

# ***Exploring the Correlation Between Teenagers' Short-Form Video Consumption and Symptoms of Anxiety and Depression***

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**Abstract.** The recent rise of short-form videos on TikTok and Instagram Reels, and YouTube Shorts has caused a shift in the media consumption of teenagers and raised concerns in question to what they can do to the mental health of adolescents. The correlation between the exposure of teenagers to short-form videos and anxiety and depressive symptoms is discussed in the paper, and especially points to the psychological mechanism and elements of design that may be amplifying the emotional susceptibility. After conceptually defining and making a wellness distinction between anxiety of depression, empirical research and cross-cultural studies of the stated associations between compulsive checking behavior, the state of excessive short type of consistently the state of discovery decreased the feeling of resilience. Research findings show that algorithmic curation, bottomless scrolling, and a feedback validation loop may produce social comparison, anxiety, search for validation, high stress, ever-worrying, and bad moods. Results of studies suggest that excessive use, late participation, and passive acquisition of content are all highly correlated with their sleep patterns and their resulting self-esteem and the probability of depressive outcomes. Although, according to some reports, there are some limitations regarding cause and cultural differences, the general story seems to be that pre-existing vulnerabilities lead to more risky use patterns, which later lead to a worsening of mental health conditions. Lastly, the paper concludes on a recommendatory note about supporting interventions through media literacy initiatives, family involvement, ethically designed platforms, favourable policy favourable environments, radiating for ensuring the welfare of the adolescent.

**Keywords:** Teenagers, short-form video, anxiety, depression, mental health

## **1. Introduction**

The rise of short-form video-sharing apps, which include TikTok, Instagram Reels, and YouTube Shorts, has significantly reordered the media consumption habits of the teenage population. Although these mediums offer social contact and entertainment, it is revealed that their use has been linked to increased cases of anxiety, depression, and emotional exhaustion among the youths [1,2].

Teens are also influenced, especially because of their age, when it is a time of building a sense of identity, emotional sensitivity, as well as seeking approval among peers. Additional mechanisms of algorithmic curation, such as endless scrolling to keep users continuously engaged, algorithmic sorting which reinforces personalized content that aligns with users' past interactions, and visible

metrics such as likes and shares, amplify social comparison and increase the psychological need for peer approval among adolescents [3]. Such relationships have led to concern regarding the lasting mental health effects of being regularly exposed to short-form video material.

The paper discusses the correlation between Anxiety and depression and short-form video use among adolescents. It examines some of the underlying psychological and technological processes, examines new research in cross-cultural research, and addresses the possibility of a platform design that could be used to enhance emotional vulnerability. Through examination of existing patterns and studies, the paper also exposes the research gaps in the area of study and proposes a channel of future intervention and ethical control of platforms. Ultimately, the goal is to make a positive contribution to the understanding of the risks and responsibilities associated with teens using short-form videos, which will be utilized by educators, parents, and policymakers.

## 2. Concept clarification

To determine how consumption of short-form video relates to mental health conditions of adolescents, one must first define the concepts guiding this research, i.e., short-form video platforms, anxiety, and depression. The use of these terms can be seen as the basis of the interpretation of the empirical findings that are going to be provided.

### 2.1. Short-form video platforms

The term short-form video platforms can be described as online applications where videos are normally between 15 seconds to 3 minutes. Such examples include TikTok, Instagram Reels, and YouTube Shorts. Such sites have algorithmic feeds, endless scrolling, as well as a never-ending looping of fast feedback on user behaviour in the form of likes, comments, and shares, which dynamically respond to changing user behaviour. These features of addictive design, e.g., autoplay, looping music, filters, and indicators of engagement, make the experience very engaging, and user experience tends to become an excessive habit [1,3]. This means that the users will be exposed to the long-term consumption of emotionally stimulating content without thinking.

### 2.2. Anxiety

Anxiety is a mental disorder characterized by persistent worry, restlessness, and inability to focus, and symptoms that may include tiredness or frustration. Anxiety can be manifested through avoidant behaviours, deteriorating academic performance, or withdrawal amongst adolescents. Digital spaces are able to fuel anxiety in the context of the fear of missing out (FOMO), performance anxiety, and peer comparison online. The tendency to repetitively view idealized content, along with the necessity to uphold digital presence, can become the cause of increasing emotional distress [4]. The tendency to constantly check the content and monitor notifications could, in the long run, be reinforcing compulsive checking behaviours and reducing people's ability to disconnect from the platforms, creating psychological dependence.

### 2.3. Depression

Depression can be defined as a long period of melancholy, poor self-esteem, boredom with things that one used to experience pleasure. In adolescents, some common symptoms accompanying it involve disengagement in school activities, irritability, sleep problems, and hopelessness. It has been argued that depressive symptoms are correlated with short-form video consumption when consumed

in isolation or later at night [2]. Such mechanisms are social comparison, the view of negative or traumatic things, and circadian rhythm disruption. In case digital gratification does not satisfy emotional requirements, adolescents could become withdrawn and even more dissatisfied, strengthening depressive trends.

