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The Effects of Social Networking Sites Needs and Academic Stressors on Academic Motivation of College Students

Junge B. Guillena

Abstract

In recent years, social networking sites (SNSs) have experienced a surge in popularity, particularly among college students. These online platforms offer diverse functionalities that facilitate connections with friends and family, information sharing, and resource exchange. This study aimed to determine the effects of SNSs needs and academic stressors on the academic motivation of college students in one private schools in Iligan City, Lanao del Norte, Philippines during the second semester of the academic year 2022-2023. Using a simple random sampling procedure, 511 first, second, and third-year college students participated and responded to the adapted Likert-type instruments assessing the study variables. The result showed that most college students used Facebook, Facebook Messenger, and YouTube daily. It was also revealed that both SNSs and academic stressors positively affect extrinsic motivation. However, only SNSs have a positive impact on intrinsic motivation. Furthermore, academic stressors positively affect amotivation. Hence, educators and school administrators should consider incorporating SNSs to enhance motivation and engagement among college students. Specifically, educators can leverage the features of SNSs to promote collaboration, communication, and information sharing among students. Additionally, educators may consider designing academic activities encouraging students to use SNSs to explore and apply course content.

Keywords: *Social networking sites, academic stressors, academic motivation, College students*

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About the author:
Associate Professor, Adventist Medical Center College, Iligan City, Philippines. Corresponding email: jun28guillena@gmail.com

1. Introduction

Social networking sites (SNSs) have recently become increasingly popular, especially among college students (Tafesse, 2022; Kolhar et al., 2021; Gok, 2016; Lavanya & Karthikeyan, 2016). According to Thoene (2012), SNSs provide a range of functionalities that enable individuals to establish connections with their loved ones and acquaintances, as well as share information and resources. However, there is growing concern that SNSs may have more negative impacts than positive ones (Kolhar et al., 2021). For instance, Karpinski et al. (2013) argue that students' increased usage of social media for non-academic purposes can lead to disruptions in the learning environment and have negative effects on their academic performance. Multiple studies (Malak et al., 2022; Bhandarkar et al., 2021; Azizi et al., 2019; Al-Menayes, 2015) have discovered a consistent association between increased time spent on SNSs and lower academic performance among students. These findings suggest that students who prioritize online chatting and making social connections on SNSs over engaging in academic activities such as reading books are more likely to demonstrate poorer academic performance. While SNSs offer various functions for college students, including socializing, entertainment, and information seeking, students must use them in moderation and prioritize their academic responsibilities (Kolhar et al., 2021; Cao et al., 2018). The adverse effects of SNSs on students' academic performance are more pronounced because students tend to use such platforms to have fun and pass the time rather than for academic purposes (Masood et al., 2022).

Several studies have examined the correlation between SNSs, academic motivation, and academic stressors in college students. It was found that excessive use of SNSs can negatively impact academic performance and motivation, and SNS use can lead to increased academic stress and decreased academic motivation (Bottaro & Faraci, 2022). However, some studies have also found that SNSs can positively affect academic motivation, such as providing social support and a sense of belonging (Verduyn et al., 2022). Similarly, Manzano-Sanchez et al. (2021) showed that SNS use could positively affect academic motivation by providing social support and a sense of belonging. For this, Yang et al. (2022) emphasized that academic stress is negatively related to academic motivation in college students.

Despite the existing literature on the relationship between SNSs, academic motivation, and academic stressors among college students, there seems to be a research gap in understanding the specific effects of SNSs and academic stressors on academic motivation among Filipino college students. While some studies suggest that SNS usage and need can negatively impact academic performance and motivation and lead to increased academic stress, other studies suggest that SNSs can have positive effects on academic motivation by providing social support and a sense of belonging. Hence, this study investigates the effects of SNSs need and academic stressors on academic motivation among college students in one of the private schools in Iligan City, Lanao del Norte, Philippines.

2. Literature Review

2.1. Social Networking Site Usage and Needs

SNSs play a crucial role in meeting the various needs of their users, encompassing diversion, cognitive, affective, personal, and social integrative needs. Firstly, diversion refers to the entertainment and relaxation aspect of SNS use, providing a break from academic or work-related tasks. To fulfill this need, SNSs should offer a range of engaging and entertaining features, such as multimedia content, games, and interactive elements (Wu et al., 2020). Secondly, cognitive needs involve acquiring information, knowledge sharing, and intellectual stimulation through SNS use. SNSs should facilitate the dissemination of educational and informative content, encourage discussions, and promote knowledge exchange among users. Additionally, features such as online courses, academic forums, and access to reliable resources can cater to users' cognitive needs, enhancing their learning experiences (Hew et al., 2016). Affective needs pertain to emotional well-being, self-expression, and social support. SNSs should provide a platform for users to express themselves, share their thoughts and emotions, and receive support from their social network. Features like status updates, photo and video sharing, and private messaging can contribute to fulfilling affective needs and promoting positive emotional experiences and social connections (Kross et al., 2019). Personal integrative needs involve the desire for self-presentation, identity construction, and personal development. SNSs should enable users to create personalized profiles, curate their online presence, and express individuality. By offering tools for self-reflection, skill development, and goal setting, SNSs can assist users in personal growth and self-improvement (Raacke &

Bonds-Raacke, 2008). Lastly, social integrative needs encompass the desire for social interaction, relationship building, and community engagement. SNSs should facilitate user-to-user interactions, group collaborations, and networking opportunities. Features like friend requests, commenting, event invitations, and online communities can foster social connections, support shared interests, and promote a sense of belonging (Ellison et al., 2007). By addressing these needs for diversion, cognitive engagement, affective support, personal integration, and social integration, SNSs can create an enriching and fulfilling user experience.

