

## Envy as a Mediator Between Dark Triad Traits and Cyberstalking Among Undergraduates

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**Abstract:** The present study examined the mediation role of envy in the relationship between Dark Triad personality traits and cyberstalking among undergraduate students. The sample consisted of 406 volunteer undergraduates (61.3% female,  $n = 249$ ; 38.7% male,  $n = 157$ ), with ages ranging from 18 to 28 years ( $M = 20.05$ ,  $SD = 1.74$ ). Data were collected using the Cyberstalking Scale, the Benign and Malicious Envy Scale, and the Dark Triad Scale. Correlational and mediation analyses revealed that Dark Triad traits were positively associated with both envy and cyberstalking, while envy was also positively related to cyberstalking. Bootstrapping analyses further indicated that envy partially mediated the relationship between Dark Triad traits and cyberstalking. These findings highlight the pivotal role of emotional processes (particularly envy) in explaining how maladaptive personality traits translate into intrusive online behaviors. Overall, the results contribute to a more nuanced understanding of cyberstalking by integrating personality and emotional mechanisms within a unified framework. These results indicate that the mediation is partial rather than full, as the direct effect remains statistically significant.

**Keywords:** Dark triad, Cyberstalking, Envy, Undergraduates, Türkiye.

### 1. Introduction

The Internet, the final link in the chain of mass communication, has proliferated exponentially since the 1990s, affecting profound and irreversible changes in human life. According to the Digital 2026 Global General Report published in October 2025, 73.2% of the global population (approximately 6.04 billion individuals) uses the Internet. This reflects an increase from 59% of the global population (approximately 4.54 billion people) in 2020 (DataReportal, 2026). This data demonstrates a rapid rise in the number of users. Notably, the ability of smartphones to connect to the Internet has been a significant factor in this growth.

In the modern era, the Internet has become a pervasive force, shaping nearly all aspects of human activity by responding to individuals' personal needs and goals. It offers substantial benefits that enhance daily life, including widespread service provision across industries, increased access to information, and the facilitation of long-distance interpersonal relationships. However, alongside these advantages, the rapid expansion of online environments has also generated new challenges. Digital networks enable interactions among individuals and organizations on a global scale, thereby creating conditions that facilitate both novel forms of crime and the digital extension of crimes traditionally committed in offline settings (Jewkes & Yar, 2013). Cyberstalking represents a prominent example of this transformation.

Traditional or offline stalking refers to a pattern of repeated and intentional behaviors designed to cause fear, distress, or anxiety in the victim (Reis & Sprecher, 2009). Although offline stalking has been documented for decades, cyberstalking is a comparatively recent phenomenon that has emerged with the proliferation of internet-based communication technologies. As a result, while offline stalking is supported by a relatively well-established body of research, cyberstalking remains characterized by conceptual ambiguity and a lack of consensus regarding its definition (Kobets & Krasnova, 2018). Nevertheless, most scholars agree that cyberstalking involves the repeated use of digital or technological tools to harass, monitor, threaten, or intimidate a target (Nobles et al., 2014).

Cyberstalking involves repetitive online monitoring and intrusive behaviors directed toward a target through digital platforms. Although cyberstalking shares certain characteristics with offline stalking, such as persistence and intentional disturbance, important differences also exist between the two forms. For example, victims are often less familiar with perpetrators in online settings, and cyberstalking incidents may occur over shorter periods compared to traditional stalking cases (Bocij, 2002). Despite these distinctions, both forms exert serious psychological, social, and legal

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consequences, prompting increased legislative attention and policy development aimed at addressing this evolving form of victimization.

Empirical evidence indicates that cyberstalking disproportionately affects children and young adults, although individuals across the lifespan may also become victims (Maple et al., 2011). Gender differences are not absolute, as both men and women can occupy roles as victims or perpetrators (Marcum & Higgins, 2021; Stevens et al., 2021). Exposure to cyberstalking has been associated with a range of adverse mental health outcomes, including heightened fear, anxiety, post-traumatic stress symptoms, sleep disturbances, and social withdrawal (Maple et al., 2011; Sheridan & Grant, 2007; Worsley et al., 2017). Victims may also experience substantial financial costs related to protective measures, relocation, or psychological treatment (Maple et al., 2011). These consequences underscore the importance of identifying the psychological characteristics of perpetrators, the emotional mechanisms underlying their behavior, and the contextual conditions in which cyberstalking occurs.

Social media platforms constitute a central context in which cyberstalking behaviors are enacted. Recent global statistics indicate that approximately 68.7% of the world's population actively uses social media, with an average daily usage time of 220 minutes (DataReportal, 2026). This extensive engagement has fueled growing concerns regarding problematic or compulsive social media use-terms that describe maladaptive patterns characterized by impaired self-regulation and addiction-like symptoms (Andreassen, 2015; Sun & Zhang, 2021). Although research on social media addiction is still emerging, the rapidly expanding literature suggests that excessive engagement in online platforms may intensify social comparison processes and emotional vulnerabilities, thereby increasing the risk of harmful interpersonal behaviors.

Among the psychological variables associated with cyberstalking, personality traits and emotional dispositions have received increasing scholarly attention. Individuals who exhibit characteristics of the Dark Triad and experience heightened levels of envy may be especially prone to engaging in stalking behaviors in online contexts. The Dark Triad comprises narcissism, psychopathy, and Machiavellianism (Paulhus & Williams, 2002). Narcissism is a multifaceted trait marked by grandiosity, entitlement, and interpersonal exploitation, often expressed through attention-seeking behaviors and strategic self-presentation (Campbell et al., 2002; Vazire & Funder, 2006). Despite these tendencies, narcissism is frequently regarded as the most socially acceptable of the dark traits (Rauthmann & Kolar, 2012).

