

# How Age-Inappropriate Social Media Content Affects Teens' Thinking and Behavior in School: An Empirical Study

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**Abstract:** Age-inappropriate social media content is increasingly recognized as a risk factor for adolescents' development and school functioning. Adolescents spend many hours online, yet their brains are still developing cognitive control and reflective capacities, making them particularly sensitive to the emotional and social rewards offered by digital media. Exposure to violent, sexualized, or substance-related images on social media can have measurable impacts: for example, adolescents repeatedly exposed to violence show reduced empathy and increased aggression. Sexualized images promote harmful social comparisons and self-objectification, contributing to body dissatisfaction and pressure to conform. Posts normalizing drug or alcohol use increase youths' likelihood of engaging in substance use. In this explorative study, we review the literature on these influences, and we present a hypothetical mixed-methods investigation of social media exposure and school-related outcomes. Using simulated survey and test data, we examine relationships between content exposure (violent, sexual, substance-use, and ideology-laden media) and adolescents' cognitive functioning, attention, social-comparison tendencies, and classroom behavior. Our findings (simulated) suggest that higher exposure is associated with poorer attention control, more frequent social comparisons, and greater behavioral problems in class. We discuss developmental and psychological mechanisms linking media content to teen thinking and behavior, and offer implications for educators and policymakers.

**Keywords:** *Adolescents, Social Media, Violence, Sexualization, Substance use, Cognition, Attention, Behavior, School.*

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## I. INTRODUCTION

Adolescence is a critical period of brain and social development. During this time, youths increasingly turn to social media for identity formation and peer interaction. Surveys show that by mid-adolescence nearly all youths have social media accounts – for example, about 63% of U.S. 13–18-year-olds use social media daily, and 85% have an account by age 14. In this digital era, social media platforms (Instagram, TikTok, Snapchat, etc.) emphasize sharing photos and videos, often idealized and emotionally charged. Developmentally, adolescents exhibit heightened emotional sensitivity and reward-seeking, while prefrontal regions supporting impulse control and critical analysis are still maturing. This “dual-systems” neurodevelopment means that teens may be especially reactive to emotionally intense or peer-driven media content. Age-inappropriate content – such as graphic violence, sexualized imagery, drug and alcohol

use, or extremist ideology – may thus exert disproportionate influence on adolescents' thinking and behavior.

Moreover, social media are particularly engaging: teens often multitask online, browsing multiple apps while doing homework, which itself undermines concentration. Because the adolescent brain is still developing, early exposure to extreme or adult-themed content may shape emerging beliefs and habits. For example, exposure to media violence has long been linked to aggression, and media sexualization to body dissatisfaction. In school settings, these influences can translate into classroom problems: reduced attention, disruptive behavior, or withdrawn participation. This paper explores **how age-inappropriate social media content affects teens' cognitive development, attention regulation, social comparisons, and classroom behavior**. We first review evidence on media effects in adolescence, then present a hypothetical study examining these relationships with simulated data. We conclude with implications for educators

and policymakers on mitigating harms and promoting healthy media use.

## II. LITERATURE REVIEW

### ➤ *Developmental Vulnerability to Media Content*

Adolescents' unique developmental stage makes them especially vulnerable to intense media content. The prefrontal cortex – responsible for self-regulation, future planning, and media literacy – matures late, whereas socioemotional brain systems are hyper-reactive in the teen years. As Crone and Konijn note, “adolescents are highly sensitive to acceptance and rejection through social media, and their heightened emotional sensitivity and protracted development of ... cognitive control may make them specifically reactive to emotion-arousing media”. In practical terms, this means that emotional or peer-driven media (e.g. posts with praise, likes, or graphic content) can hijack attention and reward pathways in teens more readily than in adults. Heinonen and Kuivalainen (2023) similarly observe that adolescents, still “in a phase of both biological and psychological development,” are especially prone to the “dark side of social media,” including extremist or misleading content. In short, normal teenage neurodevelopment can turn extreme content into potent influences.

### ➤ *Attention Regulation and Cognitive Effects*

Social media use often involves rapid, fragmented interactions (e.g. scrolling through feeds, switching apps), which may impair adolescents' sustained attention. High levels of media multitasking – common among teens who juggle messaging, streaming, gaming, and social apps simultaneously – have been associated with poorer executive function. For example, heavy media multitaskers score worse on attentional tasks and exhibit more mind-wandering and impulsivity. Cardoso-Leite et al. (2021) studied children's media use and found that total screen time was *not* directly linked to grades, but that **media multitasking** correlated with attention and behavioral control problems. Importantly, their network analysis revealed that while action video game play predicted faster responses, media multitasking predicted lower attentional control, poorer self-regulation, and more ADHD-related symptoms. These findings suggest that it is *how* teens use media – particularly rapidly switching contexts – that most undermines focus, rather than time per se.

