we ran the PCA with an instruction to extract two components using an oblique (promax) rotation. The two extracted components explained 38.19% of the variance in RAPE scale scores. Item loadings for each of the two components are presented in Table 2.

There was substantial overlap between the loadings onto each factor when comparing the models produced by Hermann et al.'s (2012) data and our own (Table 3). In the present study, we used the item loadings produced by our own analysis, as this was the model we could be most confident in. Given the substantial item overlap between our model and that reported by Hermann et al. (2012), we retained the labels 'excusing rape' (15 items; $\alpha = .85$) and 'justifying rape' (17 items; $\alpha = .90$) for these components.

² We are thankful to an anonymous reviewer for this recommendation, which has greatly improved our confidence in the findings reported in subsequent sections of this paper.

Table 2. Item loadings for the RAPE scale in the present sample

		Factor 1 Justifying Rape	Factor 2 Excusing Rape
1	Men who commit rape are probably responding to a lot of stress in their lives, and raping helps reduce that stress	.144	.367
2	Women who get raped probably deserved it	.480	.262
3	Women generally want sex no matter how they can get it	.491	.479
4	Since prostitutes sell their bodies for sexual purposes anyway, it is not as bad if someone forces them into sex	.569	.310
5	If a woman does not resist strongly to sexual advances, she is probably willing to have sex	.612	.593
6	Women often falsely accuse men of rape	.427	.601
7	A lot of women who get raped had "bad reputations" in the first place	.386	.438
8	If women did not sleep around so much, they would be less likely to get raped	.575	.336
9	If a woman gets drunk at a party, it is really her own fault if someone takes advantage of her sexually	.625	.408
10	When women wear tight clothes, short skirts, and no bra or underwear, they are just asking for sex	.747	.397
11	A lot of women claim they were raped just because they want attention	.440	.621
12	Victims of rape are usually a little bit to blame for what happens	.673	.445
13	If a man has had sex with a woman before, then he should be able to have sex with her any time he wants	.601	.249
14	Just fantasizing about forcing someone to have sex isn't all that bad since no one is really being hurt	.380	.560
15	Women who go to bars a lot are mainly looking to have sex	.610	.481
16	A lot of times, when women say "no," they are just playing hard to get and really mean "yes"	.605	.490
17	Part of a wife's duty is to satisfy her husband sexually whenever he wants it, whether or not she is in the mood	.703	.372
18	Often, a woman reports rape long after the fact because she gets mad at the man she had sex with and is trying to get back at him	.577	.542
19	As long as a man does not slap or punch a woman in the process, forcing her to have sex is not as bad	.502	.172

20	When a women gets raped more than once, she is probably doing something to cause it	.655	.395
21	Women who get raped will eventually forget about it and get on with their lives	.467	.296
22	On a date, when a man spends a lot of money on a woman, the woman ought to at least give the man something in return sexually	.816	.337
23	I believe that if a woman lets a man kiss her and touch her sexually, she should be willing to go all the way	.878	.490
24	When women act like they are too good for men, most men probably think about raping the women to put them in their place	.485	.188
25	I believe that society and the courts are too tough on rapists	.415	.459
26	Most women are sluts and get what they deserve	.708	.310
27	Before the police investigate a woman's claim of rape, it is a good idea to find out what she was wearing, if she had been drinking, and what kind of person she is	.543	.619
28	Generally, rape is not planned—a lot of times it just happens	.167	.527
29	If a person tells himself that he will never rape again, then he probably won't	.248	.551
30	A lot of men who rape do so because they are deprived of sex	.275	.698
31	The reason a lot of women say "no" to sex is because they don't want to seem loose	.445	.615
32	If a woman goes to the home of a man on the first date, she probably wants to have sex with him	.471	.637
33	Many women have a secret desire to be forced into having sex	.519	.576
34	Most of the men who rape have stronger sexual urges than other men	.236	.624
35	I believe that any woman can prevent herself from being raped if she really wants to	.430	.544
36	Most of the time, the only reason a man commits rape is because he was sexually assaulted as a child	.093	.495

Table 3. Discrepancies between items loading onto components in Hermann et al. (2012) compared to the present sample

		Hermann et al.	Present Sample
1	Men who commit rape are probably responding	Excusing*	Excusing
	to a lot of stress in their lives, and raping helps		
	reduce that stress		
2	Women who get raped probably deserved it	Justifying	Justifying
3	Women generally want sex no matter how they	Excusing	-
1	can get it	Inatifyina**	Instifying
4	Since prostitutes sell their bodies for sexual purposes anyway, it is not as bad if someone	Justifying**	Justifying
	forces them into sex		
5	If a woman does not resist strongly to sexual	Excusing	Justifying
3	advances, she is probably willing to have sex	Lacusing	Justifying
6	Women often falsely accuse men of rape	Excusing	Excusing
7	A lot of women who get raped had "bad	Excusing	-
	reputations" in the first place	6	
8	If women did not sleep around so much, they	Justifying**	Justifying
	would be less likely to get raped		• 0
9	If a woman gets drunk at a party, it is really her	Excusing	Justifying
	own fault if someone takes advantage of her		
	sexually		
10	When women wear tight clothes, short skirts,	Excusing	Justifying
	and no bra or underwear, they are just asking for		
11	sex	.	г.
11	A lot of women claim they were raped just	Excusing	Excusing
12	because they want attention Victims of rope are usually a little bit to blome	Evousing	Instifying
12	Victims of rape are usually a little bit to blame for what happens	Excusing	Justifying
13	If a man has had sex with a woman before, then	Justifying	Justifying
13	he should be able to have sex with her any time	Justifying	Justifing
	he wants		
14	Just fantasizing about forcing someone to have	Justifying	Excusing
	sex isn't all that bad since no one is really being	•	
	hurt		
15	Women who go to bars a lot are mainly looking	Excusing	Justifying
	to have sex		
16	A lot of times, when women say "no," they are	Justifying	Justifying
	just playing hard to get and really mean "yes"		
17	Part of a wife's duty is to satisfy her husband	Justifying	Justifying
	sexually whenever he wants it, whether or not		
10	she is in the mood	Evousing	
18	Often, a woman reports rape long after the fact because she gets mad at the man she had sex	Excusing	-
	with and is trying to get back at him		
19	As long as a man does not slap or punch a	Justifying	Justifying
17	woman in the process, forcing her to have sex is	o abdir jilig	v asar y mg
	not as bad		

