


## Intersection of Online Violence, Mindfulness Traits and Self-Esteem in Multifaceted Dimensions among Marginalized Females in Uttarakhand: An Extensive Study

Ms. Ayushi Pandwal ([ayushipandwal.phd@doonuniversity.ac.in](mailto:ayushipandwal.phd@doonuniversity.ac.in)), Doctoral Researcher,

Department of Psychology, Doon University, Uttarakhand, India;  <https://orcid.org/0000-0002-3313-1619>



Copyright: © 2023 by the authors. Licensee [The RCSAS \(ISSN: 2583-1380\)](http://www.thercsas.com). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution Non-Commercial 4.0 International License. (<https://creativecommons.org/licenses/by-nc/4.0/>). Crossref/DOI: <https://doi.org/10.55454/rcsas.3.07.2023.004>

**Abstract:** *Recently digital spaces have become susceptible to online gender-based violence, particularly for marginalized females who are disadvantaged. This Empirical study was carried out with 300, scheduled caste and scheduled tribe females in Dehradun, Haridwar, Nainital, and Chamoli districts of Uttarakhand, India to investigate the levels of experienced online violence in the form of cyber victimization and sexual harassment. The role of online violence in their social self-esteem appearance self-esteem, and performance self-esteem was accessed. Further, the influence of mindfulness traits was studied. The study reported a high negative association between online violence and self-esteem across three parameters (appearance, social, and performance) and mindfulness was found to mediate the relationship between the experience of online violence and self-esteem. Further, the results have been compared for scheduled caste and scheduled tribe female, rural, and female as one of the sub-categories to provide an in-depth and extensive analysis. This study has the potential to provide evidence-based insights into the psychological needs and challenges experienced by marginalized females, resulting in more effective and contextually appropriate preventive, support, and empowerment programs incorporating esteem needs and mindfulness skills.*

**Keywords:** Marginalized Females, Mindfulness Traits, Online Violence, Sexual Harassment, Social Self-Esteem

**Article History:** Received: 22 June 2023; Accepted: 15 July 2023; Published/Available Online: 30 June 2023;

### 1. Introduction

Recently, there has been a great focus on addressing online gender and ethnicity-based violence. Any sort of abusive, damaging, or violent behavior that occurs in online or digital settings is referred to as online violence that includes cyberbullying, harassment and threats, online hate speech, and online stalking are examples of technology-facilitated gender-based violence that causes or is likely to cause physical, sexual, psychological, social, political, or economic harm (Finn & Banach, 2000; Finn, 2004; Waldron et al., 2000). According to studies, there is an alarmingly high proportion of online violence among marginalized girls worldwide, caused by intersecting characteristics such as gender, ethnicity, and social identity (Lenhart et al., 2016). It influences psychological, social, and cultural aspects of an individual's identity (Sarkar & Rajan, 2023). The negative mental health consequences of online violence among marginalized females are depression, anxiety, and post-traumatic stress disorder, whereas, isolation, stigma, and limitations on educational and professional prospects are some of the social effects (Vitak et al., 2017). Self-esteem has been identified as an important aspect of the experience of online victimization. Individuals with low self-esteem were more likely to be harassed online; additionally, the negative impact of online victimization on self and social perception, and self-worth can explain the link between low self-esteem and vulnerability to violent online behavior (Extremera et al., 2018). Mindfulness has been reported as a potential protective factor against online violence. Mindfulness is widely defined as bringing one's full attention to the events occurring in the present moment while being accepting and non-judgmental (Baer et al., 2006; Marlatt & Kristeller, 1999; Zinn, 2003). Higher degrees of mindfulness were associated with reduced levels of online victimization and greater emotional resilience. Mindfulness practices can improve self-awareness, emotional control, and coping skills, reducing the impact of online violence (Colomer et al., 2018). Much of the previous research has concentrated on children's and young people's experiences, but there have been few worldwide studies on adult experiences of online harassment and abuse (Powell et al., 2020). Further, in Uttarakhand, there is very little research on females from scheduled castes and scheduled tribes thus the purpose of this study was to fill information gaps and create contextually relevant data that can be used to influence policies, interventions, and support systems for marginalized scheduled caste and schedule tribal adult females in Uttarakhand.

