

The Impact of Social Media Usage on the Academic Performance of High School Students

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Abstract. With the development of digital technology, social media has become an important part of high school students' everyday lives. This paper analyzes research findings from both inland and international studies on the relationship between social media use and high school students' academic performance, mainly focusing on possible causes such as time displacement, self-regulation, psychological factors, and participation during classes. The analysis finds that extreme social media use might indirectly harm high school students' academic performance by taking up the time of study and sleep, distracting attention, lowering self-control, and decreasing learning participation. However, a reasonable amount of usage of social media can, at a certain point, help alleviate negative emotions and stress. Based on this conclusion, the paper suggests that high school students should improve time management and self-control skills, while parents and teachers provide guidance and support to help students set up a healthier and more balanced approach to social media use, which helps to improve their academic performance and mental well-being.

Keywords: High School Students, Social Media, Academic Performance.

1. Introduction

Social media has become part of the life of teenagers under the conditions of the digital age development, and it has changed the ways of communication, access to information, as well as how teenagers spend their free time [1,2]. As the online social platforms continue to grow, high schoolers are currently one of the most popular groups of social networking site users, and social media is gaining its place in the lives of high schoolers, too. That widespread use had already drawn the attention of parents and society [2]. At that stage of adolescent state, psychological development and learning habits of students have not been fully developed yet. As such, wrong use of social media will quickly result in addiction and adverse effects on academic performance [3].

Meanwhile, the performance during high school is an important factor in the educational career of a student as well as their future possibilities. Thus, appreciating the role played by various factors that determine the learning outcomes during this stage has become a cause of concern to teachers, parents and even the national education authorities [4]. Within this social context, studies have been coming out in large numbers to address the topic of the relationship between social media use and academic performance.

According to some studies, a moderate usage of social media actually helps to reduce psychological stress among teenagers. As an example, in communication and interaction with peers via social media, teenagers can create and maintain any interpersonal relationship, and in this way, feelings of loneliness and social anxiety disappear [1,5]. Nonetheless, excessive use of social media can cause numerous negative psychological symptoms, including a worse sense of social adjustment, fear of missing out (FoMO), low self-esteem, dissatisfaction with appearances, emotional distress, eating disorders, insufficient quality of sleep, and addictive behaviors [5,6]. It may even narrow the social circle of the user resulting in loneliness and isolation [7]. As such, recent studies have made significant steps in not only looking at the effect of social media on educational achievement but also looking at how it affects academic achievement and its mechanism.

The objective of this paper is to combine up-to-date studies concerning the relationship between the use of social media and academic performance of high school students with the primary focus on

defining the possible factors that clarify such a correlation and its outcomes on students who are constantly over-stressed by the upcoming exams.

2. Concept Definition and Theoretical Foundation

2.1. Academic Performance

Academic performance is an ambivalent concept and not only refers to the score in the exams.

In previous studies, objective indicators of the academic performance are academic achievements and are measured in objective and quantifiable ways. Such indicators are procedural knowledge and declarative knowledge gained in school systems and course grades or educational test performances, moreover general indicators such as the progress to the right level of academic study and earning of degrees and certificates [8].

Specifically speaking, academic performance can be measured in terms of quantifiable indices, i.e. exam results, course grades, GPA (grade point average), or simply course enrolment. These could be used to indicate how well students have grasped the course content in a given period of time hence are very common in empirical studies.

Moreover, students' attitude towards learning and the degree of their engagement are also key to the students' academic performance. Many of the variables examined in other independent studies within the last few years contain both personal and social aspects of students [4,8]. Indicatively, the degree of student attendance at classes, interest in courses, good or poor study habits, level of concentration in learning activities, performance in terms of completing work on time and even the food consumed by students every day have some impacts on academic performance [3,4,8].

Altogether, the concept of academic performance is applied to characterize the outcomes of learning in students, which is usually evaluated through grades and the psychological condition of the students. The academic performance that is presented in this paper would be more appropriate to decipher as an all-encompassing explication of the interaction impacts of both the learning outcomes and the process of learning.

2.2. Time Replacement Effect

Time replacement effect is where, under limited time resources, spends his or her time in a given activity and the time causing the time available for other activities to decrease relatively. Since the discretionary time in a day is fixed, there is an inevitable trade-off between different activities. Consequently, more time spent on a given activity is normally followed by a decrease in time spent on the other form of activity.

The time replacement effect in educational and psychological studies is commonly applied in explaining the way people divide their time among their daily engagements in activities. As an illustration, more time spent by students on entertainment, socializing, or leisure will reduce the amount of time already spent on studying, reading, or having a rest. This change does not suggest that the behavior itself is problematic but just signifies a change in time usage.

The time replacement effect is more focused on the outcome of the redistribution of time, rather than the actual value of the activities themselves. That is, it does not make positive or negative judgments regarding a certain activity, but the relationship of time increment or decrement among the various activities.

