

# Psychological Underpinnings of Online Trolling: The Interplay of Ambivalent Sexism and Dark Triad Personality Traits

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**Abstract:** *Online trolling is an act that may include deception, aggression, and abuse of individuals online. It results in emotional distress to the victim and can lead to extreme consequences such as withdrawing or quitting social media, mental health difficulties, and others. This study was conducted to understand the relationship between online trolling, ambivalent sexism towards women, and dark triad personality traits (Machiavellianism, psychopathy, and narcissism). A cross-sectional Design was followed, and purposive sampling was performed. A total of 42 individuals in the 18–25 years age group were included in the sample, with 22 female participants and 20 male participants. The Ambivalent Sexism Inventory-Short Form (ASI-SF), Dark Triad Dirty Dozen (DTDD) scale and a 7-items scale developed by the authors for online trolling were employed to collect data. Statistical analysis involved descriptive statistics, Pearson's Correlation, Independent Samples t-test, and simple linear regression using Jamovi software. Correlational analysis revealed significant relationships between online trolling and ambivalent sexism, Machiavellianism, and psychopathy. There were significant gender differences in online trolling and ambivalent sexism, with males scoring higher than females. Finally, dark triad personality traits and ambivalent sexism significantly predicted online trolling. The future implications and limitations of this study are discussed.*

**Keywords:** Online trolling, Ambivalent sexism, Dark triad, Significant, Psychopathy

## INTRODUCTION

Online trolling is an act of persistent, disturbing, and deviant digital behaviour committed by a person targeting individuals and groups. It has a wide variety of practices, meanings, contexts, and implications. Online trolling is described as a deceptive, disruptive, and destructive way of behaving in the digital realm, having no tangible instrumental goal (Buckels et al., 2014). Ambivalent Sexism is a significant concept introduced by Glick and Fiske (1996) that refers to a theoretical framework and measurement model that recognises sexism as being made up of hostile and benevolent sexism. Outwardly expressed negative attitudes targeting women who challenge conventional male authority and show them as seeking control over men are reflected in Hostile Sexism. On the other hand, patronising opinions about women as caring, pure, and in need of protection are reflected in Benevolent Sexism. As argued by Craker and March (2016), dark triad traits include characteristics such as manipulative behaviours, deception, and aggression, which are mirrored in online trolling behaviours, thus prompting the need to understand dark triad traits in the context of digital behaviours, especially its links to trolling. It is also important to explore whether patriarchal beliefs, reflected through ambivalent sexism, reveal the underlying mechanisms of the association between online trolling and traits under the dark triad. Therefore, we situate our study under the objective of studying the association between dark triad personality traits, ambivalent sexism, and online trolling, and whether online trolling can be predicted from dark triad personality traits and ambivalent sexism.

## REVIEW OF LITERATURE

The reviewed literature in this study primarily builds on established findings that link online trolling to personality traits under the dark triad, with psychopathy consistently emerging as the strongest predictor (Buckels et al., 2014; Craker & March, 2016; Moor & Anderson, 2019). Previous studies have also shown that individuals with high levels of these traits exhibit callousness, a lack of empathy, and malevolent intentions. Buckels et al. (2014) draw on a broad base of earlier research that links personality traits categorised under the dark triad to various forms of antisocial online behaviour, particularly trolling. It acknowledges prior findings that psychopathy is highly linked with online trolling, while narcissism and

Machiavellianism influence behavior based on self-interest and manipulation.

Lumsden and Morgan (2017) built their study on the foundation of previous scholarship that explored cyber trolling, online abuse, and gendered violence. These studies reveal how digital spaces, especially social media platforms such as Twitter, have enabled new forms of misogynistic abuse that reinforce traditional power hierarchies. Their work uniquely contributes by reframing trolling as a “silencing strategy” that reproduces patriarchal norms and restricts women’s participation in online public discourse. Hamarta, Akat, and Akbulut (2023) build on previous research linking the Dark Triad personality traits of Machiavellianism, narcissism, and psychopathy to various antisocial online behaviours, particularly trolling. They found that empathy significantly mediated the relationship, suggesting that individuals with Dark Triad traits are very likely to troll because of their reduced levels of empathy.

Although the internet is seen as a digital space where everyone has a chance to participate and voice their feelings, this is not the case, as observed recently, as prejudices and stereotypes are getting reinforced openly in the digital spaces under the guise of jokes, memes, and dark humour. Female users specifically experience sexism and trolling on these platforms, which makes their perception of online spaces more hostile. In some cases, they are also met with death threats to the individual and their family members for posting something. All of this is further promoted under the name of being cool and relatable. Thus, the Internet becomes a space where one not only shares information but is also at a position where their perspectives and attitudes towards many issues can be shaped. This is of utmost importance in cases of children, teens and adolescents who use the internet, as in their tender age, their attitudes are being shaped in a negative direction because they feel it’s acceptable to post abusive and misogynistic comments online. This highlights the need to understand the psychological basis of online trolling. Studies have shown that dark triad personality traits are influential in shaping behavioural patterns in a way that one lacks empathy for others and does not feel remorse.

