

## **The interplay of Personality Factors, Facebook Usage and Recreational Activities: The Case of Selected Filipino University Students**

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### **Abstract**

The present study endeavors to investigate the students' personality factors, Facebook usage, and recreational activities of students. This study is quantitative correlational research employing descriptive and inferential statistics. The study respondents were the 199 randomly sampled students on one campus of a State University in the Philippines. The study used an adapted 30-item questionnaire. Results showed that those students with a high level of extraversion and a low level of emotional stability had more friends. Those with a high level of extraversion, low emotional stability, and a high level of openness spent more time on Facebook and had more friends and photos. In comparison, those with a low degree of agreeableness spent more time and had fewer photos. The relationship test showed that personality qualities and recreational activities indicated that recreational activities were related to personality traits. Hence, respondents with a high openness preferred team sports, fitness activities, and artistic activities. In contrast, those with high conscientiousness and emotional stability preferred fitness activities—the students with high personality qualities engaged in more outdoor leisure activities than those with low personality traits. Further, there was no statistically significant difference in recreational activities across all personality traits. The findings of this study provided insight into the beneficial interactions between students' personality traits, Facebook usage, and leisure activities in the Philippine environment.

*Keywords: Facebook use, personality traits, recreational activities, Filipino students,*

### **Introduction**

For most young people today, digital technology consumes the majority of their time since they view it as a tool that helps them improve their communication and interpersonal skills, and creativity. Teenagers in the twenty-first century are widely referred to as "digital natives" or "digital immigrants," as they exist and speak a new language unique to those exposed to internet communication. The internet world defines these computer-generated communication devices as social networking sites that enable users to create and maintain a public or partially public profile, as well as create a list of other users they've identified as friends or acquaintances with whom they share a connection, which they can view as often as they like. These technologies are considered critical by social networking site users to communicate with friends, peers, and others.

Since the introduction of the web browser in the early 1990s, there have been significant changes in the way individuals interact with the Internet. Later, a few application developers produced applications that allow individuals to create and share interests on the Internet, which became famous (i.e., blogging, wikis, and social networking). Facebook is one of the most widely used social networking services globally. On March 31, 2013, Facebook had a global active user base of 1.11 billion people, up from 1.2 million people in 2006 (Pascua, 2018). Researchers from a range of professions have been encouraged to conduct their studies using a variety of perspectives because of the amount of information and content created by Facebook members. People's differing levels of openness to revealing their data on Facebook have been studied by several researchers (Kim et al., 2019), while others have looked at the

correlation between personality factors and Facebook use itself (Marino et al., 2018).

An increase from 18 minutes in 2003 to 26 minutes in 2011 has been found by the American Time Use Survey, which looked at data collected between 2003 and 2011 Sturm & Cohen (2019). There would be a decline in time spent engaging in other leisure activities if more time was spent playing games and using computers for entertainment (Dong et al., 2018). People's age, gender, educational level, and socioeconomic situation impact their leisure activities (Scholes & Bann, 2018). However, there has been no research on the possible correlations between personality qualities and Facebook use or personality traits and online leisure activities. As of the end of 2012, Facebook had a user base of 13.24 million, increasing 205 thousand from the year before. Compared to the US average of 67 percent, 76% of all Internet users have access to the Internet at this time. (Toker&Baturay, 2019) Studying how Facebook use and other extracurricular activities correlate with students' personality traits is critical.

### **Use of Facebook**

Facebook allows users to connect with others who share their interests and friends from other social networks (Vermeulen et al., 2018). To create a Facebook account, users must provide demographic and relational information. The resulting massive volume of data has proven to be a rich and rewarding resource for researchers throughout the world (Schneider &Harknett, 2022).Since Facebook's rise in popularity, friendships, information exchanges, and leisure activities have been affected (Schneider &Harknett, 2022). In 2007, 81.6 percent of students were using social networking sites, while in 2010, 90.4 percent of students were using them (Belentschikow et al., 2022). To stay in touch with friends, share images, and learn about their peers, college students turned to social networking sites like Facebook, Myspace, and other similar sites. Rather than using Facebook for academic objectives, students primarily used it to reconnect with old friends and make new ones, according to research released in 2019. Students spent between 10 and 60 minutes a day on Facebook.Valerio-Ureña et al. (2020) "explored the probable influence of personality on Facebook use and discovered that different personality types used different features of Facebook." If you're more introverted and prefer to post on Facebook's wall, you are more likely to join a group, whereas those who are more open are more likely to start a group.