Academic literature has explored the use of SNS concerning academic stress and motivation. In a literature review conducted by Astatke et al. (2021), the influence of SNS on secondary school student's academic achievement was analyzed. The review found that excessive use of SNS could lead to lower academic performance due to distractions and time management issues. However, other studies, such as Doleck and Lajoie's (2018) research on social networking and academic performance, have produced mixed results. While some studies indicated a negative correlation between SNS use and academic performance, others found no significant relationship. The literature review suggests that the impact of SNS on academic performance may depend on individual factors such as self-regulation and time management skills. Tafesse's (2020) work developed and tested a model in which student engagement mediates the relationship between SNS use and college academic outcomes. The study found that SNS use can have positive and negative effects on student engagement, affecting academic outcomes.

Singh and Malik (2021) discovered that SNS use could enhance learners' intrinsic motivation and academic achievement. Additionally, Barton et al. (2021) found that motivation is crucial to academic success. SNS use can also affect students' goal-setting abilities for academic tasks. However, other studies have demonstrated the negative effects of SNS use on academic stress and motivation. The literature review by Astatke et al. (2021) found that excessive SNS usage, inappropriate SNS use, and using SNS for recreational activities rather than educational purposes can harm students' academic achievement. The review also suggested that internet addiction, cyberbullying intentions, and sexually inappropriate behavior can mediate the negative effects of SNS use on academic achievement. Tafesse's (2020) study developed a model that showed that SNS use could have negative effects on academic performance if it leads to decreased student engagement. Moreover, Weinstein

(2022) explored the impact of problematic SNS use on sleep quality and duration in adolescents and young adults, finding a negative correlation between screen-based device usage and sleep quality. Additionally, Kolhar et al. (2021) discovered that excessive social media use could negatively affect family and friends' relationships. In summary, SNS use can positively and negatively affect academic motivation.

2.2. Academic Stressors

Academic stressors refer to the various factors and challenges that can contribute to the stress experienced by students in an educational setting. These stressors encompass academic demands, time management pressures, social expectations, and performance-related concerns. Understanding and addressing these stressors is essential for promoting student well-being and academic success. One significant academic stressor is the high academic demands placed on students, including heavy workloads, challenging coursework, and academic expectations. These demands can create pressure to excel academically, leading to stress and anxiety (Hudd et al., 2018). Students may experience stress when faced with many assignments, examinations, and deadlines, particularly during peak academic periods.

Time management pressures are another common academic stressor. Students often juggle multiple responsibilities, such as coursework, part-time jobs, extracurricular activities, and personal commitments. Balancing these demands and allocating sufficient time for studying and completing tasks can be challenging, contributing to stress (Britt et al., 2017). Poor time management skills and feeling overwhelmed by competing priorities can exacerbate this stressor. Social expectations and interpersonal factors also contribute to academic stress. Students may experience pressure from family, peers, or society to achieve high grades, meet specific academic goals, or pursue certain career paths. These expectations can create stress and feelings of inadequacy or fear of disappointing others (Ganster et al., 2021). Additionally, social interactions within the academic environment, such as group work or presentations, can induce anxiety and stress related to performance evaluation and peer judgment.

The impact of academic stress on students has been extensively studied in academic literature. Studies have shown that academic stress can lead to musculoskeletal disorders, mental well-being, and overall health (Alharbi & Smith, 2018; Ekpenyong, Daniel & Aribo, 2013; Barbayannis et al., 2022). The effects of academic stress on mental and physical health

can be significant, with excessive pressure leading to depression, anxiety, poor sleep, substance abuse, and musculoskeletal disorders (Alsulami et al., 2018). Moreover, academic stress has been linked to negative learning and academic performance effects, resulting to academic burnout (Lin & Huang, 2014). Recent research by Barbayannis et al. (2022) found that nonbinary, female, and second-year college students are most affected by academic stress. Zhang et al. (2022) also reported a positive association between academic stress and depression, perceived stress, and mental pressure among students. The COVID-19 pandemic has exacerbated academic stress among college students, with academic workload and social isolation being significant stressors (Yang, Chen & Chen, 2021).

One study discovered that academic stress harms academic motivation, whereas a high level of autonomous academic motivation can reduce academic stress (Yang et al., 2022). However, another study found no significant relationship between academic stress and motivation and students' academic performance (Tus, 2020). Another study on undergraduate students showed that academic stress negatively correlates with academic motivation (Muza & Muhammad, 2020). Given the complexity and variability of the impact of academic stressors on academic motivation, this current study aims to examine the effect of academic stressors on students' academic motivation.

2.3. Academic Motivation

Academic motivation encompasses various forms, including intrinsic, extrinsic, and amotivation. Understanding these different types of motivation is crucial for comprehending the driving forces behind students' engagement and persistence in academic pursuits. Intrinsic motivation refers to the internal desire and enjoyment that individuals experience when engaging in academic activities. It involves pursuing learning for inherent satisfaction, driven by personal interest, curiosity, and competence (Ryan & Deci, 2000). Intrinsically motivated students are more likely to display higher levels of engagement, persistence, and a deep understanding of the material being studied. Intrinsic motivation is fostered by creating a supportive and stimulating learning environment that allows students to explore their interests, make choices, and experience a sense of autonomy in their learning (Glynn et al., 2015).

