

Defining Cyberpsychopathy : An Integrative Review

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Abstract

Background: The rapid expansion of digital communication platforms has created new spaces for the expression of antisocial, manipulative, and emotionally detached behaviors. While traditional psychopathy has been well-characterized in clinical and forensic settings, the manifestation of similar traits in digital environments, referred to as cyberpsychopathy, remains conceptually fragmented and underdefined. Although several studies have examined dark personality traits in relation to online aggression, trolling, and social media misuse, an integrative framework for understanding how psychopathic tendencies operate in virtual contexts has yet to be established.

Objective: The aim of this integrative review was to synthesize the existing literature on cyberpsychopathy in order to (1) identify the primary conceptual domains underpinning this construct, (2) assess the methodological quality of included studies, and (3) offer a preliminary, evidence-based definition of cyberpsychopathy that reflects both dispositional traits and digital affordances.

Methods: An integrative search of peer-reviewed literature was conducted using multiple databases to identify empirical studies published that explored psychopathy or dark personality traits in relation to online behaviors. Thirty-five studies met the inclusion criteria and were analyzed using thematic synthesis. The methodological quality of each study was evaluated.

Results: Six core conceptual domains were identified across the literature: (1) online behaviors (e.g., trolling, cyberbullying, deception), (2) online environment (e.g., anonymity, platform design, reward mechanisms), (3) sociodemographic factors (e.g., age, gender, culture), (4) personality traits (e.g., narcissism, Machiavellianism, psychopathy, sadism), (5) psychological factors (e.g., emotion dysregulation, impulsivity, low self-esteem), and (6) motivations (e.g., dominance, validation seeking, emotional compensation). These domains interact dynamically to shape the expression of psychopathic tendencies in online contexts. Most studies were of moderate to high quality, though methodological variability limited direct comparisons across findings. A working definition of cyberpsychopathy was proposed as a multidimensional construct involving the online expression of dark personality traits, shaped by digital affordances, psychological vulnerabilities, and social reinforcement mechanisms.

Conclusions: Cyberpsychopathy represents a complex and context-dependent phenomenon that extends beyond traditional models of psychopathy. This review provides a foundational framework for its study and highlights the need for further empirical research, including the development of validated assessment tools tailored to digital behaviors. Understanding the mechanisms behind cyberpsychopathy is essential for designing effective interventions, informing platform moderation policies, and safeguarding user well-being in increasingly digital societies.

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Original Manuscript

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Keywords: psychiatry; dark personality traits; online aggression; trolling; digital behavior; social media; psychopathy; cyberbullying; emotion dysregulation; digital mental health

Introduction

As digital platforms have become essential to contemporary social, educational, and professional life, there has been a growing awareness of the frequency of mental health problems associated with online conduct [1-3]. The internet's widespread use has revolutionized communication and interaction, providing unmatched convenience but also posing new mental health hazards [4,5]. According to research, excessive or maladaptive online behavior are correlate to and may contribute

to the development or worsening of preexisting mental health problems like anxiety and depression over time [6]. Psychological distress, poor emotional control, and strained interpersonal connections have all been repeatedly associated with behaviors like obsessive internet use, cyberbullying, and problematic social media involvement [7,8]. These difficulties are exacerbated by the anonymity and depersonalization provided by digital contexts, which permit unrestrained and frequently damaging behaviors like trolling, harassment, and deceptions that might not normally take place in face-to-face interactions [9].

Interestingly, some maladaptive personality traits, such as impulsiveness, anger, and a lack of empathy, all of which are characteristics of psychopathy and part of the Hare Framework, seem to be amplified in the online environment [10]. When exhibited on digital platforms, these characteristics show up as enduring antisocial tendencies such as taking advantage of other people, acting maliciously, and exhibiting a flagrant disrespect for social norms, all of which add to what scholars have referred to heterogeneously as violence in cyber space or “cyberpsychopathy” [11]. This new concept aims to depict the distinct ways that psychopathic tendencies manifest and intensify in virtual environments. For example, cyberpsychopathy may include actions like planning phishing scams, disseminating false information, or using social engineering tactics to take advantage of people for one's own benefit, all while avoiding accountability and detection by remaining anonymous online [12]. These parameters, grouped together, highlight the significant effects of online conduct on mental health and the general well-being of society.

It is important to understand the complex interactions between personality traits and online settings, especially in light of our growing reliance on digital platforms for everyday tasks [13,14]. In addition to providing insights into the psychological bases of harmful online behaviors, research into cyberpsychopathy lays the groundwork for the creation of focused interventions that lessen their consequences. Research is also needed to promote healthier, more moral online communities, and to address the psychological hazards connected to digital interactions [15-17].

