The impact of toxic relationships on students' mental and physical health in family, friends, and spouses.

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ABSTRACT

Toxic relationships are a phenomenon that is increasingly experienced by students and has a significant impact on mental and physical health. The family, friends, and partner environment are the main spaces for this unhealthy relationship to occur, causing various psychological and physical problems. This study aims to analyze the impact of toxic relationships on the mental and physical health of students in the three environments. The research used mixed methods with data collection through questionnaires and in-depth interviews, and involved students from various faculties as a population sample. Quantitative data was statistically analyzed to determine the prevalence and level of impact, while qualitative data was analyzed thematically to explore students' subjective experiences. The results of the study show that toxic relationships in family, friends, and partners contribute to increased levels of stress, anxiety, as well as sleep disorders and physical fatigue in college students. Results indicated that higher levels of exposure to toxic relationships were associated with increased severity of mental health issues such as anxiety and stress, as well as physical symptoms like fatigue. Students who are exposed to toxic relationships tend to experience a decrease in motivation to learn and quality of life. In conclusion, Toxic relationships significantly affect students' mental and physical health, indicating the need for targeted prevention and intervention efforts. from the campus as well as social environmental support to create healthy and supportive relationships. The implications of this research are expected to be the basis for the development of counseling and education programs about healthy relationships in the university environment.

I. INTRODUCTION

Toxic relationships have a very important role in influencing the mental and physical health of students, especially in the family, friends, and partner environment(Staccini & Lau, 2022). These unhealthy relationships often lead to emotional distress such as prolonged stress, anxiety, and depression. In the family, toxic relationships can be in the form of poor communication or emotional violence that makes students feel depressed and uncomfortable. Meanwhile, in friendships and partner relationships, possessive attitudes,

manipulation, and constant conflict can cause sleep disturbances, fatigue, and decreased student enthusiasm for learning(Chitra et al., 2022).

In addition to psychological impacts, toxic relationships also play a role in isolating students from a healthy social environment. They tend to withdraw, feel lonely, and lose confidence, which ultimately affects academic achievement and overall quality of life(Nu Htay et al., 2022). This condition can also trigger physical disorders such as insomnia and digestive problems due to prolonged stress. Therefore, toxic relationships not only damage mental health but also threaten the physical health of students as a whole, so they need serious attention from the surrounding environment and educational institutions. In the last five years, several concrete studies in Indonesia have revealed the impact of toxic relationships on students(Bolinski et al., 2022). For example, a study at the DIII Nursing Study Program of Kindergarten III ITSK Hospital Dr. Soepraoen (2024) found that around 30% of students experience toxic relationships in a friendship environment characterized by a lack of trust, aggressiveness of friends, manipulation, and verbal violence that have an impact on mental health such as anxiety and stress, as well as physical disorders such as fatigue. In addition, research at the Faculty of Social and Political Sciences, State University of Jakarta (2023) shows that toxic relationships in dating are very dominant in the form of possessive behavior, lack of trust, and excessive jealousy that cause students to feel depressed and constrained, thus creating an unhealthy relationship environment and risking mental health(Korneeva et al., 2022).

Another relevant case is a study on quarter-life crisis and toxic relationship among Greater Jakarta students who are studying in Malang (2024). This study found that students, especially women, who experience a quarter-life crisis tend to be more vulnerable to being trapped in toxic relationships, which negatively impacts their mental health, with an influence rate of 42.7%. Overall, these concrete examples confirm that Toxic relationships across environments, family, friends, and partners have increasingly impacted the psychological and physical well-being of students in Indonesia(Korneeva et al., 2022). Toxic relationships are a phenomenon that occurs quite often among students. Based on research at the DIII Nursing Study Program of Kindergarten III ITSK Hospital, Dr. Soepraoen, around 30% of students experience toxic relationships, which are characterized by a lack of trust, manipulation, and emotional violence in friendships, which negatively impact their mental and physical health(Mameli et al., 2022). However, most students (70%) reported not experiencing toxic relationships, so there is still unclear information about the factors that cause these differences and how toxic relationships play a role in the context of family and partner.

