

## THE RELATIONSHIPS BETWEEN PARENTAL PSYCHOLOGICAL CONTROL, DARK TRIAD TRAITS, CYBERBULLYING AND CYBERVICTIMIZATION

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### Abstract

The increasing prevalence of cyberbullying among young adults is a pressing issue that has drawn significant attention in academic literature. Studies have indicated that individuals who experience high levels of parental psychological control, characterized by manipulative behaviors that undermine a child's emotional autonomy, are more likely to develop maladaptive personality traits. The Dark Triad, which encompasses Machiavellianism, psychopathy, and narcissism, has been shown to correlate with antisocial behaviors, including bullying. The current study thus seeks to explore the role of Dark Triad traits as mediators between parental psychological control (from both mothers and fathers) and the likelihood of cyberbullying and cybervictimization. In this study, 1016 young adults (50% women) aged 18 to 25 years ( $M=21.64$ ,  $SD=2.22$ ) participated in an online survey, providing self-reported information on their experiences with parental psychological control, their Dark Triad trait levels, and their involvement in cyberbullying and cybervictimization. The analysis utilized latent variable structural equation modeling (SEM) to test for mediation effects. The model showed a good fit:  $\chi^2(182)=561.69$ ,  $p<.001$ ,  $CFI=.97$ ,  $RMSEA=.05$  (90%  $CI=.04-.05$ ),  $SRMR=.04$ . Maternal psychological control (MPC) is linked to an increase in Machiavellianism, psychopathy, narcissism and cybervictimization, but it does not directly contribute to cyberbullying. Paternal psychological control (PPC) similarly influences Machiavellianism, psychopathy, and narcissism and is associated with both cyberbullying and cybervictimization. Among the Dark Triad traits, Machiavellianism and psychopathy are significant predictors of both cyberbullying and cybervictimization, while narcissism has a negative impact on both behaviors. Indirectly, MPC contributes to cyberbullying and cybervictimization through Machiavellianism and psychopathy. PPC also has indirect positive effects on cyberbullying and cybervictimization via these traits. Conversely, narcissism serves as a negative mediator, suggesting that higher levels of MPC and PPC may decrease the likelihood of engaging in cyberbullying and experiencing cybervictimization when mediated by narcissism. Overall, the study suggests that young adults who experience greater parental psychological control are more likely to develop manipulative and unemphatic traits, increasing their risk for both perpetrating and experiencing cyberbullying. Specifically, the results highlight the importance of considering both the direct and indirect pathways through which parental influence affects young adults' online behaviors. Consequently, effective measures should address not only the individual but also family dynamics, peer relationships, and the specific challenges of online environments to reduce the risks linked to these detrimental behaviors.

**Keywords:** *Parental psychological control, dark triad traits, cyberbullying, cybervictimization, young adults.*

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### 1. Introduction

Parental psychological control involves manipulative tactics that can deeply influence a child's mental and emotional well-being, often correlating with increased psychological distress (Rogers et al., 2020). Research suggests a link between such controlling parenting and cyberbullying behaviors, where youths might adopt online bullying as a way to exert control or cope with the powerlessness they feel at home (Lin et al., 2020). Similarly, these children may also become victims of cyberbullying, as controlling parenting can impact their ability to set boundaries and form assertive relationships (Kokkinos et al., 2016). Personality traits within the Dark Triad, narcissism, Machiavellianism, and psychopathy,

have also been connected to cyberbullying behaviors. Narcissistic individuals may seek admiration and lack empathy, while those high in Machiavellianism are often manipulative, and those with psychopathic traits show low empathy and impulse control (Jonason & Webster, 2010). The anonymity of online interactions can amplify these traits, allowing cyberbullies to target others without immediate consequence (Panatik et al., 2022). This research aims to explore how maternal and paternal psychological control, along with the Dark Triad, may influence cyberbullying dynamics. By analyzing the specific contributions of these factors, it seeks to inform prevention strategies that address the root causes in family dynamics and personality development, fostering healthier online and offline behaviors (Li et al., 2020).

## 2. Methods

### 2.1. Participants

The study involved 1,016 young adults from Italy, evenly divided into 508 females and 508 males, with ages ranging from 18 to 25 years ( $M = 21.64$ ,  $SD = 2.22$ ). Participants were recruited online, mainly through social media platforms. Educational levels varied, with 11% having completed middle school, 47% holding a high school diploma, 31% with a university degree, and 11% pursuing postgraduate studies. For employment status, 30% were students, 13% were unemployed, 44% were employed, and 13% were self-employed. Regarding relationship status, 46% were single, 41% engaged, 6% cohabiting, and 7% married.