Furthermore, in the digital age, cyber violence, which includes a variety of damaging practices like doxing, cyberstalking, cyberbullying, and online harassment, has become a major social issue [18,19]. Forensic psychiatry is essential in tackling the various components of cyberviolence and comorbid psychiatric disorders, especially when it comes to understanding the psychological characteristics of offenders and evaluating the effects on victims [20]. The Dark Tetrad of personality (Machiavellianism, sadism, psychopathy, and narcissism) is frequently displayed by perpetrators of cyberviolence, which raises concerns about their motivations and recidivism risk factors [21,22]. Forensic psychiatrists also play a significant role in assessing the mental health effects of prolonged online attacks on victims, who often suffer from anxiety, depression, trauma, and social disengagement.[23]. Additionally, forensic psychiatrists support legal proceedings by offering expert testimony on the psychological foundations of cyberviolence, and by assessing intent and responsibility [24]. The integration of forensic psychiatry into legal, preventive, and rehabilitative frameworks is needed to help reduce the impact of cyber violence on people and society as it continues to change in line with technology improvements. Considering the rise in cyber violence, offering a precise definition of cyberpsychopathy could guide forensic psychiatrists in assessing the psychological motivations of offenders and their capacity for rehabilitation.

The main objective of this integrative review is to identify key concepts of cyberpsychopathy. Using these concepts, the secondary goal is to offer a preliminary definition of cyberpsychopathy. We hypothesize that cyberpsychopathy is defined by the emergence of psychopathic characteristics in online settings, including impulsiveness, lack of empathy, manipulativeness, and antisocial behavior. This phenomenon is made possible by digital anonymity and the disinhibition effect of virtual

interactions. This study intends to outline the precise psychological, behavioral, and environmental components that characterize cyberpsychopathy by identifying essential themes through the review of the existing literature.

Methods

Search

strategies

To conduct a thorough review of cyberpsychopathy, the PRISMA for Scoping Reviews (PRISMA-Sr) technique was used. Additionally, the technique adhered to the integrative review methodology created by de Souza and colleagues [25]. The formulation of the research topic, literature search, data collecting, critical analysis of the found articles, results discussion, and presenting of the integrative perspective of the found articles are the six steps in this methodology [25]. A librarian with expertise in mental health assisted in the search strategy. Articles published from the databases' founding until December 2024 were retrieved by searching Medline, Embase, Web of Science, PsycNet (PsycINFO), and Google Scholar. Search terms were used to encompass relevant concepts such as: cyber, internet, digital, psychopathy, online and narcissism. All the authors conducted the literature search. Multimedia Appendix 1 has comprehensive search strategies, and Multimedia Appendix 2 additionally includes the PRISMA-Sr checklist.

Study eligibility

If the examined papers satisfied the following inclusion requirements, they were added to the analysis: (1) the main topic of the study was on violent behavior in cyber space (internet or digital application); (2) the study was conducted in the field of psychiatry, psychology or social sciences; (3) one or more concepts about violence in the cyber space is associated with another concept; and (4) French or English was the main language used in the identified manuscript. The analysis did not include case studies, protocols, pre-experimental research, or unpublished works.

Data extraction

A Microsoft Excel form was used to extract the data. Data extracted by the authors were independently reviewed for integrity and consistency. The authors worked together to settle any disputes on which studies should be included or excluded. Authors, population samples, main concepts, associations between concepts, and main outcomes were retrieved.

Data analysis

Considering this study attempted to define the entity known as cyberpsychopathy, the biopsychosocial model was followed to classify the different concepts identified during the analysis of the studies [26]. The frequency of each concept as well as the reported associations between the concepts were used to establish the major concepts and sub-concepts encompassed in the definition of cyberpsychopathy.

The biopsychosocial model is a thorough framework for comprehending health and illness as the

results of the complex interactions between biological, psychological, and social elements is the bio-psycho-social model [27]. The field of psychiatry, including forensic psychiatry, makes extensive use of it.

Genetic predispositions, neurological functions, physiological reactions, and general physical health are examples of biological influences in this model. For instance, mental and physical disorders might be influenced by hormone imbalances and genetics [28]. Psychological elements include personality traits, emotions, coping strategies, and cognitive processes. Individual well-being is greatly influenced by mental health issues, cognitive processes, and stress reactions [29]. Finally, the social factors encompass social structures, relationships, cultural norms, socioeconomic status, and environmental impacts [29]. All these elements are pertinent when defining the components of psychiatric illnesses and were used to shape the conceptual framework of cyberpsychopathy.

Quality assessment

Two well-known instruments were used to evaluate the quality of the studies that were part of this analysis: the Cochrane Risk of Bias Tool for randomized controlled trials and the Newcastle-Ottawa Scale for nonrandomized controlled studies [30,31].

The Cochrane Risk of Bias Tool was used to comprehensively evaluate potential biases in randomized controlled trials. Random sequence creation, allocation concealment, blinding of participants and staff, blinding of outcome assessments, completeness of outcome data, selective reporting, and other possible sources of bias are the seven domains that are examined by this technique [30]. According to predetermined criteria, each domain is classified as having a low, high, or uncertain risk of bias. In order to assess the quality of cohort and case-control studies, the Newcastle-Ottawa Scale looks at three important areas: research group selection, group comparability, and exposure or outcome determination. Studies receive stars for fulfilling the requirements for each domain; the best quality is represented by a maximum score of nine stars [31].

The studies in this review were divided into three quality categories: low quality studies were those with 1-3 stars on the Newcastle-Ottawa Scale or that were rated as having a high risk of bias using the Cochrane tool; moderate quality studies were those with 4-6 stars or a moderate risk of bias; high-quality studies were those with 7-9 stars on the Newcastle-Ottawa Scale or a low risk of bias.