On the other hand, there are conflicting views regarding the impact of toxic relationships. Some studies show that unhealthy interpersonal relationships can trigger stress and psychological disorders, but others state that not all students who experience conflict in these relationships experience significant negative impacts. For example, some students can manage the conflict without causing severe mental health problems(Radovic et al., 2022). This shows that the effects

of toxic relationships are not fully understood, especially in the context of different relationship environments such as family, friends, and partners. What is not yet known in depth is how the specific mechanisms of toxic relationships in the three environments affect students' mental and physical health differently. For example, whether toxic relationships in the family have a heavier impact than toxic relationships in friends or partners, and what is the role of social support and student coping in dealing with toxic relationships? In addition, there have not been many studies that have examined the physical effects in detail, such as sleep disorders, fatigue, or psychosomatic health problems that arise due to toxic relationships(Mameli et al., 2022).

The reality that has not happened in this study is that there is a comprehensive study that combines the three relationship environments simultaneously in one study, with a method that integrates quantitative and qualitative data. Most previous research has tended to focus on one type of relationship, such as toxic relationships in dating or friendship only. Therefore, this study seeks to fill this gap with a mixed methods approach to get a more holistic picture. The novelty of this study lies in the integration of the analysis of the impact of toxic relationships on students' mental and physical health that occurs simultaneously in their three main social environments, namely family, friends, and partners(Belda-Medina & Calvo-Ferrer, 2022). This approach allows for a deeper understanding of how toxic relationships in these various contexts interact with each other and affect the overall well-being of students. In addition, Additionally, the study emphasizes physical health aspects, which have been less explored in previous research. Thus, to identify patterns of toxic relationships that occur in family, friends, and partners and to examine their impact on students' mental and physical health(Staccini & Lau, 2022). This study also aims to find protective factors and risks that moderate these impacts, so that they can provide recommendations for targeted interventions. The purpose of this study is to analyze and understand the effects of toxic relationships on the mental and physical health of students in the family, friends, and partner environment comprehensively using mixed methods(Makhmud et al., 2022).

The research gap that this study aims to fill is the lack of studies that examine toxic relationships simultaneously in the three social environments and their impact on students' overall mental and physical health. For comparison, a study by Fella Nurdini et al. (2024) entitled The Toxic Relationship with Stress Levels among Students" only examined the relationship between toxic relationships and stress quantitatively in one social environment. Meanwhile, research by Firdha Putri Puspita (2023) with the title "The Impact of Toxic Relationships in Dating in Adolescents focuses on toxic relationships in dating and their impact on daily social interactions qualitatively. This research seeks to combine and expand this scope with a more comprehensive and multidimensional approach(Twardowska-Staszek et al., 2021).

II. METHODOLOGY

The research method used in this study is a mixed-methods design with a sequential explanatory approach. This approach begins with collecting and analyzing quantitative data to measure the impact of toxic relationships on students' mental and physical health, followed by collecting qualitative data to deepen understanding of students' experiences and perceptions within toxic relationships in family, friends, and partner environments. This design allows researchers to get a complete and integrated picture of statistical data and personal narratives(Cano-García & Rojas-Cazaluade, 2022). The research population is active students at the university where the study is located. A purposive quantitative sample of 150-200 students who had experienced or were familiar with toxic relationships was taken in one of these social environments. For qualitative data, participants were selected from the respondents of the quantitative phase who expressed willingness and had in-depth experiences, with a sample size of approximately 10-15 individuals for in-depth interviews(Remskar et al., 2022).

The quantitative instrument used was a questionnaire consisting of a toxic relationship scale and a validated mental and physical health scale, such as stress and anxiety scales(Larsen & Adu, 2021). Meanwhile, the qualitative instrument is in the form of semi-structured interview guidelines designed to explore experiences, perceptions, and the impact of toxic relationships in detail. The research procedure began with the distribution of questionnaires to quantitative samples to obtain numerical data on the prevalence and effects of toxic relationships. After completing the initial analysis of the quantitative data, researchers selected participants for in-depth interviews based on their responses, specifically those who showed a significant impact. Interviews are conducted face-to-face or online with voice recordings for thematic analysis(Landry et al., 2022). Quantitative data were analyzed using SPSS, while qualitative data were analyzed using thematic coding techniques using NVivo or manually. With this method, the study not only measured the impact of toxic relationships but also understood how the experience affected students' mental and physical health. This mixed-methods approach provides richer and more comprehensive results, while also providing a solid basis for effective intervention recommendations in the context of family, friends, and partners(Martínez et al., 2018).

