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Victim blaming, prior history to sexual victimization, support for sexually assaulted friends, and rape myths acceptance as predictors of attitudes towards rape victims in the general population of Pakistan

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Abstract

Background Individuals who have been sexually assaulted often turn to their friends for comfort and support. Responses to such disclosures vary greatly and may be influenced by prior victimization, the relationship of the disclosure recipient to the accused, and the recipient's acceptance of rape myths. Moreover, currently there are no studies to date that have validated the Illinois Rape Myths Acceptance Model in Pakistan.

Method To gain a better understanding of this phenomenon, the online survey was administered to the general population. Of this sample, 512 (consisting of 312 females and 200 males) reported having received a rape disclosure from a friend.

Results The results showed that having lower scores on rape myths acceptance (being less likely to endorse rape myths) was significantly associated with positive attitudes towards rape victims. Similarly, being female, having graduate or above level education, not blaming the victim, having prior history of sexual victimization, offering support for friends experiencing sexual assault, and being liberal were significantly associated with positive attitudes towards rape victims. Additionally, confirmatory factor analysis of the Illinois Rape Myths Acceptance Scale showed acceptable model fit indices and relevance to the Pakistani context.

Conclusion In conclusion, it has been assessed through the results that showed that having lower scores on rape myths acceptance (being less likely to endorse rape myths) was significantly associated with positive attitudes towards rape victims. Similarly, being female, having graduate or above level education, not blaming the victim, having prior history of sexual victimization, offering support for friends experiencing sexual assault, and being liberal were significantly associated with positive attitudes towards rape victims. It is further concluded that having experienced sexual victimization leads individuals towards showing empathy to rape victims and thus may influence them to provide support for such victims. The findings further show that Illinois Rape Myths Acceptance is a valid measure for measurement of rape myths in Pakistan as established through the acceptable model fit indices. With the use of validated scales, we could gain a better understanding of rape and the factors related to it, which could be used to inform practices and policy decisions.

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Keywords Victim blaming, History of sexual victimization, Rape myths acceptance, Responses to sexual assault of friends, Attitudes towards rape victims, Structural equation modeling, Stepwise regression

Background

There is widespread sexual aggression against women, as evidenced by multiple studies (Jaffe et al. 2021). This is a critical issue that has been of great concern to researchers and law enforcement, who are working to address it through educational campaigns (Barn & Powers 2021). While there are many factors influencing the public's attitude towards rape victims, such as rape myths, gender roles and stereotypes, social and cultural norms, personal biases and experiences, psychopathic tendencies, and prior exposure to sexual violence (Kim & Santiago 2020; Litchy & Gowen, 2021), it is clear that this problem needs to be addressed. Through an exploration of the literature, it will be established that victim blaming is a key factor in the perpetration of sexual aggression, and that it serves to inhibit the reporting of sexual aggression, as well as impede justice from being served. By understanding the issue of victim blaming and its implications, we can work towards creating a society that is more conducive to justice and support for victims of sexual aggression.

Sexual aggression and victim blaming are closely intertwined, as victim blaming often occurs in cases of sexual aggression (Ryan 2019). In many cases, victims of sexual aggression are blamed for their own victimization, even though they did nothing wrong (Bohner & Schapansky 2018). This can create a culture of fear and silence, as victims may be reluctant to report their experiences or seek help due to fear of being blamed or judged (Penone & Spaccatini 2019). This can lead to an increase in sexual aggression, as perpetrators may feel more emboldened to commit such acts if they know they can escape accountability. At the same time, the level of social support available to rape victims serves as a protective factor against psychological and emotional damages (Hosterman et al. 2018).

The reactions of friends have serious implications for victims. Research has shown that those who receive support are more likely to go to the police (Testa et al. 2020) and seek counseling (Sutton et al. 2021), while those who experience negative reactions are more likely to suffer from PTSD and other psychological issues (Ferguson & Brausch 2022). College students are in a unique position to assist friends who have been sexually assaulted, for example, by offering emotional support, providing a place to stay if necessary, accompanying them to classes and services, and referring them to the police or counseling center (Santelli et al. 2018). Additionally, they can provide transportation and money for

emergency expenses and help with other needs when the survivor is reluctant to use formal services (Wood et al. 2021). While friends often provide some help, such as showing belief and empathy and sharing similar experiences (Ameral et al. 2020), 20–40% of them are uncertain how to help or believe that their responses made the situation worse.