### 2. Materials and Methods

**Participants and Procedure:** this empirical study was conducted on 300 adult female participants' age ranging from 18 to 35. The females belonged to marginalized communities i.e., scheduled caste and scheduled tribe in Dehradun, Haridwar, Nainital and Chamoli districts of Uttarakhand. Quota sampling was used for incorporating participants into the study with sample distribution as 149 scheduled caste females and 151 scheduled tribe females which were further divided into urban and rural categories. Participation in the study was voluntary, and the participants were provided with a self-administered questionnaire consisting of a cyber harassment student survey, a cyber sexual harassment questionnaire, five facet mindfulness questionnaire, and state self-esteem scale.

**Online Violence Measures:** online violence was measured using cyber harassment student survey developed by Li & T. B. Q (2005) and cyber sexual harassment questionnaire by Schenk (2008). The combined score of both questionnaires reports the scores for online violence. The validity and reliability of both including their factor structure, internal consistency and Cronbach's alpha reliability coefficient are sound.

**Mindfulness Traits:** this study utilized the five-facet mindfulness questionnaire to evaluate the level of mindfulness among the participants (Baer et al., 2008). The validity and reliability including its factor structure, internal consistency, and Cronbach's alpha reliability coefficient, were examined by Gu et al. (2016) who recommended the use of this questionnaire as a concise research tool. this tool encompasses five subscales, each representing a facet of mindfulness, including 'non-reactivity to inner experience', 'observing', 'acting with awareness', 'describing', and 'non-judging of inner experience'.

**Self & Social Perception and Performance Self-esteem:** The scale measures three aspects of self-esteem- appearance, performance and social (Heatherton & Polivy, 1991).

### 3. Data Analysis and Results

The aim and objects of this research were to access and analyze variables i.e., online violence, state self-esteem and mindfulness traits using hypotheses based on the literature review. Hypothesis 1: There exists no relationship between the variables. Hypothesis 2: There exists no significant difference among the variables for SC and ST females. Hypothesis 3: There exists no significant difference among the variables for Rural and Urban SC females. Hypothesis 4: There exists no significant difference among the variables for rural and urban ST females. Hypothesis 5: Online violence does not predict state self-esteem and mindfulness. Hypothesis 6: Mindfulness doesn't mediate the relationship between online violence and state self-esteem. The data analysis was performed with IBM SPSS version 20 software. The findings presented in Figure 1 show the descriptive analysis as series 1 represent online violence scores, series 2 represents state self-esteem scores and series 3 represent mindfulness traits scores among all participants followed by their datasets respectively in Figure 2, Figure 3 & Figure 4.