## METHODOLOGY

### Objectives

The current study aimed to assess the relationship between online trolling, ambivalent sexism, and Dark Triad personality traits (Machiavellianism, narcissism, and psychopathy). The current study had the following objectives:

- To examine the relationship between online trolling and dark triad personality traits
- To examine the relationship between online trolling and ambivalent sexism
- To examine the gender differences with respect to online trolling, ambivalent sexism and dark triad personality traits
- To examine whether ambivalent sexism and Dark Triad personality traits predict online trolling tendencies among males and females.

### Hypotheses

The following hypotheses were formulated for the study based on the literature review:

- There will be a significantly positive relationship between online trolling and dark triad personality traits
- There will be a significantly positive relationship between online trolling and ambivalent sexism
- There will be significant differences between males and females on dark triad personality traits
- There will be significant differences between males and females on ambivalent sexism
- There will be significant differences between males and females on online trolling
- There will be a significant prediction of online trolling by ambivalent sexism
- There will be a significant prediction of online trolling by dark triad personality traits

### Design

The present study utilised a Cross-Sectional Research Design, where data were collected from the sample at one point in time, and different groups in the sample were compared. In our study, the participants were assessed for Online Trolling, Patriarchal Beliefs and Dark Triad. Gender differences and correlations between these constructs were also examined.

### Sample

Purposive sampling was used in this study. The sample included 42 individuals in the young adult age group, that is, between 18 and 25 years of age. The mean age was 20.92 years. There were 22 female participants and 20 male participants in the sample.

### Tools used

#### Ambivalent Sexism Inventory - Short Form

The Ambivalent Sexism Inventory-Short Form (ASI-SF), developed by Glick and Fiske (1996) aims to assess sexist attitudes around women, which can be categorized into two types: Hostile and Benevolent Sexism, as posited by Glick and Fiske (1996). Hostile Sexism (HS) relates to attitudes in which women are seen as trying to control men and taking men’s power in their hands. On the other hand, Benevolent Sexism (BS) sees women as having qualities that are needed by men, and women must be protected and safeguarded. There are a total of 12 items in this scale, with six items in each type of sexism. The Internal Consistency Reliability is high for both subscales, as demonstrated by Cronbach’s alpha values of 0.85 for Hostile Sexism and 0.80 for Benevolent Sexism (Rollero et al., 2014).

#### Dark Triad Dirty Dozen (DTDD)

The Dark Triad Dirty Dozen (DTDD) is a psychological tool authored by Jonason and Webster (2010) to assess dark triad traits. This scale has a total of 12 items, with four items each for Machiavellianism, Psychopathy, and Narcissism. The scale has good internal consistency, with Cronbach’s alpha values ranging from 0.71 to 0.83 for

all the subscales and the total score. The Cronbach's  $\alpha$  values for Machiavellianism, Psychopathy, and Narcissism were 0.78, 0.80, and 0.83, respectively. It also showed good convergent validity, corresponding well with models such as Big Five and HEXACO (Jonason et al., 2013).

**Online Trolling**

To assess online trolling behaviours in the sample, the authors mutually developed a short scale, keeping in mind that the items must indirectly assess engagement in online trolling. As a result, the authors came up with a rough draft of the potential items, which were discussed in depth for their wordings, leading to the elimination of certain items. Finally, seven items were finalised for data collection. It included items such as "I feel a sense of satisfaction when my comments get a strong reaction, which I know are controversial", which are not associated with any negative connotations and are not too direct in assessing it.

**Scoring and Data Analysis**

After the responses were collected, the form was closed for accepting responses, and the items were scored in accordance with the manuals of all the tools employed in the study. Jamovi software version 2.3.21 was used for analysing the data. Pearson's Correlation, Independent Samples t-test, and linear regression were employed for data analysis.

**RESULTS**

**Table 1: Descriptive Statistics of the Scores of Respondents**

	N	Mean	Standard Deviation (SD)
Ambivalent Sexism	42	2.54	0.798
Dark Triad Personality Traits	42	37.8	12.1
Online Trolling	42	15.9	6.57

Table 1 shows the total sample denoted by 'N', Mean and Standard Deviation (SD) of the scores on ambivalent sexism, dark triad personality traits, and online trolling.

**Table 2: Pearson Correlation between online trolling and ambivalent sexism and, dark triad personality traits**

	Online Trolling r	p - values
Ambivalent Sexism	0.405	**0.008
Machiavellianism	0.546	***<0.001
Psychopathy	0.440	**0.004
Narcissism	0.104	0.511

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$

Table 2 shows the Pearson Correlation Coefficients  $r$  calculated to examine the relationship between online trolling and ambivalent sexism and Dark Triad personality traits.