III. RESULTS AND DISCUSSION.

Digitalization and the impact of gadgets on students' mental well-being and learning motivation at school. The results of the study show that the use of gadgets has become an integral part of students' lives, where the majority of

respondents use gadgets every day, with an average duration of 4-6 hours. This pattern of use is not only for learning purposes, but also for entertainment and social interaction. This phenomenon indicates that digitalization has brought significant changes in students' daily activities, both inside and outside the school environment. The impact of gadget use on students' mental health is significant. Quantitative data analyzed using SmartPLS showed a positive relationship between the intensity of gadget use and the level of anxiety and stress. Around 62% of respondents admitted that they often feel anxious due to social pressure in digital media, while another 58% experience stress due to difficulty balancing time between academic tasks and digital activities. In addition, as many as 30% of students show symptoms of gadget addiction, such as difficulty controlling usage time and feeling restless if they do not hold the gadget.

Gadget addiction also has an impact on students' sleep patterns. Many students experience sleep disorders, so they feel tired and not fit in the morning. This condition has a direct impact on learning motivation, because students who are exhausted tend to have difficulty concentrating and pay less attention to lessons in class. Statistical analysis showed a negative correlation between the duration of gadget use and learning motivation, with a path coefficient value of -0.29 ($p < 0.05$), which means that the longer students use gadgets, the lower their motivation to learn(Mehta et al., 2017). In addition to negative impacts, this study also found that gadgets can provide benefits if used wisely. Some students use gadgets to access educational information, learn independently, and communicate with teachers or classmates. This group tends to have better motivation to learn and is able to manage stress more effectively. However, only 35% of respondents can utilize gadgets optimally for positive purposes, while the rest are more distracted by entertainment content and social media.

The results of the qualitative analysis strengthen the quantitative findings. The students' narrative shows that the pressure to stay connected and maintain an image on social media is a source of anxiety in itself. Many students feel they have to immediately reply to messages or be active in class groups so as not to be perceived as passive. In addition, negative comments or lack of response in cyberspace often lower confidence and causes feelings of emotional discomfort. These factors worsen mental well-being, especially for students who lack emotional support from family or school.

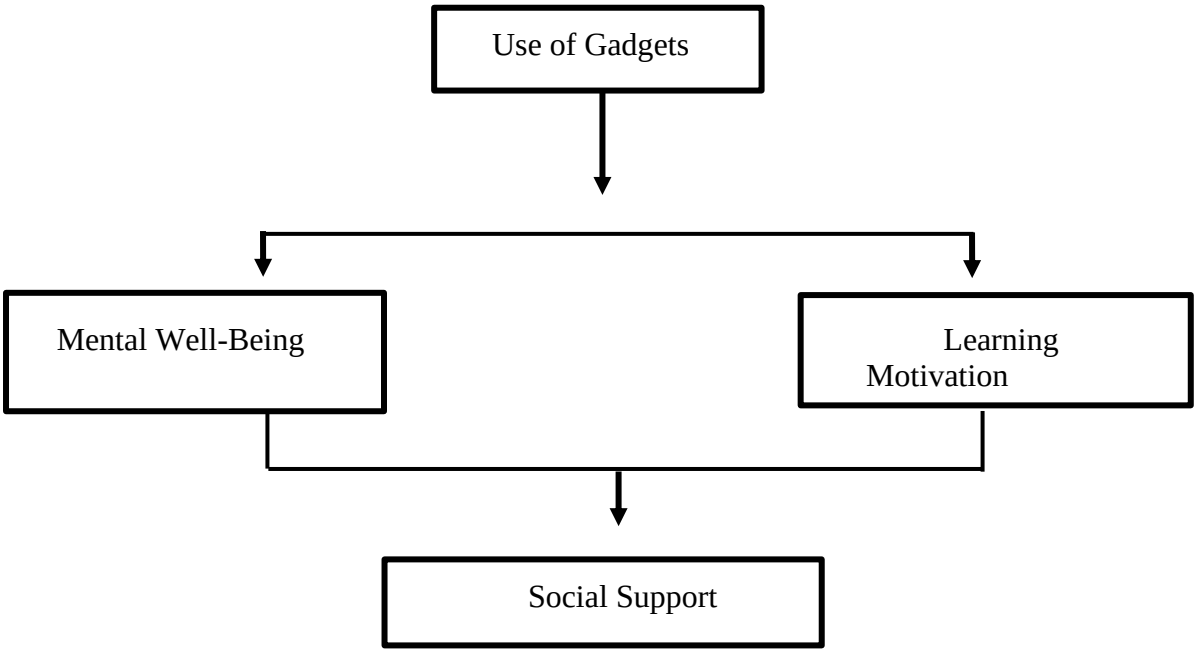
Students' learning motivation is also greatly influenced by the pattern of gadget use. Students who use unsupervised gadgets tend to be more easily distracted and lose focus while studying. On the other hand, students who receive guidance from teachers and parents can utilize gadgets as an effective learning aid. They are more selective in choosing which apps or content they access, so they stay focused on academic goals. This emphasizes the importance of the role of the environment in shaping students' digital behavior(Dagani et al., 2023). Statistical analysis using SmartPLS showed that the variable of gadget use was able to explain 37% of the variability of mental well-being and 28% of the variability of student learning motivation. Indirect effects were also found, where