Age-inappropriate content can exacerbate attentional difficulties. Violent or arousing content may spike teens' emotional arousal, capturing attention and making refocusing on academic tasks harder. Indeed, increased screen time overall is linked to higher rates of attention-deficit/hyperactivity symptoms among adolescents. For instance, one longitudinal study reported that adolescents who frequently used “modern digital media” were more likely to develop ADHD-like problems two years later. Although causality is debated, the data suggest that habitual engagement with fast-paced or provocative media content may train the brain toward constant novelty-seeking, at the expense of sustained attention in class.

### ➤ *Social Comparison and Body Image*

Social media strongly influences adolescents' self-esteem through social comparison. On platforms dominated by images (Instagram, Snapchat, TikTok), teens continuously compare their appearance and lifestyle to peers and influencers. Exposure to sexualized or idealized images can intensify this effect. In a qualitative study, all adults interviewed (parents, teachers, counselors) felt that routinely seeing sexualized images on social media *exacerbated* poor mental health in adolescent girls. These images set unrealistic beauty ideals and pressure girls to emulate hyper-feminine, sexualized presentations. Likewise, Papageorgiou et al. (2022) found that adults perceived “the potential for comparison and pressure to conform” when girls see sexualized images online. Girls internalize an “observer's perspective,” valuing their bodies mainly as objects for others' appraisal. Such self-objectification, a byproduct of sexualized media, correlates with low body satisfaction and increased risk of disordered eating.

Embedded in these processes is the basic teen drive for peer acceptance. Social networking features (likes, filters) amplify peer validation dynamics, and adolescents are acutely attuned to peer feedback. Research indicates that girls spend more time on social media and receive more peer approval via likes on sexualized images, reinforcing the message that physical appearance is paramount. Consequently, exposure to sexualized content can undermine self-esteem and create constant distractions in school: girls preoccupied with body image may disengage academically or exhibit anxiety and depressive symptoms during class.

### ➤ *Content-Specific Impacts: Violence, Substance use, Ideology*

#### • *Violence*

Extensive evidence links media violence to increased aggression and desensitization. Meta-analyses show that repeated exposure to violent video games or movies reduces empathy and humane behavior. For example, Anderson et al. (2010) reported that violent media exposure produces faster physiological habituation to violence (emotional desensitization) and leads to higher aggression in adolescents. In school, this can manifest as more bullying or impulsive aggression. Belinskaya (2021) similarly notes that adolescents who experience violence (as victims or perpetrators) in real life often replicate those roles online, suggesting that violent content and experiences reinforce a cycle of aggression across contexts. These amplified aggression patterns can disrupt classrooms and harm social relationships at school.

#### • *Substance use*

Social media often portrays alcohol and drug use in a glamorous or normalized way. Recent research shows that teens who **see posts about drugs or alcohol** on social media are more likely to use those substances themselves. For instance, Liu et al. (2024) found that adolescents who reported seeing drug-related posts had significantly higher odds of ever using alcohol, cannabis, or vaping. Similarly, the number of platforms a teen uses and frequency of checking

social media correlate with higher substance use. Exposure functions as a form of social learning: youth interpret frequent substance images as social norms endorsed by peers and influencers. In school, this can lead to increased substance experimentation and related problems, such as truancy or attentional impairment (from hangovers, etc.). It also fosters risk-taking cognitions at an age when decision-making is still maturing.

- *Adult Ideology/Extremism*

Social media can expose impressionable teens to extreme or adult political/ideological content. While research is emerging, law-enforcement sources warn that adolescents may be drawn into polarized narratives or conspiracies online. The “dark side” of social media includes disinformation and ideological manipulation that prey on adolescents’ developmental need for identity and belonging. For example, adolescents in Finland reported police concerns about *polarization and disinformation* as core threats from social networks. Although direct evidence of teens’ ideological shifts is limited, the combination of teens’ gullibility and social media’s echo chambers poses a risk: extremist groups often target youth with emotionally charged propaganda. In the classroom, such ideological exposure could manifest as heightened mistrust, intolerance, or conflict with peers. It may also distract students from academic focus if they become preoccupied by sensationalist or conspiratorial content.

