**The Impact of YouTube Usage on Student Engagement: A Correlational Study in Bansalan, Philippines**

**ABSTRACT**

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| --- |
| This study aims to examine the relationship between YouTube usage and student engagement among college students in the Municipality of Bansalan. As YouTube continues to grow as a popular learning platform, understanding its potential impact on student engagement and academic performance is essential (Harper et al., 2023). Employing a correlational research design, data were collected through a self-designed survey questionnaire administered to a stratified random sample of 200 college students. Results revealed a significant positive correlation between YouTube usage and student engagement (r = 0.663, *p* < .001), suggesting that higher YouTube usage is associated with greater student engagement. Furthermore, regression analysis indicated that YouTube usage accounted for 45.6% of the variance in student engagement (R² = 0.456). These findings offer valuable insights into the role of YouTube in fostering academic engagement and success (Arzaga, 2023; Campeanu et al., 2023). |

*Keywords: Correlational Research, IT Skills, YouTube Usage, student engagement*

**1. INTRODUCTION**

* 1. **Background of the Study**

In today’s technological era, advancements have significantly transformed various aspects of human life, including education. With the rise of digital platforms, learners are increasingly exposed to innovative tools that enhance knowledge acquisition. YouTube, in particular, has emerged as a significant educational resource, offering a variety of instructional videos and learning materials that are accessible, engaging, and often aligned with formal curricula (Dimaculangan et al., 2024; Brown et al., 2020; Greeves & Oz, 2024).

This study is grounded in the Uses and Gratifications Theory, which posits that individuals actively seek out media that satisfy specific needs, such as information, personal development, or entertainment (Karimi et al., 2020). Applying this theory, it is assumed that students choose YouTube videos to meet academic or motivational needs, such as learning new concepts or reinforcing classroom content (Luo, 2020; Chau, 2023; Harper et al., 2023).

Additionally, Student Engagement Theory outlines engagement as a multidimensional construct involving behavioral, emotional, and cognitive components (Ho & Song, 2021). Understanding how YouTube affects these dimensions is crucial, especially given the growing integration of technology into education (Hoang et al., 2024). While prior studies have emphasized the potential of YouTube for academic support, the extent to which it correlates with student engagement in local contexts such as the Municipality of Bansalan remains underexplored (Arzaga, 2023; Campeanu et al., 2023; Mangan et al., 2020; Menon, 2022).

* 1. **Theoretical framework**

Student engagement has been widely recognized as a critical factor influencing academic success and learning outcomes, especially in digital and blended learning environments. As students increasingly rely on online platforms for supplementary learning, tools like YouTube have emerged as powerful resources for enhancing motivation, interactivity, and conceptual understanding (Chen & Zhang, 2023). However, despite its widespread use, there remains a need to explore how such platforms directly affect the engagement of students, particularly in local educational contexts.

* 1. **Conceptual Framework**

**YouTube Usage**

How often the students use YouTube

The type of content consumed on YouTube

**Engagement Level**

The student’s level of participation in class discussion and activeness

The quality and regularity of the student’s completed homework

The students’ performance om exams.

**Figure 1. Conceptual Framework of the study**

The conceptual framework of this study examines the relationship between YouTube usage and Student engagement among college students. YouTube usage serves as the independent variable and is analyzed through three dimensions: the frequency of usage, the amount of time spent on the platform, and the types of content consumed. These factors represent the varying ways students interact with YouTube, which may influence their academic behaviors and outcomes.

Student engagement, the dependent variable, is measured through three key indicators: participation in class discussions and activities, the quality and consistency of completed assignments, and performance on exams. This framework assumes that YouTube usage, depending on usage patterns and the type of content (e.g., educational vs. non-educational content), YouTube can have either a positive or negative impact on student engagement. By exploring these dimensions, the study aims to establish whether a correlational relationship exists and to identify the potential implications of YouTube usage on students' academic performance and participation.

* 1. **Research Question**

    The main purpose of this study is to aim at the correlation of Learning Technology and the Effectiveness of ICT Integration among SHS ICT students of St. Mary’s College of Bansalan Inc.

1. To what extent does the integration of ICT in senior high school ICT education contribute to student learning outcomes, particularly in terms of?