### 2.2. Procedures

This study adhered to ethical standards set by the Helsinki Declaration and the Italian Association of Psychology (AIP). Approval was obtained from the Institutional Review Board (IRB) of the Institute for the Study of Psychotherapy (ISP; reference: ISP-IRB-2023-5). Participants were asked to complete an extensive online survey, with full completion required to ensure thorough data collection. Only individuals who provided informed consent were included, participating voluntarily without any form of compensation. Participant privacy and confidentiality were strictly maintained at all stages of the study.

### 2.3. Measures

Maternal and paternal psychological control were measured using the Italian adaptation of the Psychological Control Scale (PCS; Costa et al., 2015). Participants rated the level of psychological control they experienced from each parent separately by responding to eight items. Responses were given on a 3-point Likert scale, with higher scores indicating greater perceived psychological control. The Italian version of the Dark Triad Dirty Dozen scale (DTDD; 2010; Schimmenti et al., 2019) was used to assess dark personality traits. This scale includes 12 items, with 4 items for each trait, rated on a 7-point Likert scale. Higher scores on each subscale reflect a stronger presence of that personality trait. The study assessed cyberbullying and cybervictimization using the Italian version of the cyberbullying and cybervictimization subscales from the Behaviors in Cyberbullying Scale (Pozzoli & Gini, 2020). Both subscales consist of four items. Responses were given on a 5-point Likert scale, with higher scores indicating greater involvement in cyberbullying or cybervictimization.

### 2.4. Statistical analyses

The study used IBM SPSS 27 for descriptive statistics and correlation analyses, while RStudio's lavaan package was employed for the more advanced statistical procedures. Structural equation modeling (SEM) was used to test mediation models. The first model included both maternal and paternal psychological control as predictors, the Dark Triad traits as mediators, and cyberbullying and cybervictimization as outcomes. Models two and three isolated maternal and paternal psychological control, respectively, as predictors, assessing their independent roles. Models four through six examined the mediating roles of each Dark Triad trait individually. A bias-corrected confidence interval method with 5,000 bootstrap resamples was applied to evaluate the significance of indirect paths within these mediation models.

## 3. Results

### 3.1. Descriptive statistics and correlations

Table 1 displays the descriptive and correlational statistics for all study variables.

Table 1. Descriptive analyses and correlations.

	M	SD	$\alpha$	1	2	3	4	5	6
1. Maternal Psychological Control	1.61	.51	.84	-	-	-	-	-	-
2. Paternal Psychological Control	1.53	.53	.87	.36*	-	-	-	-	-
3. Machiavellianism	.78	.94	.87	.28*	.22*	-	-	-	-
4. Psychopathy	.88	.92	.81	.25*	.17*	.57*	-	-	-
5. Narcissism	1.45	1.08	.84	.26*	-.24*	.60*	.43*	-	-
6. Cyberbullying	1.39	.66	.82	.24*	.25*	.50*	.50*	.32*	-
7. Cybervictimization	1.51	.77	.81	.32*	.27*	.39*	.40*	.26*	.64*

Note:  $n = 1016$ . \* $p < .01$ .

### 3.2. Mediation models

Table 2. Path Estimates, Standard Errors and 95% Confidence Intervals.

	$\beta$	$p$	SE	CI (LL)	CI (UL)
Direct Effect					
Maternal Psychological Control → Machiavellianism	.27	< .001	.10	.39	.77
Maternal Psychological Control → Psychopathy	.26	< .001	.09	.33	.70
Maternal Psychological Control → Narcissism	.22	< .001	.12	.37	.85
Maternal Psychological Control → Cyberbullying	.03	.44	.06	-.08	.16
Maternal Psychological Control → Cybervictimization	.17	< .001	.07	.15	.43
Paternal Psychological Control → Machiavellianism	.15	< .001	.08	.13	.44
Paternal Psychological Control → Psychopathy	.10	.02	.08	.04	.34
Paternal Psychological Control → Narcissism	.18	< .001	.10	.24	.63
Paternal Psychological Control → Cyberbullying	.15	< .001	.05	.10	.31
Paternal Psychological Control → Cybervictimization	.14	< .001	.06	.09	.33
Machiavellianism → Cyberbullying	.40	< .001	.05	.19	.40
Machiavellianism → Cybervictimization	.26	< .001	.06	.09	.34
Psychopathy → Cyberbullying	.36	< .001	.05	.18	.37
Psychopathy → Cybervictimization	.29	< .001	.06	.14	.36
Narcissism → Cyberbullying	-.16	.001	.03	-.14	-.04
Narcissism → Cybervictimization	-.12	.02	.03	-.14	-.02
Indirect Effect via Machiavellianism					
Maternal Psychological Control → Cyberbullying	.11	< .001	.04	.09	.26
Maternal Psychological Control → Cybervictimization	.07	.01	.04	.05	.22
Paternal Psychological Control → Cyberbullying	.06	.004	.03	.04	.15
Paternal Psychological Control → Cybervictimization	.04	.02	.03	.02	.12
Indirect Effect via Psychopathy					
Maternal Psychological Control → Cyberbullying	.09	< .001	.04	.08	.22
Maternal Psychological Control → Cybervictimization	.07	.001	.04	.05	.22
Paternal Psychological Control → Cyberbullying	.04	.04	.02	.01	.10
Paternal Psychological Control → Cybervictimization	.03	.047	.02	.01	.09
Indirect Effect via Narcissism					
Maternal Psychological Control → Cyberbullying	-.04	.01	.02	-.10	-.02
Maternal Psychological Control → Cybervictimization	-.03	.03	.02	-.09	-.01
Paternal Psychological Control → Cyberbullying	-.10	.01	.02	-.07	-.02
Paternal Psychological Control → Cybervictimization	-.02	.04	.02	-.07	-.01