When friends are trying to be helpful, they may have negative emotional reactions to the disclosures, which not only may hurt them psychologically but also which they may communicate to the survivor (Bogen et al. 2019). These reactions can include anger, guilt, shame, sadness, depression, anxiety, fear, doubt, helplessness, confusion, hopelessness, and even flashbacks of similar traumas they have experienced in the past (Bach et al. 2021). Hearing about a friend's victimization can even lead to secondary victimization; in other words, they may experience symptoms of trauma as a result of empathizing with the victim (Alaggia & Wang, 2020). Research has also shown that those who received disclosures of sexual assault were more likely to have a history of mental health issues, substance abuse, and victimization than those who did not receive such disclosures (Mishori et al. 2019). This could be indicative of individuals feeling more open to share their traumatic experiences with people who have had similar experiences. However, this can also put individuals with a history of sexual assault who receive such disclosures from friends at risk of being retraumatized (experiencing upsetting reminders of previous traumatic events) (O'Callaghan et al. 2019). Similarly, prior history of sexual victimization also influences the attitudes of individuals towards rape victims and their tendency to accept rape myths (Littleton et al. 2019).

McMahon (2010) found that individuals with a history of victimization had lower rape myth acceptance (RMA) and were more likely to intervene. It has also been found that, compared to those without such experiences, individuals having history of sexual victimization were more likely to support and encourage their friends and those associated with them to report experiences or incidences of sexual assault (Schmitt et al. 2021). However, hearing of these experiences may bring about vicarious trauma in students with victimization histories (Nason et al. 2019). This trauma may lead to feelings of self-blame, which can reduce the support given to other survivors of rape (O'Neal & Hayes 2020).

Attitudes towards rape victims are significant in terms of the perpetration of sexual assault or rape

against women (Sjöberg & Sarwar, 2022). Research has consistently shown that violence-supporting beliefs, acceptance of rape myths, and lack of empathy resulting from psychopathy for rape victims are all predictive of sexual aggression (Persson & Dhingra, 2022). For example, men with traditional, conservative, and misogynistic beliefs are likely to have negative attitudes and low levels of empathy for rape victims and are more likely to attribute blame to the victim in rape cases (Cole et al. 2020). Masculinity and conservative beliefs are also associated with negative attitudes towards rape victims, while higher levels of perpetrator blame are associated with lower levels of victim blame (Obierefu & Ojedokun, 2019). Within the Pakistani context, Shahid et al. (2021) found that the rate of rape in Pakistan was 8.4 per 100,000 people and the need to take strict legal action against the perpetrators. Similarly, Jamshed and Kamal (2021) have found that the general population in Pakistan tend to place the blame on victims of sexual assault and rape and more negative attitudes towards rape victims. The role of social and cultural factors in having causal influences towards rape myths acceptance and victim blaming has also been documented in the relevant literature (Munir et al. 2021; Rasool & Rasool 2020).

Purpose of the study

This study examines the role of victim blaming, prior history of sexual victimization, rape myths acceptance, and responses to sexual victimization of friends as predictors of the attitudes towards rape victims. Moreover, the study tries to assess the role of the above factors in an indigenous Pakistani context keeping in view sociocultural realities which influence and shape the belief systems of individuals regarding rape.