**Table 3: Independent Samples t Test for gender differences**

	Gender	Mean	SD	t	p	Effect Size
Ambivalent Sexism	Male	2.97	0.773	3.81	***<0.001	1.178
	Female	2.15	0.609			
Machiavellianism	Male	12.6	6.45	2.150	0.038	0.664
	Female	9.05	4.11			
Psychopathy	Male	13.0	4.18	1.227	0.227	0.379
	Female	11.09	5.70			
Narcissism	Male	14.7	5.08	0.529	0.599	0.164
	Female	15.50	5.30			
Online Trolling	Male	17.95	6.541	2.02	*0.04	0.624
	Female	14.00	6.141			

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$

Table 3 shows the comparison of males and females on ambivalent sexism, dark triad personality traits, and online trolling with the mean and standard deviation of each gender on each of the four scales. The test statistic of the Independent Samples t-test and p-values are demonstrated for comparison of each variable. Effect sizes were calculated using Cohen's  $d$ .

**Table 4: Simple linear regression for predicting online trolling from ambivalent sexism and dark triad personality traits**

		B	SE B	$\beta$	t	p
Ambivalent Sexism	Intercept	7.41	3.16	-	2.34	0.024
	Predictor	3.33	1.19	0.405	2.80	**0.008
Dark Triad Personality Traits	Intercept	4.07	3.15	-	1.29	0.024
	Predictor	0.31	0.08	0.526	3.91	***<0.001

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$

Table 4 shows the simple linear regression analysis for predicting online trolling from ambivalent sexism and Dark Triad personality traits. It shows the regression coefficients, standard errors, standardised coefficients, and t- and p-values for each predictor.

**DISCUSSION**

This study was conducted to understand the relationship between online trolling, ambivalent sexism, and dark triad personality traits (Machiavellianism, narcissism, and psychopathy). A cross-sectional research design was employed, and purposive sampling was performed. The sample included 42 participants aged 18–25 years. The mean age of the sample was 20.92 years, and the sample consisted of 22 female and 20 male participants. We employed the Ambivalent Sexism Inventory Short Form by Glick and Fiske (1996) and the Dark Triad Dirty Dozen Scale by Jonason and Webster (2010). Online trolling was assessed using a 7 items scale developed by the authors. Pearson's

correlation, independent samples t-test, and linear regression were employed to analyse the collected data using Jamovi software. The descriptive statistics revealed that the mean scores on the Ambivalent Sexism Inventory, Dark Triad Dirty Dozen Scale, and Online Trolling Scale were 2.54, 37.8, and 15.9, respectively. The standard deviations on these scales were 0.798, 11.1, and 6.57, respectively.

It was hypothesised that there would be a significantly positive relationship between online trolling and dark triad personality traits. It was found that Machiavellianism and Psychopathy were significantly and positively correlated with online trolling. For Machiavellianism, the correlation coefficient was 0.546 ( $p < 0.001$ ). Similarly, the correlation coefficient for psychopathy was 0.440, with a p-value of 0.004. For Narcissism, the correlation coefficient was 0.104 with a p-value of 0.511, which was not significant. Thus, there was a statistically significant and positive relationship between online trolling, Machiavellianism, and psychopathy, leading us to retain this hypothesis. Our findings for Machiavellianism were consistent with those of previous studies. Machiavellianism is linked to the problematic use of networks and manipulative behaviour which can become negative on the internet, resulting in violence and control (Leite et al., 2023). Similarly, Psychopathy is associated with dysregulation of emotions and searching for greater sensations, which results in the engagement in antisocial behaviours online, which are further reinforced by internet features like anonymity and issues in the identification of the troll (O'Higgins Norman, 2020). The same results were obtained by Volkmer et al. (2023).

It was also hypothesised that there would be a significantly positive relationship between online trolling and ambivalent sexism. Pearson's correlation was calculated, and the correlation coefficient was 0.405, and the accompanying p-value was 0.008 which was significant, thus indicating a significantly positive relationship between online trolling and ambivalent sexism, leading us to retain this hypothesis. Thus, the observed correlation coefficient was statistically significant. Hostile sexism and gender moderated the effect of online disinhibition on moral disengagement. This means that those who are high on hostile sexism, especially men, have higher online disinhibition, leading to more moral disengagement, thus adapting their morality to explain and justify numerous antisocial behaviours against women and managing their accountability and guilt (Sánchez-Hernández et al., 2024).