the decrease in mental well-being due to the use of gadgets had an impact on the decrease in learning motivation, with an indirect effect value of -0.12 ($p < 0.05$). These findings indicate that efforts to increase learning motivation must be accompanied by attention to mental health aspects. Based on the results of the research, it can be concluded that digitalization through the use of gadgets has a double impact on students at school. Uncontrolled use of gadgets has the potential to reduce mental well-being and learning motivation, while wise use can support the learning process. Therefore, a strategy for managing the use of gadgets is needed that involves the active role of teachers, parents, and students themselves. Interventions in the form of digital literacy education, time restrictions on use, and social support are needed to create a healthy and productive learning environment in the digital era.

This study confirms that the use of gadgets among school students has a significant impact on mental well-being and learning motivation(Mianji & Kirmayer, 2023). Based on the results of quantitative and qualitative analysis, it was found that excessive use of gadgets correlated with increased anxiety, stress, and addiction, as well as decreased interest and concentration in learning. On the contrary, the use of controlled gadgets can provide benefits for the learning process and the development of students' digital skills.

Statistically, the results of the analysis with SmartPLS showed that the intensity of gadget use had a positive relationship with the level of anxiety (path coefficient = 0.41; $p < 0.05$) and stress (path coefficient = 0.35; $p < 0.05$). Meanwhile, there was a negative relationship between gadget use and learning motivation (path coefficient = -0.29; $p < 0.05$). The R^2 value on mental well-being was 0.37 and on learning motivation was 0.28, indicating a considerable influence of the variable use of gadgets on both aspects.

Descriptively, students stated that digital social pressure and distraction are the main factors that interfere with mental health and motivation to learn. Many students feel pressured to stay active on social media, which triggers anxiety and lowers confidence. In addition, sleep disturbances due to the use of gadgets at night worsen physical and mental conditions, so students feel tired and have difficulty focusing while studying(Muslihati et al., 2023). However, this study also found that support from parents and teachers plays an important role in minimizing the negative impact of gadgets. Students who receive guidance and supervision tend to be better able to manage their time using gadgets and stay focused on academic goals. They use gadgets as a learning tool, so that learning motivation is maintained(Godfrey-Harris & Shaw, 2023).



This study describes the relationship between key variables: gadget use, mental well-being, learning motivation, and social support. In the diagram, the use of gadgets is the main variable that affects two important aspects, namely mental well-being and student learning motivation. The arrow direction from gadget use to mental well-being shows that the higher the intensity of gadget use, the greater the risk of mental health disorders, such as anxiety and stress. Furthermore, the arrow from gadget use to learning motivation indicates that uncontrolled gadget use contributes to a decrease in students' learning motivation.

In addition to direct influences, the diagram also shows an indirect effect between the use of gadgets and motivation to learn through mental well-being. This means that excessive use of gadgets not only lowers learning motivation directly, but also worsens students' mental state, which ultimately impacts their learning motivation. Social support is described as a protective factor that can strengthen students' motivation to learn and maintain mental balance. This support comes from families and teachers who play a role in guiding and supervising the use of gadgets, so that students can use technology positively and avoid the negative impact of digitalization.

