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# The Cognitive and Behavioural Impact of Social Media and Gaming on Academic Performance in Medical and Nursing Students

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**Abstract:** *This study examines the relationship between digital media consumption, gaming time, and academic performance among medical and nursing students at the University of Galați during the academic year 2024-2025. Data from 209 students were collected using PsyToolkit and analysed using SPSS v27, Excel, and Python for statistical analysis. The research explores correlations between the Bergen Social Media Addiction Scale (BSMAS), time spent on social media and gaming, and students' academic grades. The results indicate significant differences in digital media usage between medical and nursing students, with the latter group spending more time on social applications. Gaming behaviour was similar across groups, suggesting it serves as a recreational activity rather than an academic detriment. However, no significant correlation was found between gaming time and academic performance in the same group. Regression analysis found no significant predictors for academic performance, highlighting the need for further research and supplementary data. Regression analysis found no significant predictors for academic performance, highlighting the need for further research and supplementary data. Additionally, the most commonly used social media applications and their differentiated usage based on age categories were revealed. Findings emphasise the importance of balanced digital consumption and structured academic support to optimize student success.*

**Keywords:** *social media addiction; BSMAS; Bergen Social Media Addiction Scale; gaming; academic performance; academic grades; medical students; nurse students.*

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## 1. Introduction

Students' extensive use of digital apps and social media platforms has been ubiquitous in recent decades, prompting many concerns about their effects on academic achievement, mental health, and the educational process. Depending on how these technologies are incorporated into students' daily life, prior research has demonstrated that excessive exposure to social networks and video games can have beneficial and adverse effects on academic performance (Andreassen et al., 2016; Tiggemann et al., 2018).

The study of medicine is renowned for its extreme difficulty and rigorous academic standards. Due to their demanding study schedules and exposure to a large amount of knowledge, medical students are able to efficiently manage the time allotted to recreational activities, such as using digital apps and playing video games. According to earlier research, social media use can affect academic performance in two ways. On one hand, it can facilitate peer-teacher interactions, collaborative learning, and access to medical information (Tang et al., 2021). On the other hand, excessive use may contribute to distraction, procrastination, and worse academic performance (Keles, McCrae, & Grealish, 2020).

The effects of gaming and social media use on medical and nursing students in Romania have not been systematically investigated. In the 2024–2025 academic year, the current study aims to investigate the association between social media use, video game playing time, and academic achievement among students from Galaţi's Faculty of Medicine and Faculty of Nursing. It also attempts to compare the differences between these two student categories in order to determine whether and how the subject of study affects digital behaviours and academic achievement.

High scores on the Bergen Social Media Addiction Scale (BSMAS) have been linked to problematic social media use and have been shown in numerous studies to have a negative impact on academic performance (Andreassen et al., 2012; Griffiths, Kuss, & Demetrovics, 2014). To find any noteworthy patterns or distinctions between the categories, we examine the BSMAS scores of medical and nursing students and correlate them with their social media and gaming behaviours.

Data collection was performed using PsyToolkit, an online platform that facilitates the administration of standardised questionnaires and is widely used in psychological and social research, to collect data. Descriptive statistics, non-parametric tests (Mann-Whitney U), Spearman correlations, and regressions were used to evaluate the associations between the variables under study. The data were then analysed using statistical software packages, specifically SPSS v27 and Python. The Ethics Committee approved the study, and all information gathered was anonymised and used only for scientific research in compliance with current data protection laws. Before their involvement, participants provided written informed consent after being briefed on the study's objectives.

Recent empirical work has emphasised the growing cognitive impact of short-form media platforms like TikTok, which promote rapid content cycling and reward loops. These features have been associated with increased cognitive load, reduced sustained attention, and difficulties in academic concentration (Jiang & Ma, 2024; Shamloul, 2024). Integrating this dimension is vital to understanding the potential academic consequences of modern social media usage.