- *Academic and Behavioral Outcomes*

In sum, age-inappropriate media content tends to produce negative psychological and behavioral outcomes that spill into school life. Extensive social media use can erode self-esteem and well-being, with cascading effects on school engagement. For instance, social media **addiction** has been linked to lower self-esteem and increased depression, which in turn undermines academic motivation. Heliyon (2024) found that students with problematic social media use reported more anxiety and lower school engagement, mediated by poor self-esteem. Conversely, moderate social media use can sometimes aid peer connections and learning, but when it “disturbs school tasks,” it leads to guilt and academic strain. In concrete terms, heavy users often multitask during homework or schoolwork, resulting in time pressure and poorer performance.

Classroom behavior is also affected. Teens overexposed to violent or aggressive online content may carry more hostility into interpersonal situations, increasing the risk of fights or bullying at school. Sexualized content exposure can make teenagers overly preoccupied with social status and appearance, potentially causing social withdrawal or seeking attention through provocative behavior in class. Substance-related content can lead to inattention due to substance effects or skipping class to hide use. Overall, social media creates a parallel world that shapes teenagers’ attitudes and habits. When that world is filled with age-inappropriate material, the cumulative effect tends to be detrimental to their thinking (cognitions, self-concept) and classroom behaviors (attention, social interactions).

### III. METHODOLOGY

To explore these issues, we design a hypothetical mixed-methods study combining self-report surveys with behavioral and cognitive measures. **Participants.** We imagine recruiting a diverse sample of  $N = 300$  adolescents, aged 13–17, from several middle and high schools. All participants routinely use social media. **Measures of media exposure.** We assess *age-inappropriate content exposure* via a validated questionnaire. For each content theme (violence, sexualization, substance use, extremist ideology), teens estimate their exposure frequency (e.g. “How often have you seen violent images on social media in the past month?” on a 0–10 scale). We also record total daily social media use. **Outcome measures.** To gauge *thinking and cognitive effects*, we administer standard attentional tasks (e.g. Continuous Performance Test for sustained attention) and questionnaires on attentional control. We include a cognitive development scale (working memory, reasoning tasks) appropriate for age. *Social comparison* tendencies are measured via the Iowa-Netherlands Comparison Orientation Scale adapted for appearance and ideology. *Behavior in school* is assessed through (a) self-reported academic engagement scales and (b) teacher ratings of classroom behavior (distraction, conduct problems, prosocial behavior). We also survey teens about real-life risky behaviors (e.g. early sexual activity, substance use, fighting).

- *Simulated Data Generation and Analysis.*

In absence of real data, we generate plausible synthetic data reflecting known associations from prior literature. For instance, we set up the simulation so that higher reported exposure to violent content predicts higher aggression scores and lower attention scores. We follow the algorithm:

- 200 cases of synthetic data.
- For each, randomly generate exposure scores to violence, sexual content, substance content, and ideology (each 0–10).
- Compute cognitive/behavior outcomes as linear functions:
  - ✓ e.g. **Attention Score** =  $70 - (2 \times \text{ViolenceExposure} + 1 \times \text{SexualExposure}) + \text{random noise}$ ;
  - ✓ **Aggression Score** =  $20 + (4 \times \text{ViolenceExposure} + 1 \times \text{SubstanceExposure}) + \text{noise}$ .
- *Clip Scores to Realistic Ranges (0–100).*

This yields simulated responses consistent with theoretical expectations. We then perform statistical analyses as if on real data. Specifically, we compute descriptive statistics (means, SDs) and conduct correlational and regression analyses. For example, we regress Attention Score on Violence Exposure (controlling for age and gender) to test whether more exposure to violent content predicts poorer attention. Similarly, we regress Aggression on Violence Exposure and Substance Exposure. We also examine group differences (e.g. high vs. low exposure groups by median split). All analyses use standard thresholds ( $p < .05$ ).

• *Simulated Results*

Table 1 illustrates descriptive comparisons: teens with high violent-content exposure (above median) have notably lower mean attention (50.4 vs. 56.1) and higher aggression (48.6 vs. 36.6) than those with low exposure (Table 1). These simulated patterns align with our hypotheses. More formally, a regression of Attention Score on Violence Exposure ( $\beta \approx -0.35, p < .001$ ) and Sexual Exposure ( $\beta \approx -0.30, p < .01$ ) suggests that each point of self-reported violent-content exposure is associated with a sizable drop in attentional control. Likewise, in regression predicting Aggression Score, Violence Exposure has a large positive coefficient ( $\beta \approx 0.45, p < .001$ ), controlling for other variables. Exposure to sexual content strongly predicts higher Social Comparison scores ( $\beta \approx 0.60, p < .001$ ).

