



Dark Triad Personality Traits and Social Media Engagement: Implications for Audience Profiling in Digital Journalism

¹Mr. Tarun Panda

Founder, Ex3 Set Go | Behavioral Psychologist | Habit Development Coach | Management Consultant | Consumer Psychology Researcher

²Dr. Sundeep Katevarapu

Founder and Chief Managing Director at We Avec U® Mental Health Organization, Founder at WeAvecU@ Pvt Ltd, Founder President at We Avec UR Trust, Founder Director at We Avec U Organization LLC (USA), Director, We Avec U Limited (UK)

³Aarzo

Research and Journal Manager, We Avec U Centre for Research & Innovations

Abstract

The Dark Triad of personality—comprising narcissism, Machiavellianism, and psychopathy—has emerged as a critical explanatory framework for understanding disruptive, antisocial, and disinformation-related behavior in digital media environments. This paper provides a comprehensive psychometric investigation of Dark Triad trait–social media engagement relationships, synthesizing evidence from 45+ empirical studies and examining the implications for digital journalism, audience profiling, and media ethics. Drawing on Uses and Gratifications Theory, Goffman's (1959) self-presentation framework, and Crockett's (2017) moral outrage analysis, the paper demonstrates that narcissism predicts self-promotional content creation, status signaling, and compulsive self-disclosure; psychopathy predicts online trolling, cyberbullying, and disinformation spreading; and Machiavellianism predicts strategic identity manipulation and information weaponization. The Short Dark Triad (SD3; Jones & Paulhus, 2014) and Dirty Dozen (Jonason & Webster, 2010) are evaluated as primary measurement instruments. Emerging evidence

links Dark Triad traits to Fear of Missing Out (FOMO) as a mediating variable for problematic social media use, while emotion dysregulation moderates psychopathy's effects on compulsive platform behavior. The paper advances a Dark Triad Audience Risk Matrix for digital journalism, identifying platform-specific risk profiles associated with different Dark Triad configurations, and proposes ethical guidelines for incorporating dark personality profiling in audience analytics. Critical gaps in the literature include insufficient research on disinformation spreading specifically, absence of longitudinal designs, and lack of cross-cultural validation of Dark Triad measures. The paper contributes a theoretically grounded, practically applicable framework for understanding the psychological architecture of disruptive digital media audiences.

Keywords: Dark Triad; narcissism; psychopathy; Machiavellianism; social media; trolling; audience profiling; digital journalism ethics

1. Introduction

The growth of participatory digital media has created not only vast new opportunities for civic engagement and information democratization, but also new vectors for manipulation, harassment, and disinformation. While structural analyses of platform design and algorithmic amplification explain part of this phenomenon, dispositional psychology offers a complementary lens: some individuals are systematically more likely than others to weaponize digital media environments for social manipulation, attention extraction, or deception. The Dark Triad framework captures precisely this dispositional constellation.

The Dark Triad—comprising subclinical narcissism (grandiosity, entitlement, exhibitionism), Machiavellianism (strategic manipulation, cynical worldview, long-term instrumental planning), and psychopathy (callousness, impulsivity, sensation-seeking, interpersonal dominance)—was formalized by Paulhus and Williams (2002) as three distinct but inter-correlated personality traits sharing a core of social exploitativeness. Unlike clinical personality disorders, Dark Triad traits fall on a normal distribution across the general population, meaning they predict gradations of exploitative behavior rather than categorically pathological conduct. This subclinical framing makes Dark Triad research directly applicable to understanding ordinary but disproportionately harmful media behaviors.

The applied stakes of Dark Triad media research are significant for digital journalism specifically. Digital journalists operate in an information environment where high-Dark Triad individuals may constitute a small but disproportionately influential minority of commenters, sharers, and content creators. The "Trolls Just Want to Have Fun" findings (Buckels et al., 2014) established that trolling behavior—one of the most disruptive elements of digital news comment sections—is systematically predicted by Dark Triad traits, particularly sadism and psychopathy. Understanding the personality architecture of these disruptive audiences has practical implications for comment moderation, news credibility management, and platform design.

This paper serves three objectives. First, it synthesizes the empirical evidence base for Dark Triad–social media relationships, integrating findings from experimental, survey, and behavioral analysis approaches (Aarzo & Lal, 2024). Second, it develops a Dark Triad Audience Risk Matrix for digital journalism, mapping trait profiles to specific platform risk behaviors. Third, it critically evaluates ethical implications of dark personality profiling in media audience analytics and proposes a framework for responsible application.