Results

Description of studies

A total of 2,064 records were retrieved through the initial search. After removing 352 duplicate entries, 1,712 unique studies remained. Following title and abstract screening, 1,307 articles were excluded due to a lack of relevance. Among the remaining studies assessed in full, 32 were excluded for not addressing the appropriate topic, 117 were found to fall outside the fields of psychiatry, psychology, or social sciences, and 221 did not establish a clear link between a concept of cyber-related violence and another relevant construct. After a thorough study of the articles chosen for eligibility evaluation, a total of 35 articles were kept in full. Figure 1 provides specifics of the article selection procedure, and Multimedia Appendix 3 lists the papers that were found as well as their quality assessment.

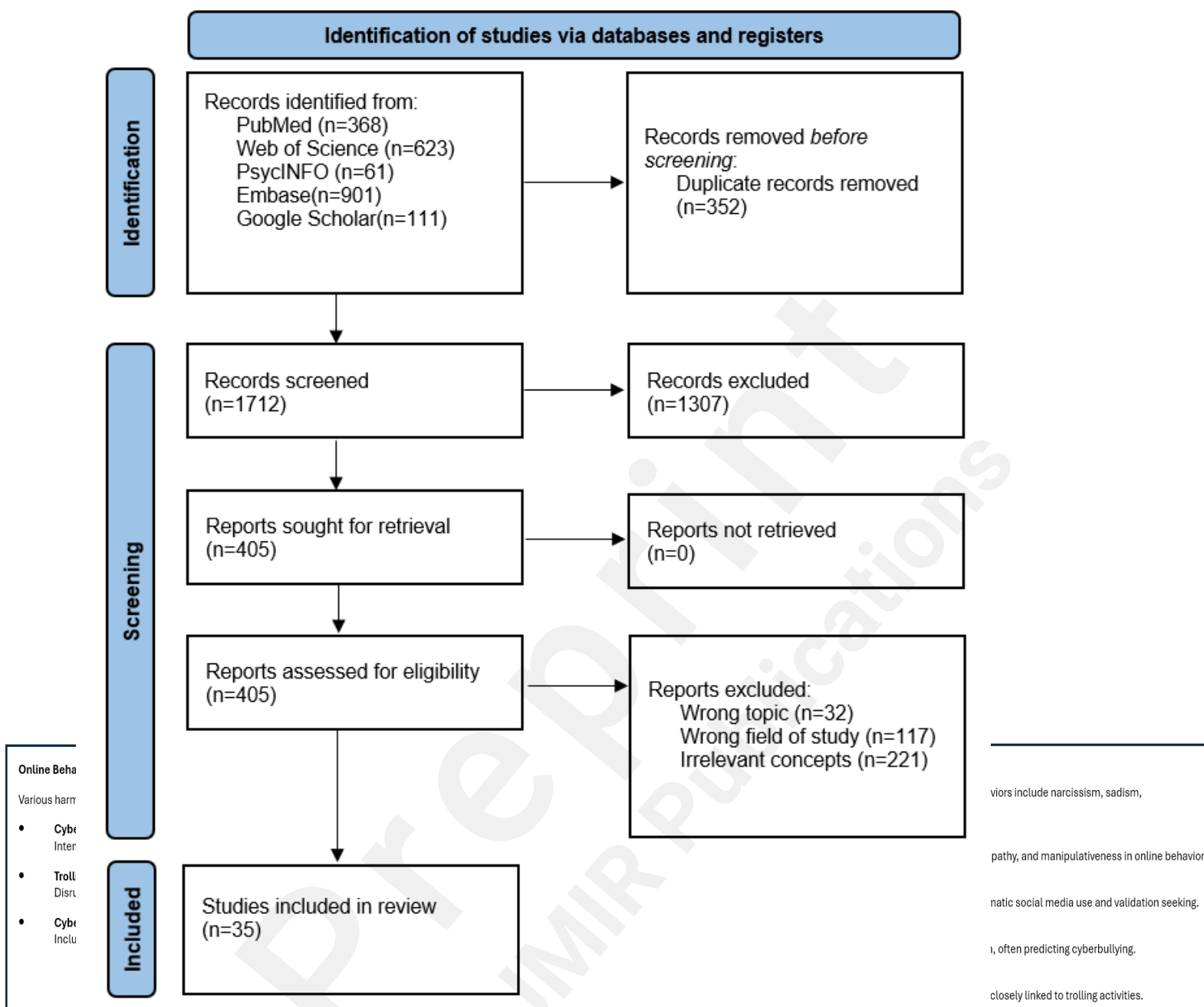


Figure 1. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)

flowchart for the inclusion of studies.

Main concepts

From the analysis of the 35 identified studies, six central concepts were identified as core to define cyberpsychopathy: online behaviors (n = 15), online environment (n = 11), sociodemographic factors (n = 7), personality traits (n = 24), psychological factors (n = 12), and motivations (n = 3). These domains were derived to capture the multifaceted nature of cyberpsychopathy as a phenomenon situated at the intersection of personality, digital affordances, social context, and internal psychological states. This framework provides a comprehensive lens through which the expression and development of psychopathic traits in online environments can be systematically examined. A conceptual framework for Cyberpsychopathy is presented in Figure 2.