Psychopathy, in contrast, is characterized by impulsivity, emotional coldness, manipulation, and a profound lack of empathy or remorse. While early research focused primarily on forensic populations, recent studies increasingly examine psychopathic traits within non-clinical samples, recognizing their relevance to everyday social functioning (Mullins-Nelson et al., 2006). Individuals high in psychopathy often violate social norms through aggression and intimidation in pursuit of self-centered goals (Baughman et al., 2012). Machiavellianism differs from psychopathy in its emphasis on calculated manipulation, strategic deception, and emotional detachment. Rooted in the political philosophy of Niccolò Machiavelli, this trait reflects a belief in the instrumental use of others to achieve personal objectives (Geis & Moon, 1981). Although the Dark Triad traits reflect socially aversive tendencies, they are typically assessed within normative personality ranges rather than clinical or forensic classifications (Furnham et al., 2013; Vernon et al., 2008).

In addition to personality traits, envy represents a critical emotional factor in understanding cyberstalking. Envy is a negative and distressing emotion that arises when individuals perceive others as possessing desired attributes, resources, or statuses that are personally significant (Reis & Sprecher, 2009). This emotion may involve feelings of inferiority, longing, resentment, admiration, and perceived injustice. Contemporary models distinguish between malicious envy, which is characterized by hostility and a desire to undermine the advantaged other, and benign envy, which lacks hostile intent and may motivate self-improvement (Smith, 2008). Regardless of its form, envy is inherently rooted in social comparison processes and is most likely to emerge when comparisons involve personally relevant domains tied to self-esteem and identity. Consequently, social media environments (where individuals are frequently exposed to curated representations of others' success) may intensify envy and create conditions conducive to cyberstalking behaviors.

At this point, it is of great importance to understand and explain the changes that the internet has caused in individuals' lives. Since cyberstalking is one of the internet-related problems that affect individuals' daily lives, it is important to determine the variables that are related to understanding, explaining, and predicting the issue. Therefore, the subject of the research was determined as the mediating role of envy in the relationship between cyberstalking behavior and the dark triad among undergraduate students.

## Current Study

Previous studies have shown that Dark Triad traits are associated with several problematic online behaviors, including cyber aggression, trolling, and cyberstalking. However, the emotional processes underlying these relationships have not been sufficiently examined. In particular, the mediating role of envy in the relationship between Dark Triad traits and cyberstalking remains unclear. Online environments, especially social media platforms, increase opportunities for social comparison and interpersonal monitoring. Individuals with high levels of Dark Triad traits may be more likely to experience envy due to their competitive and antagonistic interpersonal tendencies. These emotional reactions may contribute to intrusive online behaviors such as cyberstalking. In addition, most studies examining Dark Triad traits, envy, and problematic online behaviors have been conducted in Western cultures. Therefore, investigating these relationships in a Turkish cultural context may contribute to the literature by providing culturally relevant findings regarding online interpersonal behaviors among university students. Accordingly, the present study aimed to examine the mediating role of envy in the relationship between Dark Triad traits and cyberstalking among undergraduate students. The hypothesized model of the study is presented in Figure 1.

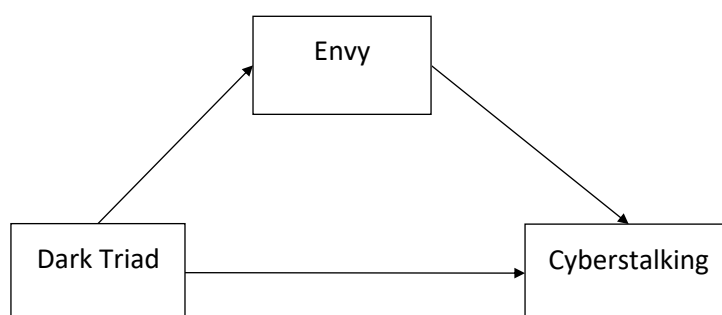


Figure 1. The hypothesized model

## Hypotheses

In this study, the following hypotheses are put forward for investigation:

- H1. The dark triad will be positively related to cyberstalking.
- H2. The dark triad will be positively related to envy.
- H3. Envy will be positively related to cyberstalking.
- H4. The relationship between dark triad and cyberstalking will be mediated by envy.

## 2. Method

### 2.1. Participants

The study sample consisted of undergraduate students enrolled at a public university in Türkiye. Participants were recruited using a convenience sampling method, which involves selecting individuals who are accessible and willing to participate in the research (Creswell, 2021). A total of 406 voluntary participants took part in the study, including 249 females (61.3%) and 157 males (38.7%). Participants' ages ranged from 18 to 28 years ( $M = 20.05$ ,  $SD = 1.74$ ). Regarding social media use, most participants reported having three to four social media accounts (42.4%), followed by one to two accounts (30.0%) and five or more accounts (27.6%). The majority indicated using social media for approximately three to four hours per day, and Instagram was reported as the most frequently used platform. Detailed demographic characteristics of the participants are presented in Table 1.

