"Internet Utilization among College Students in China: The Role of Ideological and Political Education in Fostering Academic Performance"

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Abstract: This study investigates internet addiction among third year college students in Yantai City, China, using a Sequential Explanatory Mixed Methods Design. The research locale includes four purposefully selected universities (A, B, C, and D) in Y district. A sample of 380 3rd year college students completed the researcher-made Internet Behavior and Academic Performance Assessment Tool (IBAPAT). Furthermore, 12 students participated in a semi-structured interview. Statistical analysis using descriptive statistics, correlation analysis, ANOVA, and MANOVA were used to generate findings based on the collected quantitative data. Meanwhile, thematic analysis of interviews with ideological and political education students was conducted to generate themes and patterns within qualitative data. Objectives include assessing internet addiction prevalence, patterns of utilization, and correlations with academic performance. The study aims to contribute to theoretical research on network ideological and political education, guide social forces, and enhance college students' all-round development. Ethical considerations ensure participant consent, confidentiality, and data protection. The findings will inform interventions to mitigate internet addiction among college students.

Keywords: Internet Utilization; Internet Addiction; Ideological and Political Education; Academic Performance.

1. Introduction

The advent of the all-media era has ushered in the rapid development of the Internet, with social networks playing an increasingly prominent role in the daily lives of individuals. College students, known to be the most active users of the internet, are at the forefront of online community. However, this digital transformation poses some challenges, leading to an alarming surge in Internet addiction among this population. Recent statistics indicates that the number of college students grappling with Internet addiction has surpassed 300,000, with a staggering 40,000 classified as severely addicted (Han, 2021) [1]. As evidenced by Shao et al.'s (2018) analysis, which revealed that Chinese college students exhibited an Internet addiction detection rate 11% higher than other countries[2]. This escalating crisis warrants immediate attention and proactive measures.

Internet addiction among college students is a prevalent and concerning issue with implications for personal, academic, and societal well-being. With the widespread availability of digital devices and internet access, college students find themselves at a higher risk of developing problematic internet use patterns. This addiction can result in various psychological problems, including anxiety, depression, and loneliness, that can also affect their personal well-being (Shen et al., 2020)[3].

Additionally, it leads to physical health problems like obesity, sleep disturbances, and social withdrawal, causing further harm (Shi et al., 2016). Academically, students' performance suffers as they struggle with procrastination, time management, and academic integrity (You et al., 2021)[4]. The economic impact of decreased productivity and healthcare burdens on society adds to the complexity of the problem. Ju, W (2019) has attributed Internet addiction among college students to various factors, including a lack of self-time management skills, the need for interpersonal communication, academic pressure-induced escape tendencies, over-reliance on the Internet, and the consequent development of addiction[5]. These issues significantly impact college students' lives and overall physical and mental health. As such, preventive measures include integrating addiction awareness into the curriculum, offering mental health services, involving parents, and promoting offline activities. Addressing internet addiction among college students is crucial for the holistic development of the youth and the well-being of society at large.

The issue surrounding the classification of Internet addiction as a mental illness remains a matter of debate among medical professionals (Adams, 2016)[6]. Nevertheless, it undeniably presents an urgent concern, particularly among the youth. Price (2011), in their work highlighted the distinction between dependence on the Internet and full-blown Internet addiction, emphasizing the latter's detrimental impact on various aspects of physical, psychological, and social well-being[7]. Research conducted domestically reveals that approximately 57.4% of college students experience anxiety when they are unable to access their cell phones and the Internet normally, with 29.8% demonstrating dependency (Liu, Y.P. 2022)[8]. Therefore, it is imperative to proactively implement measures to foster the rational, standardized, and legal utilization of the Internet among college students.