Online Environment

The digital landscape impacts individual behaviors and facilitates cyberpsychopathy.

- **Anonymity**
Reduces social repercussions, allowing antisocial behaviors to thrive online.
- **Social Platforms**
Platforms play a significant role in fostering narcissistic and addictive behaviors.
- **Dating Apps**
Facilitate connections and interactions, often leading to cyberpsychopathic behaviors.

Sociodemographic Factors

Age, gender, and cultural norms contribute to cyberpsychopathic behaviors.

- **Gender Differences**
Males often engage more in trolling, while females may experience higher addiction.
- **Age Differences**
Younger individuals tend to be more engaged in cyberbullying behaviors.
- **Cultural Norms**
Cultural norms influence the relationship between personality traits and online behaviors.

Cyberpsychopathy

Understanding psychopathic

Psychological Factors

Understanding the psychological influences that contribute to these behaviors.

- **Impulsivity**
Functional impulsivity can lead to quick decision-making, potentially harmful online.
- **Struggles in managing emotions**
Struggles in managing emotions often lead to problematic internet behavior.
- **Self-Esteem**
Low self-esteem often leads to seeking validation through social media.

Motivations

Understanding what drives individuals to exhibit cyberpsychopathic behaviors online.

- **Self-Promotion**
Narcissists use social media to enhance their self-image and gain validation.
- **Validation Seeking**
Individuals search for positive feedback to bolster their self-esteem.
- **[unpublished, non-peer-reviewed preprint]**
The pleasure derived from causing harm motivates trolling behaviors significantly.

Figure 2. Conceptual framework for Cyberpsychopathy.

Online behaviors

A significant portion of the literature explores the link between antisocial or maladaptive online behaviors and psychological or personality traits. Several studies focus on cyberbullying and online trolling as key behavioral outcomes. Brown et al., studying 1,464 social media users (mean age=22.48), found that narcissism significantly predicted cyberbullying behaviors, alongside other dark traits [32]. Similarly, Buckels et al., using a U.S. adult sample (n = 345), reported that online trolling was strongly associated with sadistic traits, arguing that sadists find intrinsic pleasure in online cruelty [33]. Smith et al. also developed one of the foundational cyberbullying assessment tools, enabling researchers to quantify online aggression consistently across studies [34]. Maftai et al. explored cyber-ostracism and found that adolescents with higher levels of narcissism and emotional instability were more reactive to online exclusion [35].

Social media use is another central behavior. Andreassen and team analyzed a massive sample (n = 23,532) and found that addictive social media use correlated strongly with narcissism ($\beta = 0.35$, $p < .001$) and low self-esteem ($\beta = -0.29$, $p < .001$) [36]. Similarly, Brailovskaia et al., in a sample of Facebook users (n = 327), showed that both vulnerable and grandiose narcissism were significant predictors of Facebook addiction (β s ranging from 0.24 to 0.38, $p < .001$) [37]. Kircaburun et al. demonstrated that Instagram addiction is associated with both narcissistic traits and low self-control,

reinforcing the role of personality and impulsivity in shaping online behavioral addictions [38]. Online sexual behaviors also emerged in Ciocca et al., where sociosexuality ($\beta = 0.41$) was the strongest predictor of casual sex via Tinder[39].

Galica et al., who examined how problematic Internet use is associated with interpersonal difficulties, interestingly suggested that individuals may engage in maladaptive online behaviors to cope with offline relational stress. [40]. Giumetti et al. found that workplace cyberbullying behaviors were linked to displaced aggression and low agreeableness, extending the concept of online deviance to professional environments [41]. Moreover, the Kuss et al. study on online gaming addiction identified patterns of excessive use linked to poor psychological well-being and escapism motives [42].

These studies illustrate how online behaviors, ranging from social media addiction to trolling and dating app use, serve as observable outcomes of deeper psychological and personality-based mechanisms.

Online environment

The online environment plays an important role in shaping psychological tendencies and behavioral outcomes, particularly in individuals with vulnerable or antisocial personality traits. Across several studies, it is suggested that the structure of the digital world can lead to traits like impulsivity, narcissism, and disinhibition.

Aboujaoude et al. propose that the Internet can contribute to a broad psychological shift by amplifying maladaptive traits, particularly impulsivity and narcissism [43]. In their review of the literature, they report a large-scale study ($n=12,521$) that compared Internet users and non-users and suggested that the immediacy, anonymity, and reward structures of digital platforms reinforce narcissistic behaviors and reduce empathy. Though specific effect sizes are not provided, the study's extensive sample size across multiple populations (e.g., gamblers, general users) lends robust support to the hypothesis that the Internet is not a neutral tool but a transformative psychological space.

Kasper et al. explored how the online environment interacts with pornographic content consumption and narcissistic traits [44]. In a sample of 257 adults (mean age = 29), they found that individuals high in narcissism were significantly more likely to consume Internet pornography and reported greater sexual permissiveness. The study reported that those who had ever watched Internet pornography had higher narcissism scores than those who had never done so (exact statistical values not provided in the grid) [44]. The findings support the idea that online sexual content may serve as a behavioral reinforcement loop for narcissistic individuals, facilitated by the anonymity and accessibility of digital content.