### **Recreational pursuits**

Leisure activities can be divided into a multitude of subcategories. Each of the following five categories might be considered a form of leisure time activity: socializing with family and friends, doing something creative; participating in school; participating in sports; or participating in a fraternal or community organization.According to Chapoton et al. (2022), leisure activities can be broken down into six categories: physical, social, self-maintenance, passive, integrative, and novel information processing. Since then, the scales have grown to include 11 categories, including physical activity, arts and crafts, video games and television, social-private and social-public interaction, faith-based pursuits, experiential learning, technology, and travel (Marr et al., 2021).There are seven activity scales in the American Time Use Survey for leisure and sports activities: "Many people spend their time indulging in sports and fitness; socializing; watching television; reading; relaxing; and playing games and utilizing computers for entertainment." Leisure time in 2011 included 18 minutes of physical activity, 42 minutes of socialization and communication, 2.75 hours in front of the television, 18 minutes of relaxation/thought time, and 18 and 26 minutes of gaming/computer time for the average American. Time spent socializing and reading has decreased in recent years in favor of watching TV, playing video games, or using computers.

Similar surveys are conducted in Japan every five years to see what kinds of activities people enjoy doing in their spare time (Galvin et al., 2021). Six different activities can be found under this heading: surfing the web, studying, participating in sports, having fun, giving back,

and going on trips. Within Croatian culture, Suzuki et al. (2020) classified Croatians' leisure activities as follows: active socializing (such as participating in sports or going out to see live performances), cultural activities (such as going to museums or seeing plays or concerts), and family time (such as watching television together or playing video games) visiting friends and relatives; shopping; going to the church; watching TV. Art and craft, games and sports, music, reading, socializing, contemplating, and television were some of the scales used to measure the interests of college students (Lipovčan et al., 2018). They discovered a relationship between intellectual activities like reading and thinking and professional self-identification.

### **Personality**

The Big Five Factors Model is a popular way to analyze personality traits, and the model defines five personality types: open, conscientious, extraverted, agreeable, and emotionally stable" (D'Alessandro, 2021). Various tools are at your disposal to obtain data on the Big Five Factors. A 10-item personality inventory (TIPI) was designed to comprehend better the relationship between personality qualities and several other ideas (Oshio et al., 2018). There are anywhere from 240 to 10 items (Anglim & Horwood, 2021). Due to their length, some respondents may have an adverse reaction to the most comprehensive questionnaire.

### **Self-concept and social media use**

Numerous research studies have investigated a connection between specific personality qualities and online behavior, but the results have been mixed (Czerwonka, 2019). An intriguing correlation was found between Facebook use and personality traits by Nguyen et al. (2021). For example, extraverted people had more friends and groups, while people who were neurotic had fewer. At the same time, those who were agreeable shared more pictures, while those who were open used more features, and those who were conscientious had more friends but fewer pictures on their profile pages. Another study found that neurotic persons love using social media, such as instant messaging and blogging, to converse and meet new people on the Internet (Kaspar & Müller-Jensen, 2021). It's because neurotic people use the Internet to replace face-to-face communication, whereas extroverts utilize it to expand their social networks. It was found that people with high levels of agreeableness, conscientiousness, and extraversion resented using the Internet. According to Nguyen, Facebook users are more likely to be extroverted than conscientious (2022).

### **A person's character and interests outside of work or school**

Extroverts were drawn to team sports, psychoticism to combative activities, and neuroticism to various hobbies and interests (Carvalho, et al., 2020). According to Wallace (2022), extroverts enjoy a wide range of leisure pursuits, while neurotic individuals have little interest. According to Stieger et al. (2020), agreeable people want watching TV, participating in religious or spiritual activities, and engaging in social or public activities. Still, they dislike doing crafts, exercising, or learning new skills. People who were more open to other viewpoints were less interested in religious activities and more interested in learning new skills and utilizing a new technology.