Extrinsic motivation, on the other hand, refers to engaging in academic activities to attain external rewards or avoid punishments. These external factors include grades,

recognition, competition, or meeting external expectations (Deci & Ryan, 1985). While extrinsic motivation can provide initial incentives and guide behavior, an overreliance on external rewards may undermine intrinsic motivation and hinder long-term engagement. To promote healthy extrinsic motivation, educators can create a supportive classroom climate that emphasizes mastery-oriented goals, acknowledges effort, and provides meaningful feedback (Grolnick & Ryan, 1987). Amotivation represents the lack of motivation or intention to engage in academic tasks. Individuals who experience amotivation feel disconnected from the value or relevance of academic pursuits and may exhibit disinterest, apathy, or a lack of effort (Vallerand, 1997). Addressing amotivation requires identifying the underlying reasons and barriers that contribute to this state, such as a perceived lack of competence, the irrelevance of the curriculum, or a sense of learned helplessness. Strategies to combat amotivation include providing students with autonomy, relevance, and competence opportunities and fostering a positive and supportive learning environment (Vansteenkiste et al., 2009).

Academic motivation, which is critical for academic success, directs behavior towards achievement (Steinmayr et al., 2019), and highly motivated students actively engage in academic activities, leading to better academic outcomes (Kotera et al., 2021). Oclaret's (2021) study on the impact of academic intrinsic motivation facets identified six subscales of intrinsic academic motivation: mastery orientation, need for achievement, power motivation, fear of failure, authority expectations, and peer expectations.

Academic motivation plays a critical role in determining students' success in their studies, and several studies have been conducted to examine its various aspects. According to Steinmayr et al. (2019), achievement motivation is an essential determinant of academic success as it directs behavior toward achieving academic goals. H.U. & Luo's (2021) study among senior medical students revealed that academic motivation is reflected in a student's approach, persistence, and interest in academic subjects. A literature review conducted by Vu et al. (2022) also demonstrated that multiple motivation constructs are linked to academic achievement, emphasizing the importance of the motivation-achievement cycles in learning. Additionally, Cañabate et al. (2021) raised the question of the role of academic motivation in cooperative approaches in educational psychology, highlighting the need to explore this aspect of academic motivation further.

3. Methodology

3.1. Design and Participants

The present study employed a cross-sectional and descriptive research design, utilizing an online Google form survey to collect quantitative data. The participants were 511 college students from a private institution in Iligan City, Lanao del Norte, Philippines, selected through a simple random sampling procedure. The sample was predominantly female, with 72% (n=368) of participants identifying as female and 28% (n=143) as male. The mean age of the students was 19.89 years old, with a standard deviation of 1.88 years, and the majority fell within the age range of 17-19 years old, accounting for 75.7% (n=387) of the sample. First-year college students comprised the most significant proportion of participants, followed by second-year college students (37.8%, n=193), with only 3.7% (n=19) participants in their third year of college. Regarding parental education, most students reported having parents who were college graduates (n=296, 57.9%). In contrast, in terms of parental income, most participants came from families with a monthly income of at least 20,000 (n=311, 60.9%).

3.2. Instruments

Social Networking Sites Usage and Needs Scale (SNSUN). Ali et al. (2020) developed and validated an instrument consisting of five dimensions of social networking site (SNS) needs (diversion, cognitive, affective, personal integration, and social integration) using a two-phase approach: expert validation of the questionnaire and instrument convergent validation. They administered the adapted questionnaire to 162 participants in an online survey in Pakistan, followed by structural equation modeling (SEM). The instrument demonstrated high reliability with a Cronbach's alpha coefficient of .922.

Academic Stressors. The scale used in this study was adapted from Yikealo et al. (2018) and consisted of 10 items. The participants rated their stress levels on a scale of 1 (never) to 4 (frequently), with higher scores indicating more significant stress. The scale demonstrated a marginal level of reliability, with a coefficient of $\alpha = 0.60$.

Academic Motivation (AMS) Scale. Vallerand et al. (1992) initially developed the instrument utilized in this study. It consists of 28 items that are categorized into three primary subscales: intrinsic motivation (12 items), extrinsic motivation (12 items), and amotivation (4 items). The instrument has been found to have satisfactory internal consistency ($\alpha = 0.79$) and

temporal stability over one month (mean test-retest correlation = 0.79). Intrinsic motivation is the enjoyment and satisfaction derived from participating in an activity for its own sake (Vallerand, 1992; Deci & Ryan, 1985). Extrinsic motivation refers to behaviors engaged in as a means to an end rather than for their own sake (Vallerand, 1992; Deci, 1975). Another motivational construct, amotivation, was later introduced by Deci and Ryan (1985) to explain human behavior further. Individuals are considered amotivated when they do not perceive any connection between outcomes and their actions and are neither intrinsically nor extrinsically motivated.

3.3. Procedure

Participants were given online Google form surveys through various means, including Facebook group chats, individual messenger accounts, and institutional email addresses, to gather data. The questionnaires, adapted in English, were given directly to the participants who had a firm grasp of the language, without translation to the local dialect. Sufficient time, up to two days, was given to complete and return the surveys to ensure a high response rate. The collected data were encoded into Jamovi, a free statistical software, and analyzed using descriptive statistics, such as frequency and percentages, mean, and standard deviation. The Pearson correlation was utilized to investigate potential associations between students' SNS needs, academic stressors, and academic motivation. Finally, multiple regression analysis with simultaneous entry was performed to test if social networking sites and academic stressors significantly impact students' academic motivation.

3.4. Study Limitations

The cross-sectional research design has limitations as it provides only a snapshot view of the data at a particular moment, without the ability to establish causality or track changes over time. Furthermore, questionnaire-type instruments are susceptible to numerous factors that may impact their accuracy, such as memory bias and social desirability bias, leading respondents to give socially acceptable answers. These instruments may also need more detail to fully capture the intricacies of the phenomenon under investigation. Additionally, a study's sampling method may have limitations, including sampling bias and sampling error. Sampling bias can occur when certain groups are over or under-represented in the sample, resulting in inaccurate results. Similarly, sampling error can result from random fluctuations in the sample,

leading to inaccurate results. However, these limitations can be minimized by utilizing appropriate sampling techniques such as randomization and stratification.