Ideological and political education teachers play a vital role in preventing internet addiction among college students. These dedicated ideological and political education teachers hold a crucial and influential role in the lives of college students, shaping their values and nurturing their critical thinking skills. They are instrumental in guiding young minds' moral and ethical development (Zhang, L.W, 2023)[9]. Regarding internet addiction, these educators have a unique
opportunity to impart valuable lessons on fostering a healthy relationship with technology, emphasizing the importance of responsible internet usage. Furthermore, they possess an exceptional platform for educating students about the potential consequences of excessive internet use, shedding light on the implications of personal, academic, and societal well-being. By integrating internet addiction prevention into the curriculum, these teachers can reach a wide and diverse student population, which may produce a significant impact.

Moreover, they serve as mentors, providing counseling and unwavering support to students grappling with addiction issues. Through their active involvement and guidance, they may substantially reduce the prevalence of internet addiction and mitigate its adverse effects, thereby contributing to the holistic development and prosperity of college students and, ultimately, enhancing the well-being of society as a whole. In this context, ideological and political education, a mandatory component of the Chinese college curriculum, is important in guiding students' personal and academic growth. This course is designed to address the ideological challenges that college students encounter. Through social practice and educational content, students gain a better understanding of societal development and history, enhancing their sense of agency, social responsibility, and self-regulation (Fan, 2022). To optimize ideological and political education's impact, it must remain attuned to the realities faced by college students, aligning teaching, management systems, and educational approaches to enhance its effectiveness in student development comprehensively (Li, R.S, 2023)[10].

This paper will use the IBAPAT and semi-structured interview questionnaire to investigate the current status and patterns of internet utilization among third year college students in Yantai City, China. Further, it will analyze associations between internet use and internet addiction and academic performance being the main variables of this study. Moreover, it will also evaluate the correlation between internet addiction and academic performance of 3rd year college students in the same locale and will assess the role of ideological and political education teachers in promoting responsible internet usage among students and influence positive online behavior from the perspectives of the students.

2. Methods

This study will utilize a sequential explanatory mixed method design, which has two distinct strands that are implemented consecutively: a quantitative strand, in which numeric data are collected and analyzed, followed by a qualitative strand, in which textual data are collected and analyzed (Ivanova et al., 2006)[11]. The purpose of an explanatory sequential design is often to use narrative data to explain or interpret numeric findings, especially those that are unexpected (Creswell et al., 2003)[12]. In the quantitative phase, a survey and a questionnaire will be used to collect data on demographics and internet utilization, respectively. The academic performance of the students will also be analyzed quantitatively, aimed at investigating the internet utilization and levels of college students in select universities in the Y District of Yantai City, China. The researcher believes that this research method is appropriate to gain profound understanding of the subject matter being investigated because it does not only allow for an understanding of the prevalence of internet utilization practices and risks for addiction but it also enables the researcher to gain deep understanding of the actual lived experiences of the respondents/participants. In the first phase, 380 third year college students from four (4) selected universities in Yantai City will be selected using a purposive sampling method. These selected respondents will take and complete the researcher-developed Internet Behavior and Academic Performance Assessment Tool (IBAPAT) and Questionnaire on Psychological Needs Network Satisfaction of College Students. The quantitative data will be analyzed using inferential and descriptive statistics. In the qualitative phase, students will be interviewed about the impact of ideological and political education teachers on their internet use and online behavior in order to provide in-depth analysis and insights on the role of political and ideological education in regulating or curbing internet addictions among college students in these select universities and perceptions of the impact of political and ideological education programs on their academic performances. A thematic analysis will be used to analyze their responses. The integration of research findings from both phases may provide novel and useful information about the internet addiction prevalence among college students in the Y District of Yantai City. This will also shed light on the best practices that ideological and political teachers use to prevent it from the perspectives of the students. Ethical considerations are employed to ensure consent, confidentiality, and data protection throughout the study.