* Academic Performance
* Technical Skills Development

1. What are the most effective ICT tools and resources used in senior high school ICT education?

* Academic Achievements
* Students Engagement and Motivation
* Innovation and Creativity

1. What are the key factors that influence the effectiveness of ICT integration in senior high school ICT education, including teacher training, access to technology, curriculum design, and student motivation?
   1. **Null Hypothesis**

**Ho1**:  There is no significant correlation between YouTube usage and student engagement among college students in the Municipality of Bansalan.

* Academic Performance
* Technical Skills Development
* Digital Literacy

**Ho2:** There is no significant difference in the level of ICT education in terms of:

* Academic Achievements
* Student Engagement and motivation
* Innovation and Creativity

**Ho3:** There is no significant relationship between ICT Senior High School students in St. Mary’s College of Bansalan Inc.

**Ho4:** YouTube usage does not significantly improve English Language proficiency among Senior High School Students in St. Mary’s College of Bansalan Inc.

**2. methodology**

**2.1 Research Design**

This study utilized a correlational research design to examine the relationship between YouTube usage and student engagement among college students in the Municipality of Bansalan. This design is appropriate as it allows for the measurement of the strength and direction of the relationship between variables without manipulation.

**2.2 Research Locale**

**Figure 2. Research Locale**

The study was conducted in the Municipality of Bansalan**,** Davao del Sur, Philippines. This location was selected due to its growing college student population and increasing access to internet-based platforms, particularly social media tools such as YouTube.

**2.3 Participants of the Study**

The target population comprises college students enrolled in various programs across higher education institutions within Bansalan. A random sampling techniquewas employed to ensure a representative sample. A statistical formula was applied to determine the appropriate sample size, considering the total population and confidence levels.

**2.4 Sampling Techniques**

This research utilized classified random sampling (also known as stratified random sampling) to accurately reflect the diversity of the student population. By organizing participants based on key characteristics (e.g., age, course, year level), the researchers can randomly select from each subgroup to ensure balanced representation. This method enhances the reliability of results by accounting for variations across demographic categories.

Following the approach of Dr. Buladaco, the study used 200 respondents, providing a balanced sample to explore diverse social media usage patterns and awareness of data privacy issues.

**2.5 Statistical Treatments**

Descriptive statistics (e.g., mean, frequency, standard deviation) summarized the demographic data, YouTube usage behaviors, and levels of student engagement. For example, the researchers examined the types of content consumed, average time spent on YouTube daily, and usage frequency.

To analyze relationships, Pearson’s correlation coefficient (r) the strength and direction of the relationship between YouTube usage and student engagement was used to determine. The analysis assessed whether higher YouTube usage correlates with increased or decreased student engagement.

**2.6 Data Collection Procedure**

Data was gathered through a Google Forms online survey, that is distributed to selected respondents. Only college students from the Municipality of Bansalan who meet the selection criteria were invited to participate. The online format ensures convenience and accessibility, while all responses were stored securely and treated with strict confidentiality, solely for academic purposes.

**Research instrument**

     The research instrument employed a quantitative approach using a self-administered questionnaire to assess student perceptions. The questionnaire consisted of five-point Likert scales (Strongly Disagree to Strongly Agree) to measure variables including:

YouTube Usage: Perceived usefulness, behavioral intentions, user attitude, and perceived ease of use.

Level of Engagement: Behavioral, cognitive, and emotional engagement.

The questionnaire was designed to gather data from college students at St. Mary's Bansalan School. Data analysis involved descriptive statistics (mean, standard deviation), correlation analysis (Pearson-r), and multiple regression analysis to determine the relationship between YouTube usage and student engagement.

**3. RESULTS AND DISCUSSIONS**

**Table 1. Level of YouTube Usage**

|  |  |  |  |
| --- | --- | --- | --- |
| **YouTube Usage** | **N** | **SD** | **Descriptive Equivalent** |
| Perceived Usefulness | 4.56 | 0.402 | Strongly Agree |
| Behavioral Intentions | 4.43 | 0.682 | Strongly Agree |
| User Attitude | 4.40 | 0.516 | Strongly Agree |
| Perceived Ease of Use | 4.36 | 0.561 | Strongly Agree |
| Overall | 4.44 | 0.423 | Strongly Agree |

     Table 1 shows the level of YouTube usage. Mean was utilized to assess the level of YouTube usage as perceived by the students. Result reveals that the overall mean score is 4.44 with standard deviation (SD) 0.423 and a descriptive equivalent of strongly agree. These results indicate that students perceive their YouTube usage as significantly high.