### **3. The impact of short-form video platforms on anxiety**

The popularity and the consequent surge of short-form video platforms have given rise to an increasing concern about their impact on the mental well-being of teens, and especially about anxiety. Anxiety is described as a condition of continuous fear or apprehension, and it is one of the most widespread psychological disorders in adolescents nowadays. Although some anxiety is functional as an emotion, chronic or high anxiety does hinder academic performance, social functioning, and emotional development. Although not all studies indicate this as a connection, multiple studies suggest that the consumption of short-form video is potentially connected to the increasing anxiety levels of both adults and younger generations.

#### **3.1. Evidence of association**

Several studies have revealed that there is a strong correlation between using short-form videos and increased anxiety levels among adolescents. According to Zhu et al., such behaviors as gratification-seeking behaviors in short-form video platforms were closely associated with anxiety in combination with addictive behavior patterns [5]. Due to the capacity of the platform to fulfil the psychological needs in the short-term, the result can be addiction to the platform and hence its emotional instability. Liu et al. backed this up by demonstrating that the perceived stress variable can be used as a strong predictor of short-form video addiction and creates a loop where compulsive use is the result of stress and, in turn, causes anxiety to increase [6]. Moreover, Raudsepp and Kais also found that there is a longitudinal relationship between social media problematic use and anxiety symptoms among adolescent girls, implying that the early exposure of adolescent females might have emotional latent effects [7].

#### **3.2. Mechanisms of influence**

Short-form video platforms cause anxiety due to the very way their applications are designed and content is delivered. Computerized systems offer users emotionally intense and repetitive content from which they have difficulty disengaging, which reinforces compulsive use by adding mechanisms such as variable reinforcement. These affect-laden videos can overstimulate users and minimize their efficient emotional control [3]. The platform structure promotes browsing without thinking and deprives rest in cognition, which can lead to symptom aggravation over the course of time. The interface of TikTok, especially, uses bright visuals, rapid-sounding, allied with quick transmodification, which all lead to increased arousal and impaired emotional control. Moreover, teenagers usually want to be approved by their peers, and the lack of likes or comments may cause anxieties related to social rejection or self-deficiency.

#### **3.3. Social comparison and validation anxiety**

Social comparison contributes to the development of high levels of anxiety substantially on short-form video websites. Such sites are full of perfect images of beauty, money, lifestyle, and social achievements. For teens still developing their identity, content that is not sufficiently or accurately

represent them can instill feelings of inadequacy and personal failure. According to Jain et al., adolescents who regularly consume the content of influencers state that their stress level is higher because of unrealistic social demands [1]. In addition, on this quest for likes and followers, researchers have discovered validation anxiety, a condition where an emotional state relies increasingly on outside digital approval [5]. Such an attempt to always have an attractive digital avatar may turn into unrelenting stimulation and emotional burnout.

### **3.4. Limitations and differences across studies**

Although the association between the use of short-form video with anxiety is self-evident, one should not disregard the limitations of the previous investigations. Not every research confirms causality- some adolescents with pre-existing anxiety might become more likely to seek out short-form videos as a coping strategy, whereas the platforms may only triggering so indirectly trigger the anxiety. Generalizability is also affected by cultural/demographic differences. As an example, targeting the adolescent population of China, Raudsepp and Kais emphasized higher anxiety associations among female users [7]. These results imply that gender, cultural values such as collectivism versus individualism, and use context will act as mediators, and that studies on platform influence conducted in the future need to adjust to such factors.

## **4. The impact of short-form video platforms on depression**

Depression is a mood disorder and is defined by a constant state of sadness, apathy of interests, and feelings of uselessness, and this problem is facing an alarming growth among teenagers. In such a way that digital media and specifically short-form video consumption become more and more popular as the entertainment and socialization channel amongst teenagers, there is concern about the depressive consequences that the overuse of digital characteristics of short-form video might cause. Whereas the available literature claims that such online platforms provide emotional escape, such as temporary distraction from stress, and a sense of social belonging, emerging evidence indicates that overuse of such platforms, especially in their passive consumption with the use of algorithms, can be a limitation in the path to depression in adolescents.

### **4.1. Empirical evidence**

Empirical research resulted in some consensus that the consumption of short-form video is associated with depressive symptoms among adolescents. Qu et al. followed a cross-lagged panel network analysis and determined that a bidirectional dependence exists between addiction to short-form videos and depression [8]. Teens with depressive symptoms were vulnerable to developing addictive behavior on these sites due to their heightened need for distraction and emotional regulation. In the same light, Wang established that adolescents with extensive exposure to short-form videos had lower emotional resilience scores, reflecting reduced ability to cope with stress and negative emotions [9]. Zhu et al. also affirmed that failure to meet the psychological needs of users through the platforms tends to result in emotional dissatisfaction among users, and emotional dissatisfaction is likely to escalate into depressive tendencies [5].