**Table 1.** Demographic Characteristics of the Participants

|                                                            | Frequency | %    |
|------------------------------------------------------------|-----------|------|
| Gender                                                     |           |      |
| Female                                                     | 249       | 61.3 |
| Male                                                       | 157       | 38.7 |
| Number of social media accounts                            |           |      |
| 1-2                                                        | 122       | 30.0 |
| 3-4                                                        | 171       | 42.4 |
| 5 and more                                                 | 113       | 27.6 |
| How often to use social media notifications during the day |           |      |
| Every 1-2 hours                                            | 67        | 16.5 |
| Every 3-4 hours                                            | 166       | 40.9 |
| Every 5-6 hours                                            | 126       | 31.0 |
| 7 and more hours                                           | 47        | 11.6 |
| How often to check notifications during the day            |           |      |
| Instagram                                                  | 242       | 69.6 |
| WhatsApp                                                   | 83        | 20.4 |
| YouTube                                                    | 48        | 11.8 |
| X                                                          | 19        | 4.7  |
| TikTok                                                     | 12        | 3.0  |
| Snapchat                                                   | 2         | 0.5  |

## 2.2. Measures

**Cyberstalking Scale (CSS).** Cyberstalking behaviors were assessed using the Cyberstalking Scale (CSS) developed by Silva Santos et al. (2023). The scale consists of 10 items (e.g., “I usually find the social media of someone I’m interested in, even if it takes hours”) rated on a 5-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree). The original scale demonstrated excellent fit indices (GFI = .98, TLI = .99, RMSEA = .02, SRMR = .06, CFI = .99), with factor loadings ranging from .43 to .72 and explaining 32.93% of the total variance. The original Cronbach’s alpha coefficient was .86. The CSS was adapted into Turkish by Bakioğlu and Ercan (2025). Confirmatory factor analysis supported the one-factor structure with satisfactory goodness-of-fit indices ( $\chi^2 = 129.36$ ,  $\chi^2/df = 4.04$ , CFI = .94, GFI = .95, AGFI = .91, IFI = .94, NFI = .92, TLI = .92, RMSEA = .08, SRMR = .05). The Turkish version explained 43.45% of the total variance, with factor loadings ranging from .47 to .79. In the present study, the Cronbach’s alpha coefficient was .85.

**Dirty Dozen Scale (DDS).** Dark Triad personality traits were measured using the Dirty Dozen Scale (DDS) developed by Jonason and Webster (2010). The scale includes 12 items assessing Machiavellianism, psychopathy, and narcissism, rated on a 9-point Likert scale (1 = totally disagree, 9 = totally agree). The original scale demonstrated acceptable model fit ( $\chi^2 = 192.02$ ,  $\chi^2/df = 3.76$ , NFI = .92, RMSEA = .08, CFI = .94). Reported reliability coefficients were .72 for Machiavellianism, .66 for psychopathy, and .87 for narcissism. The Turkish adaptation was conducted by Satıcı et al. (2018) and showed good fit indices (CFI = .96, GFI = .95, IFI = .96, SRMR = .047, RMSEA = .06). In the current study, Cronbach’s alpha coefficients were .75 for Machiavellianism, .72 for psychopathy, and .83 for narcissism.

**Benign and Malicious Envy Scale (BeMaS).** Envy was assessed using the Benign and Malicious Envy Scale (BeMaS) developed by Lange and Crusius (2015). The scale consists of 10 items measuring benign envy and malicious envy, rated on a 6-point Likert scale (1 = totally disagree, 6 = totally agree). The original version demonstrated good model fit (GFI = .96, RMSEA = .07, CFI = .97), with factor loadings ranging from .72 to .88. Cronbach’s alpha coefficients were .85 for benign envy and .89 for malicious envy. The Turkish adaptation by Çırpan and Özdoğru (2017) confirmed the two-factor structure, explaining 62.32% of the total variance, with factor loadings ranging from .54 to .87. In the present study, Cronbach’s alpha coefficients were .76 for benign envy and .82 for malicious envy.

## 2.3. Procedure and Data Analysis

Prior to hypothesis testing, normality assumptions, reliability, and correlation analyses were examined. Normality was assessed using skewness and kurtosis values, with absolute values below 1.5 considered acceptable (Tabachnick et al., 2013). Internal consistency was evaluated using Cronbach’s alpha coefficients. To test the hypothesized direct and indirect relationships between Dark Triad traits and cyberstalking through envy, mediation analyses were conducted using Jamovi (version 2.6) (Jamovi, 2024). Indirect effects were tested using bootstrapping procedures with 5,000 resamples and 95% confidence intervals, which is recommended for assessing mediation effects in large samples (MacKinnon et al., 2004; Preacher & Hayes, 2008). Data were collected online via secure survey platforms. Participants

were informed about the study's purpose and procedures, and voluntary participation was ensured through an informed consent form. Completion of the questionnaires took approximately 15–20 minutes.

## 2.4. Ethical Statement

Ethical approval was obtained from the Karamanoğlu Mehmetbey University Social and Human Sciences Ethics Committee (Approval ID: 01-2023-14).

