



World  
Anti-Bullying  
Forum



# Adolescents' Digital Escapism: Maladaptive Daydreaming Predicts Cybervictimization via Social Media and Game Addiction

Prof. Claudio Longobardi (University of Turin) Dr Sofia Mastrokoulou (University of Salerno) Dr Matteo Angelo Fabris (University of Turin) Prof. Michele Settanni (University of Turin)

Presenter: Sofia MASTROKOUKOU



# Outline

- Cybervictimization Facts
- Adolescent Escapism Loop
- Study Aims & Research Questions
- Methodology Overview: Sample, Measures, and Analysis
- Key Findings: MD, SMA, GA, and Cybervictimization
- Implications for Anti-Bullying Interventions
- Limitations & Future Research Directions
- Q&A



# Cybervictimization Facts

International Journal of Bullying Prevention  
<https://doi.org/10.1007/s42380-024-00269-y>

ORIGINAL ARTICLE



## Social Media Linked to Early Adolescent Suicidal Thoughts via Cyberbullying and Internalizing Symptoms

Davide Marengo<sup>1</sup> · Michele Settanni<sup>1</sup> · Sofia Mastrokoukou<sup>1</sup> · Matteo Angelo Fabris<sup>1</sup> · Claudio Longobardi<sup>1</sup>

Accepted: 24 September 2024  
© The Author(s) 2024

### Abstract

Early adolescents are increasingly engaged in visually rich social media platforms, which may lead to the involvement in visual cybervictimization, i.e., the unsolicited sharing of personal visuals, resulting in negative mental-health outcomes. The present study examined the association between social media use and suicidal ideation among early adolescents, with a focus on the mediating roles of visual cybervictimization and internalizing symptoms. The sample consisted of 1140 middle-school students from Northwestern Italy with a mean age of 12.35 years ( $SD=0.97$ ), 53.3% female, 45.1% male, and 1.6% non-binary. We explored a serial mediation model, hypothesizing that increased social media engagement might lead to heightened suicidal ideation through elevated experiences of visual cybervictimization and subsequent rise in internalizing symptoms. Results indicated significant associations exist between increased social media use and both direct involvement in and bystander experiences of visual cybervictimization. Participating in visual cyberbullying events, both as victim and bystander, was significantly associated with higher levels of internalizing symptoms, in turn linked to greater suicidal ideation. These findings emphasize the critical need for digital literacy and interventions targeting visual aspects of cyberbullying to mitigate its detrimental effects on youth mental health.

**Keywords** Early adolescent · Social media · Cyberbullying · Cybervictimization · Suicidal ideation · Internalizing symptoms

### Introduction

Suicidal ideation is a significant concern among adolescents, including early adolescents, i.e., those who are in the transitional stage of development between childhood and

full adolescence, typically occurring between the ages of 10 to 14 years. This issue is especially pressing because globally, suicide ranks as the second most common cause of death among individuals aged 10 to 24 years (Patton et al., 2009; Sedgwick et al., 2019). Research indicates varying prevalence rates, but the issue is undeniably widespread. For instance, a study found that suicidal ideation and suicide attempts were reported by 11% and 3% of students, respectively (Sampasa-Kanyinga et al., 2017). Another study revealed that about 18% of adolescents experienced suicidal ideation during the past 12 months (Baiden & Tadeo, 2020). The impact of suicidal ideation is profound, often correlating with other indicators of psychological distress (Miotto et al., 2003). Moreover, suicidal ideation is closely related to other high-risk behaviors and psychosocial factors. For example, a study found that psychosocial, health-risk behaviors, and the lack of protective factors appear to affect suicidal ideation in this youth population (Peltzer & Pengpid, 2012). The severity of symptoms associated with mood disorders provides the strongest prediction of suicidal ideation (Esposito & Clum, 2002).

Davide Marengo and Michele Settanni share the first author position.