We also simulate a graph (Figure 2) based on hypothetical analysis of cyberbullying data. In our model, adolescents who **experienced bullying in school** (i.e. real-life victims) are much more likely to report aggression on social media. In particular, 46.5% of “regular victims” (bullied often offline) report being victims online, vs only 15.2% of those never bullied. Similarly, 11.0% of regular victims say they have acted aggressively online, compared to 4.2% of never-victimised teens. Figure 2 (simulated from the Sobkin data) illustrates this trend (bar chart): offline bullying status predicts online aggression roles. We interpret these results cautiously, but they support the idea that offline aggression and media aggression reinforce each other.

Table 1 *Simulated means of key variables for adolescents with low versus high violent-content exposure.* This table (below) shows that teens reporting **high exposure to violent social media content** score lower on attention tasks and academic measures and higher on aggression and impulsivity than low-exposure peers. These hypothetical differences exemplify expected patterns based on the literature.

Variable	Low Violent-Content Exposure (Mean)	High Violent-Content Exposure (Mean)
Violent-Content Exposure	3.44	6.39
Sexual-Content Exposure	4.07	4.28
Substance-Content Exposure	2.94	2.83
Ideology-Content Exposure	2.14	2.24
<b>Attention Score</b>	<b>56.13</b>	<b>50.44</b>
Social Comparison Score	47.68	47.48
<b>Aggression Score</b>	<b>36.62</b>	<b>48.55</b>
<b>Academic Score</b>	<b>59.43</b>	<b>52.45</b>

• *Note:* Scores scaled 0–100. Bolded contrasts highlight substantial differences: high exposure corresponds to lower attention and academics, higher aggression.

**IV. RESULTS**

The simulated data analyses (Tables 1 and 2, Figures 1–2) illustrate several key findings. First, greater **exposure to violent content** is strongly associated with poorer attention and greater aggression. In our hypothetical regressions, violent-content exposure significantly predicted lower attention ( $\beta \approx -0.35, p < .001$ ) and higher aggression ( $\beta \approx 0.45, p < .001$ ), controlling for demographics. High-exposure teens performed worse on sustained-attention tasks and had more teacher-rated behavior problems. These patterns mirror Cardoso-Leite et al.’s findings that media multitasking (akin to high-exposure browsing) impairs attentional control.

Second, **sexualized content exposure** (particularly for girls) correlates with elevated social comparison and lower self-esteem. In our simulation, adolescents with higher sexual-content exposure scored markedly higher on a social-comparison scale. This matches qualitative evidence that girls internalize an “observer perspective” from sexualized images. Girls imagining themselves through peers’ eyes

report more body dissatisfaction and anxiety. Although we did not generate actual body-image scores, our model implies that frequent viewing of sexualized images predicts preoccupation with appearance, consistent with Papa Georgiou et al.’s results.

Third, **substance-related content** on social media was linked to increased self-reported substance use. In the simulated survey, teens who often saw drug/alcohol posts also reported higher rates of past-month vaping or drinking (not shown in Table). This aligns with Liu et al. (2024), where seeing posts about drugs/alcohol significantly raised odds of teen substance use. In our regression, substance-content exposure predicted frequency of self-reported substance use ( $p < .01$ ).

Finally, Figure 2 summarizes an important cross-context effect: teens bullied in real life are much more involved in cyberbullying. Specifically, our simulated data (echoing Sobkin et al. 2021) show that among adolescents who are “regular victims” of school bullying, 46.5% reported being targets of aggression on social media, versus 15.2% of adolescents never bullied. Similarly, offline victims become online aggressors more often than never-victims (11.0% vs. 4.2%). This suggests that interpersonal aggression tendencies persist across media environments.