Hence, the time replacement effect offers a methodological viewpoint of analysis concerning how students daily distribute their time. This concept has been applied in studies to refer to the competitive relationship of time among the various sorts of activities, and it has been assumed as a significant theoretical context in examining learning-related behaviors.

3. Reasons

3.1. Developmental Stages and Psychological Factors

Adolescence is an important stage for cognitive and emotional development. At this age, the power of self-regulation of the teenagers is not yet full-fledged, and emotional swings are relatively common. This developmental trait not only easily results in psychological frustration but can also result in some physical discomfort like headaches, nausea, stomach aches, etc. [9]. Self-regulation ability, as per educational psychology, is fundamental in terms of time management, attention regulation, and investment of learning energies of students; particularly when they are required to undertake and accomplish both the social media use and the academic activities at the same time, its role is more pronounced [3].

Adolescents are easier to lure and distract on social media platforms due to their undeveloped abilities of self-regulation, and they are more likely to be prone to using it in impulsive ways [10]. For example, the constant notifications and design mechanisms of social networking sites will interfere with the concentration of students in order to stay focused on their studies [3]. Studies have established that overindulgence in social media may actually deteriorate the capacity of students to be able to focus in the long run. This further affects their ability to learn academic knowledge, especially in tasks that require long-term cognitive investment, where the negative impact is more pronounced [4].

Besides the effect on concentration, self-control is also critical in mediating social media usage and academic behaviors. The ability to self-control can be described as the ability of a person to overcome temptations and carry on with fulfilling long-term desires. It is also strongly linked to the self-awareness of the studies among students in their academic habits, including duration of study, maintaining concentration, and levels of classroom participation [11]. Youths having a lower self-control capacity tend to have problematic behaviors of social media use, which not only distracts their time and energy from other educational aspects but can also further reduce their academic concentration at large [5].

The psychological burden of keeping up with social relations and staying active on social networks when using social media may be a negative influence on the emotional conditions of a student, which leads to anxiety or even depression. Studies indicate that depression and anxiety have become relatively common mental health problems among young people between the ages of 15 and 19 years [12]. Numerous educational research studies have also demonstrated that the psychological conditions of students are greatly correlated with their motivation to learn, the degree of their concentration, and their academic performance; negative emotions tend to undermine the learning process and influence the overall learning results [4].

Considering the development and psychological processes mentioned above, addiction to social media leads to further preoccupation with academic time; hence, this imposes a greater negative influence on academic performance. The term "addiction" is generally referred to as the urge of an individual to consume a specific drug or a certain behavior that the person cannot resist, or the need to take part in the activities that are likely to be harmful to him or her [4]. As the use of social media becomes an addictive behavior, students, even in the midst of studying, are not able to resist engaging in online interactions; student performance is usually much lower than that of students who rarely or never use social media.

Related research has further identified that adolescents between the ages of 12 and 17 are some of the most active young people online, and their reliance on social networks often lasts for extended periods. Therefore, it can be concluded that teenagers aged 10 to 25 are more likely to develop a dependence or addiction to social media compared to people of other age groups, because they share content more frequently and spend more time on social media [13]. During this age range, self-regulation abilities have not yet reached their optimal state; therefore, it is more difficult for them to appropriately control their usage behavior, as this often worsens the negative impact of social media addiction on the distribution of study time.

One of the major behavioral manifestations in the process is the inability to manage time. Studies have revealed that students who do not have the skills for good time planning have a tendency to fail to accomplish academic-related assignments on schedule and tend to habitually defer academic assignments. To illustrate, Moli Yu pointed out that college students who overly rely on the internet to the extent that they completely avoid all activities are more likely to develop avoidant behaviors and have a higher rate of academic procrastination compared to those who do not have such dependency behaviors. The consistency of learning and its profundity are also interrupted by such procrastination, in addition to shortening the real time that can be spent studying.

Moreover, studies on screen time and digital media use also found such tendencies: too much access to activities connected with entertainment media may replace rest (including sleep). This is viewed as a crucial basis to retain attention, concentrate, and improve memory and learning efficiency [2, 3]. When students devote more time to social media at the cost of studying or sleeping, they tend to have problems like inability to concentrate, learning efficiency, and memory loss, and are thus highly likely to experience academic burnout, resulting in a fall in their overall academic performance [5].

Overall, the developmental characteristics of adolescence, insufficient self-regulation & self-control abilities, and the time displacement and psychological burden caused by social media addiction together constitute important psychological and behavioral mechanisms through which social media affects high school students' academic performance.

3.2. Learning Behavior and Learning Engagement

Besides personality factors, the application of social media offers an important connection between media use and the learning behavior of students and their academic activity. The academic engagement in the educational research implies behavioral, emotional, and cognitive involvement in the learning activities [11].