20	When a women gets raped more than once, she is	Justifying	Excusing
21	women who get raped will eventually forget about it and get on with their lives	Justifying	Justifying
22	On a date, when a man spends a lot of money on a woman, the woman ought to at least give the man something in return sexually	Justifying	Justifying
23	I believe that if a woman lets a man kiss her and touch her sexually, she should be willing to go all the way	Justifying	Justifying
24	When women act like they are too good for men, most men probably think about raping the women to put them in their place	Justifying	Justifying
25	I believe that society and the courts are too tough on rapists	Justifying*	-
26 27	Most women are sluts and get what they deserve Before the police investigate a woman's claim of rape, it is a good idea to find out what she was wearing, if she had been drinking, and what kind of person she is	Justifying Excusing	Justifying Excusing
28	Generally, rape is not planned—a lot of times it just happens	Excusing	Excusing
29	If a person tells himself that he will never rape again, then he probably won't	Excusing	Excusing
30	A lot of men who rape do so because they are deprived of sex	Excusing	Excusing
31	The reason a lot of women say "no" to sex is because they don't want to seem loose	Excusing	Excusing
32	If a woman goes to the home of a man on the first date, she probably wants to have sex with him	Excusing	Excusing
33	Many women have a secret desire to be forced into having sex	Excusing	Excusing
34	Most of the men who rape have stronger sexual urges than other men	Excusing	Excusing
35	I believe that any woman can prevent herself from being raped if she really wants to	Justifying*	Excusing
36	Most of the time, the only reason a man commits rape is because he was sexually assaulted as a child	Excusing	Excusing
TAT 4	* No significant item loading in Hammann at al. (0)	10 41	7C. /

Note. * No significant item loading in Hermann et al. (0.40 threshold); ** Significant crossloading on to both factors in Hermann et al.; - indicates no significant item loading in the present sample.

Baseline RAPE scale scores

Before conducting our main analyses, we sought to establish whether there were any differences between the two vignette conditions in relation to their endorsement of either

factor on the RAPE scale. We entered both excusing rape and justifying rape cognitions as dependent variables into a 2 (Participant Sex: Male vs. Female) x 2 (Vignette: Perpetrator Paid vs. Victim Paid) multivariate analysis of variance (MANOVA). Descriptive statistics are presented in Table 4.

Table 4. Baseline RAPE scale factor scores, by vignette and participant sex

	<u> </u>				
	Male Participants		Female Participants		
	Perpetrator Paid Victim Paid		Perpetrator Paid	id Victim Paid	
	(n = 57)	(n = 49)	(n = 56)	(n = 55)	
Excusing rape	1.77 (0.48)	1.82 (0.42)	1.45 (0.29)	1.51 (0.37)	
Justifying rape	1.22 (0.28)	1.30 (0.40)	1.06 (0.08)	1.09 (0.19)	

Note. Figures listed represent estimated marginal means from the multivariate analysis, with ± 1 SE in parentheses.

There was a significant multivariate effect for Participant Sex, Wilks' $\lambda = 0.85$, F(2, 212) = 19.11, p < .001, $\eta^2_p = 0.15$. Here, the univariate tests demonstrated that male participants scored higher for both factors; Excusing Rape: F(1, 213) = 3.98, p < .001, $\eta^2_p = 0.14$; Justifying Rape: F(1, 213) = 26.60, p < .001, $\eta^2_p = 0.11$.

In relation to Vignette group, there was no multivariate effect, Wilks' $\lambda = 0.99$, F(2, 212) = 1.12, p = .327, $\eta^2_p = 0.01$, and no univariate main effect in relation to either factor, Excusing Rape: F(1, 213) = 1.10, p = .295, $\eta^2_p < 0.01$; Justifying Rape: F(1, 213) = 2.22, p = .138, $\eta^2_p = 0.01$. Similarly, there was no multivariate Sex*Vignette interaction effect, Wilks' $\lambda = 1.00$, F(2, 212) = 0.38, p = .684, $\eta^2_p < 0.01$, and no specific interaction when examining scores on each factor, Excusing Rape: F(1, 213) < 0.01, p = .984, $\eta^2_p < 0.01$; Justifying Rape: F(1, 213) = 0.48, p = .490, $\eta^2_p < 0.01$.

What these results indicate is that male participants scored higher in relation to both types of rape-supportive cognition as compared to females. However, levels of these cognitions (both specific to each participant sex group, and when collapsing all participants together) did not differ at baseline between each Vignette group.