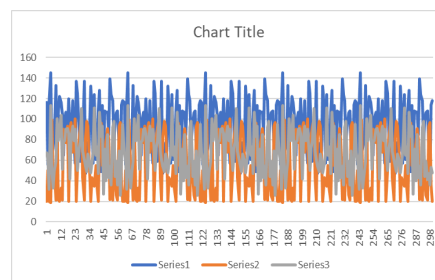


Figure 1: Descriptive Analysis

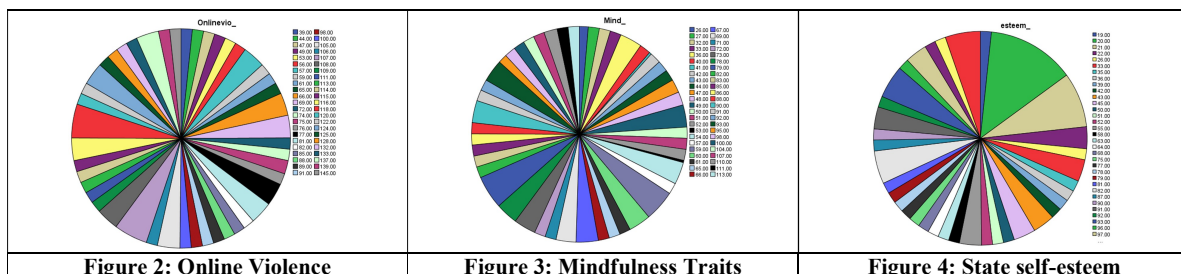


Figure 2: Online Violence

Figure 3: Mindfulness Traits

Figure 4: State self-esteem

Correlations				
		Online violence	State self esteem	Mindfulness traits
Online violence	Pearson Correlation	1	-.657**	.183**
	Sig. (2-tailed)		.000	.001
	Sum of Squares and Cross-products	234253.987	-164504.186	34811.086
	Covariance	780.847	-548.347	116.037
	N	301	301	301
State self esteem	Pearson Correlation	-.657**	1	.136*
	Sig. (2-tailed)	.000		.018
	Sum of Squares and Cross-products	-164504.186	267571.395	27560.209
	Covariance	-548.347	891.905	91.867
	N	301	301	301
Mindfulness traits	Pearson Correlation	.183**	.136*	1
	Sig. (2-tailed)	.001	.018	
	Sum of Squares and Cross-products	34811.086	27560.209	153648.439
	Covariance	116.037	91.867	512.161
	N	301	301	301

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 1: Correlation Analysis**

As depicted in Table 1, there is a negative correlation between online violence and state self-esteem, the correlation coefficient ( $\rho$ ) is  $-.657$ . There is a reported significant correlation between mindfulness traits and online violence with a correlation coefficient ( $\rho$ ) is  $.183$ . Further, the correlation coefficient ( $\rho$ ) for state self-esteem and mindfulness traits is  $.136$ . Thus Hypothesis 1 is rejected, stating a significant correlation.

		Independent Samples Test									
		Levene's Test for Equality of Variances			t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
ONLINE_VIOLENCE	Equal variances assumed	.328	.567	.117	298	.907	.38002	3.23484	-5.98601	6.74604	
	Equal variances not assumed			.118	297.902	.907	.38002	3.23416	-5.98467	6.74471	
STATE_SELFESTEEM	Equal variances assumed	.413	.521	.214	298	.830	.73937	3.44789	-6.04592	7.52466	
	Equal variances not assumed			.214	297.550	.830	.73937	3.44847	-6.04712	7.52586	
MINDFULNESS_TRAITS	Equal variances assumed	.003	.957	.955	298	.340	2.48722	2.60337	-2.63609	7.61053	
	Equal variances not assumed			.955	297.971	.340	2.48722	2.60330	-2.63597	7.61041	

**Figure 5: Comparison of SC and ST females**

Figure 5 reports the comparison for Schedule caste and Schedule tribe females, showing p-value ( $.907$ )  $>$   $\alpha$  value ( $.05$ ), thus accepting Hypothesis 2, predicting insignificant difference in online violence among the two groups. Further, state self-esteem and mindfulness traits too show insignificant differences between schedule caste and schedule tribe females.

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
ONLINE_VIOLENCE	Equal variances assumed	.318	.574	.159	147	.874	.72072	4.53170	-8.23497	9.67641
	Equal variances not assumed			.159	146.671	.874	.72072	4.53273	-8.23719	9.67863
STATE_SELFESTEEM	Equal variances assumed	.000	.990	-1.155	147	.250	-5.71405	4.94924	-15.49491	4.06680
	Equal variances not assumed			-1.154	146.891	.250	-5.71405	4.94970	-15.49588	4.06777
MINDFULNESS_TRAITS	Equal variances assumed	.303	.583	-.538	147	.591	-1.98955	3.69635	-9.29439	5.31529
	Equal variances not assumed			-.538	146.402	.591	-1.98955	3.69761	-9.29713	5.31803

Figure 6: Comparison of rural and urban SC females

The comparison between rural and urban Schedule caste females reports insignificant difference for online violence, state self-esteem and mindfulness traits as the p value >  $\alpha$  value for across all the variables as depicted in Figure 6. Thus, Hypothesis 3 is accepted.

4

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Onlinevio_	Equal variances assumed	.213	.645	-.520	151	.604	-2.38830	4.59320	-11.46354	6.68694
	Equal variances not assumed			-.520	149.996	.604	-2.38830	4.59561	-11.46880	6.69220
esteem_	Equal variances assumed	.003	.958	-.211	151	.833	-1.00907	4.78985	-10.47285	8.45471
	Equal variances not assumed			-.211	150.216	.833	-1.00907	4.79086	-10.47525	8.45711
Mind_	Equal variances assumed	.859	.356	.416	151	.678	1.53028	3.68239	-5.74539	8.80594
	Equal variances not assumed			.416	150.965	.678	1.53028	3.67627	-5.73331	8.79386

