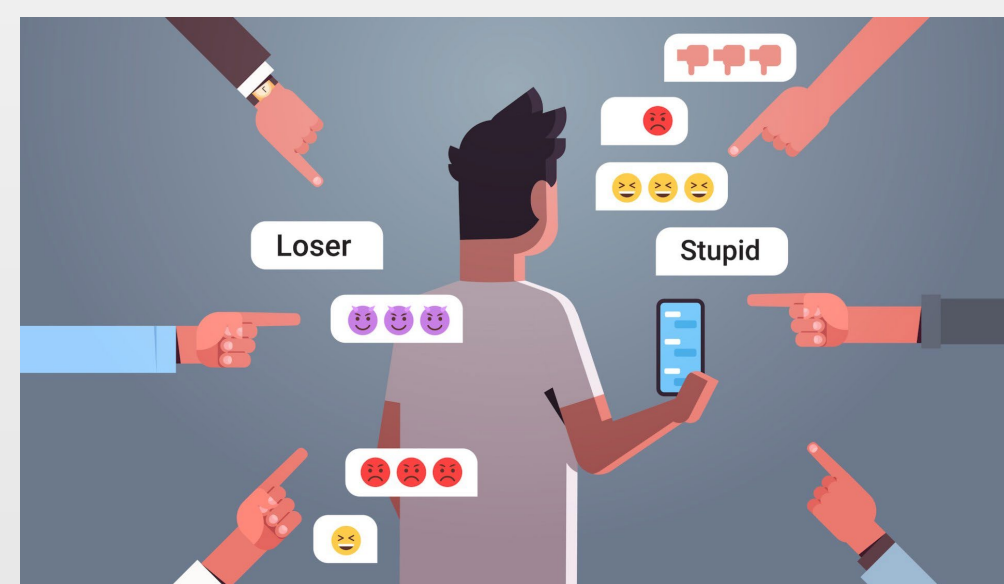


Introduction

Cyberbullying is defined as “using information and communication technologies (ICT) to repeatedly and intentionally harm, harass, hurt and/or embarrass a target.” (Peter & Petermann, 2018)

With the increased usage of social media, mobile devices, and online communication, cyberbullying has become more prevalent, more difficult to detect and more harmful to the victims. (Pew Research Center, 2021)



Cyberbystanders, individuals who observe or witness cyberbullying, can be critical in cyberbullying scenarios.

Bystanders' own actions (or lack thereof) can affect the severity and the impact of the bullying. (O'Connell et al., 1999)

However, there is a lack of research investigating the characteristics and possible predictors of cyberbystander behavior.

4 types of cyberbystander behavior* (High & Young, 2018):

- **Passive Observer:** do nothing when witnessing cyberbullying.



- **Confront Bully:** send open posts to refute the bully.



- **Support Victim:** use indirect method to support or comfort the victim (e.g., report bullying tags, send private message to victim).



- **Assist Bully:** share or like the bullying content.



Research Question

Big five personality traits may predict differences in cyberbystander behavior. (Van Geel et al., 2017; Zhou et al., 2019)

- Agreeableness linked with decreased interest in participating in cyberbullying and greater tendency to support victims
- Extraversion and neuroticism linked with supporting bullying behavior.



Additional personality traits found to predict cyberbullying perpetration that may also predict cyberbystander behavior include:

- Social dominance orientation—characterized by accepting and even preferring social inequalities and hierarchical social structures (Sidanius & Pratto, 1999)
- Dark personality traits, including psychopathy, Machiavellianism, and narcissism (i.e., the “Dark Triad”) (van Geel et al., 2017)

Research Question: To what extent do the Big 5 personality traits, Dark traits, and social dominance orientation predict different forms of cyberbystander behavior?

Methods

Design: 15-minute online survey

Participants: 337 U.S. adults recruited from Prolific

- Age: $M = 33.42$, $SD = 12.76$
- Men ($n = 150$, 44.5%), Women ($n = 160$, 47.5%), Other ($n = 27$, 8.0%)

Materials:

- Big 5 traits: BFI-2 Short Form (Soto & John, 2017)
- Dark Triad traits: Dirty Dozen Scale (Jonason & Webster, 2010)
- Social dominance orientation: SDO-7 Scale (Ho et al., 2015)
- Cyberbystander Behavior Scale (Sarmiento et al., 2019)
- Cyberbullying Victimization & Perpetration Scale (Hinduja & Patchin, 2019)

Results

Hierarchical Regression with Big Five Traits, Dark Triad Traits, and SDO as Predictors of Cyberbystander Behavior ($N = 319$)