Explicit judgements of date rape scenarios

The first of our regression analyses pertained to explicit judgements of the two rape scenarios used in this study. To begin, we conducted correlational analyses between both types of rapesupportive cognitions and participants' self-reported judgements of each vignette. For both vignettes, there were strong positive correlations between both RAPE scale factors (though these correlations fell just short of indicating collinearity), and moderate positive correlations between both types of rape-supportive cognition and judgements of the perpetrator's innocence (Table 5). We further established that the mean explicit innocence judgements for the 'Perpetrator Paid' scenario (M = 3.15, SD = 2.26) and 'Victim Paid' scenario (M = 3.27, SD = 2.09) were not significantly different, t(215) = 0.41, p = .684, d = 0.06.

Table 5. Zero-order correlations between excusing rape and justifying rape cognitions and perpetrator innocence judgements, by vignette

	Perpetrator Paid $(n = 113)$			Victim Paid $(n = 104)$		
	1	2	3	1	2	3
1. Excusing rape	-	.70**	.24*	-	.62**	.49**
2. Justifying rape	.70**	-	.15*	.62**	-	.37**
3. Innocence judgement	.42**	.36**	-	.41**	.35**	-

Note. Coefficients below the diagonal refer to correlations with explicit (self-report) judgements, while coefficients above the diagonal refer to correlations with implicit (IAT) scores

These correlations indicate that linear multiple regression was an acceptable method for analysis. As such, we entered excusing rape and justifying rape cognitions as predictors with participant sex and age in a regression model for each vignette, with explicit innocence judgements as the dependent variable. We included sex and age owing to the observed differences in rape-supportive cognition levels between the sexes (Table 4), and recent commentaries about the #MeToo and Title XI college rape response movements, which are typically being driven by younger millennials and iGen-aged students on university

^{*} p < .005 ** p < .001

campuses.³ Both models explained a significant proportion of the variance in explicit innocence judgements; Perpetrator Paid: adjusted $R^2 = .228$, F(4, 106) = 9.11, p < .001; Victim Paid: adjusted $R^2 = .196$, F(4, 98) = 7.20, p < .001. Coefficients within each regression model are presented in Table 6.

Table 6. Regression coefficients explaining innocence judgements of the perpetrator, by vignette

	Perpetrator Paid			Victim Paid			
	B (SE)	β	p	B (SE)	β	p	
Explicit (self-report) judgements							
Sex	0.37 (0.41)	0.08	.370	0.67 (0.41)	0.16	.108	
Age	0.15 (0.05)	0.24	.005	0.07 (0.05)	0.13	.185	
Excusing rape	1.69 (0.63)	0.32	.009	1.41 (0.59)	0.29	.018	
Justifying rape	1.17 (1.24)	0.11	.348	0.57 (0.78)	0.09	.466	
Implicit (IAT) judgements							
Sex	0.32 (0.08)	0.42	< .001	0.12 (0.07)	0.17	.091	
Age	0.00 (0.01)	< 0.01	.954	0.00 (0.01)	0.02	.874	
Excusing rape	0.15 (0.11)	0.17	.191	0.32 (0.10)	0.38	.002	
Justifying rape	-0.22 (0.23)	-0.13	.327	0.09 (0.13)	0.08	.520	

Note. Sex: 0 = female, 1 = male. B = unstandardized beta-value (± 1 SE in parentheses). $\beta =$ standardised beta-value. Significant values are also presented in **bold** typeface.

Examining the coefficients, it appears that age, $\beta = 0.24$, t(106) = 2.86, p = .005, and excusing rape cognitions, $\beta = 0.32$, t(106) = 2.67, p = .009, were the only significant predictors of innocence judgements when the perpetrator paid for the bill, with older age and greater levels of excusing cognitions explaining higher levels of perceived innocence,. When the victim paid for the bill on the date, higher levels of the excusing rape cognitions significantly explained greater levels of perceived innocence, $\beta = 0.29$, t(99) = 2.41, p = .018. These data are only partially supportive of our hypotheses. That is, justifying rape cognitions did not have any effect in increasing innocence judgements when the perpetrator paid for the

20

³ While we believe that the vast majority of our participants were UK-based as a result of our data collection strategies, recent work has suggested that generation-based differences in political outlook are consistent across cultures (Twenge, 2018), hence the inclusion of the age variable in these analyses.

bill. However, when the victim paid for the bill (potentially indicative of sexual interest in the perpetrator in the lead up to the rape), innocence judgements were positively associated with increased levels of excusing rape cognitions.

Implicit judgements of date rape scenarios

As observed by Süssenbach et al. (2017), rape-supportive cognition (operationalised as RMA) was associated with higher perceived innocence at the implicit level when a rape scenario was framed in a manner consistent with the 'real rape' stereotype. We sought to examine whether the subtle priming of different cues related to specific clusters of rape-supportive cognition could contribute to increased innocence judgements at the implicit level.

IAT scoring. Using the iatgen applet (Carpenter et al., 2018), we computed standardised D scores for each participant according to their response latencies as they completed the IAT. A score of 0 on this scoring procedure indicated no difference between implicit judgements of guilt or innocence. Positive scores indicated implicit judgements of innocence, while negative scores indicated an increased propensity to see the perpetrator as guilty at an implicit level. The applet provides a score of 'NA' for participants who should be removed from analyses on the basis of indiscriminate responding (i.e., they responded too quickly on a significant proportion of trials or made a large number of errors). A total of 10 participants (4.61% of the sample) were dropped from subsequent analyses for this reason (revised N = 207).