By examining variations in digital behaviours and their effects on academic achievement in two distinct groups of medical students, this study adds to the body of existing literature. The findings will provide valuable insights for improving teaching methods, mitigating problematic social media usage, and promoting efficient digital time management among Romanian students. The data utilised in this study were collected as part of a comprehensive and ongoing investigation into student well-being, digital behaviour, and mental health within healthcare education programs. This larger research initiative aims to expand to additional academic institutions and incorporate longitudinal designs, ultimately seeking to identify temporal patterns and predictive factors that may guide early interventions and inform institutional policies.

## 2. Methods

### *2.1. Participants*

First-year students enrolled in the Faculty of Medicine and Faculty of Nursing at Dunărea de Jos University of Galaţi for the academic year 2024–2025 were recruited for this study. A convenience sampling method was employed to select volunteers who provided informed consent prior to participation. The respondents' personal information was fully anonymised before data processing and storage, ensuring that participation was entirely voluntary. Each participant was made aware of their legal rights concerning the management and security of their personal information, as well as their freedom to withdraw from the study at any time without facing any consequences.

### *2.2. Data Collection*

The online tool PsyToolkit was used to collect data (Stoet, 2010, 2017). This web platform, which offers a safe and private setting for distributing questionnaires and psychometric tests, has been validated and is widely used in behavioural and psychological research. Without the researcher's assistance, participants completed the online questionnaires in a set amount of time (15–30 minutes), which helped minimise any interview biases and outside influences on responders.

Three primary sections comprised the online survey:

- Academic information and general demographics (faculty, year of study, age, gender, and prior academic average).
- Bergen Social Media Addiction Scale (BSMAS).
- An ordinal scale with distinct time categories, modified from other studies on digital activity, is used to measure the amount of time spent on social media and gaming apps.

Participants read and electronically signed a comprehensive informed consent form outlining the study's goals, data anonymisation, their rights, and data protection procedures before beginning to fill out the questionnaire.

### *2.3. Instruments*

The Bergen Social Media Addiction Scale (BSMAS), a globally recognised psychometric tool that gauges problematic behaviour related to social media use, was employed to evaluate social media addiction (Andreassen et al., 2012). Each of the six items on this scale is scored on a Likert scale ranging from 1 (extremely seldom) to 5 (very often). An increased likelihood of digital addiction and harmful behaviour related to social media use is indicated by higher scores. While the BSMAS does not establish strict cut-off thresholds for clinical diagnosis of addiction, scores in the upper range on this scale indicate a higher level of problematic use and symptoms associated with social media addiction. In the context of research, Andreassen et al. (2012) suggest that endorsing items with 'often' (4) or 'very often' (5) can signal the presence of problematic behaviours. Although categorical classification is less relevant in our study, where the focus lies on associations and interrelations, it should be noted that there are no universally accepted thresholds for BSMAS scoring. Some studies, however, have proposed cut-off values of 19 or 24 for identifying problematic use (Luo et al., 2021). Prior research has shown that this instrument is valid and reliable in a variety of academic and cultural situations (Andreassen et al., 2012; Griffiths, Kuss, & Demetrovics, 2014).

Using an ordinal category scale, participants were asked to estimate the duration of daily use of digital apps and gaming in the following well-defined categories: (0) absolutely not, (1) less than ten minutes, (2) ten to thirty minutes, (3) thirty to sixty minutes, (4) one to two hours, (5) two to three hours, and (6) more than three hours. According to current studies on digital use, this scale was modified (Keles, McCrae, & Grealish, 2020; Tang et al., 2021).

### *2.4. Statistical Analysis*

SPSS version 27 software and Python (with the modules pandas, scipy, matplotlib, and seaborn) were used for statistical analysis. Before being moved to SPSS for in-depth descriptive and inferential analysis, the data were entered into a secure database and managed in Excel.