## 3. Findings

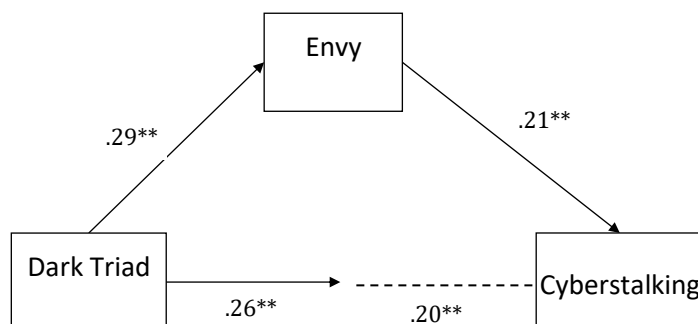
Descriptive statistics, reliability coefficients, and intercorrelations among the study variables are presented in Table 2. Prior to hypothesis testing, normality assumptions were examined. Skewness values ranged from .03 to 1.28, while kurtosis values ranged from –.83 to 1.12, indicating acceptable univariate normality. The internal consistency of the measures was satisfactory, with Cronbach's alpha coefficients of .70 or higher for all scales. Correlation analyses revealed significant positive associations between cyberstalking and Dark Triad traits, with correlation coefficients ranging from  $r = .17$  to  $r = .39$  ( $p < .001$ ), supporting H1. Cyberstalking was also positively and significantly related to both benign and malicious envy ( $r = .29$  and  $r = .30$ ,  $p < .001$ ), providing support for H3. Furthermore, Dark Triad traits showed significant positive correlations with envy, with coefficients ranging from  $r = .13$  to  $r = .50$  ( $p < .001$ ), supporting H2.

**Table 2.** Descriptive Statistics and Reliabilities for the Study Variables.

| Variable            | Correlations |        |        |        |        | Descriptive Statistics and Reliabilities |      |      |      |          |
|---------------------|--------------|--------|--------|--------|--------|------------------------------------------|------|------|------|----------|
|                     | 1            | 2      | 3      | 4      | 5      | M                                        | SD   | SK   | KR   | $\alpha$ |
| 1. Cyberstalking    | -            |        |        |        |        | 29.74                                    | 8.98 | -.03 | -.83 | .85      |
| 2. Machiavellianism | .33***       | -      |        |        |        | 9.16                                     | 5.53 | 1.28 | 1.12 | .75      |
| 3. Psychopathy      | .17***       | .37*** | -      |        |        | 8.88                                     | 4.93 | 1.16 | .93  | .72      |
| 4. Narcissism       | .39***       | .39*** | .28*** | -      |        | 17.09                                    | 8.57 | .29  | -.88 | .83      |
| 5. Benign envy      | .29***       | .30*** | .13**  | .39*** | -      | 16.25                                    | 6.00 | .21  | -.46 | .76      |
| 6. Malicious envy   | .30***       | .50*** | .26*** | .37*** | .33*** | 8.39                                     | 3.84 | 1.23 | .72  | .82      |

M: mean, SD: standard deviation,  $\alpha$ : Cronbach alpha reliability, SK: skewness, KR: kurtosis, \*\*  $p < .01$ , \*\*\*  $p < .001$

Examination of the research model indicated that Dark Triad traits significantly and positively predicted cyberstalking ( $\beta = .199$ ,  $p < .001$ ), supporting H1. In addition, envy emerged as a significant positive predictor of cyberstalking ( $\beta = .208$ ,  $p < .001$ ), providing support for H3. Consistent with H2, Dark Triad traits were also found to be positively associated with envy, with coefficients ranging from .294 to .506 ( $p < .001$ ). Bootstrapping analyses (5,000 resamples) further demonstrated that envy partially mediated the relationship between Dark Triad traits and cyberstalking. The standardized indirect effect was .0612, and the 95% confidence interval did not include zero [ $CI = (.0284, .0957)$ ], indicating a statistically significant mediation effect and supporting H4. Detailed results of the direct and indirect effects are presented in Table 3, and the tested mediation model is illustrated in Figure 2. These results indicate that the mediation is partial rather than full, as the direct effect remains statistically significant.



**Figure 2.** The mediating role of envy in the relationship between dark triad and cyberstalking

**Table 3.** The mediating role of envy in the relationship between dark triad and cyberstalking

| Effect         | Label     | Estimate | Standard Error | 95%<br>Confidence Interval |        | Z     | p     | % Mediation |
|----------------|-----------|----------|----------------|----------------------------|--------|-------|-------|-------------|
|                |           |          |                | Lower                      | Upper  |       |       |             |
| Indirect       | a x b     | 0.0612   | 0.0173         | 0.0284                     | 0.0957 | 3.54  | <.001 | 23.6        |
| Direct         | c         | 0.1985   | 0.0305         | 0.1395                     | 0.2584 | 6.50  | <.001 | 76.4        |
| Total          | c + a x b | 0.2597   | 0.0266         | 0.2061                     | 0.3118 | 9.78  | <.001 | 100.0       |
| Path Estimates |           |          |                |                            |        |       |       |             |
| DT→EN          | a         | 0.294    | 0.0243         | 0.2478                     | 0.343  | 12.14 | <.001 |             |
| EN→CS          | b         | 0.208    | 0.0571         | 0.0974                     | 0.320  | 3.64  | <.001 |             |
| DT→CS          | c         | 0.199    | 0.0305         | 0.1395                     | 0.258  | 6.50  | <.001 |             |

Note. DT: Dark Triad, EN: Envy, CS: Cyberstalking,  $p < .001$

#### 4. Discussion

The purpose of this study was to examine the mediation of envy in the relationship between the dark triad and cyberstalking among undergraduates. The research question was answered with the hypotheses created by the researchers. The discussion regarding the hypotheses of this research is given below, respectively.