After computing these D scores, we conducted a series of one-sample t-tests in order to determine the validity of the IAT in the present study. The mean D score for the sample as a whole was -0.43 (SD = 0.37), which was significantly different from zero, t(206) = -16.58, p < .001, d = -1.15. This indicates that, across the sample, the implicit scores were oriented in

the direction of seeing the perpetrator as guilty, providing evidence of the validity of this method for establishing innocence judgements. The size of this effect was consistent in both scenario conditions; Perpetrator Paid: M = -0.47 (SD = 0.38), t(104) = -12.60, p < .001, d = -1.23; Victim Paid: M = -0.39 (SD = 0.36), t(101) = -10.89, p < .001, d = -1.08. The difference in the average levels of implicit innocence judgements was not statistically different when comparing the two scenario conditions, t(205) = 1.61, p = .109, d = 0.22.

Correlational and regression analyses. As with the explicit judgement analyses, we first examined the extent to which each type of rape-supportive cognition was associated with participants' IAT scores. As with the self-report data previously reported, both types of cognition were significantly and positively associated with innocence judgements at the implicit level, particularly within the Victim Paid condition (Table 5).

We next repeated the same linear multiple regression analyses as were run in relation to the explicit judgements previously reported. Again, the collection of participant sex, age, excusing rape cognitions, and justifying rape cognitions accounted for a significant proportion of the variance in implicit innocence judgements of both vignettes; Perpetrator Paid: adjusted $R^2 = .176$, F(4, 98) = 6.44, p < .001; Victim Paid: adjusted $R^2 = .237$, F(4, 96) = 8.77, p < .001. Regression coefficients for both models are presented in Table 6.

When the perpetrator paid for the bill on the date, he was seen as significantly more innocent at the implicit level by male participants than female participants, $\beta = 0.42$, t(108) = 4.30, p < .001. No other variables uniquely explained variance in implicit judgements of this scenario. However, when the victim paid for the bill, increased endorsement of excusing rape cognitions were significantly associated with greater implicit innocence judgements, $\beta = 0.38$, t(99) = 3.23, p = .002. These results are consistent with the explicit innocence judgements, in that rape-supportive cognitions had no effect on judgements when the

perpetrator paid for the bill, but excusing rape cognitions explained an increased propensity to view the perpetrator as innocent when the victim paid for the bill. These findings are again partially supportive of our hypotheses.

Discussion

In this study, we sought to examine the divergent explanatory effects of excusing rape and justifying rape cognitions on two different date rape scenarios. Consistent with the definitions advanced by Hermann et al.'s (2012) factor analysis of Bumby's RAPE scale, we hypothesised that excusing rape cognitions (but not justifying rape cognitions) would contribute to higher innocence judgements when the victim paid for the bill, given that this could be inferred as a signal of sexual interest by those high on this type of cognition. In contrast, we hypothesised that justifying rape cognitions (but not excusing rape cognitions) would explain higher innocence judgements when the perpetrator paid the bill, as this could indicate the victim being in the debt of the perpetrator to those high on this type of cognition.

We found no support for our first hypothesis. When the perpetrator paid for the bill, there was no evidence in our data that endorsing justifying rape cognitions enhanced perceptions of their innocence at either level of analysis. Instead, explicit judgements were influenced by age, with older participants seeing the perpetrator as more innocent. This finding may be reflective of younger participants holding a more egalitarian view of courtship and the division of responsibility to pay on dates (Lever, Frederick, & Hertz, 2015). At the implicit level, enhanced innocence judgements when the perpetrator paid the bill was explained by participants' sex (specifically, being male). This conforms to established findings suggesting that men are more likely to find rapists less culpable (and to assign greater levels of blame to female victims) than women (Black & Gold, 2008; Grubb &

Harrower, 2008; Pinciotti & Orcutt, 2017), but extends this existing body of work into the implicit domain.

However, our data did support our second prediction. That is at both the explicit (self-report) and implicit (IAT) levels, higher levels of excusing rape cognitions explained enhanced perceptions of the perpetrator's innocence when the victim paid the bill. However, justifying rape cognitions were unrelated to judgements of this scenario. These findings support the two-factor structure of the RAPE scale that was reported by Hermann et al. (2012) and demonstrates how excusing rape and justifying rape cognitions are not only distinct from a conceptual standpoint, but also have unique empirical effects on judgements of rape scenarios.

Active vs. passive functions of rape-supportive cognitions

The lack of concordance between our data and the predictions we made on the basis of prior theorising – specifically in relation to justifying rape cognitions – raise some interesting questions about the nature and function of specific rape-supportive cognitions. The endorsement of such beliefs (particularly with regard to rape myth acceptance) has been associated with lenient judgements of rape perpetrators (and exaggerated levels of victim blame) for several decades (Blumenthal et al., 1999; Bohner et al., 2010; Burt, 1980; Grubb & Turner, 2012). However, Hermann et al.'s (2012) factor analysis and subsequent explanation of the underlying structure of the RAPE scale allowed for a more nuanced examination of the effects of rape-supportive cognition than has previously been possible.