2.1. Study Design and Locale

This research will employ a Sequential Explanatory Mixed Methods Design, integrating both quantitative and qualitative approaches to investigate internet addiction among college students in Yantai City, China. The research locale will include four universities (A, B, C, and D) in Y district, Yantai City, selected purposefully to provide a diverse participant pool. Yantai City, China is chosen as the locale of this study because of the familiarity of the researcher to the educational, structural, and technological structure of the city. Further, the city also hosts several higher learning institutions with a varied student population, which can contribute to better representation of student and teacher populations in the context of the objectives of this study. Moreover, the choice for 3rd year level students is based on the idea that they have been using the internet for a sufficient period of time as they navigate the university life. Also, third year students provide a balance between sufficient exposure to the internet and ongoing development. The study will unfold in two phases. In the initial quantitative phase, a large sample of 380 3rd year college students from these universities will participate in structured surveys to gauge the extent of internet addiction and its associated factors. Following the quantitative phase, the qualitative component includes in-depth interviews with students regarding their views and experiences of the strategies employed by ideological and political education teachers in preventing internet addiction by helping them developing positive online behavior and productive internet utilization practices. This locale and research design allow for a comprehensive exploration of internet addiction in the context of Chinese college students and the vital role that ideological and political education plays in its prevention.

2.2. Study Participants

2.2.1. Sample Size and Sampling

The researcher selected four (4) universities in Yantai City, Shandong Province, China. In order to determine the sample size for the quantitative phase, the undergraduate student
population of each of these universities were identified and summarized in Table 1 below. The total target population was 99,500 undergraduate students in all four universities. Considering the difficulty of determining the total population of 3rd year students in each of these universities, it was assumed that student population was evenly distributed in all four-year levels. As such, the total 3rd year population was estimated to be 24,875. Using Raosoft, and by setting a 95% confidence level and a margin of error of 0.05, the sample size was 380 students. The researcher aimed to select 380 3rd year college students who have completed four courses on "Ideological and Moral Cultivation and Legal Basis", "Basic Principles of Marxism", "Outline of Modern History of China", and "Mao Zedong Thought and Introduction to the Theoretical System of Socialism with Chinese Characteristics" at universities A, B, C, and D in Y district, Yantai City using a simple random sampling technique.

<table>
<thead>
<tr>
<th>University</th>
<th>Total Population</th>
<th>3rd Year Population</th>
<th>Proportion (%)</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>27,000</td>
<td>6,750</td>
<td>27.13%</td>
<td>104</td>
</tr>
<tr>
<td>B</td>
<td>25,000</td>
<td>6,250</td>
<td>25.13%</td>
<td>95</td>
</tr>
<tr>
<td>C</td>
<td>25,000</td>
<td>6,250</td>
<td>25.13%</td>
<td>95</td>
</tr>
<tr>
<td>D</td>
<td>22,500</td>
<td>5,625</td>
<td>24.61%</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>99,500</td>
<td>24,875</td>
<td>100%</td>
<td>380</td>
</tr>
</tbody>
</table>

*Sample Size = 380

In order to ensure that each school was proportionately represented in the sample based on the size of its population, the sample size was multiplied to the proportion of each university’s population with the total 3rd year population in all four universities. To calculate sample allocation for each university, the following formula was used:

Sample Size for University X = Total Sample Size * (Number of Students in X/Total 3rd year College Students in All Universities)

where X = each of the university that is part of this study

2.2.2. Inclusion and Exclusion Criteria

Inclusion

Student participants must be third year students regardless of their major from the four universities and are between the ages of 19 and 22. Students must have completed these four (4) subjects: "Ideological and Moral Cultivation and Legal Basis", "Basic Principles of Marxism", “Outline of Modern History of China”, and “Mao Zedong Thought and Introduction to the Theoretical System of Socialism with Chinese Characteristics”.

Exclusion

Students who are not in the 3rd year level and who have not taken the 4 subjects specified in the inclusion criteria will not be included.

Students with diagnosed learning disabilities or cognitive impairments that could significantly hinder their ability to understand the survey questions or interview prompts and provide reliable and accurate data.

Students who have physical impairments such as difficult of hearing, verbal problems, or visual impairments which can affect the accuracy of their understanding, hearing, or reading of the questions or interview prompts and their respondents thereof.