Leite et al., using a sample of 773 adults (aged 19–78), analyzed the interaction between dark personality traits (particularly Machiavellianism) and problematic Internet use, including behaviors like cyberstalking and doxing [45]. They found that online disinhibition significantly increased the relationship between dark traits and cyberstalking behaviors, especially in female participants. Specifically, being female was positively associated with cyberstalking, and online disinhibition enhanced this effect among individuals scoring high on Machiavellianism. These findings highlight how the structure of the online environment (e.g., enabling disinhibition, secrecy, and access to personal data) facilitates the enactment of manipulative or controlling behaviors.

Sociodemographic factors

Sociodemographic variables, particularly gender, age, and education level, are crucial in understanding how individuals engage in various forms of online behavior and how these behaviors interact with personality traits.

Kristindottir et al., studying a sample of 334 adults (66.7% male), found that all three types of narcissism (agentic, communal, and vulnerable) were positively associated with social media use, with communal narcissism showing a slightly stronger correlation [46]. While effect sizes were not explicitly stated, the study suggests that the male gender was overrepresented in higher narcissism scores, particularly for agentic narcissism, indicating gender-based expression of narcissistic traits online.

March et al. conducted a study on 400 participants (67.5% women) to examine the role of gender and personality traits in predicting trolling [47]. The authors found a significant positive relationship between the male gender, high sadism and psychopathy, and trolling behavior. Also, in the context of online moral behavior, Muir et al. analyzed data from 411 participants, including diverse gender identities [48]. They found that moral disengagement, emotional reactivity, and moral grandstanding predicted online shaming behaviors. Together, these variables explained 23% of the variance in online shaming behavior ($R^2 = 0.23$), suggesting that socio-cognitive traits interact with digital behaviors in a gender-diverse sample. Lui et al. found that younger males were more likely to engage in anonymous antisocial online acts, suggesting gender and age as moderators of digital disinhibition [49].

Saulnier et al. focused on adolescents and young adults ($n = 392$), revealing that moral identity and moral disengagement vary with online engagement, especially in family and peer contexts [50]. Though specific age-related trends were not detailed, the age distribution (mean age = 19.8 years) supports the idea that younger users are particularly vulnerable to shifts in moral self-concept when online.

Volkmer et al., in a large sample of 1,026 German university students (mean age = 23.8), found that not all Dark Tetrad traits were equally associated with trolling behavior, and that gender moderated some of these associations, with men scoring higher on psychopathy and sadism [51]. This emphasizes that sociodemographic profiles interact with personality in shaping digital deviance.

Overall, these studies reveal that gender (often male), young age, and in some cases lower education levels, are consistently linked to higher engagement in antisocial or morally questionable online behavior. These factors often moderate the expression of personality traits and psychological vulnerabilities in digital environments.

Personality traits

The vast majority of the identified studies explore the role of personality traits, particularly the Dark Triad/Tetrad (narcissism, Machiavellianism, psychopathy, and sadism), in predicting maladaptive online behaviors and tendencies. These traits often serve as core explanatory variables for phenomena such as trolling, cyberbullying, problematic social media use, and online aggression.

Narcissism is the most frequently studied trait. Meta-analytic evidence from Gnambs et al., which reviewed 57 studies, confirms a small to moderate positive association between narcissism and social networking behavior, particularly with agentic and grandiose narcissism [52]. Andreassen et al., in a large-scale Norwegian sample ($n = 23,532$), reported a strong correlation between narcissism and

addictive social media use ($\beta = 0.35$, $p < .001$) [36]. Brailovskaia et al. similarly found that vulnerable and grandiose narcissism significantly predicted Facebook addiction (β s ranging from 0.24 to 0.38) [37]. These results suggest that individuals with narcissistic traits use social media to regulate self-esteem and seek admiration.

Other traits of the Dark Tetrad also play important roles. Brown and colleagues showed that all four traits (narcissism, Machiavellianism, psychopathy, sadism) predicted cyberbullying among 1,464 social media users [32]. Buckels et al. found that sadism was the strongest predictor of online trolling, emphasizing the unique role of this trait in promoting cruel online behaviors [33]. Lyon's study highlighted the interplay between social dominance orientation and digital aggression, providing a sociopolitical angle on personality-driven behaviors online [53]. Volkmer and March further confirmed these associations, noting that male gender and higher sadism/psychopathy scores are significantly related to trolling tendencies [47,51]. Heyman et al. found that higher levels of callous-unemotional traits were predictive of online manipulation and catfishing behaviors in emerging adults [54].

Ciocca and team extended the literature to dating app usage, demonstrating that sociosexuality ($\beta = 0.41$), linked with narcissistic traits, was the main predictor of casual sex via Tinder [39]. Also, Leite et al. found that online disinhibition mediated the relationship between Machiavellianism and cyberstalking, with women particularly affected [45].

Traits related to self-regulation and emotional instability are also highlighted in Bui et al. showed that borderline personality disorder traits and insecure attachment styles predicted higher susceptibility to online victimization and aggression [55]. Rogier et al. revealed that pathological narcissism, especially the grandiose type narcissism, was significantly associated with social media addiction [56]. Also, Shokkenbroek et al., working with over 1,100 Belgian adults, highlighted the moderating role of self-control in the link between dark traits and online behavior [57].