### **Research Gap**

A dearth of studies for personality, leisure activity, social network. Some studies demonstrate that Internet socializing can reduce one's quality of life, while community or religious activities can increase. On the other hand, those with high Internet self-efficacy used the Internet to facilitate offline entertainment. The researcher came up with this study to confirm the interplay of the students' personality factors, Facebook usage, and the recreational activities of students in the Philippine setting. Personality traits, Facebook use, leisure activities, and Facebook users were all examined for possible connections.

### **Objectives of the Study**

The present study endeavors to investigate the students' personality factors, Facebook usage, and recreational activities of students. It aims to: (1) Ascertain the relationships between Facebook use, and personality traits; (2) Ascertain the relationships between personality traits and leisure interests; (3) Ascertain the relationships between personality traits leisure interests; (4) Ascertain the connections between Facebook use and recreational pursuits. To find out the interplay of these variables was the locus of this study.

### **Method**

#### **Research Design**

The study employed quantitative correlational research utilizing descriptive and inferential statistics. This design becomes appropriate in the present study since the variables such as Personality Factors, Facebook Usage and Recreational Activities were quantitatively described and correlated. In this design, the researcher surveyed and described the phenomenon.

#### **Participants and Sampling**

The one hundred ninety-nine (199) sampled respondents from the population of 800 students of one campus of a university in the Philippines who participated in the study. As to the profile of the respondents, all of them have cell phones (100%) and have access to Facebook (100%). Most of them were females (72.9%). Using the Rao soft sampling size calculator set at a 5% margin of error, 95% level of confidence, and a disturbing of 50%, a total of 199 respondents were selected. To ensure that all respondents have equal chances of being chosen to represent the population of the study, the Systematic Sampling Technique was used.

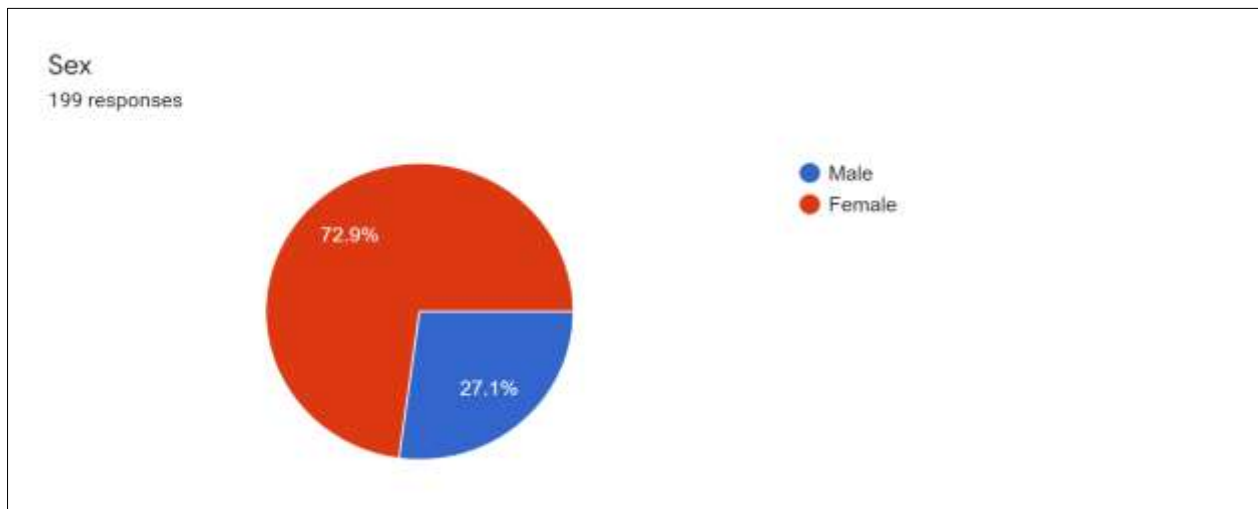


Figure 1. Profile of the Respondents as to Sex

#### **Instrumentation**

A 30-question survey was used to gather information on demographics, personality traits, Facebook use, and leisure activities for this study. The respondents' personality traits assessment is composed of ten items adapted from the study of Correa et al. (2020) and Gosling et al. (2003). The questionnaire is the Big Five Personality traits, openness, conscientiousness, extraversion, agreeableness, and emotional stability. It has a Likert scale of 1 to 7 from strongly disagree to agree strongly. In like manner, the assess the Facebook usage of the respondents, a tool developed by Ellison et al. (2007) was adopted. An individual's commitment to Facebook can be gauged by looking at the average amount of time they spend on the site each day, the number of friends, and six other factors. Finally, the