Predictors	Passive Observer					Confront Bully					Support Victim					Like/Share Bullying Content				
	b	SEb	β	R^2	ΔR^2	b	SEb	β	R^2	ΔR^2	b	SEb	β	R^2	ΔR^2	b	SEb	β	R^2	ΔR^2
Step 1																				
Openness	-0.15	0.11	-0.08	0.11*	0.11*	0.03	0.12	0.02	.06*	.06*	0.1	0.14	0.04	.05*	.05*	-0.06	0.09	-0.04	.06*	.06*
Conscientiousness	0.32**	0.11	0.19			-0.22	0.12	-0.12			-0.31*	0.14	-0.14*			-0.21*	0.09	-0.16*		
Extraversion	-0.48***	0.11	-0.28			0.47*	0.12	0.25*			0.4*	0.14	0.19*			0.27**	0.09	0.21**		
Agreeableness	-0.05	0.12	-0.02			-0.02	0.14	-0.01			0.04	0.16	0.02			-0.17	0.1	-0.11		
Neuroticism	-0.27**	0.09	-0.19			0.19	0.1	0.12			0.22	0.12	0.12			-0.02	0.07	-0.02		
Step 2																				
Openness	-0.18	0.11	-0.1	.14*	.03*	0.07	0.12	0.03	.09*	.03*	0.15	0.14	0.06	.08*	.03*	-0.05	0.09	-0.03	.07*	.01*
Conscientiousness	0.24*	0.11	0.14**			-0.13	0.13	-0.07			-0.22	0.15	-0.1			-0.19*	0.09	-0.14*		
Extraversion	-0.32**	0.12	-0.19***			0.31*	0.13	0.17*			0.21	0.15	0.1			0.25**	0.09	0.19**		
Agreeableness	0.04	0.16	0.02			-0.07	0.18	-0.03			-0.07	0.2	-0.03			-0.13	0.13	-0.08		
Neuroticism	-0.2*	0.09	-0.14			0.12	0.1	0.08			0.14	0.12	0.08			-0.02	0.07	-0.02		
Machiavellianism	-0.15*	0.07	-0.14			0.11	0.09	0.1			0.05	0.1	0.04			-0.07	0.06	-0.09		
Psychopathy	0.2	0.1	0.16			-0.14	0.11	-0.1			-0.15	0.13	-0.1			0.09	0.08	0.1		
Narcissism	-0.13*	0.06	-0.13			0.15*	0.07	0.14*			0.23**	0.08	0.18**			0.07	0.05	0.09		
Step 3																				
Openness	-0.11	0.11	-0.06	.16*	.02*	-0.03	0.12	-0.01	.11*	.02*	0.05	0.14	0.02	.11*	.02*	0.01	0.09	0.01	.09*	.02*
Conscientiousness	0.24*	0.11	0.12			-0.1	0.13	-0.05			-0.17	0.15	-0.08			-0.22*	0.09	-0.16*		
Extraversion	-0.34**	0.12	-0.2			0.33**	0.13	0.18**			0.24	0.15	0.11			0.24**	0.09	0.18**		
Agreeableness	0.02	0.16	0.01			-0.04	0.17	-0.02			-0.02	0.2	-0.01			-0.12	0.13	-0.08		
Neuroticism	-0.17	0.1	-0.12			0.1	0.11	0.06			0.12	0.12	0.07			0.02	0.08	0.02		
Machiavellianism	-0.17*	0.07	-0.16			0.13	0.08	0.12			0.07	0.1	0.05			-0.08	0.06	-0.1		
Psychopathy	0.17	0.1	0.14			-0.12	0.11	-0.09			-0.12	0.13	-0.08			0.07	0.08	0.07		
Narcissism	-0.14*	0.06	-0.14			0.17*	0.07	0.16*			0.24**	0.08	0.19**			0.06	0.05	0.08		
SDO Dominance	0.17	0.09	0.15			-0.23*	0.1	-0.19*			-0.29*	0.12	-0.21*			0.07	0.07	0.08		
SDO Anti-Equal	-0.01	0.09	-0.01			0.05	0.1	0.04			0.08	0.11	0.06			0.08	0.07	0.1		

Note: * $p < .05$ ** $p < .01$ *** $p < .001$

A series of hierarchical regressions with each category of personality variable (Big 5, Dark triad, SDO) as predictors of each of the four types of cyberbystander behavior was performed. We found that:

- Participants higher in extraversion reported a lower likelihood of bystander involvement, both in terms of supporting the victim and assisting the bully, whereas participants higher in conscientiousness reported a lower likelihood of assisting the bully.
- Participants higher in narcissism reported a lower likelihood of remaining a passive bystander and a higher likelihood of supporting the victim.
- Participants higher in the dominance sub-factor of SDO reported a lower likelihood of supporting the victim and assisting the bully.

Conclusion

The results of this study revealed associations between specific Big 5 personality traits, Dark traits, and social dominance orientation, on one hand, and different forms of cyberbystander behavior, on the other.

However, a major limitation of this study was its reliance on participants' recall and self-report of past experiences, broadly, as a cyberbystander.

To help address this, we are currently carrying out follow-up studies in which: (1) participants report their likelihood of performing different cyberbystander behaviors in response to *specific* instances of cyberbullying conveyed through screenshots, and (2) participants' actual cyberbystander behavior is recorded via real-time interactions on a mock social media website.