Claudio Longobardi  
claudio.longobardi@unito.it  
Davide Marengo  
davide.marengo@unito.it  
Michele Settanni  
michele.settanni@unito.it  
Sofia Mastrokoukou  
sofia.mastrokoukou@unito.it  
Matteo Angelo Fabris  
matteoangelo.fabris@unito.it

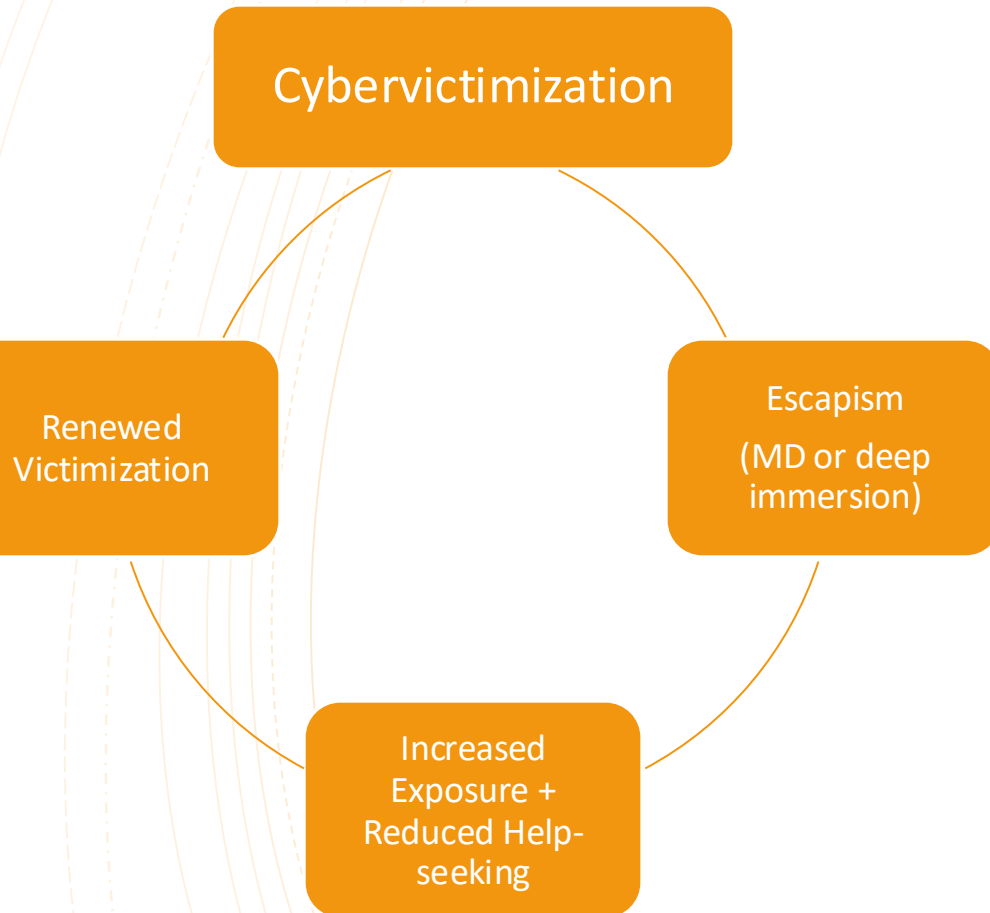
<sup>1</sup> Department of Psychology, University of Turin, Via Verdi 10, 10124 TO Turin, Italy

Published online: 04 November 2024

Springer

- Nearly all adolescents (~97%) go online daily; problematic social media use rose from 7% (2018) to 11% (2022), and ~12% are at risk of problematic gaming (WHO Regional Office for Europe, 2024).
- Approximately 1 in 6 school-aged children experience cyberbullying, with rates rising from ~12% to ~16% between 2018–2022 (WHO Regional Office for Europe, 2024).
- Cybervictimization incurs anxiety, depression, psychosomatic complaints, and school avoidance; anonymity and broad reach of digital platforms exacerbate these harms.
- Adolescents facing online harassment or exclusion may seek refuge in immersive fantasies (maladaptive daydreaming) or deeper immersion in social media/gaming to avoid distress (Soffer-Dudek & Somer, 2018; Somer, 2002).

# Adolescent Escapism Loop



- Internal: Maladaptive daydreaming—extensive fantasies interfering with daily life (Somer, 2002; Soffer-Dudek & Somer, 2018).
- External: Deep immersion in social media or gaming as coping outlets.
- Online harassment/exclusion may trigger escapist coping.
- While brief online engagement can distract, **excessive immersion** lowers risk awareness and increases isolation.
- Prolonged unmonitored sessions elevate chances of further harm (Arrivillaga et al., 2022).