First, dark triad (Machiavellianism, psychopathy, and narcissism) was positively related to cyberstalking (H1). This finding is consistent with previous research (Blais et al., 2024; Branković et al., 2023; Kanemasa et al., 2024; Leite et al., 2023). The results of the present study indicate that Dark Triad traits are positively associated with cyberstalking behaviors, supporting the assumption that maladaptive personality characteristics play a significant role in intrusive online conduct. This finding is theoretically consistent with research suggesting that individuals high in Machiavellianism, psychopathy, and narcissism tend to adopt manipulative, self-serving, and low-empathy interpersonal strategies, which can be more easily enacted in digital environments marked by anonymity and reduced social accountability (Jones & Paulhus, 2014; Paulhus & Williams, 2002). Online contexts may amplify these tendencies by lowering interpersonal constraints and increasing opportunities for covert observation and monitoring (Suler, 2004). From a trait-specific perspective, Machiavellianism may facilitate cyberstalking through strategic information-seeking, psychopathy through impulsivity and diminished concern for others' boundaries, and narcissism through heightened sensitivity to ego threat and social evaluation (Buckels et al., 2014). Recent empirical studies further indicate that Dark Triad traits are linked to a range of problematic digital behaviors, including cyber aggression and online harassment, suggesting that cyberstalking may represent another manifestation of broader antisocial tendencies expressed in virtual settings (Madan, 2014). Overall, these findings extend existing literature by demonstrating that the influence of Dark Triad traits is not confined to offline interpersonal contexts but also meaningfully contributes to persistent and intrusive behaviors in online environments. From a trait-specific perspective, Machiavellianism may contribute to cyberstalking through manipulative and strategic monitoring behaviors, whereas psychopathy may increase intrusive online behaviors due to impulsivity and lack of empathy. Narcissism, on the other hand, may be associated with cyberstalking through heightened sensitivity to social evaluation and the need for admiration. Within the Turkish cultural context, where interpersonal relationships and social visibility may play an important role, these personality characteristics may become more noticeable in online environments.

Second, dark triad was positively related to envy (Benign and malicious) (H2). This finding is consistent with the findings of other studies conducted previously (Lange et al., 2018; Le et al., 2025; Veselka et al., 2014). The present findings support H2 by demonstrating that Dark Triad traits are positively associated with both benign and malicious envy, suggesting that individuals high in Machiavellianism, psychopathy, and narcissism are particularly susceptible to envious responses across different motivational forms. This result is consistent with prior research indicating that dark personality traits are fundamentally rooted in antagonism, competitiveness, and heightened sensitivity to social comparison, all of which constitute central antecedents of envy (Lange et al., 2018; Paulhus & Jones, 2015; Veselka et al., 2014). Although benign envy is typically linked to self-improvement motives following upward social comparisons,

individuals characterized by Dark Triad traits may be less inclined to channel envy into adaptive striving and more prone to experience malicious envy marked by resentment, hostility, and derogation of others. Narcissistic traits may intensify envy in response to ego-threatening comparisons, whereas Machiavellianism and psychopathy may foster envious affect through instrumental social orientation, chronic distrust, and reduced empathic concern (Krizan & Johar, 2012). Recent empirical evidence further suggests that antagonistic personality features are more strongly associated with the malicious dimension of envy than with its benign counterpart, underscoring the maladaptive emotional profile of individuals high in Dark Triad traits (Le et al., 2025). Taken together, these findings position envy (particularly its malicious form) as a salient emotional correlation of dark personality traits and highlight its potential role as a psychological mechanism linking such traits to subsequent maladaptive interpersonal and behavioral outcomes.

Third, envy (Benign and malicious) was positively related to cyberstalking (H3). The findings of the present study support H3 by demonstrating that both benign and malicious envy are positively associated with cyberstalking behaviors, suggesting that envious affect constitutes an important emotional precursor of intrusive online conduct. This result aligns with social comparison theory, which posits that upward comparisons can elicit envy and motivate increased attention toward comparison targets, particularly in digital environments where constant monitoring is facilitated (Smith & Kim, 2007; Vogel et al., 2014). While benign envy is often conceptualized as a self-improvement-oriented response, persistent exposure to others' achievements and visibility in online contexts may still encourage heightened surveillance behaviors, thereby increasing the likelihood of cyberstalking. Malicious envy, characterized by resentment and hostility toward advantaged others, appears especially relevant for explaining cyberstalking, as it may drive individuals to engage in repetitive monitoring, boundary violations, or retaliatory behaviors aimed at undermining or controlling the target (Kircaburun et al., 2018; Lange & Crusius, 2015). Recent research further indicates that maladaptive envy in digital contexts is associated with problematic online behaviors, social comparison stress, and digital harassment, providing additional support for the emotional pathways linking envy and cyberstalking (Geng et al., 2022; Meier & Johnson 2022; Tandon et al., 2025). Overall, these findings highlight envy (particularly its malicious form) as a central emotional mechanism connecting social comparison processes to intrusive online behaviors.