The distribution of the primary variables (BSMAS, time spent on applications and games, and academic grades) was examined using descriptive statistics. Given that the data did not follow a normal distribution (as validated by the Kolmogorov-Smirnov and Shapiro-Wilk tests), non-parametric tests were applied (Mann-Whitney U) for the comparative analysis between the groups under study (medical and nursing students). Taking into account the ordered nature of the observed variables, correlations between them were examined using the Spearman correlation coefficient. Additionally, visualisations were generated using the Python graphical packages Matplotlib and Seaborn to provide a clear and understandable representation of the findings, and also in Excel when appropriate.

### *2.5. Ethical aspects*

The Ethics Committee of the Dunărea de Jos University of Galaţi granted its approval to this study. All participants were informed in advance about the study's aims, the anonymous and exclusive use of the data for academic purposes, and the option to discontinue participation at any time in compliance with the General Data Protection Regulation (GDPR) of the European Union. Only authorised researchers actively involved in the project had restricted access to the data, which was stored anonymously and under safe settings. Throughout the whole process of data collection and analysis, the participants' information was kept strictly confidential.

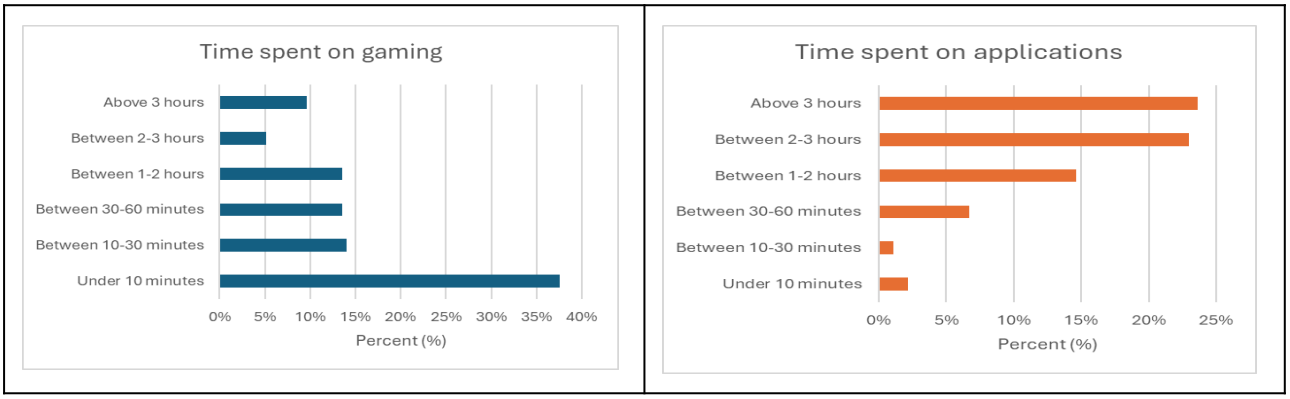
## *3. Results*

### *3.1. Academic Performance and Digital Media Consumption*

#### *3.1.1. Descriptive Statistics*

For the 2024–2025 academic year, 209 students from the faculties of medicine and nursing at Dunărea de Jos University in Galaţi, Romania, were included in the analysis. The two student groups' academic achievement and digital media usage showed different trends, according to descriptive statistics.

With an average academic score that was significantly higher than that of nursing students (mean: 9.25 vs. 8.95; Mann-Whitney U = 1,514; $p < 0.001$), students from the Faculty of Medicine demonstrated superior academic performance. Additionally, medical students reported spending less time on social media on average, which may indicate a connection between improved academic performance and reduced digital media engagement– see Figure 1.




*(a)* *(b)*

*Figure 1. Distributions of Gaming (a) and Media App time (b)*

*3.1.2. Comparative Analysis between Medicine and Nursing Students*

To facilitate statistical analysis, the responses given by the participants were coded as follows:

- Under 10 minutes = 1
- Between 10-30 minutes = 2
- Between 30 -60 minutes = 3
- Between 1-2 hours = 4
- Between 2-3 hours = 5
- Above 3 hours = 6

We used a Mann-Whitney U test to find any possible differences between the two groups in terms of their gaming time, digital application usage, and social media addiction scores (BSMAS). There were no statistically significant differences in BSMAS scores between nursing and medicine students (Mann-Whitney U = 2,315; p = 0.161), suggesting that social media addiction levels were comparable in both academic fields.