4. Results

This section presents the analysis and findings per the study's research objectives.

Table 1

Usage of Different SNSs

SNS	Everyday	3-5 times a day	Occasionally	Rarely	Never
Facebook	348 (68.1)	75 (14.7)	53 (10.4)	33 (6.5)	2 (.4)
Twitter	71 (13.9)	43 (8.4)	150 (29.4)	99 (19.4)	148 (29.0)
WhatsApp	6 (1.2)	8 (1.6)	96 (18.8)	54 (18.8)	347 (67.9)
Myspace	3 (.6)	4 (.8)	86 (16.8)	26 (5.1)	392 (76.7)
Instagram	230 (45.0)	93 (18.2)	99 (19.4)	53 (10.4)	36 (7.0)
Snapchat	26 (5.1)	24 (4.7)	130 (25.4)	114 (22.3)	217 (42.5)
LinkedIn	5 (1.0)	3 (.6)	89 (17.4)	52 (10.2)	362 (70.8)
Google+	213 (41.7)	96 (18.8)	105 (20.5)	35 (6.8)	62 (12.1)
YouTube	246 (48.1)	123 (24.1)	115 (22.5)	23 (4.5)	4 (.8)
Facebook Messenger	465 (91.0)	28 (5.5)	15 (2.9)	2 (.4)	1 (.2)

Table 1 presents the results of a survey on respondents' usage of different SNSs. The data are displayed in terms of the frequency of use, ranging from "*Every day*" to "*Never*." The table shows that Facebook is the most widely used SNS, with 68.1% of respondents using it daily and 93.2% using it at least occasionally. In contrast, Myspace is the least used SNS, with only 0.6% of respondents using it every day and 16.8% using it occasionally. Twitter is used by a smaller percentage of respondents, with 13.9% using it every day and 29.4% using it occasionally. WhatsApp is used even less frequently, with only 1.2% of respondents using it every day and 18.8% using it occasionally. Moreover, Instagram is another popular SNS, with 45% of respondents using it daily and 64.6% using it at least occasionally. Snapchat is also used frequently, with 25.4% of respondents using it occasionally and 5.1% using it daily. LinkedIn is used less frequently than other SNSs, with only 1% of respondents using it every day and 17.4% using it occasionally. Google+ is used more frequently, with 41.7% of respondents using it daily and 62.6% using it at least occasionally. Finally, Facebook

Messenger is the most widely used messaging app, with 91% of respondents using it daily and 99.4% using it at least occasionally. Then, the survey results suggest that Facebook, Instagram, and Google+ are the most widely used SNSs, while Myspace is the least used. The data also indicate that messaging apps like Facebook Messenger are top-rated among users.

Table 2

SNS Needs Assessment of the Respondents

Indicators	Mean	SD	Description
Diversion	**3.55**	**1.08**	**Agree**
1. SNSs help me to feel less lonely.	3.44	1.17	Somewhat
2. I use SNSs to pass the time when I am bored.	3.83	1.25	Agree
3. SNSs, let's escape my worries.	3.31	1.16	Somewhat
4. I start using SNSs when I have nothing better to do.	3.61	1.22	Agree
Cognitive needs	**3.85**	**1.15**	Agree
1. SNSs help me in research and studies.	3.98	1.27	Agree
2. SNSs help to search for jobs/online businesses/scholarship	3.76	1.22	Agree
3. SNSs help to gain knowledge.	3.82	1.21	Agree
4. SNSs give me information about others.	3.85	1.22	Agree
Affective needs	**3.12**	**.95**	**Somewhat**
1. Using SNSs is one of the routine things I do when I am online.	3.71	1.21	Agree
2. SNSs help me to express my emotions to others easily.	3.16	1.14	Somewhat
3. SNSs allow me to develop a romantic relationships.	2.67	1.13	Somewhat
4. I use SNSs to talk about my problems and get advice.	2.93	1.14	Somewhat
Personal integrative needs	**2.76**	**1.29**	**Somewhat**
1. SNSs are part of my self-image.	2.88	1.10	Somewhat
2. SNSs portray an image of me to others.	2.95	1.09	Somewhat
3. People can use SNSs to judge me.	2.69	1.15	Somewhat
4. I use SNSs to gain favorable approval among friends.	2.51	1.11	Somewhat
Social integrative needs	**3.65**	**1.07**	**Agree**
1. SNSs allow me to communicate with my friends.	3.98	1.29	Agree
2. SNSs allow me to stay in touch with family.	3.97	1.29	Agree
3. SNSs enable me to add new friends.	3.54	1.20	Agree
4. SNSs enable me to find more interesting people than in real life.	3.11	1.17	Somewhat
5. SNSs enable me to get through to someone who is hard to reach.	3.66	1.24	Agree
Total Measure	**3.39**	**.89**	**Somewhat**

Legend: 1.00-1.49 Strongly Disagree; 1.50-2.49 –Disagree; 2.50-3.49 –Somewhat; 3.50-4.49 Agree; 4.50-5.00 - Strongly Agree

Table 2 presents the mean and standard deviation scores for the five dimensions of social media needs assessment - diversion, cognitive, affective, personal, and social integrative needs. The total mean score for all the dimensions is also provided, which is 3.39, with a standard deviation of 0.89. Regarding diversion needs, the mean score is 3.55 (*SD=1.08*), which indicates that the respondents agree that social media platforms help them feel less lonely, pass their time when they are bored, and escape their worries. The highest mean score among these items is for using social media when they have nothing better to do (*Mean=3.61, SD=1.22*). Regarding cognitive needs, the mean score is 3.85 (*SD=1.15*), indicating that the respondents agree that social media platforms help them in their research and studies, job search, gaining knowledge, and obtaining information about others. The highest mean score among these items is for using social media to help in research and studies (*Mean=3.98, SD=1.27*). For affective needs, the mean score is 3.12 (*SD=.95*), indicating that the respondents somewhat agree that social media platforms are one of the routine things they do when they are online. However, they only somewhat agree that social media helps them express their emotions to others easily (*Mean=3.16, SD=1.14*). The lowest mean score in this dimension is for developing romantic relationships (*Mean=2.67, SD=1.13*) and using social media to discuss their problems and get advice (*Mean=2.93, SD=1.14*). For personal integrative needs, the mean score is 2.76 (*SD=1.29*), indicating that the respondents somewhat agree that social media platforms are a part of their self-image, portray an image of them to others, and can be used to judge them. However, they only somewhat agree that they use social media to gain favorable approval among friends (*Mean=2.51, SD=1.11*).