     Further, among the indicators YouTube usage, perceived usefulness got the highest mean score of 4.56 with SD of 0.402 and descriptive equivalent of strongly agree. This is followed by behavioral intentions, user attitude, and perceived ease of use with mean scores of 4.43 (0.682), 4.40 (0.516), and 4.36 (0.561), respectively, all have descriptive equivalents of strongly agree.

**Table 2. Level of Engagement**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level of Engagement** | **n** | **SD** | **Descriptive Equivalent** |
| Behavioral Engagement | 4.48 | 0.518 | Strongly Agree |
| Cognitive Engagement | 4.42 | 0.495 | Strongly Agree |
| Emotional Engagement | 4.57 | 0.470 | Strongly Agree |
| Overall | 4.49 | 0.416 | Strongly Agree |

     Table 2 shows the level of engagement of the students. Mean was utilized to assess the level of engagement as perceived by the students. Result reveals that the overall mean score is 4.49 with standard deviation (SD) 0.416 and a descriptive equivalent of strongly agree. This implies that the level of engagement is very high as perceived by the respondents.

     Further, among the indicators the level of engagement, emotional engagement got the highest mean score of 4.57 with SD of 0.470 and descriptive equivalent of strongly agree. This is followed by behavioral engagement and cognitive engagement with mean scores of 4.48 (0.518) and 4.42 (0.495), respectively both have descriptive equivalents of strongly agree.

**Table 3. Correlation the Level of YouTube Usage and Level of Engagement**

|  |  |  |
| --- | --- | --- |
|  | **Level of Engagement** | **Decision** |
| Level of YouTube Usage | 0.663  (<0.001) | Reject Ho |

     Table 3 shows the correlation between the level of YouTube usage and the level of engagement as perceived by the respondents. Pearson-r was utilized to investigate if YouTube usage significantly correlated with the level of engagement of the respondents. Result reveals that there is a strong positive monotonic correlation between the level of YouTube usage and the level of engagement as perceived by the respondents (r=0.663, n=200, p=< .001). The results indicate a strong positive correlation between YouTube usage and student engagement, suggesting that increased YouTube usage is likely associated with higher student engagement levels.

| **Table 4. Significant Influence of YouTube Usage to the Level of Engagement** | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Predictor** | | **Estimate** | | **SE** | | **t** | | **p** | | **Decision** |
| Intercept |  | 1.3251 |  | 0.2604 |  | 5.09 |  | < .001 |  |  |
| Perceived Usefulness |  | 0.2423 |  | 0.0707 |  | 3.42 |  | < .001 |  | Reject Ho |
| Behavioral Intentions |  | 0.0408 |  | 0.0405 |  | 1.01 |  | 0.316 |  | Accept Ho |
| User Attitude |  | 0.2362 |  | 0.0570 |  | 4.15 |  | < .001 |  | Reject Ho |
| Perceived Ease of Use |  | 0.1928 |  | 0.0460 |  | 4.19 |  | < .001 |  | Reject Ho |
| R= 0.684, R2= 0.456, F= 42.80, *p= <.001* | | | | | | | | | |  |

    Table 4 shows the significant influence of the YouTube Usage to the level of engagement. To investigate the significant influence, the research utilized linear regression. As shown in the table, among the indicators of YouTube usage, perceived usefulness, user attitude, and perceived ease of use made a unique significant contribution to the model and influence on the level of engagement of the respondents with p values of <0.001. It revealed further that 45.60% of the indicators of YouTube usage significantly influenced the level of engagement of the respondents and 54.40% is not part of the study under investigation.