Rationale for validation of the Illinois rape myths acceptance scale in Pakistan

During the span of past many decades, a number of valid and reliable measures have been developed for the purpose of assessing rapid myths including the Attitudes Towards Rape Scale, the RMAS Scale, and Illinois Rape Myths Acceptance Scale (Skov et al. 2022). From among these scales, the IRMA scale is known for being widely used. Research has also shown that the IRMA scale has been used across a number of countries which further shows the level of cross-cultural relevance (Canan et al. 2022). However, it is imperative to note that most of the studies in this regard have been descriptive, and thus, there is a need for developing an extensive measure for rape myths acceptance. Although Pakistan is known for its adverse sexual behavior towards women, there is very little empirical evidence about the attitudes and beliefs

that are connected to it. According to qualitative-descriptive reports, this can be attributed to religion, cultural practices, and psychological factors (Nisar et al. 2021). However, there is a lack of research that uses standardized measures that are valid. For example, recent studies on rape and rape myths in Pakistan (Zahid & Rauf, 2021) used unstandardized measures and provided qualitative reports and prevalence data rather than quantitative data that can be used for further analysis. Although the prevalence data is helpful in learning more about rape, it is difficult to make objective and accurate comparisons across nations.

Objectives

1. To examine the role of victim blaming, prior history of sexual victimization, rape myths acceptance, and support for sexually assaulted friends as predictors of the attitudes towards rape victims
2. To analyze whether the IRMAS as a measure of rape myths acceptance is consistent with our understanding about the nature of rape myths acceptance within the Pakistani context

Hypothesis

1. Being female, having low scores on endorsement of rape myths, having graduate and above level education, having prior history of sexual victimization, being liberalism, and having non-victim blaming orientations would be significantly associated with positive attitudes towards rape victims.
2. IRMAS would exhibit acceptable five-factor solution and model fit indices within the Pakistani context.

Methods

Participants

In this study, a cross-sectional research design was employed to evaluate the relationship between grandiose narcissism, rape myths acceptance, and attitudes of the general population in Pakistan. Purposive sampling was used to select 512 participants, of which 312 were males and 200 were females ranging in age from 18 to 68 years old. The sample size was determined using G*Power analysis with 95% confidence intervals, and it was concluded that a sample size of 500 would be sufficient for the study. Moreover, the margin of error was designated to 0.5 along with finalization of confidence intervals at 95% which showed that a sample of 500 is sufficient for computing effect sizes as well as for sample determination purposes (Kang, 2021). In terms of socioeconomic status,

8 participants belonged to low income, 354 belonged to middle income, and 76 belonged to high-income groups. Out of the participants, 327 were single, 150 were married, 22 were separated, and 13 were divorced. In terms of educational attainment, 52 had intermediate-level degrees, 345 had graduate-level degrees, 75 had post-graduate-level degrees, 40 had doctorate and postdoctorate level education, and 310 identified as liberal, while 202 as conservative. This sample was selected through convenience sampling to assess their attitudes towards rape victims. The convenience sample included Pakistan users all of whom were approached through an online questionnaire the link to which was distributed through students and graduates. This approach is consistent with the relevant literature on rape myths acceptance in which conveniently drawn samples of university students have been used (Lys et al., 2021). In terms of the inclusion criteria, participants are above the age range of 18 belonging to any gender, currently residing in Pakistan, and who indicated providing support or counseling to a friend who has had previously disclosed an experience of sexual victimization to them. The exclusion criteria included noninclusion of participants who did not want to discuss their sexual histories or any other sexual experiences they have had.

Instruments

Attitude Towards Rape Victims Scale

The Attitudes Towards Rape Victims Scale is a scale developed by Ward and colleagues (1995) to measure attitudes towards rape victims. The scale consists of 20 items that are rated on a 5-point Likert scale from strongly agree to strongly disagree. The items measure attitudes on a range of topics related to rape victims, such as victim blaming, sympathy for victims, and the perceived seriousness of rape. The scale is designed to measure both positive and negative attitudes towards rape victims, with higher scores indicating a more positive attitude towards rape victims. The scale has been used in a variety of research contexts, such as to examine the impact of media portrayals of rape on attitudes and to examine gender differences in attitudes towards rape victims. The alpha reliability of the scale is reported to be 0.83 (Ward 1988).