There was a statistically significant difference in the amount of time spent on social media applications between the two groups (Mann-Whitney U = 1,902; p < 0.001). Compared to medical students, nursing students reported using social media platforms with greater frequency, as illustrated in Figure 2. These findings support other research suggesting that medical studies' increased demands and academic rigor may restrict the amount of time available for intensive usage of digital media (Andreassen et al., 2016; Tang et al., 2021).

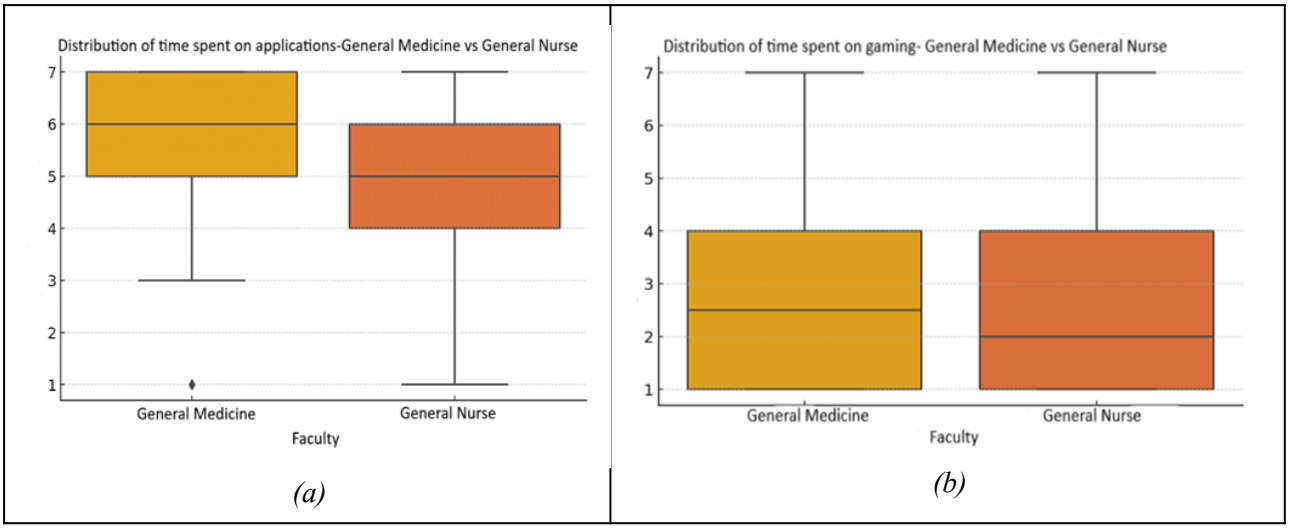



*Figure 2. Time spent on social media (a) and gaming (b) medicine vs nursing students*

There were no notable variations in the amount of time spent gaming between the two groups (Mann-Whitney U = 2,904; p = 0.675). This finding implies that, in contrast to the notable variations observed in social media use, gaming as a particular recreational activity is not significantly impacted by the type of medical education sought.

*3.1.3. Correlation between BSMAS, Academic Performance, and Digital Usage*

Several important findings were uncovered by Spearman correlation analyses. There was a moderate positive correlation between the BSMAS score and the amount of time spent on social media applications ($\rho = 0.301$, $p < 0.001$), indicating that greater social media dependency scores are associated with increasing program usage.

Academic achievement (average grades) and the BSMAS score did not significantly correlate ($\rho = 0.122$, $p = 0.105$), nor did academic performance and gaming and application time ($\rho = 0.070$, $p = 0.355$; $\rho = 0.028$, $p = 0.715$, respectively). These findings imply that the use of digital

media by itself does not substantially predict or correlate with academic achievement in this specific population.