# Study Aims & Research Questions

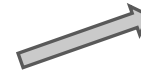
**Primary Aim:** Investigate direct and indirect links between Maladaptive Daydreaming (MD), Social Media Addiction (SMA), Game Addiction (GA), and cybervictimization in adolescents.

**Objective 1:** Examine whether Maladaptive Daydreaming (MD) predicts cybervictimization in adolescents.



Is higher MD associated with greater cybervictimization?

**Objective 2:** Test Social Media Addiction (SMA) and Game Addiction (GA) as mediators between MD and cybervictimization.



Does SMA mediate the MD → cybervictimization link?



Does GA mediate the MD → cybervictimization link?

**Objective 3:** Compare the strength of mediation via SMA versus GA.



Is the indirect effect via SMA stronger than via GA?

**Objective 4:** Compare the strength of mediation via SMA versus GA.



Do these patterns hold after controlling for age and gender?

## The sample

- 1,216 adolescents aged 11 to 19 years ( $M_{\text{age}} = 14.81$ ,  $SD = 1.79$ ).
- Regarding sexual orientation, 69.5% identified as heterosexual, 13.6% as bisexual, 9.1% as homosexual, and 7.5% as belonging to other categories.





## The instruments

- **Socio-demographics:** Self-report on age, gender, sexual orientation, nationality.
- **The Bergen Social Media Addiction Scale (BSMAS, Andreassen et al., 2016):** 6 items, 5-point scale (1=Very rarely to 5=Very often); Italian version used; Indicative item: "How often during the past year have you tried to cut down on your use of social media without success?"; Cronbach's  $\alpha = .76$ .
- **Cybervictimization:** 4-item subscale (Pozzoli & Gini, 2019), 5-point frequency scale (1=Never to 5=Several times a week); Indicative item: "Someone started an online group where they made fun of me."; Cronbach's  $\alpha = .79$ .
- **Maladaptive Daydreaming (MDS-16; Somer et al., 2016; Italian version by Schimmenti et al., 2020)** 16 items across two subscales; Indicative item: "I find it difficult to control the time I spend daydreaming." Cronbach's  $\alpha = .87$ .
- **Game Addiction (GAS) (Lemmens et al., 2009):** 7 items, 5-point scale (1=Never to 5=Very often); Indicative item: "I feel restless, frustrated, or irritable when I cannot play video games."; Cronbach's  $\alpha = .80$ .



## The procedure

- **Design & Recruitment:** Cross-sectional online survey using snowball sampling via institutional and personal social networks.
- **Eligibility:** Italian native speakers.
- **Procedure:** Participants received study information and provided informed consent before beginning; participation was voluntary and unpaid.
- **Ethics:** Anonymity ensured; conducted per the Declaration of Helsinki; approved by the University of Turin IRB (Protocol No. 0245430).



First, descriptive statistics and Pearson correlations among MD, SMA, GA, and cybervictimization were computed to examine preliminary associations.

Then a mediation analysis using PROCESS in SPSS was run with MD as predictor, SMA and GA as parallel mediators, and cybervictimization as outcome (controlling for age and gender).

Indirect effects were evaluated via 5,000-bootstrap confidence intervals, and effect sizes estimated for practical significance.

Sensitivity checks with alternative variable specifications confirmed the robustness of the observed pathways, while noting that causal inference remains limited by the cross-sectional design.

# Statistical analysis

*Pearson correlations computed among study variables.*

Variables	1	2	3	4	5
1. Social Media Addiction	—	.254	.332	.826	.339
2. Game Addiction	.254	—	.285***	.241***	-.085***
3. Maladaptive Daydream	.332	.285	—	.316**	-.07
4. Cybervictimization	.826	.241	.316	—	.251
5. Age	.339	-.085	-.07	.251	—

Note. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

- Social media addiction exhibited a **very strong positive correlation** with cybervictimization ( $r = .826$ ), indicating that increased social media use is strongly associated with higher exposure to cybervictimization.
- Game addiction showed a **moderate positive association** with maladaptive daydreaming ( $r = .285$ ,  $p < .001$ ), suggesting a potential link between excessive gaming and dissociative fantasy behaviors.
- A **moderate significant correlation** was also observed between game addiction and cybervictimization ( $r = .241$ ,  $p < .001$ ), implying that individuals with higher gaming addiction may be more prone to online victimization.
- Game addiction demonstrated a **weak but statistically significant negative correlation** with age ( $r = -.085$ ,  $p < .001$ ), indicating a slight tendency for younger individuals to report higher levels of game addiction.
- Age showed **no significant associations** with maladaptive daydreaming or cybervictimization, reflecting minimal influence of age on these variables in the sample.