Rape myths acceptance

The Illinois Rape Myths Acceptance Scale (IRMAS) is a widely used and validated psychological assessment tool designed to measure an individual's acceptance of false or distorted beliefs regarding rape and sexual assault. This 22-item questionnaire is scored on a 5-point Likert scale, with higher scores representing an increased level of acceptance of rape myths. The IRMAS is composed

of four subscales that assess acceptance of different rape myths, such as "she asked for it" or "he didn't mean to." The reliability of the IRMAS has been reported to be 0.93 (McMahon & Farmer 2011). Furthermore, Das and Bhattacharjee (2021) conducted a validation of the factor structure of the IRMAS using Indian students and found that it has satisfactory cross-cultural validity. Due to the similarities between Pakistani and Indian cultures in terms of gender roles, religious practices, and adherence to traditional beliefs and practices, the IRMAS can be utilized in the Pakistani context.

Victimization history

We used items from the Sexual Experiences Survey (SES) created by Koss and Oros (1982) to measure victimization history, including whether participants were victims of unwanted sexual activities through force, coercion, or incapacitation, before they turned 18 and while they were in college.

Victim blaming and behavior Towards Rape Victims

The participants' behavior towards the survivor was assessed by asking them if they (1) gave encouragement to the individual to report the sexual assault and (2) advised on how to avoid being victimized in the future. The responses were then categorized as either |1| (affirmative) or |0| (negative).

Procedure

All participants provided informed consent, and the study was approved by the Ethical Review Board of Government College University, Lahore. It was found that the study posed no major ethical risks and was in accordance with the principles of the Declaration of Helsinki. Additionally, one of the authors of the study is a clinical psychologist who provided mental health counseling to participants upon request. To ensure confidentiality, participants' names and contact information were not collected, and instead, each participant was assigned a unique ID number. A web-based survey was created using the measures and demographic items, and it was shared on social media for people to access and participate. Before beginning the survey, participants had to sign a consent form that outlined the goals of the study and provided other necessary information.

Data collection

By leveraging the reach of online platforms such as WhatsApp and Facebook, the researchers employed Google Forms to collect data by sharing the questionnaire with participants. They also encouraged participants to spread the questionnaire to their friends, family,

and acquaintances, which enabled the researchers to successfully reach their desired sample size.

Data analysis

To assess the relationships between the variables, SPSS version 25 and AMOS version 24.0 for Windows were used to conduct descriptive statistics, reliability, and stepwise regression analysis. The variables prior history of sexual victimization, victim blaming, gender, educational attainment, liberal vs. conservative orientation, and offering support to friends who have experienced sexual assault were subjected to dummy coded with reference groups. To assess the five-factor solution of Illinois Rape Myths Acceptance, we conducted a confirmatory factor analysis in accordance with the factors structure identified by McMahan and Farmer (2011). The Kaiser-Mayer-Olkin Value was 0.92 that showed that the sample size was sufficient for the conduct of confirmatory factor analysis as reported by Kyriazos (2018). For the purpose of validating the Illinois Rape Myths Acceptance Scale, the English version of the instrument was distributed. As the main sample of this research included university students having above 12 years of education, they had the linguistic competency needed to understand the content of the scale and its items in English language.

Results

Table 1 presents the demographic characteristics of the participants. The data shows that out of the 512 participants, 312 were males, and 200 were females in the age range of 18 to 68 years. Moreover, 327 were single, 150 were married, 22 were separated, and 13 were divorced. In terms of educational attainment, 52 had intermediate-level degrees, 345 had graduate-level degrees, 75 had postgraduate-level degrees, 40 had doctorate and post-doctorate level education, and 310 identified as liberal, while 202 as conservative.

Table 2 demonstrates the psychometric properties of the study variables. According to the alpha reliability analysis, the Rape Myths Acceptance Scale had the highest reliability score of 0.90, while the Attitude Towards Rape Victims Scale had a score of 0.89. Both of these scores were found to be within the acceptable range (Ravinder & Saraswathi, 2020).