2. Literature Review

The Dark Triad's relationship with digital media behavior has been investigated across multiple behavioral domains since Buckels et al.'s (2014) foundational study. Narcissism's relationship with social media has received the greatest empirical attention, driven by intuitive alignment between the narcissistic core (grandiosity, self-admiration, need for validation) and social media's affordances for self-broadcasting, self-promotion, and follower accumulation.

The foundational Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) and Facebook studies established that narcissism predicts greater Facebook use, higher self-promotional post frequency, greater profile photo attention, and more responses to comments from strangers (Mehdizadeh, 2010; Buffardi & Campbell, 2008). Carpenter (2012) demonstrated narcissism's specific prediction of exhibitionistic Facebook behavior including status updates, photo posting, and profile construction for self-promotional purposes—while finding that narcissism predicted angry reactions to negative feedback on public posts, revealing the contingent self-esteem dynamics underlying social media use.

Psychopathy's digital media profile is darker and more disruptive. Buckels, Trapnell, and Paulhus (2014) administered the trolling behavior scale alongside Dark Triad measures to online participants and found that everyday sadism was the most robust predictor of trolling

enjoyment and frequency. Critically, narcissism was not significantly associated with trolling—suggesting the interpersonal exploitativeness driving trolling is qualitatively different from the self-promotional drive of narcissistic behavior. Kircaburun et al. (2022, N = 323) extended these findings, demonstrating that psychopathy and sadism predicted both cyberbullying and cybertrolling behavior, while narcissism predicted cyberbullying but not trolling—confirming the construct-specific behavioral prediction pattern.

Machiavellianism's digital media signature involves strategic information manipulation rather than impulsive antisocial behavior. Bhagat, Kim, and Parrish (2020) found Machiavellianism predicted disinformation sharing on social media through self-regulatory processes, suggesting that Machiavellian individuals strategically calculate the social costs and benefits of sharing false information (Aarzo & Lal, 2025a). This distinguishes Machiavellian from psychopathic disinformation spreading—Machiavellian actors are calculating instrumentalists, while psychopathic actors may spread misinformation impulsively or for excitement.

Tang, Reer, and Quandt (2022, N = 1,865) provided the most comprehensive investigation of Dark Triad–social media disorder relationships, finding differential trait pathways: narcissism operated through entertainment motives; psychopathy (Aarzo & Lal, 2026) operated through status and disinhibition pathways; Machiavellianism operated through relationship maintenance (in an instrumentally manipulative rather than genuinely affiliative manner). All three traits independently predicted social media disorder after controlling for each other, supporting the construct distinctiveness central to Dark Triad theory.

Moor et al. (2023, N = 788) introduced Fear of Missing Out (FOMO) as a mediating variable, finding FOMO partially mediated Dark Triad–problematic social media use relationships across all three traits. The SEM model showed excellent fit (CFI = .96, RMSEA = .06), and FOMO mediated 23–35% of the trait–problematic use relationships. This finding suggests that FOMO-reduction interventions may be particularly effective for Dark Triad-influenced problematic use, though the underlying dispositional drivers may be resistant to change.

Sindermann et al. (2021, N = 555) found emotion dysregulation mediated psychopathy's relationship with problematic SNS use, while narcissism operated directly. This differential mediation (Aarzo & Lal, 2025b) pattern suggests that psychopathy-related SNS

problems may be addressed through emotion regulation skill training, while narcissism-related problems require self-concept intervention.

3. Theoretical Framework

Four theoretical frameworks provide integrative explanation for Dark Triad–media relationships. Self-Presentation Theory (Goffman, 1959; Leary & Kowalski, 1990) explains narcissism's social media profile through impression management motivation. Narcissistic individuals have chronically elevated self-presentation motivation—the desire to control others' impressions—and systematically elevated self-presentation capability through learned social performance skills. Social media platforms provide an unprecedented self-presentation stage, with narcissistic individuals effectively "casting" their public performance for maximal audience appeal.

Uses and Gratifications Theory (Katz et al., 1974) explains trait-differentiated platform use through need profiles. March et al. (2022) argued that Dark Triad traits predict differences in needs that in turn predict antisocial media behaviors: narcissism drives status signaling, attention seeking, and social comparison needs; Machiavellianism drives information monitoring, social intelligence gathering, and influence management needs; psychopathy drives stimulation seeking, dominance expression, and rule-violation enjoyment. These distinct need profiles generate systematically different gratification patterns from social media use.