Last, the relationships between dark triad (Machiavellianism, psychopathy, and narcissism) and cyberstalking were mediated by envy (Benign and malicious) (H4). Support for H4 indicates that the relationship between Dark Triad traits and cyberstalking behaviors is indirectly explained through both benign and malicious envy, highlighting the central role of affective mechanisms in translating maladaptive personality traits into intrusive online conduct. Consistent with prior research, individuals high in Dark Triad characteristics tend to be more sensitive to upward social comparisons and status-related threats, which increases their susceptibility to envious emotions (Lange et al., 2018; Le et al., 2025; Veselka et al., 2014). In digital environments, where opportunities for continuous comparison and monitoring are intensified, envy may amplify attentional focus on others and facilitate behaviors such as repeated observation and boundary violations. Although benign envy is often associated with self-improvement motives, persistent exposure to comparison targets in online contexts may still promote heightened surveillance behaviors that resemble cyberstalking. Malicious envy, characterized by resentment and hostility toward advantaged others, appears particularly influential, as it may motivate retaliatory or controlling actions aimed at reducing perceived disadvantage (Lange & Crusius, 2015; Smith & Kim, 2007). Recent studies further demonstrate that envy in digital contexts is linked to problematic online behaviors, cyber aggression, and social comparison stress, providing additional support for its mediating role between personality traits and cyberstalking (Geng et al., 2022; Kircaburun et al., 2018; Meier & Johnson 2022; Tandon et al., 2025). Overall, these findings extend existing literature by showing that the effects of Dark Triad traits on cyberstalking are best understood through emotional pathways, emphasizing envy (particularly its malicious form) as a key psychological mechanism underlying intrusive online behaviors.

## Conclusion

The present study provides a comprehensive framework for understanding cyberstalking by integrating dark personality traits and emotional mechanisms within a unified model. The findings demonstrate that Dark Triad traits (Machiavellianism, psychopathy, and narcissism) are positively associated with cyberstalking behaviors and that these relationships are both directly and indirectly explained through envy. Importantly, the results show that envy, in both its benign and malicious forms, functions as a key mediating mechanism linking dark personality characteristics to intrusive online conduct. By distinguishing between benign and malicious envy, the study advances existing literature and highlights that not all envious responses are uniformly adaptive or maladaptive in digital contexts. Overall, the findings underscore the central role of affective processes, particularly envy, in translating maladaptive personality traits into

problematic online behaviors and contribute to a more nuanced understanding of cyberstalking from a personality, emotion and behavior perspective.

### Theoretical and Practical Implications

From a theoretical standpoint, this study extends research on the Dark Triad by demonstrating that the influence of these traits on cyberstalking is best understood through emotion-based pathways rather than direct trait-behavior associations alone. By incorporating benign and malicious envy as distinct mediators, the findings enrich social comparison and personality theories and emphasize the importance of differentiating emotional processes when explaining maladaptive online behaviors. This approach offers a more refined conceptualization of how dark personality traits manifest behaviorally in digital environments characterized by constant visibility and comparison.

From a practical perspective, the results suggest that interventions aimed at reducing cyberstalking should not focus solely on dispositional risk factors but also target maladaptive emotional responses, particularly envy. Programs designed to improve emotion regulation, reduce harmful social comparison, and promote healthier online engagement may be especially beneficial for individuals exhibiting elevated Dark Triad traits. Additionally, digital literacy and prevention efforts in educational and organizational settings should address the emotional dynamics of social media use, emphasizing how envy can escalate into intrusive or harmful online behaviors. By targeting both personality-related vulnerabilities and emotional mechanisms, such interventions may be more effective in mitigating cyberstalking and fostering safer online environments.

### Limitations and Future Research

Despite the contributions of the present study, several limitations should be acknowledged. First, the cross-sectional design limits the ability to draw causal inferences regarding the relationships among Dark Triad traits, envy, and cyberstalking. Although the proposed mediation model is theoretically grounded, longitudinal or experimental designs are needed to establish temporal ordering and causal pathways more robustly. Second, the reliance on self-report measures may have introduced common method bias and social desirability effects, particularly given the socially sensitive nature of dark personality traits and cyberstalking behaviors. Future studies could benefit from multi-method approaches, such as behavioral data, peer reports, or digital trace data, to enhance measurement validity.

In addition, the sample characteristics may limit the generalizability of the findings. The use of a non-clinical and culturally specific sample suggests that caution should be exercised when extending the results to other populations or cultural contexts. In addition, the findings should be interpreted with caution because the participants were recruited from a single university in Türkiye. Future studies including different universities and cultural contexts may improve the generalizability of the findings. Future research should examine whether the observed relationships are held across different age groups, cultural settings, and levels of online engagement. Moreover, while the present study differentiated between benign and malicious envy, future research could further explore contextual moderators (such as social media platform type, anonymity, or perceived social norms) that may strengthen or weaken the role of each envy dimension. Finally, investigating additional emotional and cognitive mechanisms, such as shame, rumination, or moral disengagement, may provide a more comprehensive understanding of how dark personality traits translate into cyberstalking and other problematic online behaviors.

## 6. References

- Andreassen, C. S. (2015). Online social network site addiction: A comprehensive review. *Current Addiction Reports*, 2(2), 175-184. <https://doi.org/10.1007/s40429-015-0056-9>
- Bakioğlu, F. & Ercan, H. (2025). Turkish Adaptation of Cyberstalking Scale: Association with FoMO and Social Media Addiction. *International Asian Congress on Contemporary Sciences –XI*.
- Baughman, H. M., Dearing, S., Giammarco, E., & Vernon, P. A. (2012). Relationships between bullying behaviours and the Dark Triad: A study with adults. *Personality and Individual Differences*, 52(5), 571-575. <https://doi.org/10.1016/j.paid.2011.11.020>
- Blais, J., Aelick, C. A., Scully, J. M., & Pruyssers, S. (2024). Antisocial personality traits as potential risk factors for cyberstalking: only aspects of psychopathy and narcissism matter. *Psychiatry, Psychology and Law*, 32(5)818-837. <https://doi.org/10.1080/13218719.2024.2404833>
- Bocij, P. (2002). Victims of cyberstalking: An exploratory study of harassment perpetrated via the Internet. *First Monday*, 8(10). <https://doi.org/10.5210%2Ffm.v8i10.1086>