Finally, for social integrative needs, the mean score is 3.65 (*SD=1.07*), indicating that the respondents agree that social media platforms allow them to communicate with their friends, stay in touch with their family, add new friends, and get through to someone who is hard to reach. However, they somewhat agree that social media enables them to find more interesting people than in real life (*Mean=3.11, SD=1.17*). Thus, the respondents' total mean score for social media needs assessment is 3.39 (*SD=.89*), indicating that they somewhat agree that social media platforms meet their diversion, cognitive, affective, personal integrative, and social integrative needs, but only to a limited extent. The standard deviation scores indicate that the respondents' ratings were relatively consistent, with slight response variations.

Table 3

Academic Stressors of the Respondents

Indicators	Mean	SD	Description
1. Unfair grading system in the college	2.51	.82	Sometimes
2. Pressure in daily studying	3.22	.76	Sometimes
3. Difficult to deal with academic problems	3.05	.75	Sometimes
4. Depression due to low GPA	2.70	.97	Sometimes
5. Difficulty in studying for long hours	3.12	.83	Sometimes
6. Too much academic workload	3.13	.80	Sometimes
7. Inadequate educational facilities	2.55	.89	Sometimes
8. Dissatisfaction with one's program	2.43	.86	Rarely
9. Instructors' poor subject matter mastery and pedagogical competence	2.41	.92	Rarely
10. Boringness in attending classes regularly.	2.29	.90	Rarely
Total Measure	**2.74**	**.55**	**Sometimes**

Legend: 1.00-1.49 Never; 1.50-2.49 Rarely; 2.50-3.49 Sometimes; 3.50-4.00 Frequently

Table 3 shows that the respondents experienced academic stressors sometimes, with a mean score of 2.74 and a standard deviation of .55. The most commonly experienced academic stressors were pressure in daily studying (*Mean=3.22, SD=.76*), difficulty in dealing with academic problems (*Mean=3.05, SD=.75*), difficulty in studying for long hours (*Mean=3.12, .83*), and too much academic workload (*Mean=3.13, SD=.80*). The least commonly experienced academic stressors were dissatisfaction with one's program (*Mean=2.43, SD=.86*), instructors' poor subject matter mastery and pedagogical competence (*Mean=2.41, SD=.92*), and boringness in attending classes regularly (*Mean=2.29, SD=.90*).

Table 4 presents the results of the respondents' academic motivation in terms of intrinsic motivation. The mean score for the total measure is 3.62, with a standard deviation of .90, indicating that the respondents have a high level of intrinsic motivation toward their academic pursuits. The indicators with the highest mean scores are "Because my studies allow me to continue to learn about many things that interest me" (*Mean=4.00, SD=1.08*), "For the pleasure that I experience in broadening my knowledge about subjects which appeal to me" (*Mean=3.82, SD=1.10*), and "Because college allows me to experience personal satisfaction in my quest for excellence in my studies" (*Mean=3.77, SD=1.13*), all of which correspond a lot with intrinsic motivation. The indicators with the lowest mean scores are "For the pleasure I experience while surpassing myself in my studies" (*Mean=3.31, SD=1.14*), "For the pleasure

that I experience when I read interesting authors" (*Mean=3.42, SD=1.13*), and "For the pleasure that I experience when I feel completely absorbed by what certain authors have written" (*Mean=3.39, SD=1.15*), all of which correspond moderately with intrinsic motivation.

Table 4

Academic Motivation in terms of Intrinsic Motivation

Indicators	Mean	SD	Description
Because I experience pleasure and satisfaction while learning new things.	3.57	1.14	Corresponds a lot
For the pleasure, I experience when I discover new things never seen before.	3.87	1.09	Corresponds a lot
For the pleasure that I experience in broadening my knowledge about subjects that appeal to me.	3.82	1.10	Corresponds a lot
Because my studies allow me to continue to learn about many things that interest me.	4.00	1.08	Corresponds a lot
For the pleasure, I experience while surpassing myself in my studies.	3.31	1.14	Corresponds moderately
For the pleasure that I experience while I am surpassing myself in 1 of my personal accomplishments.	3.69	1.11	Corresponds a lot
For the satisfaction, I feel when I am in the process of accomplishing difficult academic activities.	3.59	1.17	Corresponds a lot
Because college allows me to experience personal satisfaction in my quest for excellence in my studies.	3.77	1.13	Corresponds a lot
For the intense feelings I experience when I am communicating my own ideas to others.	3.52	1.07	Corresponds a lot
For the pleasure that I experienced when I read interesting authors.	3.42	1.13	Corresponds moderately
For the pleasure that I experience when I feel completely absorbed by what certain authors have written.	3.39	1.15	Corresponds moderately
For the “high” feeling that I experience while reading about various interesting subjects.	3.48	1.15	Corresponds moderately
Total Measure	**3.62**	**.90**	**Corresponds a lot**

Legend: 1.00-1.49 Does not correspond at all; 1.50-2.49 Corresponds a little; 2.50-3.49 Corresponds moderately; 3.50-4.49 Corresponds a lot; 4.50-5.00 Corresponds exactly

Hence, the results indicate that the respondents are intrinsically motivated in their academic pursuits. They derive pleasure and satisfaction from learning new things, broadening

their knowledge, and experiencing personal satisfaction in their quest for academic excellence. However, there is room for improvement in deriving pleasure from surpassing oneself in studies and finding pleasure in reading interesting authors.