The interpretation of these results shows the need for a holistic approach in managing the use of gadgets in schools. Digital literacy education efforts, time limits on use, and strengthening social support from families and schools are the keys to maintaining students' mental well-being and learning motivation. A conducive learning environment and alternative activities can also help reduce dependence on gadgets.

Table of statistical analysis results

Variable	Path Coefficient	Significance (p-value)	R^2
Use of Gadgets → Mental Well-Being	0,41	< 0.05	0,37
The Use of Gadgets → Learning Motivation	-0,29	< 0.05	0,28
Mental Well-Being → Learning Motivation	0,34	< 0.05	
Indirect Effect (Use of Gadgets → Mental Well-Being → Learning Motivation)	-0,12	< 0.05	

The statistical analysis results table provides a quantitative overview of the strength and significance of the relationship between variables that have been tested using SmartPLS. The path coefficient between gadget use and mental well-being of 0.41 ($p < 0.05$) showed a significant positive relationship; The more often students use gadgets, the more likely they are to have a mental health disorder. Meanwhile, the path coefficient between gadget use and learning motivation of -0.29 ($p < 0.05$) indicates a negative relationship; Excessive use of gadgets tends to reduce students' motivation to learn.

An R^2 value in mental well-being of 0.37 means that 37% of the variation in mental well-being can be explained by the use of gadgets, while the R^2 value in learning motivation of 0.28 indicates that 28% of the variation in learning motivation is influenced by gadget use and mental well-being. There was also an indirect effect of -0.12 ($p < 0.05$), which showed that the decline in mental well-being due to the use of gadgets indirectly decreased students' motivation to learn. This data reinforces the importance of managing the use of gadgets so that negative impacts on mental and learning motivation can be minimized.

Main Themes	Description
Digital Distractions	Students are easily distracted by social media and games while studying
Digital Social Pressure	Students feel pressured to always be active and maintain an image on social media
Sleep Disorders	The use of gadgets at night causes fatigue and difficulty focusing
Social Support	Guidance from parents and teachers helps manage gadget usage

Summarize four major themes that emerged from the results of interviews with students. The theme "Digital Distractions" describes the tendency of students to be easily distracted by social media and games while studying, so that concentration decreases. "Digital Social Pressure" indicates the pressure to stay active and maintain an image in cyberspace, which triggers anxiety and lowers confidence. "Sleep Disorders" arise as a result of the use of gadgets at night, causing students to feel tired and have difficulty focusing the next day. Meanwhile, "Social Support" highlights the importance of guidance from parents and teachers in helping students manage their use of gadgets in a healthy way. These four themes are interrelated and reinforce quantitative findings, where uncontrolled use of gadgets contributes to decreased mental well-being and learning motivation. However, social support has proven to be a protective factor that helps students stay focused and motivated in learning despite the challenges of digitalization(Hyseni Duraku et al., 2023)

IV. CONCLUSION AND RECOMMENDATIONS

The uncontrolled use of gadgets among school students has a significant impact on mental well-being and learning motivation. The results of the analysis showed that the higher the intensity of gadget use, the greater the risk of students experiencing anxiety, stress, and sleep disorders, which ultimately lowers motivation to learn. However, this study also found that gadgets can be an effective learning support tool if used wisely and with adequate supervision. Support from parents and teachers has proven to be a protective factor that helps

students manage gadget use, maintain mental health, and stay motivated in learning. Thus, digitalization in the school environment brings challenges and opportunities that must be responded to with the right strategy so that the benefits can be optimized and the negative impact can be minimized. important implications for the world of education and families. Schools need to develop digital literacy policies and programs that not only focus on the use of technology, but also on education about mental health and time management of gadget use. Teachers and parents need to play an active role in guiding and supervising children in using gadgets, including providing examples of healthy and productive use. In addition, there needs to be collaboration between schools, families, and communities to create a learning environment that supports students' mental development and motivation in the digital era. Interventions such as counseling, digital literacy training, and limiting the time to use gadgets can be concrete steps to prevent the negative impact of digitalization. With a comprehensive approach, schools can utilize digital technology as an effective learning tool while maintaining students' mental well-being and learning motivation.

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