*3.1.4. Regression Analysis on Academic Performance*

We performed a multiple linear regression analysis with academic scores as the dependent variable and BSMAS scores, application usage, and gaming time as predictors in order to further investigate potential implications on academic performance. The overall predictive value of the regression model was not significant ($R2 = 0.016$, $F(3,174) = 0.950$, $p = 0.418$). These findings support the hypothesis that factors other than the usage of digital media might be substantial contributors to influencing academic performance.

*3.1.5. Additional Analysis: Digital Media Usage across Age Groups*

Certain noteworthy patterns emerged when digital media consumption was disaggregated by age group. Age is a key component in digital media reliance, as evidenced by the considerably higher BSMAS scores of late teens and early young adults (16–21 years old) compared to mature adults (≥31 years old) (Kruskal-Wallis $H = 24.112$, $p < 0.001$).

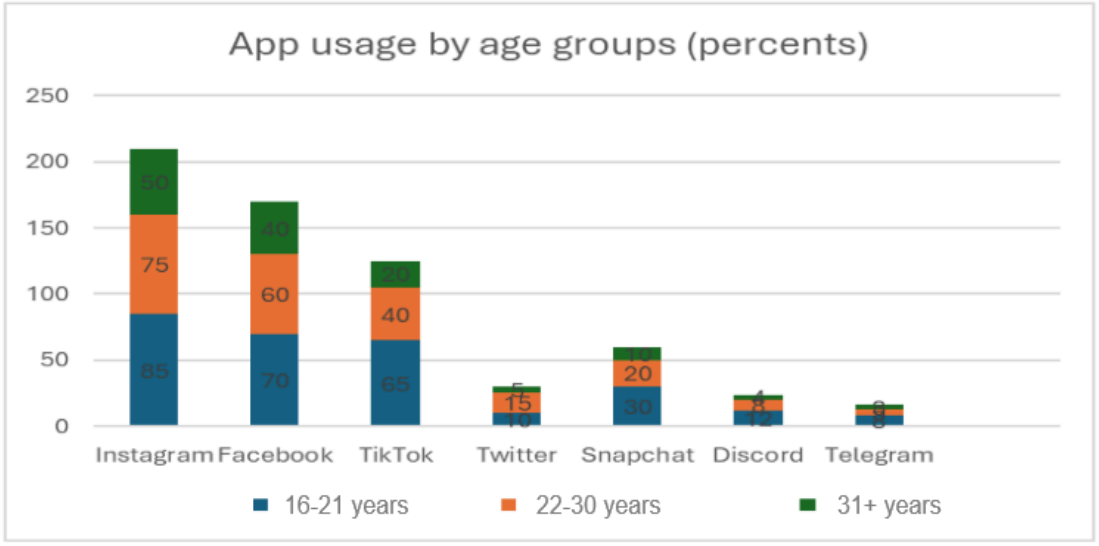



*Figure 3. App usage by age groups*

Consistent with global trends, older age groups reported significantly lower interaction with social media applications, as illustrated in Figure 3 (Sidoti, 2024; Keles, McCrae, & Grealish, 2020). This aligns with broader patterns of digital news consumption where younger generations increasingly rely on social media platforms as gateways to information (Newman et al., 2023).

The analysis reveals a marked variation in application usage based on age. Generation Z (16–21 years old) predominantly uses Instagram (85%) and TikTok (65%), reflecting a strong inclination toward fast and interactive visual content. Young adults (22–30 years old) continue to use Instagram and Facebook, but there is a noticeable decline in TikTok usage to 40%. Adults over 31 years old exhibit a stronger presence on Facebook (40%) and lower engagement with TikTok (20%), confirming findings from previous studies on the shift in digital platform preferences with increasing age. Auxier and Anderson (2021) highlight that Facebook remains the dominant platform among individuals over 30, whereas TikTok is primarily used by younger demographics under 25.

WhatsApp was also noted by 14 participants under the "Other" category and is primarily used as a messaging app for rapid group communication.

*3.1.6. Summary of Key Results*

Because of their more demanding coursework, medical students performed better academically and used digital media less.

Although nursing students reported significantly higher social media usage, this was not associated with lower academic achievement nor with increased BSMAS scores.