Social Learning Theory (Bandura, 1977) with reinforcement learning extensions explains the acquisition and maintenance of Dark Triad media behaviors. Brady et al. (2021) demonstrated through computational modeling that users who receive positive social feedback (likes, shares) for outrage-expressing posts are more likely to express outrage in future posts—a reinforcement learning mechanism that may disproportionately amplify Dark Triad content. High-psychopathy trolls who receive engagement responses are reinforced for trolling behavior through intermittent reinforcement schedules analogous to gambling reinforcement.

Dark Tetrad Theory (Buckels et al., 2013; Paulhus, 2014) extends the analysis by including everyday sadism as a fourth construct, providing the most complete explanation for pure harmful media behavior. Sadism adds cruelty motivation beyond the social exploitativeness of the original Dark Triad, explaining behaviors—extreme trolling, targeted online harassment, gratuitous cruelty in comment sections—that narcissism, Machiavellianism, and psychopathy together under-predict.

4. Methodology

The recommended methodology for primary research in this domain combines a psychometric survey with behavioral digital media task validation. The Dark Triad battery should include: SD3 (Jones & Paulhus, 2014; 27 items, three 9-item subscales; $\alpha = .71-.80$ for each scale), which provides the best balance of brevity and discriminant validity; NPI-16 (Ames et al., 2006) or NPI-40 (Raskin & Terry, 1988) for enhanced narcissism resolution; and the GAIT (Buckels et al., 2014; 4 items) specifically for trolling behavior measurement. The Comprehensive Assessment of Sadistic Tendencies (CAST; Buckels et al., 2013) should be included for Dark Tetrad extension. The Fear of Missing Out scale (FoMOs; Przybylski et al., 2013; 10 items; $\alpha = .87$) provides the FOMO mediator measurement.

Social media behavior should be measured across three levels: self-report behavioral survey (platform use, content creation types, interaction behaviors, sharing patterns); behavioral lab task (20-minute social media use protocol with behavioral coding of positive content creation, social attacks, disinformation sharing, self-promotional behavior); and digital diary (7-day log of media behavior with end-of-day entries). Structural equation modeling with mediation (FOMO and emotion dysregulation as mediators) and moderation (emotion dysregulation, self-regulatory capacity as moderators) should test the proposed theoretical model. A minimum sample of $N = 600$ is recommended, with oversampling from online panels to ensure adequate representation of elevated Dark Triad scorers who may be underrepresented in convenience samples.

5. Results and Discussion

Based on the synthesized evidence, the proposed Dark Triad Audience Risk Matrix identifies the following risk-behavior profiles. High-Narcissism profiles are characterized by: self-promotional content flooding (frequent status updates, brand-building behavior), strategic engagement farming, contingent validation seeking, hostile reactions to negative feedback, and selective news sharing that reinforces self-image. In digital journalism contexts, high-narcissism commenters may dominate comment sections with personal agenda-setting while generating volumetric engagement. Their behavior is characteristically strategic and image-conscious rather than chaotic.

High-Psychopathy profiles are characterized by: impulsive trolling and harassment, disinhibited hostile commenting, disinformation spreading for excitement rather than strategic gain, sensation-seeking news engagement with preference for crisis and conflict content, and

extreme online behavior without social cost calculation. Psychopathic commenters represent the greatest acute risk to news comment sections and reporter safety in digital environments. The behavioral profile is reactive, stimulation-seeking, and relatively insensitive to social consequences.

High-Machiavellianism profiles are characterized by: strategic misinformation spreading, targeted influence campaigns, cynical news consumption for counter-argument monitoring, manipulation of online discourse for instrumental gains, and calculated commenting designed to manipulate discussion outcomes. Machiavellian media actors represent the most concerning long-term threat to news quality—their behavior is calculated, patient, and designed for maximum impact.

The construct-specific findings have important implications. The lack of narcissism–trolling correlation (Buckels et al., 2014) means that anti-harassment interventions targeting narcissistic self-promotion are likely ineffective against the psychopathic/sadistic trolling pattern. Conversely, community norms that reduce validation-seeking outcomes (reducing like visibility, removing follower counts) may reduce narcissistic content flooding without impacting psychopathic harassment.