- Branković, I., Dinić, B. M., & Jonason, P. K. (2023). How traditional stalking and cyberstalking correlate with the Dark Tetrad traits?. *Current Psychology*, 42(30), 26238-26242. <https://doi.org/10.1007/s12144-022-03681-z>
- Buckels, E. E., Trapnell, P. D., & Paulhus, D. L. (2014). Trolls just want to have fun. *Personality and Individual Differences*, 67, 97-102. <https://doi.org/10.1016/j.paid.2014.01.016>
- Campbell, W. K., Foster, C. A., & Finkel, E. J. (2002). Does self-love lead to love for others? A story of narcissistic game playing. *Journal of Personality and Social Psychology*, 83(2), 340. <https://doi.org/10.1037//0022-3514.83.2.340>
- Çırpan, Y., & Özdoğan, A. A. (2017). Turkish adaptation of BeMaS Benign and Malicious Envy Scale: transliteral equivalence, reliability and validity study. *Anatolian Journal of Psychiatry*, 18(6), 577-586. <http://dx.doi.org/10.5455/apd.256664>
- Creswell, J. W. (2021). *A concise introduction to mixed methods research*. SAGE publications.
- DataReportal. (2026). *Digital 2026: Global Overview Report*. Retrieved February 2, 2026, from <https://datareportal.com/reports/digital-2026-global-overview-report>
- Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The Dark Triad of personality: A 10-year review. *Social and Personality Psychology Compass*, 7(3), 199-216. <https://doi.org/10.1111/spc3.12018>
- Geis, F. L., & Moon, T. H. (1981). Machiavellianism and deception. *Journal of Personality and Social Psychology*, 41(4), 766-775. <https://doi.org/10.1037/0022-3514.41.4.766>
- Geng, J., Wang, Y., Wang, H., Wang, P., & Lei, L. (2022). Social comparison orientation and cyberbullying perpetration and victimization: roles of envy on social networking sites and body satisfaction. *Journal of interpersonal violence*, 37(17-18), NP16060-NP16083. <https://doi.org/10.1177/08862605211023486>
- Jewkes, Y., & Yar, M. (Eds.). (2013). *Handbook of Internet crime*. Routledge.
- Jonason, P. K., & Webster, G. D. (2010). The dirty dozen: A concise measure of the dark triad. *Psychological Assessment*, 22(2), 420-432. <https://doi.org/10.1037/a0019265>
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A brief measure of dark personality traits. *Assessment*, 21(1), 28-41. <https://doi.org/10.1177/1073191113514105>
- Kanemasa, Y., Miyagawa, Y., & Arai, T. (2024). Attachment anxiety and the dark triad increase stalking after breakups of romantic relationships through psychological maltreatment of romantic partners and reactions to breakups. *Aggressive Behavior*, 50(1), e22133. <https://doi.org/10.1002/ab.22133>
- Kircaburun, K., Jonason, P. K., & Griffiths, M. D. (2018). The Dark Tetrad traits and problematic online gaming: The mediating role of online gaming motives and moderating role of game types. *Personality and Individual Differences*, 135, 298-303. <https://doi.org/10.1016/j.paid.2018.07.038>
- Kobets, P., & Krasnova, K. (2018). Cyberstalking: Public danger, key factors and prevention. *Przegląd Wschodnioeuropejski*, 9(2), 43-53. <https://doi.org/10.31648/pw.3001>
- Krizan, Z., & Johar, O. (2012). Envy divides the two faces of narcissism. *Journal of Personality*, 80(5), 1415-1451. <https://doi.org/10.1111/j.1467-6494.2012.00767.x>
- Lange, J., & Crusius, J. (2015). Dispositional envy revisited: Unraveling the motivational dynamics of benign and malicious envy. *Personality and Social Psychology Bulletin*, 41(2), 284-294. <https://doi.org/10.1177/0146167214564959>
- Lange, J., Paulhus, D. L., & Crusius, J. (2018). Elucidating the dark side of envy: Distinctive links of benign and malicious envy with dark personalities. *Personality and Social Psychology Bulletin*, 44(4), 601-614. <https://doi.org/10.1177/0146167217746340>
- Le, L. J., Nee, L. W., & Ling, L. Y. (2025). *The relationship between dark triad, envy and schadenfreude among undergraduates in Malaysia* [Unpublished undergraduate thesis]. Universiti Tunku Abdul Rahman.
- Leite, Â., Cardoso, S., & Monteiro, A. P. (2023). Dark personality traits and online behaviors: Portuguese versions of cyberstalking, online harassment, flaming and trolling scales. *International Journal of Environmental Research and Public Health*, 20(12), 6136. <https://doi.org/10.3390/ijerph20126136>
- Mackinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99-128. [https://doi.org/10.1207/s15327906mbr3901\\_4](https://doi.org/10.1207/s15327906mbr3901_4)
- Madan, A. O. (2014). Cyber aggression/cyber bullying and the dark triad: Effect on workplace behavior/performance. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 8(6), 1725-1730.
- Maple, C., Short, E., & Brown, A. (2011). *Cyberstalking in the United Kingdom: An analysis of the ECHO pilot survey*. University of Bedfordshire.