In this study, we found significant explanatory effects for excusing rape being associated with leniency when a victim demonstrated a behaviour that could be linked to some degree of romantic interest in the perpetrator (i.e., paying the bill on a date). This effect is consistent with Hermann et al.'s (2012) description of excusing rape cognitions. That is,

this collection of thoughts is said to reflect a tendency to ascribe complicity in the rape onto the victim (e.g., "When women wear tight clothes, short skirts, and no bra or underwear, they are just asking for sex", or more relevant to our investigation "If a woman goes home with a man on a first date, she probably wants to have sex with him"). As these cognitions are intricately related to the mitigation of rapists' responsibility (and are thus directly related to levels of culpability and guilt), we might expect these opinions to explain judgements of others' sexually coercive behaviour. That is, excusing rape cognitions (or a lack of them) might lead people to attempt to explain the behaviours of others in criminal procedures. Justifying rape cognitions, in contrast, may be more related to personal actions than in the judgements of those behaviours of others. That is, we are responsible for justifying our own actions, but not those of other people. This may help us to explain why there was no significant effect (or even a slight trend) for justifying rape cognitions to affect judgements in the present study.

If we are to accept this interpretation, we might expect justifying rape cognitions to explain judgements of rape if the participants were to be cast in the position of the perpetrator. This dichotomy of rape-supportive cognitions based upon the distinction between excusing the behaviour of others and justifying the behaviour of oneself points towards a motivated view of such beliefs. That is, the extent to which these beliefs have an effect on judgements may depend upon the extent to which the perceiver has something to lose on the basis of the rape that has been committed. This was an argument also advanced by Szumski, Bartels, Beech, and Fisher (2018) who, drawing on Kunda (1990) argued that people may use rape-supportive cognitions to rationalise judgements in a situational manner. Bartels (2016) set out how this happens in light of immediate emotional states. For example, experiencing rejection from a potential sexual partner could lead to negative affect, and as a remedy to this

an individual may use such beliefs (or 'temporary belief states'; Frijda, Mesquita, Sonnemans, & van Goozen, 1991) to rationalise or justify sexual coercion.

More specific to the present study, the explicit agreement with statements such as "A lot of times, when women say 'no,' they are just playing hard to get and really mean 'yes'" or "I believe that any woman can prevent herself from being raped if she really wants to" (items loading onto the justifying rape factor of the RAPE scale; Hermann et al., 2012) is unlikely to be widespread within the general population as a result of societal negativity towards sexual offenders (for a review, see Harper, Hogue, & Bartels, 2017). As observed by Richards and McCartan (2018), people are generally hesitant to explicitly endorse propositions that may condone or justify the behaviours of sexually coercive individuals. However, due to this societal negativity, the motivation to engage in justification might be more heightened if/when one's own behaviour is in question. That is, justification takes the form of an active process to negate cognitive dissonance associated with a conflict between one's own behaviour and that which is expected as a social norm.

In contrast, agreeing with items such as "If a woman does not resist strongly to sexual advances, she is probably willing to have sex" and "Most of the men who rape have stronger sexual urges than other men" (items loading onto the excusing rape factor of the RAPE scale; Hermann et al., 2012) are broad propositions that invite nuanced responses (rather than blanket rejections) in order to avoid generalisation. As such, agreeing with these propositions may not actually reflect specific beliefs about women and sexual relations, but rather a lack of willingness to completely reject these ideas across the board. With this in mind, the endorsement of excusing rape cognitions might take the form of more passive evaluations of the situational factors which may be present in many rape cases.

Support for this distinction between active (justifying) and passive (excusing) rapesupportive cognition comes from Hermann et al.'s (2012) initial factor analysis of the RAPE

scale. They reported that excusing rape cognitions were not significantly related to dynamic risk of sexual offending (Stable-2000 scores). However, justifying rape cognitions were strongly associated with such risk scores. While this active-passive dichotomy makes conceptual sense, further empirical work is necessary to explore these ideas in more depth.

Limitations and future directions

In this study we used a combination of self-report and indirect measures to examine judgements of the innocence of an apparent rape perpetrator in our vignettes. However, we only used a self-report measure of rape-supportive cognitions. The reason behind this was to use a validated scale that has been found to have the two distinct clusters of rape-supportive cognition embedded within it. However, as suggested above there may be concerns over the validity of data collected using such self-report measures of these cognitions in this domain (though the RAPE scale has been reported to be uncorrelated to measures of social desirability; Hermann et al., 2012). As such, examining rape-supportive beliefs at the implicit level using indirect measures may be a fruitful avenue in future research. Szumski et al. (2018) also made this observation, and we support their argument that emerging dynamic measures of implicit cognition (e.g., computer mouse-tracking; Freeman & Ambady, 2010) could provide novel insights into rape-supportive cognition – particularly subtle rape justification – in a manner that is, by design, free from social desirability biases. This method was recently employed by Smith, Treat, Farmer, and McMurray (2018) who found that undergraduate males' mouse trajectories indicated a greater tendency to ascribe sexual interest to female models dressed provocatively than conservatively.

In our discussion of the data here we have advanced an argument in relation to an active-passive dichotomy of rape-supportive cognition. This argument requires more detailed empirical attention. Some studies that could be run to examine this distinction may involve

shifting the perspective of participants. That is, in line with the active role of rape justification, it may be the case that placing participants in the position of a rape perpetrator (or portraying the perpetrator as a member of a valued ingroup) may increase the extent to which this cluster of beliefs contributes to lenient judgements. Not only might this have implications for explaining rape perpetration, but also may provide psychological insights in relation to why institutional abuse is explained away or covered up in many settings (Edwards, Turchik, Dardis, Reynolds, & Gidycz, 2011; Harper & Perkins, 2018; Sabina & Ho, 2014).