2.3. Research Instruments

The Internet Behavior and Academic Performance Assessment Tool (IBAPAT)

The text is a researcher-made questionnaire tailored to evaluate internet utilization patterns, identify potential signs of internet addiction, and analyze academic performance among junior college students in Yantai City, China. It is based on the standardized Internet Addiction Test (IAT). The main body of the questionnaire is divided into three sections namely (1) internet utilization patterns (2) internet addiction and (3) academic performance. The first two sections are comprised of five subsections each. For section 1, items 1-5 pertain to educational utilization; 6-10 are about internet and entertainment; 11-15 pertain to social interactions; 16-20 pertain to academic and career engagement; and 21-25 are about time spent online. In section 2, items 26-30 are about compulsive internet use; 31-35 are about withdrawal reactions; 36-40 are about tolerance; 41-45 are about interpersonal and health issues; and 46-50 are about time management issues. Section 3, the last section, contains 10 items related to academic performance.

Scoring and Intervals: Utilizing a Likert scale with five response options, the IBAPAT scores each participant based on their mean scores across all sections of the questionnaire. The higher the mean scores, the higher the likelihood of the student of being at the risk of developing internet addiction or was already in the state of internet addiction. The mean scores were interpreted using the following intervals:

Intervals:

1.00 – 1.80: Strongly Disagree
1.81 – 2.60: Disagree
2.61 – 3.40: Neutral
3.41 – 4.20: Agree
4.21 – 5.00: Strongly Agree

Semi-structured Interview Guide for the students

Interview questionnaire on the impact of four ideological and political courses on the 3rd year students' excessive use of the Internet after studying them

Through the design of interview questions, two students with the highest and lowest scores were selected from each of the four schools based on the pre-IBAPAT questionnaire, totaling 16 students. Investigating the impact of four Civics courses on students' academic performance and change of attitude towards excessive Internet use, the impact of Civics on students' addiction to the Internet was concluded through the interviews with students and the results of the four Civics courses and the subsequent academic performance provided by the students.

3. Statistical Analysis of Date

The statistical analysis of data will be carried out in three phases:

Phase 1: The IBAPAT will be administered to 380 3rd year college students from four selected universities in Yantai City. The tool evaluates internet utilization patterns, identifies potential signs of internet addiction, and analyzes academic performance among 3rd year college students. Students will respond to questions related to internet use, academic performance, and other relevant factors. Descriptive statistics, such as mean scores and standard deviations, will be calculated to summarize and describe the key features of the data. This will provide an overview of the prevalence of internet addiction and academic performance among the
surveyed students. Further, correlation analysis will be conducted to explore the relationships between different variables. Specifically, the study aims to understand the correlations between internet addiction, academic performance, and other factors identified in the IBAPAT.

Phase 2: Thematic analysis will be employed to analyze qualitative data obtained from semi-structured interviews with third year college students. Recurring themes and patterns related to the impact of internet utilization on students and the role of ideological and political education will be identified. The qualitative findings will be coded, and categories will be established based on emerging themes. This process involves systematically organizing data into meaningful groups, allowing for a deeper understanding of the qualitative insights. The qualitative themes will be integrated with the quantitative results obtained from the IBAPAT. This integration aims to provide a comprehensive understanding of the factors contributing to internet addiction among college students and the strategies employed by teachers in ideological and political education from the perspectives of the college students.

Phase 3: The integrated data will undergo a comparative analysis to identify consistencies, discrepancies, and correlations between qualitative and quantitative findings. This step will contribute to the development of a cohesive narrative that addresses the research objectives. Triangulation: Triangulation will be employed to validate the research findings by cross-referencing information obtained through different methods. This approach enhances the reliability and robustness of the study.

4. Results and Discussions

4.1. Profile of the Respondents

The profile of the respondents is described in terms of age, gender, and college major. Descriptive statistics was used in order to determine the distribution of these variables across all 380 respondents using frequency and percentage.

Table 2. Profiles of Respondents in Terms of Age

The table above shows the distribution of respondents in terms of age. Respondents aged 22 years old represent the highest proportion of the sample size at 28.16% followed by respondents aged 19 years old at 25%. Furthermore, 92 respondents represent the 21-year-old category (22.63%) and the lowest proportion is 19 years old, representing about 22.63% of the sample size.