Figure 7: Comparison of rural and urban ST females

Figure 7 reports the independent sample t-test results for Schedule Tribe rural and urban females and the analysis shows insignificant differences across the groups for all variables as p-value >  $\alpha$  value, accepting Hypothesis 4. The regression analysis further shows the value of the regression coefficient ( $R^2$ ) is .657 hence, online violence can predict 65.7% of the variance in state self-esteem and mindfulness traits as presented in Table 2. Thus, Hypothesis 5 is rejected.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.657	.432	.430	21.09986

Table 2: Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.712	.508	.504	19.67475

Table 3: Mediation Analysis

Further Table 3 reports that when mindfulness was constant the regression coefficient ( $R^2$ ) is .712 which is 71.2 % of the total variance thus mindfulness mediates the relationship between online violence and state self-esteem, rejecting Hypothesis 6.

#### 4. Discussion

This study has accessed the levels of online violence experienced by scheduled caste (SC) females and Scheduled tribe (ST) females in the form of cyber victimization and sexual harassment. The participants who reported higher levels were further analyzed with esteem parameters on appearance self-esteem, social self-esteem, and performance self-esteem along with mindfulness traits. The reports were analyzed for correlation, regression, mediation, and comparison on different levels. ST and ST both females reported higher and similar levels of online violence potentially due to their caste and gender identities and socio-economic factors, SC and ST females experience similar layers of marginalization and discrimination which is consistent with previous studies (Lenhart et al., 2016; Powell et al., 2020). Further, due to a lack of digital literacy, urban females in both communities experience similar levels of violence as faced by rural females, additionally rural females now have greater exposure to online platforms where harassment can occur, leading to similar levels of reported incidents compared to urban areas. A high negative correlation was observed between levels of self-esteem (appearance, social, and performance) and online violence as receiving harsh comments, insults, or criticism online is common, and it can be damaging to one's self-

esteem, as previously reported by Extremera et al. (2018). Continuous exposure to criticizing or harmful messages can result in the internalization of negative self-beliefs, resulting in reduced self-esteem. Body shaming and appearance-based attacks can have a substantial impact on a person's self-image and self-worth, leading to low self-esteem. Further, no such correlation was observed between mindfulness traits and levels of online harassment, thus the level of mindfulness traits exhibited by individuals did not show a consistent pattern of association with their experiences of online harassment inconsistent with previous results (Colomer et al., 2018). However, Regression analysis reported a prediction of self-esteem levels through the experience of online violence. However, it is also possible that individuals with lower self-esteem are more vulnerable to online violence or perceive online interactions in a way that leads to more frequent experiences of violence. Thus, additional research is required in order to test the directionality of this association and prediction. Mediation Analysis through linear regression analysis showed that mindfulness however mediates the relationship between self-esteem and experience of online violence. Mindfulness is mostly found to be linked to enhanced self-awareness, emotional management, and self-acceptance, better degrees of mindfulness are often associated with better levels of self-esteem, since more attentive persons may have a greater sense of self-acceptance and self-worth. As individuals with higher levels of experience with online aggression were taken into account in the study, lesser mindfulness traits were also detected which supported the analysis that mindfulness mediated the relationship between online violence and self-esteem.

## 5. Conclusion

Mindfulness and self-esteem (appearance, social and performance) were interconnected factors among marginalized (Schedule caste and schedule tribe) females who experienced higher levels of online violence, however conducting research in this environment offered a more in-depth understanding of the difficulties confronting marginalized females in Uttarakhand, as well as insights into their unique needs and vulnerabilities. It has the potential to provide evidence-based insights into the psychological needs and challenges experienced by marginalized females, resulting in more effective and contextually appropriate preventive, support, and empowerment programs incorporating esteem needs and mindfulness skills. Further research is needed to test the directionality of relationships. This study advocated that it is critical to promote the long-term mental health, social inclusion, and overall well-being of marginalized females in Uttarakhand. We can work towards a safer digital environment that allows marginalized girls to grow, express themselves freely, and participate equally in online spaces by addressing online violence and its consequences.