All groups exhibited similar gaming habits, regardless of academic performance or domain.

Academic outcomes and digital media intake did not significantly correlate, suggesting a complex relationship influenced by other factors beyond the scope of the current analysis.

Key statistical values are summarised in Table 1, along with the results' interpretation.

*Table 1. Summary of Statistical Results on Digital Media Use and Academic Performance*

| Comparison | Test Used | Statistic | p-value | Interpretation |
|---|---|---|---|---|
| Medical vs. Nursing Academic Performance | Mann-Whitney U | U = 1,514 | < 0.001 | Medical students scored significantly higher |
| BSMAS Scores (Medical vs. Nursing) | Mann-Whitney U | U = 2,315 | 0.161 | No significant difference in social media addiction |
| Application Time (Medical vs. Nursing) | Mann-Whitney U | U = 1,902 | < 0.001 | Nursing students used social apps more frequently |
| Gaming Time (Medical vs. Nursing) | Mann-Whitney U | U = 2,904 | 0.675 | No significant difference in gaming time |
| BSMAS vs. Application Usage | Spearman ρ | ρ = 0.301 | < 0.001 | Moderate positive correlation |
| BSMAS vs. Academic Grades | Spearman ρ | ρ = 0.122 | 0.105 | No significant correlation |
| App Time vs. Academic Grades | Spearman ρ | ρ = 0.070 | 0.355 | No significant correlation |
| Gaming Time vs. Academic Grades | Spearman ρ | ρ = 0.028 | 0.715 | No significant correlation |
| Regression (BSMAS, Applications & Game Time → Grades) | Linear Regression | F(3,174) = 0.950 | 0.418 | No predictive value ($R^2$ = 0.016) |

### *3.2. Correlations*

A positive link between social media usage and BSMAS scores was found using Spearman's correlation analysis ($r = 0.301$, $p < 0.001$).

There was no significant correlation between gaming time and academic achievement ($r = -0.121$, $p = 0.43$).

Academic grades and BSMAS scores were not significantly correlated ($r = -0.027$, $p = 0.86$).

### *3.3. Regression analysis*

BSMAS, gaming time, and social media time were not statistically significant predictors of academic achievement in a multivariate regression model ($p = 0.418$, $R2 = 0.016$), suggesting that these characteristics do not account for differences in academic performance.

## 4. Discussion

Using the Bergen Social Media Addiction Scale (BSMAS), this study investigated associations among social media addiction, gaming behaviour, digital media usage, and academic performance among students enrolled in the Faculty of Medicine and Faculty of Nursing at Dunărea

de Jos University in Galati, Romania, during the 2024–2025 academic year. Several important findings were uncovered by the investigation, adding to the body of evidence already available on medical students' usage of digital media and its effects on academic results.

### *4.1. Disparities in Digital Media Use and Academic Performance*

In keeping with earlier research indicating variations in academic rigour and performance among medical education disciplines, one noteworthy finding was that medical students demonstrated superior academic outcomes when compared to their nursing counterparts (Abdulghani et al., 2020). Due to their difficult and comprehensive coursework, medical students may have modified their digital habits to spend less time on social media than nursing students. This is consistent with studies showing that students in more demanding programs are less likely to be distracted by technology, which may improve their academic performance (Andreassen et al., 2016; Tang et al., 2021).

On the other hand, nursing students used social media applications at far higher rates, but this usage did not have a negative impact on their academic achievement. This result is consistent with earlier research demonstrating that social media use in moderation, especially for collaborative and instructional purposes, does not always negatively impact academic performance and can occasionally enhance learning outcomes (Tang et al., 2021). Nonetheless, concerns remain regarding excessive use of social media and digital applications, particularly with respect to their potential effects on time management and cognitive load (Andreassen et al., 2016).

One possible explanation for the differing digital media usage patterns between medical and nursing students is the structure of their respective curricula. Medical students typically face more rigorous schedules, including extended clinical rotations and in-depth coursework, which may limit opportunities for prolonged social media engagement.