Table 3. Profiles of Respondents in Terms of Gender

The table above shows the distribution of respondents in terms of age. Respondents aged 22 years old represent the highest proportion of the sample size at 28.16% followed by respondents aged 19 years old at 25%. Furthermore, 92 respondents represent the 21-year-old category (22.63%) and the lowest proportion is 19 years old, representing about 22.63% of the sample size.

The table above shows the distribution of respondents in terms of gender. Using descriptive statistics, it has been found that male respondents represented more than half of the sample size at 55.26% in relation to their female counterparts, representing 44.74% of the total number of respondents.

Table 4. Profile of Respondents in Terms of College Major

The table above shows the distribution of respondents in terms of college major. About 18.158% of the total respondents identify their college major as ‘Others’, which indicated majors that were not specified in the questionnaire choices; this is followed by students from the sciences (17.368%), which comprised areas such as Mathematics, Physics, Chemistry, and Environmental Science among others. Arts and literature major comes at third, representing about 17.105% of the total sample size while engineering and technology represented 16.842% of the total sample size. Third year college students majoring in philosophy and economics came last, representing only 14.737% of the sample size.

4.2. Academic Performance in Terms of Self-Reported GPA

The table above describes the distribution of self-reported GPA of 380 respondents in the study. The grading system uses letter grades (A, A-, B+, B…) and were coded as 1, 2, 3, 4… respectively in order to convert them to measurable data. The results above show that the mean GPA revolves around code 2, which implies that it falls within the A- range, which ranges from 85.00% to 89.90% with the highest reported GPA of A (min. 1.000) and the lowest of B- (max. 4.000). The standard deviation of 1.112, in this case, may not be necessarily meaningful as the intervals between these codes might not be equal and may not be consistent. This means that the numerical difference between these ordinal data does not elicit any meaningful interpretation.

Table 5. Descriptive Statistics of Coded Self-Reported GPA

The table above describes the distribution of self-reported GPAs of 380 respondents in the study. The grading system uses letter grades (A, A-, B+, B…) and were coded as 1, 2, 3, 4… respectively in order to convert them to measurable data. The results above show that the mean GPA revolves around code 2, which implies that it falls within the A- range, which ranges from 85.00% to 89.90% with the highest reported GPA of A (min. 1.000) and the lowest of B- (max. 4.000). The standard deviation of 1.112, in this case, may not be necessarily meaningful as the intervals between these codes might not be equal and may not be consistent. This means that the numerical difference between these ordinal data does not elicit any meaningful interpretation.

Table 6. Distribution of Coded Self-Reported GPA

The table above shows the distribution of self-reported GPAs of the 380 respondents. It appears that the distribution of GPAs was relatively even with the highest frequencies for codes corresponding to B+ (82.00 – 84.90) and A (90.00 – 100.00). No respondents reported missing GPA data.
4.3. Current Status of Internet Utilization Among 3rd Year College Students

Table 7. Descriptive Statistics of Internet Addiction and Internet Utilization

<table>
<thead>
<tr>
<th></th>
<th>Internet Addiction</th>
<th>Internet Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>380</td>
<td>380</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.007</td>
<td>3.790</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.170</td>
<td>0.105</td>
</tr>
<tr>
<td>Minimum</td>
<td>1.520</td>
<td>3.200</td>
</tr>
<tr>
<td>Maximum</td>
<td>2.520</td>
<td>4.240</td>
</tr>
</tbody>
</table>

1.00 – 1.80: Strongly Disagree
1.81 – 2.60: Disagree
2.61 – 3.40: Neutral
3.41 – 4.20: Agree
4.21 – 5.00: Strongly Agree

The table above shows the composite mean score of responses for internet utilization and internet addiction. For internet utilization, the composite mean score is 3.79, which implies that respondents generally agree that while there is an indication of internet usage for entertainment and social interactions, they also use it for academic and career engagement and for educational purposes such as research and learning. However, they rarely use the internet for entertainment purposes with means falling under either the “Disagree” or “Neutral” range. Furthermore, students also agree that they can control the time they spent online; although, they also agree that they use the internet for more than one hour each day. The standard deviation of 0.165 indicates less dispersion of data, which implies that responses among respondents are consistent in all items related to internet utilization.