### **4.2. Meta-analytic and cross-cultural support**

Cross-cultural and large-scale studies support the association between a passive intake of short-form content and depression. The results of a meta-analysis of the studies by Ivie et al. showed the

statistically significant relation between adolescent social media use, which mostly involves passive scrolling, and the development of depressive symptoms [4]. This relationship was higher in cases where the duration of screen time was above two to three hours per day. The risk of depression was elevated when it came to night usage of short-form videos when used in isolation due to replacing healthy behavioral patterns, such as sleep and real-life socialization [2]. Those adolescents who exceeded three hours of use of social media in a day, such as TikTok and YouTube shorts, had almost a double chance of developing moderate to severe depressive symptoms within two years [10]. These results are trans-cultural, which indicates that the platform design as such can be globally challenging to the mental well-being of adolescents.

### 4.3. Influencing mechanisms

The mental processes by which short-form videos increase depressive symptoms are complex. First, the lack of constant exposure to realistic lifestyles reduces self-esteem among adolescents. Such sites exacerbate the problem of social comparison because the content is filtered and promotes only the most attractive parts of the lives of the subscribers. This kind of comparison can be set negatively with the minds of adolescents who are already trying to fit themselves in situations of identity and self-worth issues. Second, constant scrolling leads to emotional and cognitive fatigue, as such forms of stimulation are quick and superficial, but lack deeper connections to the emotions [6]. This has the potential to leave the users feeling intellectually exhausted and dissatisfied. Third, short-form videos are usually associated with the loss of sleep and physical activity, the two components that are closely connected to mental well-being. During their study, Nagata et al. discovered that adolescents with good sleep hygiene and low screen time had fewer depressive factors compared to individuals with abnormal patterns [10]. The use of a platform can lead to depression, and at the same time, promote depression. Already, depressed teenagers can turn to short-form video platforms to distract or to go numb. In their research of depressed adolescents, Fassi et al. revealed that such children are more prone to being compulsive social media users, but in many cases, do not find them beneficial in their emotional sense [11]. These people can spend hours watching the videos in a bid to cope with the negative thoughts, and just feel even worse after the experience due to a lack of emotional resolution in real life. Such behavior results in a vicious circle of avoidance and withdrawal of emotions, which contributes to depressive states much more. Notably, there have also been studies that have conveyed the fact that emotionally vulnerable teens, victims of trauma or bullying, or those being singled out, are more vulnerable to falling into this digital trap.

### 4.4. Platform design and emotional reinforcement

Psychological reinforcements, including variable-ratio rewards and push notifications, of short-form video platforms may be responsible for depressive effects. Such properties as likes, shares, and getting on algorithms are at variable-ratio schedules, just as with gambling, and result in dopamine spikes with the backlash once the demands are not met. The features of this sort of design help to stimulate the restorative use, without having to worry about what the underlying emotional needs are [3]. Moreover, teenagers often come across emotionally charged or sometimes even traumatic material, such as confessions about personal problems, which may even reach the problems associated with gruesome world events; sometimes, such circumstances prevail without the support and context to process the given materials. This affective inconsistency can contribute to rumination, desensitization, or helplessness, which are, respectively, predisposing factors of depression. In the

case of content consumption with potential to become a passive habit rather than a significant moment of consumption engagement, the adolescents could get stuck in the emotional disengagement cycle and psychological distress.

## 5. Discussion and recommendations

In adolescence, the literature review shows a direct link between the number of apps of short-form video platforms and symptoms that are associated with anxiety and depression. The validation seeking, the overstimulation of the emotion, and the algorithmic reinforcement mechanism do appear to be at the centre of the association. Engagement platforms like TikTok and Instagram Reels can be emotionally burdensome to process by adolescents when used in large amounts over long periods of time [3]. The social comparison is also an important one as the teens will measure themselves according to the idealized content and social suggestions [1]. This never-ending need for conforming and acceptance advances the need for anxiety and thoughtless consumption, which may negatively impact long-term emotional strength. In order to manage these risks, interventions are to be held at different levels. They have required schools to incorporate media literacy curricula that explain to students about algorithm manipulation and emotional controls. The families are recommended to double up as a good example of a healthy digital use, to communicate freely about the experiences in life online. It can incorporate ethical design features, which include things like screen time notifications, mental health indicators, and content moderation warnings. Policymakers ought to create a regulatory setting in which the welfare of adolescents is emphasized and given greater weight over the degree of involvement.

## 6. Conclusion

There is emerging evidence suggesting that the harmful use of short-form videos is associated with mental health needs of teenagers, especially anxiety and depression. Even though the issue of causality is complicated, the issue of consistency in the studies is of interest to educators, parents, developers, and policymakers. Adolescence is a risk and identity-forming period. Increasing dependence on digital spaces has an influence on the ways of developing self and emotional well-being, hence self-aware consumption of platforms and interventional measures are important. Short-form video can be employed to encourage connection, instead of causing emotional damage, even through ethical platform design, digital education, and supportive environments offline.

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