In contrast, nursing programs might allow slightly more flexible time management, potentially increasing the window for recreational app use.

If we examine within the same group, namely medical and general nursing students, we do not observe significant correlations between application usage and academic performance. Comparing the groups, however, reveals that medical students typically perform better academically. This discrepancy must be considered in the context of the stricter examination standards within medical school compared to nursing programs. Additionally, we identify a statistically significant difference in BSMAS scores between these two groups. This implies that the observed differences are significant at the intergroup level and that, when the criteria used to evaluate academic achievement vary, the degree of reliance on media applications correlates adversely with academic performance between groups.

Since academic performance was assessed based on a grade obtained before the study, the way students adapt to the effort required for exam preparation remains unknown. Therefore, an additional question that could help better evaluate the correlation between academic performance and the degree of social media usage could be: "When preparing for an exam, do you reduce your social media usage?", evaluated using a Likert scale.

### *4.2. The Effects of Social Media Addiction (BSMAS) on Academic Results*

Our analysis revealed no significant correlation between BSMAS scores and academic performance in this specific population, despite prior research suggesting that social media addiction can have a detrimental effect on academic performance (Andreassen et al., 2016; Griffiths, Kuss, & Demetrovics, 2014). Medical and nursing students' strong academic drive and efficient time management techniques, which lessen the possible negative impacts of social media dependency, may be one reason for this outcome (Al-Menayes, 2015).

However, the BSMAS instrument's validity and diagnostic sensitivity in identifying problematic use patterns are highlighted by the observed positive association between BSMAS scores and the amount of time spent on social media programs. Although social media addiction did

not predict lower academic achievement in this study, the strong correlation with higher digital involvement highlights the significance of continuous monitoring and interventions meant to encourage students to use digital media in a healthy way.

### *4.3. Medical Students' Gaming Habits*

The lack of marked differences in gaming behaviours between the two student groups was another noteworthy observation. This result is consistent with recent international studies showing that medical students' gaming habits do not significantly differ between medical specialties or educational programmes (Balhara et al., 2019; Fuster et al., 2016). Medical students may be better able to handle academic challenges if they use gaming as a recreational pastime that relieves stress rather than distracting them from their studies. Additional investigation into the precise roles that gaming plays in stress reduction and balancing academic and personal lives may yield insightful information.

### *4.4. The Influence of Age on the Use of Digital Media*

Age-dependent discrepancies in digital media use and social media addiction were also found in our study. In comparison to older individuals (≥31 years old), younger students, more especially, late teens and early young adults (16–21 years old), showed noticeably higher BSMAS scores. This heightened susceptibility of younger age groups to developing patterns of potentially problematic behaviours is a recognised phenomenon, extending beyond digital media to other areas such as substance use, where patterns of planned versus unplanned engagement have been investigated in young adult populations (Fairlie et al., 2021). Our result confirms earlier research showing age-related patterns, according to which younger people are more susceptible to digital media usage and social media addiction (Keles, McCrae, & Grealish, 2020; Sidoti, 2024). To promote responsible digital media use and avoid possible academic disruptions caused by addiction, educational interventions aimed at younger student groups may prove particularly effective.

### *4.5. Limitations and Suggestions for Further Study*

Interpreting our results requires considering a number of constraints. Generalisability is constrained because the data were gathered from a single university and a small geographic area (Galați, Romania). Furthermore, the study's cross-sectional design makes it impossible to draw conclusions about a causal association between academic achievement and digital media use. To elucidate causation and the temporal correlations between these factors, longitudinal studies are necessary.

Additionally, other potentially significant factors that could mediate or moderate the relationship between digital media consumption and academic outcomes were not assessed in our study, including personality traits, motivation, stress levels, and specific social media uses (leisure versus education). These factors should be included in future research to gain a deeper understanding of the complex effects of digital media use in medical education settings.