Meanwhile, the data above also suggests that generally they disagree with the statements related to internet addiction. Specifically, they do not agree that they have developed compulsive internet usage with mean scores ranging from 1.96 to 2.04, which are both interpreted as “Disagree.” Also, students disagree that they have developed withdrawal symptoms such as feeling uneasy when not able to go online for a while (2.008) or feeling down when not able to go online for a period (1.992). Furthermore, they also disagreed that their internet usage had increased over time and that they have less time socializing with friends. They also reported that they did not experience physical discomfort or having less interactions with family. Finally, students agree that their current usage of the internet does not sacrifice their sleep, affected their physical health, or reduced their time for leisure activities. The low standard deviation of 0.170 means that there is less dispersion in the data set, which suggests that the responses of the students are generally uniform or consistent throughout all items related to internet addiction.

Table 8. Correlation between Internet Utilization and Internet Addiction

<table>
<thead>
<tr>
<th>Pearson’s Correlations</th>
<th>Internet Utilization</th>
<th>Internet Addiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internet Utilization Pearson’s r</td>
<td>0.099</td>
<td>0.863</td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Internet Addiction  Pearson’s r</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Considering the parametric nature of data, the researcher utilized Pearson’s Correlation Coefficient R to determine if there is significant relationship between the internet utilization patterns and behaviors of students and their risk for internet addiction. The data findings suggest that there is a very weak positive correlation between these two dependent variables; nevertheless, regardless of this positive correlation, its p-value (0.863) is much greater than the typical significance level of 0.05, which means that it is not statistically significant. In the context of this study, the internet utilization patterns of the students and the internet usage behaviors do not have any significant influence on their internet addiction tendencies.

Table 9. Correlation between Internet Utilization and Self-Reported GPA

<table>
<thead>
<tr>
<th>Spearman’s Correlations</th>
<th>GPA Internet Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GPA</td>
<td>Spearman’s rho</td>
</tr>
<tr>
<td></td>
<td>p-value</td>
</tr>
<tr>
<td>2. Internet Utilization</td>
<td>Spearman’s rho 0.039</td>
</tr>
<tr>
<td></td>
<td>p-value 0.452</td>
</tr>
</tbody>
</table>

The data involved in this analysis are continuous and categorical data, which require non-parametric analysis. In this case, the researcher utilized the Spearman’s rho to determine if there is a relationship between the internet utilization patterns of students and their academic performance, which is based on their self-reported GPA. The data shows that despite having a very low positive correlation of 0.039, the p-value is much greater than the typical significance level of 0.05 (0.452). This means that the internet utilization patterns and behaviors of the students do not have influence on the academic performance of the students, which is based on their self-reported GPA. The limitation of this interpretation is partly due to the accuracy or integrity of the self-reported GPAs of the student; nevertheless, based on the findings, there is no significant correlation between these two variables.

Table 10. Correlation between Internet Addiction and Self-Reported GPA

<table>
<thead>
<tr>
<th>Spearman’s Correlations</th>
<th>GPA Risk for Internet Addiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GPA</td>
<td>Spearman’s rho</td>
</tr>
<tr>
<td></td>
<td>p-value</td>
</tr>
<tr>
<td>2. Internet Addiction</td>
<td>Spearman’s rho -0.074</td>
</tr>
<tr>
<td></td>
<td>p-value 0.151</td>
</tr>
</tbody>
</table>

The table above shows the data findings on the correlation between internet addiction and academic performance, which is based on the students’ self-reported GPA. The analysis revealed a weak negative correlation coefficient of -0.074, which suggests that there is a slight tendency for high self-reported GPAs to be correlated with low risks for internet addiction. Nevertheless, the p-value of 0.151, which far exceeds the typical significance level of 0.05, indicates that there is insufficient evidence to establish significant correlation between the two variables.