It may also be interesting to examine whether other scenario details might trigger the enactment of specific rape-supportive cognitions. For example, we found no effects of justifying rape cognitions on judgements when the perpetrator paid for the bill. This was contrary to expectations. However, if we were to embed other cues related to justifying rape, such as an expectation from the victim for the perpetrator to pay (or, more explicitly, the victim's refusal to pay the bill), we might prime justifying rape cognitions in a more direct way. This is due to the items making up the justifying rape factor being relation to both male sexual entitlement *and* hostility towards women (e.g., "When women act like they are too good for men, most men probably think about raping the women to put them in their place"). Further, we did not directly assess whether paying the bill was actually viewed as an indicator of perceived sexual interest. Future studies should explicitly examine this manipulation in a direct way.

A key limitation of our work is a lack of ability to replicate Hermann et al.'s (2012) precise two-factor structure to the RAPE scale. While our sample's data did support a two-factor solution, the items loaded differently in our sample as compared to that used by Hermann et al. (2012). This difference may be reflective of the difference in sampling between our two studies. That is, Hermann et al. (2012) used a sample of men convicted of

sexual offences. In contrast, our sample was comprised of non-offending male and female community members. Future research might look to examine whether the dimensionality of rape-supportive cognitions using larger samples, and investigate the consistency of this dimensionality across offending and non-offending samples.

Away from conceptual advances of our research, it is also necessary to acknowledge some of the inherent limitations in our work. We made use of a limited age sample (18-35 years) in order to reflect the ecological characteristics of our scenarios. That is, the fact that our protagonists met on a smartphone dating app led us to want to control for age in our sample, given that 83% of Tinder users are below the age of 35 years (McGrath, 2015). Future research might make use of a broader range of scenarios and examine the effects of excusing and justifying rape cognitions across the lifespan, such as to have clearer links to crucial criminal justice contexts (e.g., jury decision-making). Our data may also be subject to some of the contextual factors embedded within the vignettes. That is, some of the variance in judgements may be explained by participants' views about online dating or dating apps in general.

For ethical reasons, we turned off IP address tracking for the online survey in order to increase participants' anonymity and encourage honest responding. However, this means that we cannot be sure about the precise locations of where our survey was completed, or the national homogeneity of our sample. While we have strong reasons to believe that the vast majority of our sample were based in the UK (owing to the location of the research team and data collection methods employed). However, the use of online for may have led to a small proportion of the sample coming from other countries. This could be an issue given the different legal definitions of rape in different jurisdictions. Future research might balance the need to maintain participant anonymity with tighter control over jurisdiction-specific definitions of rape. One way to do this may be to utilize multi-lab data collection initiatives,

such as the Psychological Science Accelerator (Chartier, McCarthy, & Urry, 2018), which enables research teams from across the world to collaborate on single projects to bring small samples together into large-scale multi-site international studies.

Conclusions

The present study sought to examine the empirical validity of Hermann et al.'s (2012) two-factor structure of Bumby's (1996) RAPE scale of rape-supportive cognitions. Consistent with this conceptualisation, we found that greater excusing rape cognitions explained exaggerated innocence judgements when the victim paid for the bill on a first date which subsequently ended in a rape. However, we found no evidence that rape was justified when the perpetrator paid for the bill. These findings suggest that excusing and justifying rape cognitions do represent empirically distinct clusters of rape-supportive cognitions about women and sex. The practical effects of this distinction, coupled with a theoretical exploration of how and under what conditions they are activated, should be the topic of future research in order to reduce the effects of such beliefs in the perpetration and judgement of rape cases.

References

- Bartels, R. M. (2016). The role of cognition, emotion & motivational goals in sexual offending: Multifactor models. In T. A. Gannon and T. Ward (Eds.), *Sexual offenders' cognition, emotion, and motivation* (pp. 17-34). Chichester: Wiley.
- Black, K. A., & Gold, D. J. (2008). Gender differences and socioeconomic status biases in judgments about blame in date rape scenarios. *Violence and Victims*, *23*, 115-128. doi: 10.1891/0886-6708.23.1.115.
- Blumenthal, S., Gudjonsson, G., & Burns, J. (1999). Cognitive distortions and blame attribution in sex offenders against adults and children. *Child Abuse and Neglect*, *23*, 129-143. doi: 10.1016/S0145-2134(98)00117-3.
- Bohner, G., Pina, A., Viki, G. T., & Siebler, F. (2010). Using social norms to reduce men's rape proclivity: Perceived rape myth acceptance of out-groups may be more influential than that of in-groups. *Psychology, Crime & Law, 16*, 671-693. doi: 10.1080/1068316X.2010.492349.
- Bumby, K. M. (1996). Assessing the cognitive distortions of child molesters and rapists:

 Development and validation of the MOLEST and RAPE scales. *Sexual Abuse*, *8*, 37-54.

 doi: 10.1177/107906329600800105.
- Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, *38*, 217-230. doi: 10.1037/0022-3514.38.2.217.
- Burt, M. R., & Albin, R. S. (1981). Rape myths, rape definitions, and probability of conviction. *Journal of Applied Social Psychology*, 11, 212-230. doi: 10.1111/j.1559-1816.1981.tb00739.x.
- Carpenter, T., Pogacar, R., Pullig, C., Kouril, M., LaBouff, J., Aguilar, S., Isenberg, N., & Chakroff, A. (2018, April 3). *Conducting IAT research within online surveys: A procedure, validation, and open source tool.* [Preprint]. doi: 10.17605/OSF.IO/6XDYJ

