Cognitive Distortions May not be Attitudes Towards Rape

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Cognitive Distortions and Sexual Aggression

- Potential dynamic risk factors/targets for treatment (Andrews & Bonta, 2010; Olver & Wong, 2011).
- Most past research has used self-report scales
 "If a man has had sex with a woman before, then he should be able to have sex with her any time he wants" (Bumby, 1996).
- Scores on these kinds of scales are associated with sexual aggression (Bumby, 1996; DeGue, et al., 2010; Helmus et al., 2013; Malamuth, 2003; Marshall & Barbaree, 1990; O' Ciardha & Ward, 2013).

Attitudes and Sexual Aggression

- Although these scales were designed to assess cognitive distortions, they are often referred to and thought of as "attitude scales".
- However, it is not obvious whether the items within these self-report scales assess attitudes towards rape or some other construct.
- If the items are assessing another construct it would be important to know this because different cognitions may serve different functions in the offense process (Gannon & Polaschek, 2006; Maruna & Mann, 2006).

Research Questions

Does a widely used self-report scale (i.e., RAPE Scale; Bumby, 1996) assess attitudes towards rape?

Are attitudes and the cognitions assessed by the RAPE scale independently associated with sexually aggressive behaviour?

Exploratory Factor Analysis

Research Question: Does the RAPE scale assess attitudes towards rape?

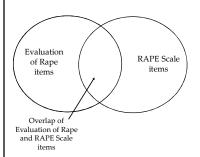
- $\boldsymbol{\diamondsuit}$ EFA is used to identify clusters of variables.
- Variables that belong to the same cluster are assumed to be related, or driven by the same underlying construct.
- Our underlying construct of interest was attitudes (i.e.,evaluation of rape scale).

Exploratory Factor Analysis

Evaluation of Rape + RAPE Scale items

One factor: would suggest both scales measure attitudes

Exploratory Factor Analysis



Overlapping Factors: would suggest some of the RAPE scale items assess attitudes towards rape

Exploratory Factor Analysis



very negative

RAPE Scale items Two separate factors: would suggest the RAPE scale does not assess attitudes

towards rape.

Method

Participants

- ❖ 660 male heterosexual undergraduate students❖ Median age of 18-19

Measures

- * Evaluation of Rape Scale (i.e., rape is positive vs. negative)
- * RAPE Scale (Bumby, 1996)
- * Coercive Sexuality Scale (CSS; Rapaport & Burkhart, 1984)
- Likelihood to Rape Question (LR; Malamuth, 1981)

Evaluation of Rape

very positive

- Total scores are computed by averaging responses to all seven items, with higher scores indicating a more positive attitude towards rape.
- * The scale has not been validated, but it was modeled after similar scales that are both validated and widely used in social psychology research (e.g., Gawronski & Bodenhausen, 2006; Osgood et al., 1957).

• Current study $\alpha = .79$

The Bumby RAPE Scale

Women often falsely accuse men of rape. strongly disagree

- Self-report scale assessing one's level of agreement with a variety of statements relevant to sexual violence
- * The Bumby RAPE scale was chosen because it is often used in both research and treatment programs for sex offenders in North America (Nunes, Pettersen, Hermann, Looman, & Spape, 2014)

Current study $\alpha = .93$

The Coercive Sexuality Scale

Since age 16, have you threatened to use a weapon on a female to

get her to have sex with you? never nine times

- * Responses are summed and higher total scores indicate more involvement in sexually coercive behaviour.
- The original scoring of the CSS was modified for this study.
 - * Results were run with both the modified and original CSS scoring, and the pattern of results remained the same.

Current study $\alpha = .91$

The Likelihood to Rape Question

What is the likelihood that you would rape someone if you could be assured of not being caught or punished?

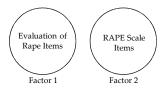
1 2 3 4 5
Not at all Likely Very Likely

(Malamuth, 1981

Research Question:

Does the RAPE scale assess attitudes towards rape?

EFA Results



❖ The EFA resulted in two distinct factors, suggesting the RAPE scale may be measuring cognitions that are distinct from attitudes towards rape.

Research Question:

Are attitudes and the cognitions assessed by the RAPE scale independently associated with self-reported sexual aggression?

Results

<u>Correlations</u>: Evaluation of Rape, The RAPE Scale, History of Sexual Aggression (CSS), and Likelihood to Rape (LR).

MEASURE	Evaluation of Rape Scale	RAPE Scale	Coercive Sexuality Scale	
RAPE Scale	.36*			
CSS	.29*	.26*		
LR	.34*	.35*	.16*	

 $^*p<.01$

Results

 $Hierarchical\ Regression\ for\ the\ Coercive\ Sexuality\ Scale\ Revised\ Outcome$

	R	R ²	Adjusted R ²	ΔR^2	В	B SE	β
Block 1	.26	.07	.06	.07*			
RAPE scale					.17*	.03	.26
Block 2	.33	.11	.11	.04*			
RAPE scale					.12*	.03	.18
Eval of Rape scale					8.4*	1.5	.23

*p < .05

Results

Hierarchical Regression for the Likelihood to Rape Outcome

	R	R ²	Adjusted R ²	ΔR^2	В	B SE	β
Block 1	.35	.12	.12*	.12*			
RAPE scale					.02*	.002	.27
Block 2	.42	.17	.17	.05*			
RAPE scale					.01*	.002	.27
Eval of Rape scale					.61*	.097	.24

*p < .05

Summary

- ❖ The RAPE scale and Evaluation of Rape Scale formed separate factors suggesting the RAPE scale may not measure attitudes towards rape.
- Hypothesis 2 was supported:
 - Soth the RAPE scale and Evaluation of Rape scale were independently associated with sexually aggressive behaviour, and were more strongly associated with sexual aggression together than apart.
- $\ \ \, \ \ \,$ These results suggest that the RAPE scale and Evaluation of Rape scale may provide complementary information relevant to sexual aggression.

Limitations

- ❖ Student sample
- * RAPE scale typically used on sex offenders
- Unknown validity of the Evaluation of Rape scale
 - Osgood et al., (1957) Factor Analysis
 - * Found that similar anchors (e.g., good-bad, pleasantunpleasant, all loaded onto an evaluative factor)
- Reliance on self-report measures
 - Although some participants may not have answered honestly studies show antisocial behaviour can be accurately assessed using self-report measures (e.g., Mathie & Wakeling, 2011; Thornberry & Krohn, 2000; Woods, Hermann, Nunes, McPhail, & Sewell, 2011)
- Cross-Sectional Study

Future Research

- Replication with another student sample, a community sample, and an offender sample
- Explore implicit and explicit attitudes (i.e., not solely relying on self-report)
- Replicate findings with a longitudinal design Provide more insight into the direction of the relationship between constructs

Conclusion

- * A greater emphasis on precision and clarity in measuring the cognitions associated with sexual offending will facilitate a more thorough understanding of these constructs.
- This will lead to improvements in theory, research, assessment, and treatment of sexually aggressive behaviour.

Thank you! kristenwhite@cmail.carleton.ca

Questions?

More about our research Aggressive Cognitions and Behaviour Research Lab http://www.carleton.ca/acbrlab/

White, K., Hermann, C. A., & Nunes, K. L. (2014, October). Cognitive distortions may not be attitudes towards rape. In K. L. Nunes (Chair), What Cognitions are we Actually Measuring? Why Should we Care? Symposium to be conducted at the 33rd Annual Research and Treatment Convention of the Association for the Treatment of Sexual Abusers, San Diego, California.