7. Implications

The Dark Triad Audience Risk Matrix has direct applications for digital journalism platform design, comment moderation, and audience analytics. For comment moderation systems, automated detection of psychopathic and sadistic harassment patterns—distinct from mere negative content—enables more targeted intervention. For reporter safety, platforms could implement Dark Triad risk indicators in user behavioral profiles to trigger protective interventions before harassment escalates. For audience analytics, understanding the disproportionate influence of Dark Triad users on engagement metrics can improve the quality of behavioral data interpretation.

Ethical considerations are substantial and must be explicitly addressed. Dark Triad profiling of audiences raises privacy concerns, potential for discriminatory content restriction, and risks of false positive identification. Any applied deployment of personality-based audience analytics must incorporate informed consent frameworks, transparent appeal mechanisms, and regular auditing for discriminatory impacts. The recommended ethical framework involves using Dark Triad insights for platform design principles (reducing trolling-reinforcing mechanics) rather than individual user profiling.

8. Limitations

The current literature has four primary limitations. First, there is insufficient research specifically on news-related disinformation spreading—the Dark Triad's role in misinformation propagation within news contexts (as opposed to general social media) is largely unexplored. Second, the vast majority of studies are cross-sectional, preventing determination of whether Dark Triad traits cause problematic media behavior or are developed through media socialization. Third, cross-cultural validation of Dark Triad measures is limited, with most research from WEIRD samples; cultural factors may substantially moderate the Dark Triad–media behavior relationship. Fourth, behavioral validation of self-report measures is insufficient—only a small proportion of studies include objective behavioral observation of the Dark Triad behaviors reported on surveys.

9. Conclusion

The Dark Triad framework provides a theoretically coherent and empirically grounded account of disruptive and antisocial digital media behaviors that are increasingly challenging for the news industry. The distinct behavioral profiles of narcissism (self-promotion), psychopathy (hostile disruption), and Machiavellianism (strategic manipulation) require differentiated responses from journalism organizations, platform designers, and media psychologists. The Dark Triad Audience Risk Matrix advances the field beyond general "toxicity" frameworks toward construct-specific behavioral prediction that can guide more precisely targeted interventions. As digital journalism continues evolving, explicitly incorporating personality psychology into audience analytics—within robust ethical frameworks—represents both a research frontier and a practical necessity for news quality preservation.

References

- Aarzo & Lal, R. (2024a). AI-Driven Emotional Storytelling for Brand Narrative Strategies and Consumer Perception. *IUP Journal of Brand Management*, 21(4), 30–50.
- Aarzo & Lal, R. (2025a). Enhancing Advertising Effectiveness Through AIDA, AI, and Data Visualization Integration for Business Strategies. In M. Muniasamy, A. Naim, & A. Kumar (Eds.), *Data Visualization Tools for Business Applications* (pp. 85-102). IGI Global. <https://doi.org/10.4018/979-8-3693-6537-3.ch005>
- Aarzo & Lal, R. (2025b). Quality culture in advertising agencies and creativity for campaign effectiveness: Analysis of Six Sigma practices. *Social Sciences & Humanities Open*, 12, 101891.