We hypothesised that there would be significant differences between males and females in the dark triad personality traits. However, we reject this hypothesis, as there were no significant differences in any of the three dark triad traits. For Machiavellianism, females scored lower ( $M=9.05$ ,  $SD=4.11$ ) than males ( $M=12.6$ ,  $SD=6.45$ ) with p-value 0.038. In psychopathy, females had a lower score ( $M=11.09$ ,  $SD=5.70$ ) than males ( $M=13.0$ ,  $SD=4.18$ ) with a p-value 0.227. Lastly, in narcissism, females scored slightly higher ( $M=15.50$ ,  $SD=5.30$ ) than the male participants ( $M=14.7$ ,  $SD=5.08$ ) with a p-value of 0.599. This led us to reject our hypothesis on gender differences in the Dark Triad personality traits. This may be explained by the fact that individuals in their early adulthood are high on psychopathy than those individuals who are in middle and older

adulthood because young adults are relatively immature and more reckless than those in middle and older adulthood, because of their still developing frontal cortex, explaining why we could not find significant gender differences in dark triad personality traits in our study (Makim & Shetty, 2018).

We found significant differences between males and females on ambivalent sexism, with females scoring lower ( $M=2.15$ ,  $SD=0.609$ ) than males ( $M=2.97$ ,  $SD=0.773$ ) with p-value  $< 0.001$ . The effect size was very large, which was calculated using Cohen's d and came out to be 1.178, signifying that the scores of males and females were very different from each other. This leads us to retain our hypothesis that there are significant gender differences in ambivalent sexism. Miko<sup>3</sup>ajczak and Pietrzak (2014) also found similar results in their research, where men scored higher on both Hostile Sexism (HS) and Benevolent Sexism (BS) than women, indicating higher ambivalent sexism (AS) in males than in females. This is also in line with previous studies, such as Glick et al. (2000) and Miko<sup>3</sup>ajczak and Pietrzak (2013).

Significant gender differences were found in online trolling, with females scoring lower ( $M=14.00$ ,  $SD=6.141$ ) than males ( $M=17.95$ ,  $SD=6.541$ ). This led us to retain our hypothesis regarding significant sex differences in online trolling. This is in line with previous studies which found that males are more aggressive and more likely to engage in trolling others online. Females are more concerned about getting trolled online and spend time on the Internet while trying to ignore interactions with trolls, thus not engaging much in online trolling behaviours (Lee & Soonah, 2023). Similar results were reported by Leite et al. (2023).

We also hypothesised that ambivalent sexism significantly predicts online trolling. This hypothesis was retained as we found that ambivalent sexism significantly predicted online trolling, with 16.64% variance in online trolling being explained by ambivalent sexism. High online trolling scores were linked to higher ambivalent sexism scores ( $\hat{\alpha} = 3.33$ ,  $p = 0.008$ ). It has been reported that men high on hostile sexism demonstrate high levels of online disinhibition and moral disengagement. This means that they find themselves more disinhibited and relaxed when expressing themselves online and are morally disengaged from their actions. Thus, they are able to adjust their ethical obligations towards crimes against women, such as IPV and abuse, and are also better able to manage the associated negative feelings, such as guilt and taking responsibility (Sánchez-Hernández et al., 2024).

Our final hypothesis was that dark triad personality traits would significantly predict online trolling. This hypothesis was also retained because it was revealed that dark triad personality traits were linked to a 27.6% variance in online trolling. This means that higher online trolling is related to high scores on the dark triad personality traits ( $\hat{\alpha} = 0.312$ ,  $p < 0.001$ ). This is consistent with Leite et al. (2023), who found that psychopathy, Machiavellianism, and narcissism are linked to Internet addiction which further strengthens their behavioural features and the way they function in digital spaces, suggesting a link between online behaviours and dark triad personality traits. Volkmer et al. (2023) found that psychopathy significantly predicted online trolling motivation among respondents. In another

interesting study, it was found that those high on psychopathy not only attack individuals who are weak or less popular, but they may also prey on those who are socially salient, more liked, and have greater social status (Lopes & Yu, 2017).

## CONCLUSION

The current study aimed to examine the associations between online trolling, ambivalent sexism, and Dark Triad personality traits. We found a significantly positive relationship between online trolling and ambivalent sexism, Machiavellianism, and psychopathy. With respect to gender differences, there were statistically significant differences between males and females on online trolling and ambivalent sexism, with males scoring higher than females on both variables. Finally, both ambivalent sexism and Dark Triad personality traits significantly predicted online trolling. These findings highlight the underlying role played by attitudes such as ambivalent sexism towards women and dark triad personality traits in shaping and producing online behaviours such as online trolling. It also highlights the role of sociodemographic variables, such as gender, in shaping the likelihood of certain personality traits and online behaviours. While there were certain limitations, such as complete dependence on the survey method and quantitative methodology and reliance on purposive sampling, which may have introduced sampling bias, this also has certain implications for future researchers working in this area. This includes incorporating victim variables, employing experimental designs, using random sampling and utilizing a mixed-methods or qualitative approach.

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