Table 3 shows the associations among rape myths acceptance, gender, educational attainment, victim blaming, prior history of sexual victimization, and support for friends experiencing sexual assault on attitudes towards rape victim. The findings showed that having lower scores on rape myths acceptance (being less likely to endorse rape myths) was significantly associated with positive attitudes towards rape victims ($\beta = 0.03, p < 0.05$). Similarly, being female ($\beta = 0.11, p < 0.05$); having graduate or

Table 1 Sociodemographic characteristics (gender, age, socioeconomic status, marital status, educational attainment, and orientation) of participants

Demographics	N	%
Gender		
Male	312	60.93
Female	200	39.06
Age		
18 to 25	97	18.94
26 to 35	282	55.07
36 to 45	100	19.53
46 to 68	33	6.44
Socioeconomic status		
Low income	82	16.01
Middle income	354	69.14
High income	76	14.84
Marital status		
Single	327	63.86
Married	150	29.29
Separated	22	4.29
Divorced	13	2.53
Education		
Intermediate	52	10.15
Graduate	345	67.38
Postgraduate	75	14.64
Doctorate and post-doctorate	40	7.81
Orientation		
Liberal	310	60.54
Conservative	202	39.45

Table 2 Psychometric properties of the Attitudes Towards Rape Victims Scale and Illinois Rape Myths Acceptance Scale

Variables	M	SD	α	No. of items
Attitude towards rape victims	48.54	16.38	0.89	25
Rape Myths Acceptance Scale	60.39	14.30	0.90	19

M mean, SD standard deviation, α reliability coefficient

above level education ($\beta = 0.14, p < .05$); not blaming the victim ($\beta = 0.16, p < 0.05$); having prior history of sexual victimization ($\beta = 0.11, p < 0.05$) and offering support for friends experiencing sexual assault ($\beta = 0.15, p < 0.05$); and being liberal ($\beta = 0.12, p < 0.05$) were significantly associated with positive attitudes towards rape victims.

Table 4 displays the model fit indices which are used to evaluate the overall performance of a statistical model. The values of the indices give an indication of how well the model is able to explain the data. Generally, larger values of the indices indicate better fit of the model to the data. However, it is important to note that the interpretation of the model fit indices depends on the context

Table 3 Regression of associations among rape myths acceptance, gender, educational attainment, victim blaming, prior history of sexual victimization, and support for friends experiencing sexual assault on attitudes towards rape victims

Variables	n (%)	Attitudes towards rape victims		
		R ²	ΔR ²	β [95% CI]
Rape myths acceptance				
Low	202 (39.45)	.00	.00	.03 [- 0.88, 4.41]
High	310 (60.45)			Reference
Gender				
Female	312 (60.93)	.01	.01	0.11* [3.49, 9.03]
Male	200 (39.06)			Reference
Educational attainment				
Graduate level and above	460 (89.84)	.02	.01	0.14* [3.48, 7.60]
Below graduation	52 (10.16)			Reference
Victim blaming				
No	241 (47.07)	.02	.02	0.16* [4.77, 9.37]
Yes	271 (52.93)			Reference
Prior history of sexual victimization				
Yes	145 (28.32)	.01	.01	0.13* [6.40, 14.38]
No	367(71.67)			Reference
Offering support to those who experienced sexual assault				
Yes	298 (58.20)	.01	.01	0.15* [6.40, 14.38]
No	214 (41.79)			Reference
Religious orientation				
Liberal	345 (67.38)	.01	.01	0.12* [6.40, 14.38]
Conservative	167 (32.61)			Reference

N = 512

CI Confidence interval

*p < .05

and the type of model being evaluated. It was identified that the hypothesized four-factor structure of the Illinois Rape Myths Acceptance Scale did not fit the data accurately (first-order CFA model). However, when two error correlations were removed from the 19-item first-order CFA (items 5, 15, and 16), the model fit improved, resulting in an RMSEA of 0.061, a CFI of 0.916, and a TLI of 0.900. The correlation between the factors was as follows: between “she asked for it” and “he didn’t mean to” = 0.65 and “it wasn’t really rape” and “she lied” = 0.72; between “he didn’t mean to” and “it wasn’t really rape” = 0.43; and between “he didn’t mean to” and “he didn’t mean to (alcohol)” = 0.61 (refer to Fig. 1).