American Time survey was adopted to assess the students' recreation, including their involvement in sports, physical activity, socializing, reading, relaxing, and thinking. As for team- or individual-based. Facebook intensity scale (Ellison et al., 2007) was used to measure the extent of participation (1: no participation, 2: 1–9 min, 3: 10–30 min, 4: 31–60 min, 5: 1–2 h, 6: 2–4 h, 7: >4 h). The data of the study were generated through online surveys using Google Forms.

**The procedure, Ethical Consideration, and Data Analysis**

The researcher requested permission from authorities to gather the data. The participants were asked to answer the informed consent of the study before their actual participation in the survey. Data obtained were treated with the utmost confidentiality. The study ensured that no names of participants would be revealed in like manner, orientation on purpose, benefits, and risks of the study to the participants was done. Further, the study data were treated with the proper statistical procedure. The descriptive component utilized statistics such as frequency, mean and standard derivation as to the inferential component, the test of differences using t-test and ANOVA, the test of relationship using Pearson's r, and factorial analysis were utilized. The data were analyzed through the Statistical Package for Social Science (SPSS) Version 24.

**Results**

Table 1 summarizes T values for Facebook use depending on personality differences. The data shows that extroverted and introverted individuals utilize Facebook in different ways. Those who were more outgoing felt more at home on Facebook than those who were more reticent. Extraverts had more Facebook experience in daily/weekly use, friends, photos, and groups than introverts. Because connecting with unpleasant people is challenging, some people prefer online communication. Because they opted not to communicate their viewpoints, the number of friends and groups on Facebook did not differ significantly between agreeable and disagreeable persons. Negative agreeability took more images than positive agreeability.

Table 1. Test of Difference between Facebook use and personality traits

	Extraversion	Agreeableness	Conscientiousness	Stability of the mind	Openness
Facebook is a regular part of my day	-3.543*	0.611	-0.088	2.280*	-1.719
I am happy to announce that I am a Facebook user for others	-4.678**	0.124	0.233	1.162	-3.284**
If I don't use Facebook for a time, I feel lost	-4.289**	1.714	0.474	2.103*	-2.289*
I consider myself a member of the Facebook community	-5.874**	0.343	-0.344	1.38	-2.467**
Experiments with Facebook	-2.179*	0.842	0.425	1.419	-1.294
Time spent daily	-3.659**	2.589*	1.378	2.619*	-1.789
Use of time each week	-3.109**	2.795**	0.375	1.898	-2.405*
The number of acquaintances	-4.503***	1.865	1.689	2.752**	-3.390***
The total amount of photographs	-5.167***	2.856**	0.811	2.429*	-2.749**
Group size	-3.278**	1.227	0.673	1.202	-1.696

On Facebook, persons with higher levels of conscientiousness expressed similar opinions as those with lower levels of conscientiousness. In any Facebook usage, no statistical difference among low conscientious persons since they were careful and guarded on the Internet. Low emotional stability individuals spend more time than high emotional stability individuals. Some respondents struggled to tell others about their Facebook activity due to a lack of real-life friends. Others felt disoriented if they hadn't used Facebook for a long time. There were no significant differences between high and low emotional stability participants regarding Facebook experience, weekly time utilization, and group membership. Compared to individuals who did not feel as close to Facebook, those who did felt more open. Those with a more outgoing personality had more friends, photos, and time per week than those who were more introverted. They didn't join as many Facebook groups as their buddies to keep themselves occupied.

A test of the relationship between a person's personality traits and leisure interests is presented in Table 2—students with low and significant personality differences in the T values for leisure activities. A positive t value indicates that those with a lower personality trait spend more time on the move. However, there was no statistically significant difference across personality types regarding recreational activities. Everyone, regardless of personality, participated in recreational activities regularly. People with high levels of extraversion were less likely than those with low levels of extraversion to engage in outdoor activities such as hiking, biking, and swimming.