- Chartier, C., McCarthy, R., & Urry, H. (2018, February 28). *The Psychological Science Accelerator*. Retrieved from https://www.psychologicalscience.org/observer/the-psychological-science-accelerator.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10, 1-9.
- Edwards, K. M., Turchik, J. A., Dardis, C. M., Reynolds, N., & Gidycz, C. A. (2011). Rape myths: History, individual and institutional-level presence, and implications for change. *Sex Roles*, *65*, 761-773. doi: 10.1007/s11199-011-9943-2.
- Feild, H. S. (1978). Attitudes toward rape: A comparative analysis of police, rapists, crisis counselors, and citizens. *Journal of Personality and Social Psychology*, *36*, 156-179. doi: 10.1037/0022-3514.36.2.156.
- Fox, J., & Potocki, B. (2016). Lifetime video game consumption, interpersonal aggression, hostile sexism, and rape myth acceptance: A cultivation perspective. *Journal of Interpersonal Violence*, *31*, 1912-1931. doi: 10.1177/0886260515570747.
- Freeman, J., & Ambady, N. (2010). MouseTracker: Software for studying real-time mental processing using a computer mouse-tracking method. *Behavior Research Methods*, 42, 226-241. doi: 10.3758/BRM.42.1.226.
- Frijda, N. H., Mesquita, B., Sonnemans, J., & Van Goozen, S. (1991). The duration of affective phenomena or emotions, sentiments and passions. In K. T. Strongman (Ed.), *International Review of Studies on Emotion* (pp. 187-225). New York, NY: Wiley.
- Gannon, T. A. (2009). Current cognitive distortion theory and research: An internalist approach to cognition. *Journal of Sexual Aggression*, *15*, 225-246. doi: 10.1080/13552600903263079.

- Gerger, H., Kley, H., Bohner, G., & Siebler, F. (2007). The acceptance of modern myths about sexual aggression scale: Development and validation in German and English.

 *Aggressive Behavior, 33, 422-440. doi: 10.1002/ab.20195.
- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85, 197-216. doi: 10.1037/0022-3514.85.2.197.
- Grubb, A., & Harrower, J. (2008). Attribution of blame in cases of rape: An analysis of participant gender, type of rape and perceived similarity to the victim. *Aggression and Violent Behavior*, *13*, 396-405. doi: 10.1080/13552600802641649.
- Grubb, A., & Turner, E. (2012). Attribution of blame in rape cases: A review of the impact of rape myth acceptance, gender role conformity and substance use on victim blaming.

 *Aggression and Violent Behavior, 17, 443-452. doi: 10.1016/j.avb.2012.06.002.
- Hammond, E. M., Berry, M. A., & Rodriguez, D. N. (2011). The influence of rape myth acceptance, sexual attitudes, and belief in a just world on attributions of responsibility in a date rape scenario. *Legal and Criminological Psychology*, *16*, 242-252. doi: 10.1348/135532510X499887.
- Hanson, R. K., Harris, A. J. R., Scott, T. L., & Helmus, L. (2007). Assessing the risk of sexual offenders on community supervision: The Dynamic Supervision Project. Ottawa, Canada: Public Safety Canada.
- Hanson, R. K., & Thornton, D. (2000). Improving risk assessment for sex offenders: A comparison of three actuarial scales. *Law and Human Behavior*, 24, 119-136. doi: 10.1023/A:1005482921333.
- Harper, C. A., Hogue, T. E., & Bartels, R. M. (2017). Attitudes towards sexual offenders: What do we know, and why are they important? *Aggression and Violent Behavior*, *34*, 201-213. doi: 10.1016/j.avb.2017.01.011.

- Harper, C. A., & Perkins, C. (2018). Reporting child sexual abuse within religious settings: Challenges and future directions. *Child Abuse Review*, 27, 30-41. doi: 10.1002/car.2484.
- Hermann, C. A., Babchishin, K. M., Nunes, K. L., Leeth-Steensen, C., & Cortoni, F. (2012).
 Factor structure of the Bumby RAPE scale: A two-factor model. *Criminal Justice and Behavior*, 39, 869-886. doi: 10.1177/0093854812436802.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108, 480-498.
 doi: 10.1037/0033-2909.108.3.480.
- Lever, J., Frederick, D. A., & Hertz, R. (2015). Who pays for dates? Following versus challenging gender norms. *SAGE Open, 5.* 1-14. doi: 10.1177/2158244015613107.
- Malamuth, N. M. (1981). Rape proclivity among males. *Journal of Social Issues*, *37*, 138-157. doi: 10.1111/j.1540-4560.1981.tb01075.x.
- Malamuth, N. M. (1986). Predictors of naturalistic aggression. *Journal of Personality and Social Psychology*, *50*, 26-49. doi: 10.1037/0022-3514.50.5.953.
- Marshall, W. L., & Barbaree, H. E. (1990). An integrated theory of sexual offending. In W. L. Marshall, D. R. Laws, and H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories and treatment of the offender* (pp. 363-385). New York, NY: Plenum.
- Maruna, S., & Mann, R. E. (2006). A fundamental attribution error? Rethinking cognitive distortions. *Legal and Criminological Psychology*, 11, 155-177. doi: 10.1348/135532506X114608.
- McGrath, F. (2015, April 24). What to know about Tinder in 5 charts. Retrieved from https://blog.globalwebindex.com/trends/what-to-know-about-tinder/.
- Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois Rape Myth Acceptance Scale. *Journal of Research in Personality, 33,* 27-68. doi: 10.1006/jrpe.1998.2238.

