

**Article Review #2: Cyberbullying on Social Media: Definitions, Prevalence, and Impact Challenges**

Kyle Dunker

Old Dominion University, School of Cybersecurity

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Professor Yalpi

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## **Introduction / BLUF**

Ray, McDermott, and Nicho (2024) examine 71 studies to explore how cyberbullying is defined, its prevalence on social media, and its psychological impact. They argue that research is complicated by inconsistent definitions and varied measurement tools. The authors stress that cyberbullying typically involves intentional harm, repeated actions, and power imbalances, influenced by both psychological traits and user behavior online. Notably, they also identify a lack of focus on adult populations within existing research.

## **Relation to Social Science Principles**

This article draws heavily from key social science principles related to behavior, motivation, and influence within digital contexts. It aligns with frameworks like social learning theory, routine activity theory, and role theory. The piece illustrates how digital anonymity, social roles, and perceived power affect individual behavior—highlighting the evolving dynamics of online social systems. It reinforces the view that cybersecurity encompasses both technical and behavioral elements.

## **Research Question, Hypothesis, Independent & Dependent Variables**

Research Questions:

How is cyberbullying defined, what drives it, and how is it measured?

What are its effects, and how can its harm be reduced?

Hypothesis: A standardized definition and consistent methods of measurement will improve the understanding and prevention of cyberbullying.

Independent Variables: Definitions used, User characteristics, Social media platform features, Measurement tools, Online interaction patterns

Dependent Variables:

Frequency of cyberbullying, Severity of incidents, Mental health outcomes, Intervention success rates

### **Research Methods**

Utilizing the PRISMA framework, the researchers conducted a systematic review. From an initial pool of over 4,000 articles sourced from Scopus, Google Scholar, and ScienceDirect, 71 met the selection criteria. Extracted data included publication year, methodology, geographic focus, sample demographics, and findings. The review incorporated both qualitative synthesis and descriptive statistics across various study types—including surveys, interviews, and case analyses.

### **Data and Analysis**

Findings reveal no consensus on the definition of cyberbullying. While some studies focus on electronic communication, others emphasize intent and power dynamics. Instagram, Facebook, and Snapchat are among the platforms with the highest reported cases. Prevalence varies widely due to methodological inconsistencies. Factors such as anonymity, digital accessibility, and bystander behavior correlate with increased instances. Effects range from anxiety and depression

to sleep issues and, in severe cases, suicidal ideation—most commonly among adolescents and young adults.

### **Connection to Course Concepts**

The review supports core course ideas including cyberbullying, behavioral influence, and system vulnerabilities. Human behavior emerges as a crucial factor in cybersecurity, with theories like social learning and routine activity helping explain online misconduct. The role of bystanders and psychological triggers further underscores the importance of integrating human-centered insights into cybersecurity strategies.

### **Marginalized Groups and Social Impact**

Although the paper does not center explicitly on marginalized communities, it surfaces disparities in cyberbullying experiences. Groups such as adolescents, those with low self-esteem, or individuals lacking support networks are at heightened risk. Cultural barriers may also suppress reporting, while gender differences suggest that females often experience distinct emotional impacts. These patterns highlight the need for inclusive and culturally sensitive prevention strategies.

### **Conclusion and Societal Contributions**

Ray et al. (2024) advance the field by highlighting the definitional ambiguities that hinder cyberbullying research. Their work proposes a clearer conceptual framework to guide future studies and intervention designs. By unpacking the roles of individual traits, social structures,

and digital environments, the review lays the groundwork for integrated policies and educational initiatives that bridge behavioral science and cybersecurity.

## Reference

Ray, G., McDermott, C. D., & Nicho, M. (2024). Cyberbullying on Social Media: Definitions, Prevalence, and Impact Challenges. *Journal of Cybersecurity*. <https://doi.org/10.1093/cybsec/tyae026>

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