Finally, studies such as Liu et al., Lee et al., and Park et al. linked narcissism with selfie posting, privacy disregard, and functional impulsivity, revealing how narcissistic and impulsive traits manifest in subtle online self-presentation and risk-taking behaviors [58-60].

These findings strongly support the notion that personality traits (especially the Dark Triad/Tetrad and emotional dysregulation patterns) are constructs in understanding problematic and antisocial online behavior. They not only predict direct behaviors like trolling or addiction, but also explain more nuanced forms of online expression, from narcissistic status updates to manipulative interactions in dating apps.

Psychological factors

Psychological factors such as self-esteem, emotional dysregulation, and oversensitivity are frequently implicated in problematic online behaviors, either as precursors to or consequences of these behaviors. While often interwoven with personality traits, these dimensions reflect broader affective and cognitive vulnerabilities that manifest in digital contexts.

Self-esteem is one of the most consistently studied variables. Andreassen et al., found that low self-esteem was significantly associated with addictive social media use ($\beta = -0.29$, $p < .001$), suggesting that individuals may use online platforms to regulate fragile self-concepts [36]. This is reinforced by Brailovskaia et al., who demonstrated that both vulnerable and grandiose narcissism predicted Facebook addiction again, pointing to self-esteem regulation as a core mechanism [37]. Similarly,

Hussein et al. reported that self-esteem was negatively associated with problematic social networking use, further emphasizing its protective role [61].

Emotional vulnerability also appears as a relevant factor. Buckels et al. and Marrington et al. both examined emotional dysregulation and its association with trolling [33,62]. In adolescents, Marrington et al. found that low empathy and high emotional reactivity were significantly related to engagement in trolling. They highlighted that trolling is closely tied to sadism, a trait often associated with poor emotion regulation [62]. Fegan et al., working with a smaller sample (n=115), explored the role of oversensitivity and attachment style in social media overuse and proposed that oversensitivity (to criticism or exclusion) contributes to compulsive digital behavior [63].

March et al. also integrates psychological traits into a broader model, noting that low self-esteem and high sadism/psychopathy were significant predictors of online trolling [47]. Their findings support a model in which vulnerable self-concept and emotional coldness may interact, leading to digital aggression.

In the adolescent context, Resett et al. reported that emotional dysregulation was significantly associated with both traditional and cyberbullying among high school students (n = 898), with a notable portion of the sample engaging in cyberbullying exclusively (7.6%) [64]. Soares et al. showed that perpetrators of antisocial online behaviors (e.g., harassment, bullying) often display a triad of risk factors: affective instability, low self-esteem, and lack of social connectedness [65].

Motivations

Although relatively underrepresented in the dataset, studies examining motivations behind online behaviors reveal important insights into the underlying drivers of cyber-aggression, harassment, and other antisocial digital conduct. These motivations often operate alongside personality traits and psychological factors, shaping how and why individuals choose to behave aggressively online.

Nocera et al. studying 317 college students, examined intentional harm via electronic means, or cyber-aggression, and how it relates to both personality and motivational variables. They found that each of the Dark Triad traits (narcissism, Machiavellianism, and psychopathy) positively correlated with cyber-aggressive behaviors, but crucially, the effect was mediated by motivational factors, such as the desire to exert control or retaliate [66]. Although precise coefficients are not reported in the grid, the study emphasized that individuals with higher dark traits were more likely to report "getting back at someone" or "making someone feel bad" as primary reasons for their behavior. This points to motivations that are not purely impulsive or reactive but are goal-directed and instrumental, fitting with the manipulative and strategic nature of dark personalities.

Soares et al. also investigated the motivational underpinnings of antisocial online behavior in a Canadian university sample (n = 359) [65]. They identified a triad of associated factors in perpetrators of online harassment and bullying: appetitive motives (e.g., deriving pleasure from causing harm), moral disengagement, and low empathy. The presence of appetitive motives indicates that for some individuals, the behavior is intrinsically rewarding, providing excitement, entertainment, or a sense of dominance.

Definition of cyberpsychopathy

Combining the results, cyberpsychopathy is a multifaceted concept that describes how antisocial

behaviors and psychopathic inclinations appear in digital settings. It includes a variety of online actions that demonstrate a lack of empathy, manipulateness, impulsivity, and a disrespect for social standards, including cyberbullying, trolling, deceit, and cyberaggression. These behaviors are specifically shaped and enabled by the online environment, where characteristics such as anonymity, continuous accessibility, and algorithm-driven social reinforcement increase disinhibited behavior and decrease accountability.

Sociodemographic variables such as age, gender, and cultural background affect the manifestation of cyberpsychopathy by varying the frequency, type, and severity of these behaviors. Fundamentally, cyberpsychopathy stems from persistent psychological qualities that make people more likely to take advantage of others for their own selfish or malevolent purposes in digital settings, particularly those of the Dark Tetrad (psychopathy, narcissism, Machiavellianism, and sadism).

Psychological traits like impulsivity, mood dysregulation, and low self-esteem, in addition to dispositional factors, are important in the initiation and maintenance of cyberpsychopathic activities. Certain incentives, such as the need for approval, social dominance, emotional fulfillment, and identity improvement, further promote these actions.