## References

- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*(1), 27–45. <https://doi.org/10.1177/1073191105283504>
- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., Walsh, E., Duggan, D., & Williams, J. M. G. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment, 15*(3), 329–342. <https://doi.org/10.1177/1073191107313003>
- Colomer, E., Calvete, E., Gámez-Guadix, M., & Orue, I. (2018). The protective role of dispositional mindfulness against the perpetuation of cyberbullying victimization and perpetration among adolescents. *Cyberpsychology, Behavior, and Social Networking, 21*(11), 703-710.
- Extremera, N., Quintana-Orts, C., Mérida-López, S., & Rey, L. (2018). Cyberbullying victimization, self-esteem and suicidal ideation in adolescence: Does emotional intelligence play a buffering role?. *Frontiers in psychology, 9*, 367.
- Finn, J. (2004). A survey of online harassment at a university campus. *Journal of Interpersonal violence, 19*(4), 468-483.
- Finn, J., & Banach M. (2000). Victimization online: The downside of seeking human services for women on the Internet. *Cyberpsychology & Behavior, 3*(5), 785-797.
- Gu, J., Strauss, C., Crane, C., Barnhofer, T., Karl, A., Cavanagh, K., & Kuyken, W. (2016). Examining the Factor Structure of the 39-Item and 15-Item Versions of the Five Facet Mindfulness Questionnaire Before and After Mindfulness-Based Cognitive Therapy for people with recurrent depression. *Psychological Assessment, 28*(7), 791–802. <https://doi.org/10.1037/pas0000263>

Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*, 60(6), 895.

Lenhart, A., Ybarra, M., Zickuhr, K., Smith, A., & Madden, M. (2016). Online Harassment, Digital Abuse, and Cyberstalking in America. *Data & Society*.

Li, T. B. Q. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of educational computing research*, 32(3), 265-277.

Marlatt, G. A., & Kristeller, J. L. (1999). Mindfulness and meditation. In W. R. Miller (Ed.), *Integrating spirituality into treatment: Resources for practitioners* (pp. 67–84). American Psychological Association. <https://doi.org/10.1037/10327-004>

Powell, A., Scott, A. J., & Henry, N. (2020). Digital harassment and abuse: Experiences of sexuality and gender minority adults. *European Journal of Criminology*, 17(2), 199-223.

Sarkar, S., & Rajan, B. (2023). Materiality and discursivity of cyber violence against women in India. *Journal of Creative Communications*, 18(1), 109-123.

Schenk, S. (2008). Cyber-sexual harassment: The development of the cyber-sexual experiences questionnaire. *McNair Scholars Journal*, 12(1), 8.

Vitak, J., Chadha, K., Steiner, L., & Ashktorab, Z. (2017, February). Identifying women's experiences with and strategies for mitigating negative effects of online harassment. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 1231-1245).

Waldron, V., Lavitt, M., & Kelley, D. (2000). The nature and prevention of harm in technology mediated self-help settings: Three exemplars. *Journal of Technology in Human Services*, 17(1-3), 267-294.

Zinn, J. kabat. (2003). *Mindfulness-based interventions in context: past, present, and future*.

**Acknowledgments:** This study acknowledges all the participants, all the previous authors and inspirations.

**Ethical Considerations:** The participants voluntarily participated in this study and had the right to withdraw during the study. Anonymity and confidentiality relevant to participants have been maintained throughout the research. The study has cited and acknowledged previous work when and where needed. The tools used in the study were available in open access platform.

**Funding:** The financial support, from the Ministry of Social Justice and Empowerment and the National Scheduled Castes Finance and Development Corporation, under the fellowship of 'National Fellowship for Schedule Caste', has been received by the author for this Research.

**Conflicts of Interest:** "The author declares no conflict of interest."

#### Author's Bio-Note

**Ms. Ayushi Pandwal** is currently pursuing her Doctorate Degree in Psychology from Doon University, Uttarakhand, India. She has worked with a special emphasis on Mindfulness. Her interest lies in cognitive psychology, Positive Psychology and Industrial Psychology. She has been also working with marginalized groups as well as she is working as a Teaching Assistant and Counselling Psychologist in the Wellness Center in the Department of Psychology at Doon University. She has pursued Majors in Psychology and a hon. in Bachelors of Physics. Pandwal has a strong academic background with research internships and training in national institutions, NIEVH and DRDO. Previously she got opportunities to present her work at International Conferences and Seminars.