Table 5

Academic Motivation in terms of Extrinsic Motivation

Indicators	Mean	SD	Description
Because I think that a college education will help me better prepare for the career I have chosen.	4.19	1.11	Corresponds a lot
Because eventually, it will enable me to enter the job market in a field that I like.	3.93	1.14	Corresponds a lot
Because this will help me make a better choice regarding my career orientation.	4.02	1.07	Corresponds a lot
Because I believe that a few additional years of education will improve my competence as a worker.	3.87	1.15	Corresponds a lot
To prove to myself that I can complete my college degree.	4.01	1.12	Corresponds a lot
Because I want to show myself that I can succeeding in my studies.	4.03	1.14	Corresponds a lot
To show me that I am an intelligent person.	3.03	1.22	Corresponds moderately
Because when I succeed in college, I feel important.	3.70	1.23	Corresponds a lot
Because with only a high-school degree, I would not find a high-paying job later.	3.00	1.41	Corresponds moderately
In order to obtain a more prestigious job later.	4.03	1.12	Corresponds a lot
Because I want to have “the good life” later.	4.16	1.12	Corresponds a lot
In order to have a better salary later.	3.91	1.17	Corresponds a lot
Total Measure	**3.82**	**.90**	Corresponds a lot

Legend: 1.00-1.49 Does not correspond at all; 1.50-2.49 Corresponds a little; 2.50-3.49 Corresponds moderately; 3.50-4.49 Corresponds a lot; 4.50-5.00 Corresponds exactly

The results show that participants scored highest on indicators related to the potential career benefits of a college education. Participants strongly agreed that pursuing a college degree would help them prepare for their chosen career (*Mean=4.19, SD=1.11*) and enable them to enter the job market in a field they like (*Mean=3.93, SD=1.14*). They also indicated that obtaining a college degree would help them make a better career choice (*Mean=4.02, SD=1.07*) and improve their competence as a worker (*Mean=3.87, SD=1.15*). These results

suggest that many participants view a college education as a means to an end rather than an intrinsically valuable pursuit. Participants also indicated that they were motivated to prove their academic abilities and feel important. They strongly agreed that completing their college degree would prove they could succeed in their studies (*Mean=4.03, SD=1.12*) and make them feel important (*Mean=3.70, SD=1.23*). However, they only moderately agreed that obtaining a college degree would show that they are intelligent (*Mean=3.03, SD=1.22*).

Finally, participants indicated that they were motivated by the potential financial benefits of a college degree. They strongly agreed that pursuing a college degree would help them obtain a more prestigious job (*Mean=4.03, SD=1.12*), have "the good life" later (*Mean=4.16, SD=1.12*), and a better salary later (*Mean=3.91, SD=1.17*). Thus, the results suggest that many participants are motivated by external factors, such as career and financial benefits, rather than intrinsic enjoyment of learning. The total measure of extrinsic academic motivation was 3.82, indicating a high degree of correspondence with the construct of academic motivation.

Table 6

Academic Motivation in terms of Amotivation

Indicators	Mean	SD	Description
Honestly, I don't know; I really feel that I am wasting my time in school.	1.99	1.16	Corresponds a little
I once had good reasons for going to college; however, now I wonder whether I should continue.	2.54	1.30	Corresponds moderately
I can't see why I go to college, and frankly, I couldn't care less.	2.00	1.20	Corresponds a little
I don't know; I can't understand what I am doing in school.	2.05	1.20	Corresponds a little
Total Measure	**2.14**	**1.01**	Corresponds a little

Legend: 1.00-1.49 Does not correspond at all; 1.50-2.49 Corresponds a little; 2.50-3.49 Corresponds moderately; 3.50-4.49 Corresponds a lot; 4.50-5.00 Corresponds exactly

Table 6 presents the results of the student's academic motivation in terms of amotivation, which refers to the absence of motivation or the lack of interest in academic activities. The mean score for the total measure is 2.14, which corresponds a little to amotivation. Looking at the indicators, the highest mean score is for the item "I once had good reasons for going to college; however, now I wonder whether I should continue" (*Mean=2.54, SD=1.30*), which corresponds moderately to amotivation. This result suggests that some

students may have started college with clear motivations but are now questioning whether they should continue. The other three items have mean scores ranging from 1.99 to 2.05, corresponding to amotivation. These items express a lack of understanding or interest in academic activities, such as "Honestly, I don't know; I really feel that I am wasting my time in school." Overall, the results suggest that while most students do not express strong feelings of amotivation, there is some degree of uncertainty and lack of interest among a subset of students.

Table 7

Reliability, Skewness, and Correlation Analysis of the Study Variables

Variables	Cronbach's Alpha	Skewness	1	2	3	4	5
1. SNS Needs	.962	-1.065	1				
2. Academic Stressor	.830	-.428	.083	1			
3. Intrinsic Motivation	.951	-.630	.336**	.042	1		
4. Extrinsic Motivation	.939	-.979	.330**	.109*	.883**	1	
5. Amotivation	.849	.711	.099*	.274**	.096*	.065	1

Table 7 presents the study variables' reliability analysis, skewness, and correlation analysis. Reliability analysis shows the internal consistency of each construct, which is measured using Cronbach's alpha coefficient. All constructs show high reliability as their Cronbach's alpha coefficient is above 0.8, indicating that the items in each construct are strongly correlated. Skewness measures the degree of symmetry of the distribution of each construct. Skewness values range from -2 to +2, and values closer to zero indicate a more symmetrical distribution.