Table 11. Moderating Impact of College Major

<table>
<thead>
<tr>
<th>MANOVA: Pillai Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases (df)</td>
</tr>
<tr>
<td>(Intercept) 1</td>
</tr>
<tr>
<td>MAJOR 5</td>
</tr>
<tr>
<td>Residuals 374</td>
</tr>
</tbody>
</table>

**Moderating Impacts of College Major, Gender, and Age**

This researcher also analyzed the moderating impacts of fixed factors (independent variables) on the relationship between internet utilization and internet addiction. In this case, the researcher utilized Multivariate Analysis of Variance (MANOVA) in order to analyze the relationship between two
dependent variables and one fixed (independent) variable.

The data shows that the TracePillai of 0.050 suggests a weak to moderate effect of college major on the dependent variables (internet utilization and internet addiction). Furthermore, the p-value of 0.038, which is lower than 0.05, is significant and indicates that there is evidence that the dependent variables differ across different college majors. This means that the relationship between internet utilization and internet addiction may vary depending on the college major, suggesting that some college majors might have some degree of positive or negative effect on this relationship.

### Table 12. Moderating Impact of Gender

<table>
<thead>
<tr>
<th>MANOVA: Pillai Test</th>
<th>Cases</th>
<th>df</th>
<th>Approx. F</th>
<th>TracePillai</th>
<th>Num df</th>
<th>Den df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER</td>
<td>1</td>
<td>2</td>
<td>2.843</td>
<td>0.015</td>
<td>2</td>
<td>377.000</td>
<td>0.059</td>
</tr>
<tr>
<td>Residuals</td>
<td>378</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data above shows a very low TracePillai value of 0.015, which signifies a very weak effect of gender on the dependent variables. Interestingly, the p-value is marginally significant (0.059) but indicates that there is weak evidence that internet utilization and internet addiction are collectively affected by gender.

### Table 13. Moderating Impact of Gender

<table>
<thead>
<tr>
<th>MANOVA: Pillai Test</th>
<th>Cases</th>
<th>df</th>
<th>Approx. F</th>
<th>TracePillai</th>
<th>Num df</th>
<th>Den df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>3</td>
<td>2</td>
<td>0.359</td>
<td>0.006</td>
<td>6</td>
<td>752.000</td>
<td>0.905</td>
</tr>
<tr>
<td>Residuals</td>
<td>376</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above shows a very small TracePillai value of 0.006, which indicates a weak impact of age on the dependent variables. Meanwhile, the high p-value of 0.905 suggests that age has no statistically significant effect on the dependent variables. This further means that there is insufficient evidence to conclude that age groups differ on the dependent variables of this study.

### 4.4. Assessment of the Role of Ideological and Political Education

The role of ideological and political education in the promotion of responsible internet usage among students was explored through a qualitative approach by means of an interview guide. The qualitative data was transcribed, organized, and thematically analyzed in order to yield meaningful results.

#### A. Integration of Ideological and Political Education with Digital Responsibility

One of the prevailing themes is the integration of ideological and political education with digital literacy. Students believe that the knowledge and principles that can be gained from these subjects/courses can influence significantly on internet usage patterns and behaviors. Ideological and political principles often involve critical thinking, an analysis of information sources, as well as recognizing bias. These skills are critically important in the utilization of the internet whether for entertainment or for educational purposes. Some students believe that some ideological and political education courses do not mention online behavior; however, “My Mao Zedong Thought course emphasize critical analysis and analyzing sources... important for spotting fake news online.” These subjects teaching about focusing on what’s important and teaching students how to harness “self-control”, which they can apply to their internet utilization behaviors and patterns. There is an overwhelming agreement to the fact that ideological and political education do not “specifically address internet behavior or how much time can we spend on the internet at a time” but it provides with ethical and philosophical framework for ethical and collective responsibility as well as dialectical materialism, as discussed in Principles of Marxism.