Cyberpsychopathy, as a concept, offers a framework for comprehending how antisocial personality traits combine with the technological advantages of the digital world to produce a new, widespread, and socially significant type of psychological pathology.

Discussion

Principal Results

This integrative review sought to identify the principal concepts that define the phenomenon of cyberpsychopathy and to offer an initial operational definition based on these findings. A total of 35 studies met inclusion criteria and were analyzed in depth using a biopsychosocial framework. From this analysis, six central conceptual domains emerged: online behaviors ($n = 15$), online environment ($n = 11$), sociodemographic factors ($n = 7$), personality traits ($n = 24$), psychological factors ($n = 12$), and motivations ($n = 3$). These domains collectively capture the dispositional, contextual, and psychological underpinnings of cyberpsychopathic conduct. Most studies were of moderate to high quality based on established critical appraisal tools.

Comparison with Prior Work

Previous reviews exploring online antisocial behavior have often focused on specific behaviors, such as cyberbullying or trolling, without embedding these within a broader personality framework. For instance, studies by Buckels et al. [33] and Brown et al. [32] clearly demonstrated that sadism and psychopathy are core predictors of trolling and cyberbullying, respectively. However, these works were not framed within a unified conceptual model like cyberpsychopathy. Meta-analyses by Kowalski et al. and more recently Basharpour et al. emphasized emotional empathy and the Dark Triad as correlates of cyberbullying, but they did not systematically integrate motivational, environmental, or demographic moderators of these behaviors [67,68]. In contrast, our review expands this field by showing how multiple domains (including online affordances, self-regulation, and user motivations) converge to express what we propose as cyberpsychopathy, thus offering a novel biopsychosocial conceptualization.

Furthermore, while existing reviews like Gioia et al. have highlighted emotional dysregulation as a

contributing factor in problematic internet use, they did not link such psychological vulnerabilities directly to antisocial online behavior [69]. Our findings show that traits such as impulsivity and low self-esteem not only increase the risk of problematic use but are also closely tied to manipulative and aggressive behaviors online, especially when combined with narcissistic and Machiavellian tendencies. This is consistent with findings from Schade et al., who used structural equation modelling to link dark personality traits to cyberbullying through empathy and emotional intelligence deficits [70]. However, our review extends this line of inquiry by showing that these relationships are mediated by the architecture of online environments, such as anonymity and disinhibition, reinforcing the need to consider contextual affordances.

In contrast to earlier studies that often used a narrow demographic (e.g., adolescents or college students), our review highlights the importance of sociodemographic variability in cyberpsychopathy. For instance, Kristindottir et al. [46] and Volkmer et al. [51] identified gender-based differences in narcissism and trolling, findings echoed in broader research such as Pineda et al., which demonstrated how the Dark Tetrad traits are differentially expressed in cyber intimate partner violence across genders [71]. The intersectionality of age, gender, and personality traits in digital behavior has not been systematically addressed in previous literature, making our inclusion of sociodemographic dimensions a critical advancement. This richer demographic contextualization is essential for developing personalized preventive strategies and targeted interventions.

Lastly, while previous theoretical contributions, such as Suler's model of the online disinhibition effect, offered foundational insights into the psychology of digital behavior, these models lacked empirical validation within clinical or forensic frameworks [72]. This integrative review does not only revisit these early theories but substantiates them with contemporary empirical studies that incorporate psychological and motivational variables. The inclusion of motivation, as seen in Soares et al. [65] and Nocera et al. [66], aligns with recent calls from authors like Basharpour et al. to move beyond trait-based explanations and incorporate functional motives such as dominance and pleasure-seeking into predictive models of cyber-aggression [67]. This positions cyberpsychopathy as not merely a digital extension of traditional psychopathy but as a novel construct requiring its own diagnostic and intervention models grounded in interdisciplinary evidence.

Limitations

A number of limitations should be noted. First, only peer-reviewed empirical studies published in English and French were included in the review; this may have left out pertinent studies published in other languages or formats, including conference proceedings or gray literature. Second, it was difficult to directly compare and evaluate consistently the quality of the included studies due to their diverse methodology, which ranged from cross-sectional surveys to theoretical and neuroimaging research. Finally, the evolving nature of online platforms and user behavior means that some findings may become outdated as digital technologies, and social norms continue to change. Future longitudinal and experimental studies are needed to validate and extend the proposed conceptual framework across diverse populations and digital contexts.

Conclusions

In order to define and explain the newly emerging concept of cyberpsychopathy, this integrative review synthesized recent empirical data. Six interconnected conceptual domains (online behaviors, online environment, sociodemographic factors, personality traits, psychological factors, and motivations) were found through the analysis of 35 studies. Each of these domains has a distinct role

in the expression of psychopathic tendencies in digital spaces. Collectively, these results suggest that cyberpsychopathy is a complex phenomenon influenced by the interaction of personal characteristics with the structural and social dynamics of digital settings, rather than just being an online manifestation of traditional psychopathy. The suggested framework and definition provide a starting point for formalizing this concept. By creating and testing standardized instruments to evaluate cyberpsychopathy, investigating its practical ramifications, and creating focused interventions to lessen harm in online settings, future research is needed to expand on these findings.

