

Exploring the Underlying Constructs of Rape Cognition Scales

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Rape Cognition and Sexual Aggression

- Theoretically related to sexual aggression (e.g., Ward, Gannon, & Keown, 2006)
- Mixed evidence in the literature (e.g., Suarez & Gadalla, 2010; Helmus et al., 2013)
- Lack of clarity and precision in **measuring** rape cognition?
 - Hermann et al. (2012) proposed that mixed findings are the result of measuring **distinct constructs as one** overall construct
 - Some self-report **measures** may **not be assessing** all relevant constructs (Nunes et al., 2016)

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Purpose of the Current Study

- To explore the number of distinct constructs both within and between measures of rape cognition
 - **Exploratory factor analysis (EFA)**
- To examine the bivariate relationships between resulting factor(s), rape cognition, and self-reported sexually aggressive behaviours
 - **Correlation analyses**

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Method

EFA	Correlation
<ul style="list-style-type: none"> 191 community men <ul style="list-style-type: none"> ➤ Majority were between 40 and 49 years old (22.5%, <i>n</i> = 43) ➤ Majority were of Caucasian ethnicity (78.5%, <i>n</i> = 150) ➤ Over half were married (51.8%, <i>n</i> = 99) ➤ Almost a quarter attending college/university (24.6%, <i>n</i> = 47) 	<ul style="list-style-type: none"> 156 community men <ul style="list-style-type: none"> ➤ Majority were between 40 and 49 years old (21.2%, <i>n</i> = 33) ➤ Majority were of Caucasian ethnicity (78.8%, <i>n</i> = 123) ➤ Almost half were married (48.7%, <i>n</i> = 76) ➤ Less than a quarter attending college/university (21.8%, <i>n</i> = 34)

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Method

Measures (completed online)

- Demographic questionnaire
- Rape Cognition
 - Rape Myth Acceptance Scale (RMAS; Burt, 1980)
 - RAPE Scale (Bumby, 1996)
 - Illinois Rape Myth Acceptance Scale (IRMAS; Payne et al., 1999)
- Sexually Aggressive Behaviours
 - Sexual Experiences Survey-Tactics Version Revised (SES-TV-R; White, 2015)
 - Proclivity: SES-TV-R (White, 2015)

} Completed in random order

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Example Rape Cognition Items

RAPE Scale
 "Women often falsely accuse men of rape."

1 2 3 4
 Strongly disagree Strongly agree

IRMA Scale
 "Many women secretly desire to be raped."

1 2 3 4
 Strongly disagree Strongly agree

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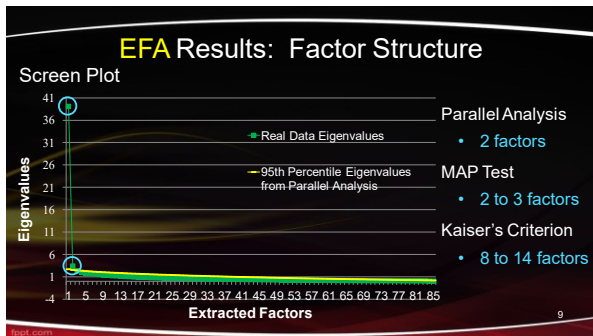
Example Sexual Aggression Item

How many times SINCE YOU WERE 16 years old have you **threatened to physically harm a woman or someone she cares about**, in order to...

1. Try to kiss, sexually touch, or make her have some sort of sex (oral, vaginal, or anal) with you when she didn't want to, but for some reason it didn't happen?
2. Kiss and/or sexually touch her when she didn't want to?
3. Make her have some sort of sex with you (oral, vaginal, or anal) when she didn't want to?
4. Take sexual pictures or videos of her when she didn't want to?

0 1 2 3 4 5 6 7 8 9
Never times or more

Results from the EFA



EFA Results: Factor Structure

2-Factor Model

Fit Statistics:
 ✓ RMSEA (< .06) = .033
 ✓ CFI (> .95) = .969
 ✓ SRMR (< .08) = .056

Significant cross-loadings between clusters

EFA Results: Factor Structure

1-Factor Model

Model 1 Fit Statistics:
 ✓ RMSEA (< .06) = .038
 ✓ CFI (> .95) = .960
 ✓ SRMR (< .08) = .065

- Factor 1
 - Accounted for 45.47% of the variance

Results from Correlation

Correlation Results

	1	2	3	4	5	6
1. Factor 1	-	.95*	.99*	.99*	.29*	.28*
2. RMA Total		-	.93*	.92*	.24*	.25*
3. RAPE Total			-	.97*	.29*	.29*
4. IRMAS Total				-	.29*	.29*
5. SES-TV-R					-	.72*
6. P-SES-TV-R						-

* $p < .001$

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Summary and Discussion

- ❖ All items from the RMA Scale, RAPE Scale, and IRMA Scale loaded onto one factor
- ❖ Inconsistent with some previous studies (e.g., Briere et al., 1985; Hermann et al., 2012)
- Possible explanations:
 1. EFA detected a super latent construct (e.g., Payne et al., 1999)?
 2. Statistical issues (e.g., Heywood cases)?
 3. True results?
 - Consistent with some previous studies (e.g., Nunes et al., 2016; Uji et al., 2007)

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Other Potential Limitations

- Multivariate collinearity?
 - Sequential analysis of the covariance matrix could identify multivariate collinearity (e.g., Wothke, 1993)
- Small sample size?
 - Suggested minimum is 300 cases (e.g., Comrey & Lee, 1992; Tabachnick & Fidell, 2012), but this is not consistent across studies
 - Factors with 10 or more loadings greater than .40 are reliable if sample size is at least 150 (e.g., Guadagnoli & Velicer, 1988)
 - **May not be a significant limitation in the current study**

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Implications

- ❖ Not only are the rape cognition measures assessing the same underlying construct, they are all assessing only one construct.
- ❖ May not be practically necessary to distinguish between specific types of cognitive constructs to predict future sexually aggressive behaviours.

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