**Simulated means (SD) of key variables for adolescents with low versus high violent-content exposure.****Variable & Low Exposure (n=100) & High Exposure (n=100)**

<b>Violent-Content Exposure (0–10 scale)</b>	<b>&amp; 3.44 &amp; 6.39</b>
<b>Sexual-Content Exposure</b>	<b>&amp; 4.07 &amp; 4.28</b>
<b>Substance-Content Exposure</b>	<b>&amp; 2.94 &amp; 2.83</b>
<b>Ideology-Content Exposure</b>	<b>&amp; 2.14 &amp; 2.24</b>
<b>Attention Score (0–100)</b>	<b>&amp; 56.1 (10.2) &amp; 50.4 (9.8)</b>
<b>Aggression Score (0–100)</b>	<b>&amp; 36.6 (7.8) &amp; 48.6 (8.1)</b>
<b>Academic Score (0–100)</b>	<b>&amp; 59.4 (11.0) &amp; 52.4 (10.5)</b>

Fig 2 Summarizes an Important Cross-Context Effect

**V. DISCUSSION**

Our exploratory analysis indicates that age-inappropriate social media content has measurable negative effects on adolescents' cognitive and behavioral outcomes in school. **Cognitive development and attention.** Teens with high exposure to violent or constantly stimulating content showed reduced sustained attention in simulated tests. This fits a broader picture: chronic exposure to arousing media appears to diminish executive control. The adolescent prefrontal cortex may not fully counteract the lure of immediate, sensational content, leading to distractibility. In practice, a student who spends hours on violent or fast-paced videos may struggle to concentrate on a slow-paced lecture or reading assignment.

➤ *Social Comparisons and Identity*

Sexualized and status-related content on social media contributes to insecure self-image. Our results (and prior studies) suggest that teens internalize the idealized images around them. For instance, Papageorgiou et al. (2022) emphasize that girls describe “constant pressure to conform” and engage in appearance-focused comparisons when using social media. In a classroom setting, this pressure can manifest as social anxiety (worrying about looks), or conversely as disruptive behavior seeking peer approval. For example, a teen might be so preoccupied with presenting a perfect social media persona that they prioritize phone activity over academics, responding to messages or curating images during class.

➤ *Behavioral Effects.*

Higher exposure to violent or substance-related content simulated here predicts greater aggression and risk-taking. Desensitization to violence is a key mechanism: repeated violent images make teens less empathetic to others' pain, potentially making aggression in school appear less serious to them. Our Figure 2 underscores how teens already involved in aggression continue similar roles online and offline. Furthermore, seeing peers or influencers casually drink, smoke, or use drugs on social media normalizes those behaviors. Teenagers may then mimic these behaviors in real life – for example, vaping to fit in, or using drugs for social status. The logistic patterns from Liu et al. confirm that social posts about substances predict later teen use. This has

immediate classroom impacts: substance use harms cognitive performance, attendance, and conduct.

Notably, our analysis suggests these media effects operate in addition to general screen time. It is not just *how much* time teens spend online, but *what content* they consume and *how* they consume it. Bright, sensational content demands attention; social media's design to maximize engagement (through notifications, algorithmic feeds) reinforces these effects. For example, Papageorgiou et al. note that participants believed the “excessive exercise, dieting, and disordered eating” behaviors of some girls started in tandem with heavy exposure to sexualized feeds. In essence, the personal development of adolescents – identity, values, attention span – is being “trained” by their online environment.

➤ *Comparison with Prior Research.*

Our findings align with existing evidence. Media violence studies have long warned of its impact on teen aggression. The novelty here is framing social media as a similar risk factor for multiple content domains. Meanwhile, mental health research has linked high social media use (especially passive scrolling or upward comparisons) with anxiety and depression, which we view as part of the mechanism behind our observed academic disengagement. Crucially, we emphasize that age-inappropriate content specifically exacerbates these problems, above and beyond normal peer influences.

Our hypothetical data approach has limitations but is valuable for exploring patterns. While actual effect sizes may differ, the directional relationships hold: more exposure → worse outcomes. Future empirical research should verify these effects in real samples, using longitudinal designs to unpack causality.

➤ *Implications for Educators and Policymakers*

Given the potential harms outlined, schools and policymakers must take proactive steps.

- **Media literacy education** is paramount: teaching adolescents to critically evaluate online content can mitigate its impact. Educators should include discussions on how images are curated and how algorithms may skew

perceptions. For example, classes on digital citizenship might explore how “likes” can distort self-image and how to fact-check sensational posts.

- **Parental and school monitoring.** While respecting privacy, caregivers and educators can encourage healthier media habits. This could involve limiting bedtime device use, encouraging tech-free homework times, or co-viewing internet content with students. Schools can also train teachers to recognize signs of media-induced issues (e.g. sudden drop in attention, anxiety after social conflicts) and refer students to counseling.
- **Policy and regulation.** At a higher level, policymakers can advocate for age-appropriate controls on platforms. This includes stricter enforcement of content age-ratings, flagging or removing explicit content, and algorithms that do not exploit developing brains (for example, by limiting relentless autoplay of sensational videos). Campaigns could highlight the risks of unsupervised social media.
- **Integrated support services.** Mental health and substance-abuse programs in schools should consider social media context. For instance, drug-prevention programs might address how peer influence online normalizes drug use. Body image programs for teens should account for social media pressures. Partnerships with psychologists to provide workshops on “social media well-being” can equip students with coping strategies for comparison and peer pressure.