# Path Coefficients for the Multiple Mediation Model



+

<u>Path</u>	<u>Estimate</u>	<u>Standard Error</u>	<u>Standardized Estimate (<math>\beta</math>)</u>	<u>p-value</u>
MD_TOT → SMA	0.160	0.011	0.355	<0.001
Age → SMA	1.593	0.105	0.383	<0.001
Gender → SMA	-1.519	0.382	-0.100	<0.001
MD_TOT → GA	0.086	0.008	0.275	<0.001
Age → GA	-0.076	0.078	-0.026	0.328
Gender → GA	-2.666	0.283	-0.253	<0.001
SMA → CYBERVIC	1.214	0.028	0.812	<0.001
GA → CYBERVIC	-0.030	0.038	-0.014	0.419
MD_TOT → CYBERVIC	0.031	0.012	0.046	0.009
Age → CYBERVIC	-0.042	0.109	-0.007	0.699
Gender → CYBERVIC	-2.658	0.377	-0.117	<0.001
SMA ↔ GA	6.200	0.898	0.202	<0.001

Note. MD\_TOT: Maladaptive Daydreaming (Total Score); SMA: Social Media Addiction; GA: Game Addiction; CYBERVIC: Cybervictimization.

- Social Media Addiction (SMA) is the **strongest predictor** of cybervictimization. Individuals with higher SMA are **much more likely to experience cybervictimization**, highlighting social media use as a major risk factor.
- Maladaptive Daydreaming significantly predicts both **SMA ( $\beta = 0.355$ )** and **Game Addiction (GA;  $\beta = 0.275$ )**. This suggests that individuals who frequently engage in maladaptive fantasies are **more prone to developing social media and gaming addictions**.
- **Gender Significantly Affects SMA, GA, and Cybervictimization.** Gender had **significant negative effects** on SMA, GA, and cybervictimization, indicating **notable gender differences**. Results suggest **females report higher levels** of these outcomes.
- **Game Addiction Does Not Predict Cybervictimization.** The path from GA to cybervictimization was **non-significant** ( $\beta = -0.014$ ,  $p = 0.419$ ), indicating that game addiction **does not contribute meaningfully** to explaining cybervictimization in this model.



# Discussion

International Journal of Bullying Prevention  
https://doi.org/10.1007/s42380-024-00269-y

## ORIGINAL ARTICLE



### Social Media Linked to Early Adolescent Suicidal Thoughts via Cyberbullying and Internalizing Symptoms

Davide Marengo<sup>1</sup> · Michele Settanni<sup>1</sup> · Sofia Mastrokoulou<sup>1</sup> · Matteo Angelo Fabris<sup>1</sup> · Claudio Longobardi<sup>1</sup>

Accepted: 24 September 2024  
© The Author(s) 2024

#### Abstract

Early adolescents are increasingly engaged in visually rich social media platforms, which may lead to the involvement in visual cybervictimization, i.e., the unsolicited sharing of personal visuals, resulting in negative mental-health outcomes. The present study examined the association between social media use and suicidal ideation among early adolescents, with a focus on the mediating roles of visual cybervictimization and internalizing symptoms. The sample consisted of 1140 middle-school students from Northwestern Italy with a mean age of 12.35 years ( $SD = 0.97$ ), 53.3% female, 45.1% male, and 1.6% non-binary. We explored a serial mediation model, hypothesizing that increased social media engagement might lead to heightened suicidal ideation through elevated experiences of visual cybervictimization and subsequent rise in internalizing symptoms. Results indicated significant associations exist between increased social media use and both direct involvement in and bystander experiences of visual cybervictimization. Participating in visual cyberbullying events, both as victim and bystander, was significantly associated with higher levels of internalizing symptoms, in turn linked to greater suicidal ideation. These findings emphasize the critical need for digital literacy and interventions targeting visual aspects of cyberbullying to mitigate its detrimental effects on youth mental health.