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Authors' Contributions

AH and VM were involved in conceptualization. Data curation was done by all the authors. Formal analysis was done by AH and VM. AH was involved in funding acquisition. Investigation was done by AH. AH and VMD contributed to methodology. Project administration was done by AH. AH contributed to resources. Supervision was done by AH. Validation was done by AH and VM. All the authors were involved in writing, original draft and writing, and review and editing.

Conflicts of Interest

None declared.

Abbreviations

PRISMA-Sr: Preferred Reporting Items for Systematic Reviews – Scoping Reviews

Multimedia Appendix 1

Electronic search strategy for the scoping review conducted.

Multimedia Appendix 2

PRISMA for scoping reviews checklist.

Multimedia Appendix 3

Integrative review study selection detailed results.

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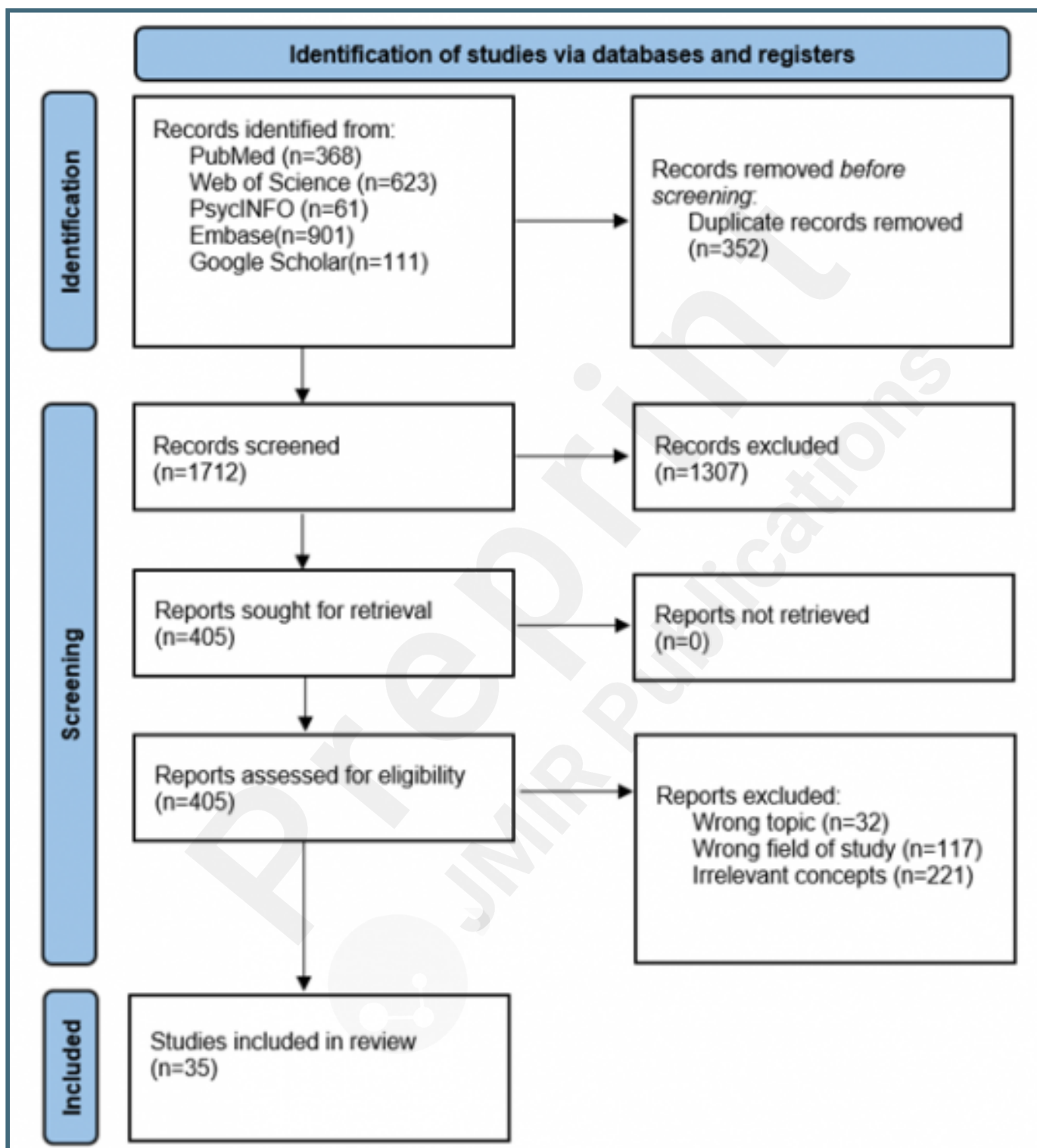
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Supplementary Files

Figures

PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flowchart for the inclusion of studies.



Conceptual framework for Cyberpsychopathy.



Multimedia Appendixes

Electronic search strategy for the scoping review conducted.

URL: <http://asset.jmir.pub/assets/2b422638de8b0f8f57392ddf0f199b55.docx>

PRISMA for scoping reviews checklist.

URL: <http://asset.jmir.pub/assets/bdcae919f1e789b5559816d72cec1116.docx>

Integrative review study selection detailed results.

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