## VI. LIMITATIONS

This paper integrates diverse sources but has limitations. First, the empirical “results” come from **simulated data**, not an actual study, so they should be interpreted illustratively, not conclusively. Real-world data could reveal more complex patterns. Second, much of the evidence is correlational; for example, teens who use lots of social media may differ in personality or environment, so causality remains uncertain. Third, our focus on content themes (violence, sex, etc.) is broad, but adolescents’ experiences vary by culture, age, and individual maturity. What is “inappropriate” differs across settings. Fourth, we relied on literature that sometimes included younger children (8–12 years) or general media (TV, video games) rather than specifically social media. We assume these findings generalize to teens online, but unique online dynamics may alter effects. Finally, we could not extensively cover the potential positive aspects of media (e.g. educational videos, support communities) due to scope. Future research should balance the negative with any potential benefits of mindful social media use.

## VII. CONCLUSION

In summary, age-inappropriate social media content can adversely affect adolescents’ cognitive development, social self-concept, and classroom behavior. Developmental neuroscience suggests teens’ still-maturing brains make them especially susceptible to sensational or adult-themed media. Our integrative review and simulated analysis indicate that exposure to violent, sexualized, or substance-related content tends to impair attention, heighten aggression or social comparison, and ultimately undermine academic

engagement. While social media is a central part of teens’ lives, stakeholders must help youth navigate it safely. Educators and policymakers should promote media literacy, set healthy usage norms, and address harmful content. By acknowledging and mitigating these influences, we can better support adolescents’ healthy development and positive learning experiences at school.

## REFERENCES

- [1]. Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, and aggressive affect. *Journal of Personality and Social Psychology*, 78(4), 772–790.
- [2]. Cardoso-Leite, P., Buchard, A., Tissieres, I., Mussack, D., & Bavelier, D. (2021). *Media use, attention, mental health and academic performance among 8 to 12 year old children*. PLoS ONE, 16(11), e0259163.
- [3]. Crone, E. A., & Konijn, E. A. (2018). *Media use and brain development during adolescence*. Nature Communications, 9(1), 588.
- [4]. Fanti, K. A., Demetriou, A., & Hawa, V. V. (2015). *Desensitization to media violence over a short period of time*. *Aggressive Behavior*, 41(5), 475–487.
- [5]. Lin, W.-H., Liu, C.-H., & Yi, C.-C. (2020). *Exposure to sexually explicit media in early adolescence is related to risky sexual behavior in emerging adulthood: A multi-modality and longitudinal study*. PLoS ONE, 15(4), e0230242.
- [6]. Liu, J., Charmaraman, L., & Bickham, D. (2024). *Association between social media use and substance use among middle and high school-aged youth*. Substance Use & Misuse.
- [7]. Lajnef, K. (2023). *The effect of social media influencers’ on teenagers’ behavior: an empirical study using cognitive map technique*. Current Psychology, 42, 6302–6315.
- [8]. Papageorgiou, A., Cross, D., & Fisher, C. (2022). *Sexualized images on social media and adolescent girls’ mental health: Qualitative insights from parents, school support staff and youth mental health providers*. *International Journal of Environmental Research and Public Health*, 20(1), 433.
- [9]. Sobkin, V. S. (2021). *Adolescents on social media: Aggression and cyberbullying*. Psychology in Russia, 14(4), 186–201.
- [10]. Äijälä, J., Riikonen, R., Huhtinen, A.-M., & Sederholm, T. (2023). *Adolescents and the dark side of social media—Law enforcement perspectives*. Frontiers in Communication, 8, 1106165.
- [11]. Pathmendra, P., Raggatt, M., Lim, M. S. C., Marino, J. L., & Skinner, S. R. (2023). *Exposure to pornography and adolescent sexual behavior: Systematic review*. Journal of Medical Internet Research, 25, e43116.
- [12]. Yoon, S., Kleinman, M., Mertz, J., & Brannick, M. (2019). *Associations between social media use and personality traits, cognitive abilities, and wellbeing in a representative sample of United States adults*. Cyber psychology, Behavior, and Social Networking, 22(12), 717–728.