Correlation analysis shows that SNS Needs have a significant positive correlation with Intrinsic Motivation ($r=.336, p < .01$), Extrinsic Motivation ($r=.330, p<.01$), and amotivation ($r=.099, p<.05$), indicating that higher SNS Needs are associated with higher levels of intrinsic, extrinsic motivation, and amotivation. Academic Stressors have a moderate positive correlation with Amotivation ($r=.274, p<.01$) and a weak positive correlation with Extrinsic Motivation ($r=.109, p<.05$). Intrinsic Motivation is significantly correlated with Extrinsic Motivation ($r=.883, p<.01$), indicating that the two constructs are strongly related. Finally, amotivation does not correlate with extrinsic motivation ($r=.065, p>.05$).

Table 8

Evaluation of the Variance Inflation Factor (VIF), Tolerance, and Durbin-Watson values of the Regression Models

Study Variables	VIF	Tolerance	Durbin-Watson
Model 1 (*Dependent: Intrinsic Motivation*)			1.958
SNS Needs	1.007	.993	
Academic Stressor	1.007	.993	
Model 2 (*Dependent: Extrinsic Motivation*)			1.906
SNS Needs	1.007	.993	
Academic Stressor	1.007	.993	
Model 3 (*Dependent: Amotivation*)			1.962
SNS Needs	1.007	.993	
Academic Stressor	1.007	.993	

The VIF and Tolerance values are used to assess multicollinearity in regression models. VIF measures the extent to which the variance of an estimated regression coefficient is inflated due to multicollinearity. Tolerance, conversely, is the reciprocal of VIF and measures the proportion of variance in a predictor variable that is not shared with other predictors. VIF values below ten and Tolerance values above 0.1 are generally considered acceptable, indicating no significant multicollinearity issues. The Durbin-Watson statistic tests for autocorrelation in the residuals of a regression model. A value close to 2 suggests no significant autocorrelation, implying that the residuals are independent and satisfy the assumption of independence in regression analysis. Thus, multiple linear regression analysis with a simultaneous entry is suitable for testing the effect of SNS needs and academic stressors on students' academic motivation.

Table 8 shows the regression analysis results that examined the relationship between SNS needs, academic stressors, and academic motivation. The table includes three regression models, each of which has a different dependent variable: intrinsic motivation, extrinsic motivation, and amotivation.

Table 9

Regression Analysis of Predicting Academic Motivation by SNS Needs and Academic Stressor

Predictors	Model 1 *Dependent: Intrinsic Motivation*		Model 2 *Dependent: Extrinsic Motivation*		Model 3 *Dependent: Amotivation*	
	B	S.E. (B)	B	S.E. (B)	B	S.E. (B)
SNS Needs	.339**	.042	.327**	.042	.087	.048
Academic Stressor	.024	.071	.139*	.071	.502**	.080
R^2	*.113*		*.116*		*.081*	
F	*32.480***		*33.204***		*22.337***	

Note: Analysis is based on multiples regression method ***p<.01* **p<.05*

In Model 1 (for predicting intrinsic motivation), social networking sites (SNS) needs significantly predicted intrinsic motivation (*B=.340, p<.01*), explaining 11.3% of the variability of intrinsic motivation. In Model 2 (predicting extrinsic motivation), SNS needs again significantly predicted extrinsic motivation (*B=.334, p<.01*), and the academic stressors also significantly influence extrinsic motivation (*B=.139, p<.05*), explaining 11.6% of the variance of extrinsic motivation. In Model 3 (predicting amotivation), SNS needs did not significantly predict amotivation (*B=.087, p>.05*), while academic stressors positively influence amotivation, explaining 8.1% of the variance of amotivation. The results suggest that SNS needs positively relate to intrinsic and extrinsic motivation but not amotivation. The academic stressor is positively related to extrinsic motivation and amotivation but not intrinsic motivation.

5. Discussion

This research aims to examine how SNS needs and academic stressors affect the academic motivation of college students in a private college in Iligan City, Philippines, during the second semester of the academic year 2022-2023. The study discovered that most college students prefer Facebook and Facebook Messenger and visit these platforms daily, and nearly half of them also use YouTube to watch videos. In contrast, they are less likely to be interested in other social media platforms like WhatsApp and MySpace. According to the previous research by Pew Research Center (2018) and Valenzuela et al. (2009), Facebook is the most widely used social media platform among American adults and college students in the United

States. Valenzuela et al. (2009) found that Facebook was linked to attitudes and behaviors that promote social capital. This result suggests that college students may choose Facebook over other social media platforms. In the Philippines, Facebook and Instagram are the most popular social media platforms, with Facebook having the largest market share. According to Statista (2023), the number of Facebook users in the country is expected to reach 97.6 million by 2027.

Regarding their SNS needs, the students agreed that social media platforms help them in their research and studies, job search, gaining knowledge, and obtaining information about others. It also helps students gain knowledge and obtain information about others (Chen & Xiao, 2022). SNSs are considered a dynamic tool to expedite the development of open learning settings by encouraging collaboration, group discussion, and exchanging ideas (Ashraf et al., 2021). Also, social media platforms have become essential to students' social lives as they allow them to communicate with their friends, stay in touch with their family, add new friends, and get through to someone hard to reach (Chukwuere, 2021). Moreover, social media platforms help students feel less lonely, pass their time when bored, and escape their worries (Chukwuere, 2021; Chen & Xiao, 2022). However, the psychological effects of social on students' life need to be studied in more depth to see whether social media acts as social support for students and whether students can use social media to cope with negative emotions and develop (Chen & Xiao, 2022). Thus, it is essential to understand the positive and negative effects of social media on students' lives and to encourage them to utilize these platforms for academic and social purposes (Gulzar et al., 2022; Boateng & Amankwaa, 2016; Ashraf et al., 2021).