Note:  $p$  = level of significance; SE = standard error; CI LL = lower limit of the confidence interval UL LL = upper limit of the confidence interval.

The proposed SEM models with latent variables demonstrated good fit across all configurations.

The first and main model showed a strong fit, with  $\chi^2(182) = 561.69$ ,  $p < .001$ , CFI = .97, RMSEA = .05 (90% CI = .04–.05), and SRMR = .04, revealing significant direct and indirect relationships among most variables, though the direct path from maternal psychological control to cyberbullying was not significant (Table 2).

The second model also showed good fit indices:  $\chi^2(132) = 494.60$ ,  $p < .001$ , CFI = .96, RMSEA = .05 (90% CI = .05–.06), and SRMR = .04, with significant direct and indirect paths across all variables.

The third model demonstrated a strong fit,  $\chi^2(132) = 487.20$ ,  $p < .001$ , CFI = .97, RMSEA = .05 (90% CI = .05–.06), SRMR = .04, with nearly all paths being significant.

The fourth model highlighted satisfactory fit indices,  $\chi^2(90) = 222.76$ ,  $p < .001$ , CFI = .98, RMSEA = .04 (90% CI = .03–.04), and SRMR = .03, with significant paths between most variables.

The fifth model showed good fit with  $\chi^2(90) = 183.45$ ,  $p < .001$ , CFI = .99, RMSEA = .03 (90% CI = .03–.04), SRMR = .02, highlighting significant paths between nearly all variables.

The sixth model also had a satisfactory fit,  $\chi^2(90) = 302.98$ ,  $p < .001$ , CFI = .97, RMSEA = .05 (90% CI = .04–.05), and SRMR = .04, where narcissism uniquely demonstrated positive relationships with both cyberbullying and cybervictimization and served as a mediator in indirect paths.

#### 4. Discussion

The primary goal of this research was to explore the mediating role of Machiavellianism, psychopathy, and narcissism in the relationship between maternal and paternal psychological control and cyberbullying/cybervictimization. The findings indicate complex dynamics involving parental control, dark personality traits, and cyberbullying behaviors. The study found that dark triad traits impact the relationship between parental control and cyberbullying, suggesting these traits help explain how parental psychological control can influence cyberbullying behaviors. This extends previous research by demonstrating that Machiavellianism and psychopathy may significantly influence this relationship (Panatik et al., 2022; Padir et al., 2021). This is consistent with the Social Learning Theory, which posits that individuals adopt behaviors through observation and reinforcement (Navarro & Marcum, 2020). Parental psychological control may reinforce manipulative or remorseless behaviors associated with these traits, which in turn can contribute to cyberbullying. The role of narcissism was more complex, with a positive correlation to cyberbullying in bivariate analyses, but a negative mediation effect when considered alongside the other dark traits. This suggests that Machiavellianism and psychopathy may overshadow narcissism's influence in the presence of the full dark triad (Fanti et al., 2012; Fernández-del-Río et al., 2021). The non-significant direct link between maternal psychological control and cyberbullying, when both maternal and paternal control were included, points to a cumulative effect of both parental figures. This interaction suggests that paternal control may have additional variability in predicting cyberbullying, overshadowing maternal control in the combined model (Yang et al., 2021; Yu et al., 2021). Finally, although dark triad traits strongly mediated cyberbullying, they also showed significant effects on cybervictimization, although with smaller effect sizes. This aligns with the notion that cyberbullying and cybervictimization are interconnected, and individuals may experience both roles, especially if they have vulnerability factors such as low self-esteem or previous victimization (Ademiluyi et al., 2022; Baldry et al., 2019).

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