- Marcum, C. D., & Higgins, G. E. (2021). A systematic review of cyberstalking victimization and offending behaviors. *American Journal of Criminal Justice*, 46(6), 882-910. <https://doi.org/10.1007/s12103-021-09653-6>
- Meier, A., & Johnson, B. K. (2022). Social comparison and envy on social media: A critical review. *Current Opinion in Psychology*, 45, 101302. <https://doi.org/10.1016/j.copsyc.2022.101302>
- Mullins-Nelson, J. L., Salekin, R. T., & Leistico, A. M. R. (2006). Psychopathy, empathy, and perspective-taking ability in a community sample: Implications for the successful psychopathy concept. *International Journal of Forensic Mental Health*, 5(2), 133-149. <https://doi.org/10.1080/14999013.2006.10471238>
- Nobles, M. R., Reynolds, B. W., Fox, K. A., & Fisher, B. S. (2014). Protection against pursuit: A conceptual and empirical comparison of cyberstalking and stalking victimization among a national sample. *Justice Quarterly*, 31(6), 986-1014. <https://doi.org/10.1080/07418825.2012.723030>
- Paulhus, D. L., & Jones, D. N. (2015). Measures of dark personalities. In *Measures of personality and social psychological constructs* (pp. 562-594). Academic Press. <https://doi.org/10.1016/B978-0-12-386915-9.00020-6>
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36(6), 556-563. [https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. <https://doi.org/10.3758/BRM.40.3.879>
- Rauthmann, J. F., & Kolar, G. P. (2012). How “dark” are the Dark Triad traits? Examining the perceived darkness of narcissism, Machiavellianism, and psychopathy. *Personality and Individual Differences*, 53(7), 884-889. <https://doi.org/10.1016/j.paid.2012.06.020>
- Reis, H. T., & Sprecher, S. (Eds.). (2009). *Encyclopedia of human relationships*. Sage Publications.
- Satıcı, S. A., Kayış, A. R., Yılmaz, M. F., & Capan, B. E. (2018). Dirty Dozen Scale: a study of adaptation to Turkish university students. *Anatolian Journal of Psychiatry*, 19, 34-40. <https://doi.org/10.5455/apd.288773>
- Sheridan, L. P., & Grant, T. (2007). Is cyberstalking different? *Psychology, Crime & Law*, 13(6), 627-640. <https://doi.org/10.1080/10683160701340528>
- Silva Santos, I. L., Pimentel, C. E., & Mariano, T. E. (2023). Cyberstalking scale: development and relations with gender, FOMO and social media engagement. *Current Psychology*, 42(6), 4802-4810. <https://doi.org/10.1007/s12144-021-01823-3>
- Smith, R. H. (2008). *Envy: Theory and research*. Oxford University Press. <https://psycnet.apa.org/doi/10.1093/acprof:oso/9780195327953.001.0001>
- Smith, R. H., & Kim, S. H. (2007). Comprehending envy. *Psychological Bulletin*, 133(1), 46-64. <https://doi.org/10.1037/0033-2909.133.1.46>
- Stevens, F., Nurse, J. R., & Arief, B. (2021). Cyber stalking, cyber harassment, and adult mental health: A systematic review. *Cyberpsychology, Behavior, and Social Networking*, 24(6), 367-376. <https://doi.org/10.1089/cyber.2020.0253>
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior*, 7(3), 321-326. <https://doi.org/10.1089/1094931041291295>
- Sun, Y., & Zhang, Y. (2021). A review of theories and models applied in studies of social media addiction. *Addictive Behaviors*, 114(2021), 106699. <https://doi.org/10.1016/j.addbeh.2020.106699>
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). *Using multivariate statistics* (Vol. 6, pp. 497-516). Boston, MA: Pearson.
- Tandon, A., Laato, S., Islam, N., & Dhir, A. (2025). Social comparisons at social networking sites: how social Media-induced fear of missing out and envy drive compulsive use. *Internet Research*, 35(2), 691-718. <https://doi.org/10.1108/INTR-10-2022-0770>
- The jamovi project. (2024). *jamovi* (Version 2.3) [Computer software]. <https://www.jamovi.org>
- Vazire, S., & Funder, D. C. (2006). Impulsivity and the self-defeating behavior of narcissists. *Personality and Social Psychology Review*, 10(2), 154-165. [https://doi.org/10.1207/s15327957pspr1002\\_4](https://doi.org/10.1207/s15327957pspr1002_4)
- Vernon, P. A., Villani, V. C., Vickers, L. C., & Harris, J. A. (2008). A behavioral genetic investigation of the Dark Triad and the Big 5. *Personality and Individual Differences*, 44(2), 445-452. <https://doi.org/10.1016/j.paid.2007.09.007>
- Veselka, L., Giammarco, E. A., & Vernon, P. A. (2014). The Dark Triad and the seven deadly sins. *Personality and Individual Differences*, 67, 75-80. <https://doi.org/10.1016/j.paid.2014.01.040>
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3(4), 206-222. <https://doi.org/10.1037/ppm0000047>

Worsley, J. D., Wheatcroft, J. M., Short, E., & Corcoran, R. (2017). Victims' voices: Understanding the emotional impact of cyberstalking and individuals' coping responses. *Sage Open*, 7(2), 2158244017710292.  
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**Conflict of Interest**

All authors declare that they have no conflicts of interest.

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