#### B. Challenges and Conflicts Practicing Responsible Internet Usage

Participants have shared about the different challenges and conflicts they encounter in aligning their personal beliefs and values with responsible internet usage, particularly in the context of ideological and political education. Some of theme are affected by the overwhelming influence of peer influences and external pressure. For instance, some students find it difficult to control the time they spent online sometimes because “friends invite to play video games", which can take so much time and can significantly impact other aspects of life. Some of them also agree that there are many temptations online that can cause them to behave irresponsibly such as “spending too much time on social media”, which can be time consuming. The way social media platforms are programmed nowadays are such in a way that psychologically conditions the user to keep on scrolling subconsciously. Participants believe that the ideological and political education allowed them to get grounded with their priorities and their focus. They argue that Marxist philosophies have impacted their way of thinking, which in effect influence the way they deal with different things, including internet usage. For instance, one participant say that he has been so influenced by Mao Zedong Thought principles of self-regulation and criticism, which encourages the participant to “monitor my internet usage habits and see if what I am doing online is contributing to my well-being or the well-being of my family.” While ideological and political education seem abstract and philosophical in nature, the way they are interpreted and translated into practical avenues for personal growth, self-regulation, and discipline contributed largely on how students use the internet.

#### C. Need for Additional Resources and Support

While ideological and political education has some degree of influence on the development of responsible internet usage among participants, they have also believed that the way it has been integrated into the curriculum lacks depth and practical implications. For instance, most of the teachers do not know how to relate the more abstract principles and concepts in these subjects with practical situations such as the growing influence of internet on people’s lives or how these principles can be used to develop robust mental and psychological conditions that enable an individual to use the internet responsibly. One participant says that “perhaps one of the main areas of improvement in this aspect is that ideological and political education must be installed with claws... I mean, it must have practical applications." This implies that universities must design these subjects in a way that balances theory and practice – that it should not be left the democratic interpretations of the students.

### 5. Conclusion and Recommendations

#### 5.1. Conclusion

1. The sample size comprised of 380 third year college
students had a relatively even distribution across gender, age, and college major.

2. Students’ mean self-reported GPA falls under A-range (85.00 – 89.90) indicates a generally good academic performance.

3. Students reported moderate internet usage for different purposes including social interaction, entertainment, and academics; although, respondents say that they rarely use the internet for entertainment purposes. However, thematic analysis show that some students struggle sometimes with peer influence and external pressure, which tempt them to use the internet irresponsibly such as playing video games or scrolling social media for extended periods.

4. There was no significant correlation between internet utilization and internet addiction or academic performance, which is based on the self-reported GPA.

5. College major appears to have a slight influence on the relationship between internet utilization and internet addiction risks. This implies that the relationship between internet utilization and internet addiction varies across different college major categories.

6. Students believe that ideological and political education promote responsible internet usage through acquisition of critical thinking skills and self-regulation.

7. Balancing personal beliefs with responsible internet usage presents challenges for students due to the presence of peer influences and external pressure.

8. The nature in which ideological and political education are formatted, designed, or framed can be improved by not just focusing on the theoretical and philosophical teachings but also on their practical implications; and to not just leave these concepts to the democratic interpretations of the students.

5.2. Recommendations

1. Develop and implement digital literacy programs that teach students about critical thinking skills, source analysis, and responsible internet usage such as self-regulation and minding priorities. This might involve different disciplines like ideological and political education and social sciences like psychology or sociology.

2. Promote self-awareness and time management skills. Universities and colleges must seriously embed time management skills and self-awareness education in the curriculum; design practical pointers that students can easily understand and relate to their internet usage patterns and other aspects of their lives.

3. Create a supportive environment by establishing centers or units that provide support and extended help to students who are struggling with internet addiction or irresponsible online behavior.

4. Design curriculum that connects ideological and political principles with practical aspects of responsible internet usage.

5. Go beyond theoretical teachings and provide students with opportunities to apply critical thinking skills to online information and behavior.

6. Offer additional resources and support by providing guidance and support to instructors on integrating digital literacy concepts within ideological and political education courses.

References