- Aarzoo & Lal, R. (2026). Challenges in Healthcare Data Journalism: Accuracy, Privacy, and Ethical Reporting in Disease Prediction Trends. In *AI Model Design and Data Management for Disease Prediction* (pp. 299-322). IGI Global Scientific Publishing
- Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality*, 40(4), 440–450. <https://doi.org/10.1016/j.jrp.2005.03.002>
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Bhagat, R., Kim, D. J., & Parrish, J. (2020). Disinformation in social media: Role of dark triad personality traits and self regulation. In *Proceedings of the 26th Americas Conference on Information Systems*. Association for Information Systems.
- Brady, W. J., McLoughlin, K., Doan, T. N., & Crockett, M. J. (2021). How social learning amplifies moral outrage expression in online social networks. *Science Advances*, 7(33), eabe5641. <https://doi.org/10.1126/sciadv.abe5641>
- Brady, W. J., Wills, J. A., Jost, J. T., Tucker, J. A., & Van Bavel, J. J. (2017). Emotion shapes the diffusion of moralized content in social networks. *Proceedings of the National Academy of Sciences*, 114(28), 7313–7318. <https://doi.org/10.1073/pnas.1618923114>
- Buckels, E. E., Jones, D. N., & Paulhus, D. L. (2013). Behavioral confirmation of everyday sadism. *Psychological Science*, 24(11), 2201–2209. <https://doi.org/10.1177/0956797613490749>
- 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>
- Buffardi, L. E., & Campbell, W. K. (2008). Narcissism and social networking web sites. *Personality and Social Psychology Bulletin*, 34(10), 1303–1314. <https://doi.org/10.1177/0146167208320061>
- Carpenter, C. J. (2012). Narcissism on Facebook: Self-promotional and anti-social behavior. *Personality and Individual Differences*, 52(4), 482–486. <https://doi.org/10.1016/j.paid.2011.11.011>
- Craker, N., & March, E. (2016). The dark side of Facebook®: The Dark Tetrad, negative social potency, and trolling behaviours. *Personality and Individual Differences*, 102, 79–84. <https://doi.org/10.1016/j.paid.2016.06.043>
- Crockett, M. J. (2017). Moral outrage in the digital age. *Nature Human Behaviour*, 1(11), 769–771. <https://doi.org/10.1038/s41562-017-0213-3>
- Farrell, A. H., Vaillancourt, T., & Volk, A. A. (2020). Early adolescent social dominance and bullying: Associations with dark triad personality traits. *Aggressive Behavior*, 46(5), 386–396. <https://doi.org/10.1002/ab.21898>
- Ferenczi, N., Marshall, T. C., & Bejanyan, K. (2017). Are sex differences in antisocial and prosocial Facebook use explained by narcissism and relational self-construal? *Computers in Human Behavior*, 77, 25–31. <https://doi.org/10.1016/j.chb.2017.07.044>
- Goffman, E. (1959). *The presentation of self in everyday life*. Doubleday.
- 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>

- Kircaburun, K., Demetrovics, Z., Griffiths, M. D., Sar, A. H., Herodotou, C., & Tosuntaş, Ş. B. (2019). Problematic online behaviors among adolescents and emerging adults: Associations between cyberbullying perpetration, problematic social media use, and psychosocial factors. *International Journal of Mental Health and Addiction*, 17(4), 891–908. <https://doi.org/10.1007/s11469-018-9894-8>
- Kircaburun, K., Griffiths, M. D., Billieux, J., Demetrovics, Z., Tosuntaş, Ş. B., Błachnio, A., & Kiraly, O. (2022). Dark tetrad of personality, cyberbullying, and cybertrolling among young adults. *Current Psychology*, 41(11), 8085–8096. <https://doi.org/10.1007/s12144-020-01231-3>
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34–47. <https://doi.org/10.1037/0033-2909.107.1.34>
- March, E., Grieve, R., Marrington, J., & Jonason, P. K. (2017). Trolling on Tinder® (and other dating apps): Examining the role of the Dark Tetrad and impulsivity. *Personality and Individual Differences*, 110, 139–143. <https://doi.org/10.1016/j.paid.2017.01.025>
- Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 357–364. <https://doi.org/10.1089/cyber.2009.0257>
- Moor, L., Machin, J., & Egan, V. (2023). The Dark Triad and trait emotional intelligence as predictors of problematic social media use and engagement: The mediating role of the fear of missing out. *Frontiers in Psychology*, 14, 1156168. <https://doi.org/10.3389/fpsyg.2023.1156168>
- Paulhus, D. L. (2014). Toward a taxonomy of dark personalities. *Current Directions in Psychological Science*, 23(6), 421–426. <https://doi.org/10.1177/0963721414547737>
- 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)
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841–1848. <https://doi.org/10.1016/j.chb.2013.02.014>
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54(5), 890–902. <https://doi.org/10.1037/0022-3514.54.5.890>
- Sindermann, C., Konjin, E. A., Lijffijt, M., Montag, C., & Griffiths, M. D. (2021). The association between problematic social networking site use, dark triad traits, and emotion dysregulation. *BMC Psychology*, 9, 171. <https://doi.org/10.1186/s40359-021-00668-6>
- Tang, C., Reer, F., & Quandt, T. (2022). The interplay of the Dark Triad and social media use motives to social media disorder. *Personality and Individual Differences*, 192, 111597. <https://doi.org/10.1016/j.paid.2022.111597>
- Valkenburg, P. M., & Peter, J. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health*, 48(2), 121–127. <https://doi.org/10.1016/j.jadohealth.2010.08.020>
- Zeigler-Hill, V., & Marcus, D. K. (Eds.). (2016). *The dark side of personality: Science and practice in social, personality, and clinical psychology*. American Psychological Association.