In contrast to popular belief, there was no evidence that those who rated themselves as highly agreeable devote more free time to intellectual or physical pursuits. People with high and low levels of conscientiousness enjoyed the same activities. Because they were concerned about their appearance, they spent more time exercising than engaging in other recreational activities. There was no substantial difference in engagement in team sports, recreation, intellectual, and artistic endeavors between those with higher and poorer emotional stability. Individuals with a high degree of openness spend more time engaging in team sports, exercise, outdoor recreation, and artistic interests than those with a lower degree of transparency.

Table 2 Test of the relationship between a person's personality traits and their leisure interests

	Extraversion	Agreeableness	Conscientiousness	Stability of the mind	Openness
Sports involving a group	-1.477	0.939	-1.466	-0.752	-2.390**
Fitness	-1.622	-0.826	-3.505***	-3.201***	-4.937**
Recreation in the open air	-2.726	-2.672	-3.864	-2.714	-2.718
Recreation	0.277	0.179	1.438	0.697	-0.987
Intellectual	-0.035	-2.367*	-1.554	-0.994	-1.625
Artistic	-0.636	-1.221	-0.018	-0.422	-2.688**

The number of participants could also interpret the results. Participating in team sports was uninteresting for those with high or low openness. More conscientious people spend more time working out than less moral people, although extraverts and pleasant people spend less time. High scorers in all five personality qualities spend more time outdoors than low scorers. Regardless of personality type, everyone engaged in similar pleasures, including watching TV, interacting online, and playing video games. Only individuals with high levels of agreeability spend more time on intellectual pursuits than those with low levels. However, other personality traits did not affect the amount of time spent on art by persons who were more open-minded than those who were more closed off.

This study looked into the influence of Facebook on leisure time. Using ANOVA, different levels of Facebook use generated significant changes in leisure activity. Facebook usage was minimal in most recreational and artistic pursuits. Facebook experience and friend count influenced team sports participation, but not daily or weekly time use, photographs, or groups. Recreational activity participation was influenced by daily and weekly time consumption but not by Facebook experience, friends, or groups. The number of Facebook friends, but not other Facebook usages, influenced intellectual activity involvement. Tukey's HSD and Games Howell's HSD were recommended by Hayes & Coutts (2020) for comparing matched means with comparable variances. Cusatis & Garbarski (2019) Significant F scores (homogeneity of variances) were subjected to the HSD post-hoc test, while significant Levene test scores were subjected to the Games Howell test (violation of homogeneity of variances).

In Table 3 is the Facebook usage intensity significantly impacts leisure activities. Social media users with more Facebook experience (6 months–1 year > less than one month) and more daily time (31–60 minutes > less than 10 minutes), and more Facebook friends (more than 200 > less than 10, more than 300 > 50–199) would be more likely to participate in team sports. People who spend more time (2–4 h > less than (10 min, 2–6 h > 10–30 min) on leisure activities (20–40 h > less than five h) and take more photos (more than 400 > less than 50) spend more time on leisure activities. A significant number of Facebook friends and images also increased the likelihood that people would enjoy socializing in person, leading to more excellent time spent doing sports or leisure activities as a team. People with less time spend more time exercising. Less socially active (2–4 hours vs. 2–4 h) spend more time studying. In other words, those with less Facebook activity and friends (10–49 vs. 200–300) opted to spend their time exercising or reading.

Table 3. test of Relationship between Facebook uses in relation to other recreational pursuits.