### *4.6. Conclusions and Practical Implications*

Despite the noted drawbacks, this study makes a significant contribution to our knowledge of how medical and nursing students use digital media and perform academically. According to our research, when used responsibly, modest digital media use can correlate with good academic accomplishment rather than negatively affecting it. Institutions should consider including temporal self-regulation and formalised digital literacy training in the medical curriculum, with emphasis on balanced media consumption strategies. Particularly aimed at younger students, awareness and prevention initiatives could lessen the risks of excessive social media use and possible addiction.

Our results, taken together, provide a balanced viewpoint that acknowledges the possible educational advantages of digital media as well as its hazards. To give academic institutions and

politicians more comprehensive and solid suggestions, further study in a range of academic and geographic contexts is necessary.

## 5. Conclusion

The current study examined the academic outcomes of medical and nursing students at Dunărea de Jos University of Galați during the 2024–2025 academic year, in relation to their use of social media applications, gaming behaviours, and problematic digital media use, as measured by the BSMAS. Several crucial results that offer pertinent insights into the relationship between medical students' academic performance and their digital activities were drawn from the analyses that were carried out.

First, the comparative analysis revealed that medical students achieved significantly higher grade point averages (GPAs) than nursing students. The more demanding academic requirements, the particular study programs, and the variations in learning styles of these two student groups can all be used to explain this outcome. This result is consistent with earlier studies that showed notable variations in academic achievement among medical specialties (Abdulghani et al., 2020).

Second, compared to medical students, nursing students demonstrated a noticeably higher amount of time spent on social applications. However, contrary to earlier theoretical assumptions and empirical findings (Andreassen et al., 2016; Griffiths, Kuss, & Demetrovics, 2014), this behaviour was not associated with lower academic performance. Accordingly, regular use of social media does not always provide a barrier to learning, particularly when it is modest and well-incorporated into daily life.

The analysis found no discernible differences between medical and nursing students' gaming habits. As a result, gaming appears to have a comparable impact on students' leisure time across both academic categories without having a detrimental effect on their academic achievement. This finding lends credence to the idea that, rather than being a detrimental diversion, gaming can operate as a coping strategy or a way to relieve academic stress.

The study found that while there is a positive association between the amount of time spent on applications and the BSMAS score, which is used to quantify social media addiction, it was not significantly correlated with academic performance. These findings imply that while frequent usage of social media may raise the risk of addiction, it does not always translate into a decline in academic achievement for the students in our study. Therefore, other elements, including self-regulation abilities, academic motivation, and efficient time management techniques, may operate as mediators between the impacts of social application use on academic achievement (Tang et al., 2021).

From a practical standpoint, the findings indicate that universities may effectively integrate educational components promoting the regulated and mindful use of digital media platforms into their curricula. Optimising academic performance can be achieved through educational initiatives that promote efficient time management and moderate usage of social media, particularly for students enrolled in demanding programs like those in the medical sector.

Furthermore, the study's findings suggest new directions for multidisciplinary research at the intersection of cognitive neuroscience, education, and artificial intelligence. Technologies like Virtual Reality (VR) and Augmented Reality (AR) have shown promise in creating engaging learning experiences in various settings (Zhou et al., 2022), and Artificial Intelligence (AI) offers potential for personalised learning pathways and feedback mechanisms. As digital activity patterns become more observable, AI-powered learning analytics solutions could be developed to track and adapt to students' digital activities in real time. These technologies can detect early indicators of cognitive overload or distraction and provide personalised responses, thereby fostering healthy study habits and academic success.

The present study does, however, have several significant shortcomings. The study's convenience sample, which included only students from one university (Dunarea de Jos University in Galati), may have limited the generalisability of the findings. Additionally, the information was

self-reported, which could add a certain amount of subjective bias. To more precisely evaluate the effects of the digital environment on academic achievement, future studies should employ longitudinal methodologies, examine additional variables (such as academic stress, motivation, or learning style), and utilise larger sample sizes.

In conclusion, this study highlights the complexity of the relationship between social media use, gaming, and academic performance, providing us with a viewpoint for future research as well as the development of educational strategies and psychological interventions in a university setting.

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