- Pinciotti, C. M., & Orcutt, M. K. (2017). Understanding gender differences in rape victim blaming: The power of social influence and just world beliefs. *Journal of Interpersonal Violence*. Advance online publication. doi: 10.1177/0886260517725736.
- Polaschek, D. L. L., & Gannon, T. A. (2004). The implicit theories of rapists: What convicted offenders tell us. *Sexual Abuse*, *16*, 299-314. doi:10.1023/B:SEBU.0000043325.94302.40.
- Polaschek, D. L. L., & Ward, T. (2002). The implicit theories of potential rapists: What our questionnaires tell us. *Aggression and Violent Behavior*, 7, 385-406. doi:10.1016/S1359-1789(01)00063-5.
- Richards, K., & McCartan, K. (2018). Public views about reintegrating child sex offenders via Circles of Support and Accountability (COSA): A qualitative analysis. *Deviant Behavior*, *38*, 400-416. doi: 10.1080/01639625.2017.1304800.
- Sabina, C., & Ho, L. Y. (2014). Campus and college victim responses to sexual assault and dating violence: Disclosure, service utilization, and service provision. *Trauma, Violence,* & *Abuse, 15,* 201-226. doi: 10.1177/1524838014521322.
- Scully, D., & Moralla, J. (1984). Convicted rapists' vocabulary of motive: Excuses and justifications. *Social Problems*, *31*, 530-544. doi: 10.1525/sp.1984.31.5.03a00050.
- Smith, J. R., Treat, T. A., Farmer, T. A., McMurray, B. (2018). Dynamic competition account of men's perceptions of women's sexual interest. *Cognition*, *174*, 43-54. doi: 10.1016/j.cognition.2017.12.016.
- Suarez, E., & Gadalla, T. M. (2010). Stop blaming the victim: A meta-analysis on rape myths. *Journal of Interpersonal Violence*, 25, 2010-2035. doi: 10.1177/0886260509354503.
- Süssenbach, P. (2016). Rape myth acceptance and judgments in rape cases An overview with meta-analysis. *Recht & Psychiatrie*, *34*, 35-42.

- Süssenbach, P., Albrecht, S., & Bohner, G. (2017). Implicit judgments of rape cases: An experiment on the determinants and consequences of implicit evaluations in a rape case. *Psychology, Crime & Law, 23,* 291-304. doi: 10.1080/1068316X.2016.1247160.
- Süssenbach, P., Bohner, G., & Eyssel, F. (2012). Studying schematic influences of rape myth acceptance on visual information processing: An eye-tracking experiment. *Journal of Experimental Social Psychology*, 48, 660-668. doi: 10.1016/j.jesp.2011.12.005.
- Süssenbach, P., Eyssel, F., Rees, J., & Bohner, G. (2017). Looking for blame: Rape myth acceptance and attention to victim and perpetrator. *Journal of Interpersonal Violence*, *32*, 2323-2344. doi: 10.1177/0886260515591975.
- Szumski, F., Bartels, R. M., Beech, A. R., & Fisher, D. (2018). Distorted cognition related to male sexual offending: The multi-mechanism theory of cognitive distortions (MMT-CD).

 *Aggression and Violent Behavior, 39, 139-151. doi: 10.1016/j.avb.2018.02.001.
- Temkin, J., Gray, J. M., & Barrett, J. (2018). Different functions of rape myth use in court: Findings from a trial observation study. *Feminist Criminology*, *13*, 205-226. doi: 10.1177/1557085116661627.
- Temkin, J., & Krahé, B. (2008). Sexual assault and the justice gap: A question of attitude.

 Oxford: Hart.
- Thompson, M. P., Koss, M. P., Kingree, J. B., Goree, J., & Rice, J. (2011). A prospective mediational model of sexual aggression among college men. *Journal of Interpersonal Violence*, 26, 2716-2734. doi: 10.1177/0886260510388285.
- Twenge, J. (2018). *iGen:* Why today's super-connected kids are growing up less rebellious, more tolerant, less happy, and completely unprepared for adulthood and what that means for the rest of us. New York, NY: Atria Books.

- Vonderhaar, R. L., & Carmody, D. C. (2015). There are no "innocent victims": The influence of just world beliefs and prior victimization on rape myth acceptance. *Journal of Interpersonal Violence*, 30, 1615-1632. doi: 10.1177/0886260514549196.
- Ward, T. (2000). Sexual offenders' cognitive distortions as implicit theories. *Aggression and Violent Behavior*, *5*, 491-507. doi:10.1016/S1359-1789(98)00036-6.
- Ward, T., & Beech, A. (2006). An integrated theory of sexual offending. *Aggression and Violent Behavior*, 11, 44-63. doi: 10.1016/j.avb.2005.05.002.
- Ward, T., & Siegert, R. J. (2002). Toward a comprehensive theory of child sexual abuse: A theory knitting perspective. *Psychology, Crime & Law*, 8, 319-351. doi: 10.1080/10683160208401823.