Table 4 Model fit indices and estimates of the Illinois Rape Myths Acceptance Scale

CMIN/df	df	P	CFI	GFI	AGFI	SRMR	RMSEA	p-close
6.55	142	.000	0.92	0.91	0.90	0.15	.061	.000

N = 512

CI Confidence interval

*p < .05

Discussion

The purpose of the present study was to assess the role of victim blaming, prior history of sexual victimization, rape myths acceptance, and support for victims of sexual victimization in predicting attitudes towards rape victims in Pakistan. Consistent with previous research findings (Johnson et al. 2021; Li et al., 2022), about 40% of the individuals had low rape myths acceptance and had positive attitudes towards rape victims. Moreover, about 72% reported having prior history of sexual victimization which further predicted positive attitudes towards rape victims. Grandgentt et al. (2022) found that there is a potential impact of sexual victimization history on positive attitudes towards rape victims. Senn et al. (2022) also endorse the above findings showing that having a prior history of sexual victimization is significantly associated with positive attitudes towards rape victims.

The results of the present study also showed that being female and having graduate level and above education were significantly associated with positive attitudes towards victims. Garcia-Esteve et al. (2021) and Hetzel-Riggin et al. (2022) have reported that highly educated females tend to have lower levels of rape myths acceptance and positive attitudes towards rape victims. Consistent with the previous literature (Belyea and Blais 2021) being male, scoring high on rape myths acceptance, and having lower level education were significantly associated with negative attitudes towards rape victims. Moreover, it was found that individuals who do not blame the victim tend to show more positive attitudes towards rape victims. Similarly, individuals having liberal orientations tend to have more positive attitudes towards rape victims. Stoll et al. (2021) have also found that having a low tendency to blame victims is associated with positive attitudes towards rape victims. The results of the present study show that individuals who support their friends having history of sexual victimization tend to have more positive attitudes towards rape victims as shown in the previous literature (Jaffe et al. 2021). The study also found that those who had a history of being subject to sexual victimization extended more supportive interventions to rape victims.

With regard to the validation of the Illinois Rape Myths Acceptance Scale in Pakistan, the findings of the present study showed that a five-factor solution was justified. In order to create transferable and objective knowledge,