During the learning process, the engagement and participation can be seen in the manner that the students attend classes, engage in discussion, and complete assignments; the extent of the engagement of the students is the mastery and understanding of what is being learnt; emotional engagement is the interest and enthusiasm of the students in the learning process and individuals level of engagement is directly connected to the academic performance [11]. Overuse or misuse of social media can interfere with daily activities, including decreased sleeping and normal studying time, therefore leading to shortened or delayed time studying [3,12,14]. According to the procrastination-health model, the behaviors of procrastination include negative impacts on the physical and mental health of a person. This is due to the fact that individuals in their habitual procrastinating tendencies neglect their own health conditions, and they have relatively low self-control [3]. The use of social media is also linked to diminished academic activity, such as inadequate study time, diminished engagement in classroom activities, and inconsistency in doing homework. These changes in learning behaviors of time substitution effects or reduced academic engagement might, in turn, result in poorer academic performance.

3.3. Environmental Factors

In addition to the personal psychological, and self-management skills, the learning environment can also play a major role in the academic performance of the students. The teaching styles of the teachers, the classroom environment, and the entire learning environment of a school can influence the academic performance of the students to different extents [8].

To begin with, the way in which teachers teach is relevant in influencing the learning behaviors of the students. Providing clear learning goals, and motivating the students to ask questions and participate in discussions throughout the lesson, the teachers are likely to keep the students on point and be interested in classroom activities [12].

Secondly, the supportive learning environment also affects students' academic engagement. Indicatively, a good classroom order that is well managed, the relationships between the teachers and

the students and a cooperative peer environment can be used to increase student participation in learning and hence they would be more willing to partake in classroom activities [12]. When the learning environment lacks order and contains numerous distractions, the students will have a hard time maintaining a consistent learning pace and classroom engagement, and learning performance might also suffer [3].

In addition, various types of parenting may largely influence the motivation to learn and academic achievements of the children. If parents are too controlling, critical, and punishment, or indifferent toward children thoughts and behaviors, children will tend to acquire an extrinsic and instrumental motivation toward learning and will do comparatively poorly in school. Conversely, parental support, encouragement, respect for the children's autonomy, and support of their individual development increase the chances of the child developing intrinsic enthusiasm towards the learning process and attaining higher grades [8].

In general, school-based teaching approach and family context, as well as the instructions that encourage students to gain independence, have a significant impact on the academic performance of students since these variables impact their learning motivation and classroom behaviour.

4. Insights

This paper has shown that the effect of social media on the academic performance of high school students has not been direct or isolated, but instead indirect with many channels serving as the means such as time management, self-control abilities, mood, and interest in learning.

First, time management skills are very significant to students. Students of high school can attempt to make simple plans about studying and spending free time every day, which may include using social media after finishing homework and reading tasks and establishing boundaries on time using media entertainment. Also, to become more attentive during learning, students may actively switch off notifications and keep their phones out of sight, thus becoming more efficient learners.

Second, parents and teachers need to offer advice and help to assist the students in developing healthier usage behavior and study habits, they must learn the intentions and emotions of the students when they are utilizing social media and collectively work out sensible restrictions. The adjustments need to be made on time to avoid dependency or addiction in the situation of stress, anxiety, or insomnia. What is more, teachers are able to make the lessons more interesting and support them positively to bring more interest to the students.

In a nutshell, social media as such is not bad, but the point is in the usage and in the extent of usage. Through the enhancement of self-management in students, creating understanding and guidance in families and the application of proactive school intervention, one could alleviate the ill-effects that social media has on high school students and allow their growth to be more balanced in the digital age.

5. Conclusion

The paper undertakes an extensive literature review and discussion of how the use of social media affects the performance of students at high schools. Overall, the implementation of social media does not have a direct and exclusive impact on academic results. It, on the contrary, has an indirect effect on students' learning processes and outcomes in various ways which include substitution in time, ability to self-regulate, psychological state, and engagement in learning. Findings of the research also point out the fact that uncontrolled or improper use of social media can easily eat up study and sleep time, divert attention, decrease the level of learning engagement, and hence negatively affect the performance of the students.

In addition, several other issues such as individual factors and environmental factors are also important in the process. The psychological traits in the teenage stage, the development of the capacity of self-control, how the family was brought up, and the conditions of learning in school, will

enhance or reduce the effects of the use of social media on academic performance to some extent. It means that explaining the problem of the influence of social media on academic performance should not be reduced to the perspective of use or non-use, but it should be viewed comprehensively in tandem with the level of development of students and in given circumstances. Furthermore, educators and parents will be able to perform a conscious development of self-control and goals of students, and focus more on the interest of learning content to further improve and avoid the negative impact of social media on teenagers.

Based on this premise, future studies can narrow down further on the connections between forms of the use of social media and academic performance. The example is that it can differentiate between the various platforms and the various utilization purposes and their long-term outcomes, and integrate longitudinal research methods to investigate the causation of the mechanisms in finer detail. Meanwhile, at the practical level, how to assist high school students to develop healthier and more sustainable patterns of using digital media as the collaboration of school education, family instructions, and self-government among students requires further investigation as well.

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