Students responded that their most commonly experienced academic stressors were pressure in daily studying, difficulty dealing with academic problems, difficulty studying for long hours, and too much academic workload. However, the least experienced academic stressors were dissatisfaction with one’s program, instructors’ poor subject matter mastery and pedagogical competence, and boringness in attending classes regularly. These findings suggest that the students are generally satisfied with their programs and instructors and that the stress they experience is primarily related to the demands of their coursework. Some studies (Pascoe et al., 2020; Terada, 2018) have also highlighted the negative impact of academic stress on students’ mental health and academic performance. The study by Terada (2018) found that when students experience an academic setback such as a bad grade, the amount of cortisol-the

stress hormone in their bodies, increases, which can impair their ability to learn and perform well in future academic tasks. However, there are ways to combat academic stress and improve students' performance. According to Beilock (2011), learning habits to combat academic stress can bring benefits beyond the classroom. High-stakes situations are an inevitable part of school and work life. Students who learn to manage their stress and perform well under pressure will be better equipped to succeed in their future careers.

Motivation is a crucial factor in academic achievement, and it has been shown to positively influence students' study strategy, academic pursuit, adjustment, and well-being (Kusurkar et al., 2013). Intrinsic motivation, which is the drive to learn for the sake of learning, is a strong predictor of academic achievement (Reeve, 2012). Intrinsically motivated students derive pleasure and satisfaction from learning new things, broadening their knowledge, and experiencing personal satisfaction in their quest for academic excellence (Kusurkar et al., 2013). However, external factors such as career and financial benefits can motivate students rather than intrinsic enjoyment of learning (Ryan & Deci, 2000). While most students do not express strong feelings of amotivation, there is some degree of uncertainty and lack of interest among some students. This finding highlights the importance of understanding the different theories of motivation, some of which focus on the quantity of motivation, while others focus on the quality of motivation. Self-determination theory (SDT) of motivation considers the source of motivation, whether internal or external and the quality of motivation (Kusurkar et al., 2013). Research studies have shown that intrinsically motivated students have higher achievement levels, lower levels of anxiety, and high levels of engagement (Reeve, 2012). Intrinsic motivation has been found to play a significant role in the academic pursuits of nontraditional students (Vallerand et al., 1992). However, external interventions can also promote situational interest and motivate academically unmotivated students (Hidi & Renninger, 2006). Understanding the different theories of motivation and the role of intrinsic and extrinsic motivation can help educators design interventions that promote student engagement and academic success.

SNSs have become an essential part of college students' lives. They provide an opportunity to connect with friends and acquaintances, share information and experiences, and build support networks. Current research has shown that social networking sites can positively influence the intrinsic and extrinsic motivations of college students. However, academic

stressors may have a positive influence on extrinsic and amotivation. First, let us examine the relationship between social networking sites and motivation. Several studies have suggested that social networking sites enhance students' intrinsic motivation. According to Ryan and Deci's self-determination theory, intrinsic motivation is driven by autonomy, competence, and relatedness (Ryan and Deci, 2000). Social networking sites can enhance these factors by providing students with a platform to express themselves freely, share their achievements and experiences with others, and connect with peers who share similar interests (Ellison et al., 2007). A study by Raacke and Bonds-Raacke (2008) found that students who used Facebook reported higher levels of intrinsic motivation to learn compared to those who did not use Facebook. Social networking sites can also enhance extrinsic motivation by providing students with a platform to showcase their achievements and receive recognition and feedback from others. For instance, a study by Burke. Marlow and Lento (2010) found that college students who received feedback and recognition from their peers on Facebook reported higher levels of extrinsic motivation to learn.

However, academic stressors can also impact college students' motivation. According to the control-value theory of achievement emotions, academic stressors such as workload and academic pressure can positively and negatively affect motivation (Pekrun et al., 2009). They added that moderate stress could enhance students' extrinsic motivation by increasing their perceived value of the task. But, excessive stress can lead to amotivation, which refers to a lack of motivation or interest in the task. A study by Kusurkar et al. (2013) revealed that academic stressors were positively associated with extrinsic motivation and amotivation among medical students. The study found that high levels of academic stressors were associated with higher levels of extrinsic motivation and amotivation. The authors suggest that excessive stress may lead to a sense of helplessness or lack of control, which can decrease motivation and lead to amotivation.

6. Conclusion

This study found that most college students used Facebook Messenger, Facebook, and YouTube daily, suggesting that these platforms have become integral to their daily routines. The results also highlight that using social networking sites is related to fulfilling cognitive, social integrative, and diversion needs, which may contribute to the positive effects on intrinsic

and extrinsic motivation. Further, the study shows that academic stressors are common among college students, including pressure in daily studying, too much academic workload, and difficulty studying long hours. Interestingly, the result indicates that academic stressors have a positive effect on extrinsic motivation and amotivation. While the positive effect on extrinsic motivation may be attributed to the desire to achieve academic goals, the positive effect on amotivation may indicate that excessive stress may lead to a lack of motivation or disinterest in academic pursuits.

Educators and school administrators consider incorporating social networking sites to enhance motivation and engagement among college students. Specifically, educators can leverage the features of social networking sites to promote collaboration, communication, and information sharing among students. Additionally, educators may consider designing academic activities encouraging students to use social networking sites to explore and apply course content. However, it is essential to note that excessive use of social networking sites may lead to distraction and negatively impact academic performance. Therefore, educators should also guide and support students to develop healthy and balanced technology habits.

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