Usage of Facebook	Recreational activities	Levene	ANOVA			
			Sig.	F	Sig.	Post Hoc
Experience with Facebook	Sports with a team	2.679*	0.026	3.148**	0.008	a period of 6 months to a year > less than a month
Time spent daily	Sports with a team	2.865*	0.013	2.282	0.054	31-60 minutes > less than ten minutes
	Fitness	2.289*	0.028	2.082	0.054	10–30 minutes > 2–4 hours 31–60 minutes > 2–4 hours
	Recreation	1.978	0.071	4.390***	0	2–4 h 10 minutes, 2–4 h 10–30 minutes, 4–6 h 10–30 minutes
Utilization of weekly hours	Recreation	1.753	0.133	3.753**	0.002	20–40 hours > 2.5–5 hours, 20–40 hours > 2.5–5 hours
The number of acquaintances	Sports with a team	3.852	0.002	4.838	0	200–300 > less than 10, more than 300 > less than 10, more than 300 > 50–99, more than 300 > 100–199
	Intellectual	3.421**	0.005	2.356*	0.04	10–49 > 200–300
The total amount of photographs	Recreation	1.619	0.285	2.590*	0.032	a number greater than 400 > a number less than 50
Group size						All activities have no bearing.

**Discussions**

The present study endeavors to investigate the students' personality factors, Facebook usage, and recreational activities of students. Personality traits and Facebook usage are related. Hence, students with a high level of

extraversion and low emotional stability have more extensive social networks, which is confirmed in the previous studies (Nanda et al., 2021, Correa, Hinsley, & De Zuniga, 2010, Tsai et al., 2017, Liu & Campbell, 2017). According to earlier research, respondents with high extraversion, low emotional stability, and openness spent more time on Facebook (Wooditch et al., 2021). They had more friends and photos, while those with low openness spent more time and photos. An independent t-test revealed a high association between personality traits and leisure activities. This research also found that people had more friends and photos; low agreeableness, people spent more time and had more pictures.

Contrary to earlier research findings (Kelly et al., 2020). This study did not confirm that extroverts favor team sports and agreeable, open persons prefer recreational activities. Conversely, open-minded and conscientious persons were more likely to participate in team sports, fitness, and artistic activities. There was no statistically significant difference in leisure activities for each of the five personality qualities. Most Facebook activities (experience, time, friends, and photos) were linked to the four leisure activities evaluated (team sports, fitness, recreation, and intellectual) in an effective manner (academic activities). If one has many Facebook friends, one is more likely to engage in physical activities like team sports and leisure activities.

In contrast, if one doesn't have many friends, one is more likely to engage in hobbies like reading and writing (such as reading and thinking). This study suggested a link between personality traits, Facebook use, and leisure activities. The more extroverted people are, the more likely they will spend 2–4 hours a day, 20–40 hours a week on Facebook. Team sports are more likely to be participated in by those who are extraverted and have a vast social network. People who are open to new experiences are more likely than those who are not to engage in recreational activities weekly. People who utilized Facebook for 2–4 hours every day and had 400 or more images spent more time on leisure activities. Because of their low agreeability and emotional stability, some people may have used Facebook to avoid face-to-face engagement. Extraverts and open-minded persons socialized online (with more time, friends, and images) and offline (with more time spent participating in team sports and other recreational activities), whereas introverts and cynics did it exclusively through social media like Facebook.

### **Limitations and Future Research Directions**

As with prior Facebook usage research, this study's conclusions may not generally apply to all Filipino students Facebook users. Due to their similar lifestyles, college students enjoy sports and other recreational activities. As a result, students from diverse socioeconomic levels use Facebook and engage in different hobbies. Researchers could collect data from the general population to find further links between personality, social media use, and leisure activities. The findings may not apply to Filipino students due to cultural impacts on personality. Cultural differences may also influence how people use Facebook and spend their time. This study focuses on Facebook use in leisure time rather than personality traits. Another way of saying this is that Facebook use may directly affect leisure activity preferences. Each of these variables has been linked to personality traits. The influence of personality on Facebook features and privacy settings would be fascinating to investigate. Such as working during the day while others spend their time on Facebook or other recreational activities. It is also probable that personality influences Facebook time preferences and leisure activities. Aside from the link between time spent on Facebook and leisure activities, the poll did not indicate any specific leisure activities for respondents, such as watching TV or movies, socializing with friends online, or playing online games. The amount of time spent on Facebook may be linked to these actions. Future research could examine Facebook's impact on leisure activities and therapy use using SEM. As an implication of this study, this study adds to our understanding of the relationship between personality factors, Facebook use, and leisure activities. People increasingly select social media over traditional leisure activities, making this research important.

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