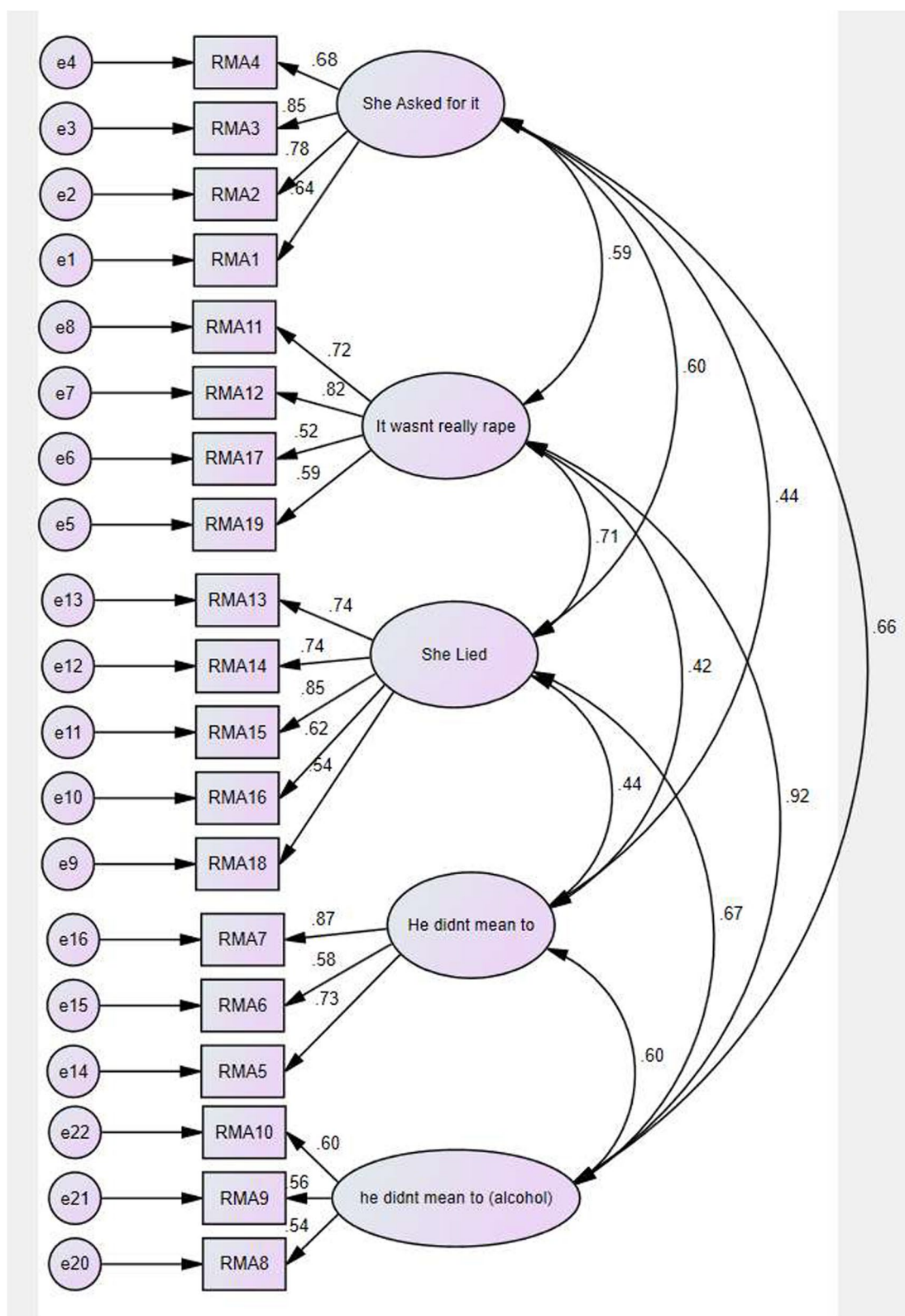


Fig. 1 Confirmatory factor analysis of the Illinois Rape Myths Acceptance. All factor loadings have been standardized and are significant ($p < .05$)

standardized measures that capture rape-supportive beliefs and myths must be empirically validated. These measures (e.g., RMASSs) are advantageous for both research and practice and have been utilized in basic and applied research, such as evaluating the effectiveness of sexual violence prevention programs or bystander/victim education/intervention programs (Hudspith et al. 2021). However, there is generally a lack of knowledge about their measurement equivalence in different societies, particularly those with high prevalence of sexual violence, which excludes them from the understanding of rape-supportive beliefs and myths (Xue et al. 2019). By examining the factor structure and measurement equivalence in different societies, the scalability of the measures can be established, and the global comparability of knowledge gained can be improved (Thelan & Meadows 2022). This examination can also provide validity and reliability information that can be used as a reference for future basic and applied research on rape-supportive myths and beliefs (Lys et al., 2021).

Within the Pakistani context, cultural norms and values, such as those related to honor, purity, and modesty, can also shape attitudes towards rape victims. For example, in some cultures including Pakistan, rape is viewed as shameful, and victims may be blamed or ostracized (Kazmi et al. 2023). On the other hand, in societies where rape is seen as an act of aggression, victims may be seen as courageous for speaking out. Rape is a serious crime in Pakistan, yet it is still a problem that plagues the country (Munir et al. 2021). Social and cultural factors play a significant role in attitudes towards rape victims in Pakistan. These factors are closely intertwined with gender roles and stereotypes and have a significant influence on how rape victims are perceived in Pakistani society (Khaliq & Sultan 2022). The traditional Pakistani view of gender roles is that men are responsible for the protection and well-being of women. This view of gender roles creates a sense of shame and guilt for the victim, as they are seen as having failed in their role of protecting themselves. This can lead to victims being blamed and stigmatized by their family and community, instead of receiving the support they need.

When attempting to employ scales across different societies, it is necessary to evaluate the factor structure and measurement equivalence of the scales in the other culture as they may perceive the phenomena differently (Beshers & DiVita 2021). Without proof of its validation, interpretations of findings from the use of the scales in a different society are often met with doubt (Martini et al. 2022). However, the present study has shown that a five-factor solution was more suited in assessing rape myths acceptance in the Pakistani population. This evidence supports the facets of rape myths (e.g., blame attribution to rape victims and inanimate objects [e.g., alcohol],

exoneration of perpetrators, minimizing of rape victimization, and believability of the dilemma of the rape victim that contribute to understanding rape-supportive beliefs in Pakistan as reported by Kazmi et al. (2023).