**Keywords** Early adolescent · Social media · Cyberbullying · Cybervictimization · Suicidal ideation · Internalizing symptoms

#### Introduction

Suicidal ideation is a significant concern among adolescents, including early adolescents, i.e., those who are in the transitional stage of development between childhood and

full adolescence, typically occurring between the ages of 10 to 14 years. This issue is especially pressing because globally, suicide ranks as the second most common cause of death among individuals aged 10 to 24 years (Patton et al., 2009; Sedgwick et al., 2019). Research indicates varying prevalence rates, but the issue is undeniably widespread. For instance, a study found that suicidal ideation and suicide attempts were reported by 11% and 3% of students, respectively (Sampasa-Kanyinga et al., 2017). Another study revealed that about 18% of adolescents experienced suicidal ideation during the past 12 months (Baiden & Tadeo, 2020). The impact of suicidal ideation is profound, often correlating with other indicators of psychological distress (Miotto et al., 2003). Moreover, suicidal ideation is closely related to other high-risk behaviors and psychosocial factors. For example, a study found that psychosocial, health-risk behaviors, and the lack of protective factors appear to affect suicidal ideation in this youth population (Peltzer & Pengpid, 2012). The severity of symptoms associated with mood disorders provides the strongest prediction of suicidal ideation (Esposito & Clum, 2002).

Davide Marengo and Michele Settanni share the first author position.

✉ Claudio Longobardi  
claudio.longobardi@unito.it

Davide Marengo  
davide.marengo@unito.it

Michele Settanni  
michele.settanni@unito.it

Sofia Mastrokoulou  
sofia.mastrokoulou@unito.it

Matteo Angelo Fabris  
matteoangelo.fabris@unito.it

<sup>1</sup> Department of Psychology, University of Turin, Via Verdi 10, 10124 TO Turin, Italy

Published online: 04 November 2024

Springer

- Results showed that **MD was positively associated with both SMA and GA**, supporting the idea that maladaptive dreamers turn to digital platforms for escapism. **SMA emerged as a strong mediator** between MD and cybervictimization, indicating that **excessive social media use is a key mechanism** linking MD to increased online victimization.
- In contrast, **GA did not significantly mediate** the MD–cybervictimization relationship. Although MD predicted higher GA, **GA had no significant effect on cybervictimization**. This may be due to the less socially interactive nature of gaming compared to social media, which reduces exposure to online risks.
- These findings align with previous research emphasizing SMA (Marengo et al. 2024) as a critical risk factor for cybervictimization and extend it by identifying MD as an underlying psychological contributor.

# Implications for Intervention and Prevention



The identification of SMA as a key mediator would be an important starting point for the development of targeted interventions.

## **Teach emotional regulation and coping skills**

- **Limit problematic social media use**
- **Promote safe and purposeful online behavior**
- **Integrate social skills training**
- **Leverage MD tendencies constructively**
- **Include psychoeducation for adolescents and parents**



# Limitations and future directions

- **Cross-sectional design** limits causal conclusions; longitudinal studies are needed (Fabris et al., 2020).
- **Self-report measures** may introduce bias; future studies should incorporate objective data or multiple informants (Marengo et al., 2021).
- **Limited sample diversity** (age, culture) affects generalizability; replication in varied populations is essential (Lin et al., 2022).

- Conduct **longitudinal studies** to confirm causal pathways from MD to SMA and cybervictimization.
- Examine **mediators/moderators** (e.g., personality traits, emotion regulation, coping styles).
- Use **experimental designs** to explore mechanisms of cybervictimization in vulnerable groups.
- Include **qualitative research** to understand lived experiences of maladaptive daydreamers online.
- Explore **cross-cultural differences** to assess the influence of sociocultural factors.



POV: Shyness is not your thing!



World  
Anti-Bullying  
Forum



Still interested?



Scan with your smart device camera  
to view the presentation, useful  
material, references and our short bios.



World  
Anti-Bullying  
Forum



## Contact details



- Sofia Mastrokourou, PhD, Assistant Professor, University of Salerno, Italy
- [smastrokourou@unisa.it](mailto:smastrokourou@unisa.it)
- Tel: +39 33 43 784 784