Limitations

The results of the survey cannot be used to draw conclusions about causality or the chronological order of events due to the cross-sectional nature of the data. Additionally, the data were collected through self-reporting rather than observation, which may have caused inaccuracies due to recall biases and people's tendency to report what is socially desirable. The sample was self-selected and may not be representative of the wider student population and was collected primarily through university setting, making it difficult to extrapolate the findings to national populations. This can raise concerns regarding the representativeness of the sample of the entire population of the region. It is also possible that the samples in our assessment differed in terms of mental health history, PTSD, and/or substance abuse, as we did not measure for these variables. Our results generally support the hypothesis that friends with a prior victimization history may be helpful for those who do not blame themselves, in agreement with previous findings. However, this is not necessarily the case for those who report to the police; it is possible that some survivors with a preexisting victimization history have had negative experiences when reporting their own assaults, and this could lead them to discourage their friends from making a report. Consequently, those with a history of victimization who do not blame themselves have a higher likely of supporting others with similar experiences.

Due to the lack of an RMA scale in Pakistan, another limitation of this research was that we did not use any other scale to measure RMA. For the purpose of validity, it would have been beneficial to see the correlation between the UIRMAS and another RMA scale.

Conclusions

In conclusion, it has been assessed through the results that showed that having lower scores on rape myths acceptance (being less likely to endorse rape myths) was significantly associated with positive attitudes towards rape victims. Similarly, being female, having graduate or above level education, not blaming the victim, having prior history of sexual victimization, offering support for friends experiencing sexual assault, and being liberal were significantly associated with positive attitudes towards rape victims. It is further concluded that having experienced sexual victimization leads individuals towards showing empathy towards rape victims and thus may influence them to provide support for such victims.

The findings further show that Illinois Rape Myths Acceptance is a valid measure for measurement of rape myths in Pakistan as established through the acceptable model fit indices. With the use of validated scales, we could gain a better understanding of rape and the factors related to it, which could be used to inform practices and policy decisions.

Implications

As a majority of individuals in our study were university students, they may have a variety of emotional reactions when their friends disclose that they have been sexually assaulted. These reactions may be impacted by Rape Myth Acceptance (RMA), prior victimization experiences, and the shared connections between survivors and accused. When engaging in the design of preventive measures and programs with sexual assault, it is important to take these factors into consideration. It is also important to challenge rape myths, as they appear to influence how people respond to those who have been sexually assaulted. In addition, it is beneficial to discuss strategies for self-care. Additionally, bystander intervention trainings can be subject to utilization for challenging rape myths and foster an environment of support for survivors by creating peer pressure to intervene. In order to ensure that prevention programs are effective, they must be able to capture the attention of the general population and for university students, who are particularly vulnerable to rape during their first semester and have a lot of information to process during orientation week. To do so, graphic imagery is often used to make sexual assault vignettes as realistic as possible. However, viewing these images of sexual violence can be emotionally triggering for survivors, leading to feelings such as sadness, anger, and fear. These feelings can make it difficult to absorb the new information being presented in the prevention program.

Abbreviation

AMOS Analysis of Moment Structures

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Authors' contributions

SMAK, AHT, and AN contributed to the study's conception and design. Data collection was performed by SMAK, RI, and AN, and AHT and RI performed data analysis. The authors read and approved the final manuscript.

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Availability of data and materials

Raw data were generated at the SPSS sheet. Derived data supporting the findings of this study are available upon request.

Declarations

Ethics approval and consent to participate

Ethical approval of the study was obtained from the Ethics Review Committee, Government College University, Lahore. Moreover, all participants had issued informed consent for participation in the study. Anonymity and confidentiality of participants were also ensured. There was no harm for participants to contribute to this study. The study was performed following all relevant ethical standards of the Declaration of Helsinki.

Consent for publication

Consent has been given by all authors for publication of this study.

Competing interests

The authors declare that they have no competing interests.

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