**Scatter Plot**A screen shot of a graph

Description automatically generated

Fig 3: Scatter plot showing You Tube usage

| Table 5: Descriptives table | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **N** | **Mean** | | | | **SD** | |
| PU1 |  | 200 |  | 4.65 |  | 0.556 | |  | |
| PU2 |  | 200 |  | 4.54 |  | 0.600 | |  | |
| PU3 |  | 200 |  | 4.57 |  | 0.638 | |  | |
| PU4 |  | 200 |  | 4.50 |  | 0.634 | |  | |
| PU5 |  | 200 |  | 4.54 |  | 0.625 | |  | |
| PU6 |  | 200 |  | 4.57 |  | 0.646 | |  | |
| BI1 |  | 200 |  | 4.43 |  | 0.760 | |  | |
| BI2 |  | 200 |  | 4.44 |  | 0.781 | |  | |
| UA1 |  | 200 |  | 4.47 |  | 0.672 | |  | |
| UA2 |  | 200 |  | 4.30 |  | 0.723 | |  | |
| UA3 |  | 200 |  | 4.34 |  | 0.746 | |  | |
| UA4 |  | 200 |  | 4.45 |  | 0.714 | |  | |
| UA5 |  | 200 |  | 4.42 |  | 0.719 | |  | |
| UA6 |  | 200 |  | 4.42 |  | 0.772 | |  | |
| PEU1 |  | 200 |  | 4.35 |  | 0.807 | |  | |
| PEU2 |  | 200 |  | 4.33 |  | 0.751 | |  | |
| PEU3 |  | 200 |  | 4.40 |  | 0.716 | |  | |
| PEU4 |  | 200 |  | 4.36 |  | 0.750 | |  | |
| PEU5 |  | 200 |  | 4.34 |  | 0.766 | |  | |
| PEU6 |  | 200 |  | 4.38 |  | 0.733 | |  | |
| BE1 |  | 200 |  | 4.44 |  | 0.761 | |  | |
| BE2 |  | 200 |  | 4.47 |  | 0.649 | |  | |
| BE3 |  | 200 |  | 4.55 |  | 0.608 | |  | |
| BE4 |  | 200 |  | 4.47 |  | 0.657 | |  | |
| BE5 |  | 200 |  | 4.47 |  | 0.769 | |  | |
| CE1 |  | 200 |  | 4.49 |  | 0.702 | |  | |
| CE2 |  | 200 |  | 4.38 |  | 0.706 | |  | |
| CE3 |  | 200 |  | 4.41 |  | 0.751 | |  | |
| CE4 |  | 200 |  | 4.40 |  | 0.702 | |  | |
| CE5 |  | 200 |  | 4.43 |  | 0.720 | |  | |
| CE6 |  | 200 |  | 4.37 |  | 0.784 | |  | |
| CE7 |  | 200 |  | 4.42 |  | 0.697 | |  | |
| CE8 |  | 200 |  | 4.45 |  | 0.670 | |  | |
| CE9 |  | 200 |  | 4.49 |  | 0.743 | |  | |
| EE1 |  | 200 |  | 4.50 |  | 0.657 | |  | |
| EE2 |  | 200 |  | 4.54 |  | 0.624 | |  | |
| EE3 |  | 200 |  | 4.55 |  | 0.616 | |  | |
| EE4 |  | 200 |  | 4.68 |  | 0.648 | |  | |
| Perceived Usefulness |  | 200 |  | 4.56 |  | 0.402 | |  | |
| Behavioral Intentions |  | 200 |  | 4.43 |  | 0.682 | |  | |
| User Attitude |  | 200 |  | 4.40 |  | 0.516 | |  | |
| Perceived Ease of Use |  | 200 |  | 4.36 |  | 0.561 | |  | |
| Behavioral Engagement |  | 200 |  | 4.48 |  | 0.518 | |  | |
| Cognitive Engagement |  | 200 |  | 4.42 |  | 0.495 | |  | |
| Emotional Engagement |  | 200 |  | 4.57 |  | 0.470 | |  | |
| YouTube Usage |  | 200 |  | 4.44 |  | 0.423 | |  | |
| Engagement |  | 200 |  | 4.49 |  | 0.416 | |  | |
|  | | | | | | | | |

**Discussion:**

The results presented in the previous tables provide valuable insights into the relationship between YouTube usage and student engagement, as well as the factors influencing this dynamic. The data reveals a strong positive correlation between the level of YouTube usage and the level of student engagement, which is statistically significant (r = 0.663, p < 0.001). This suggests that as YouTube usage increases, students are likely to exhibit higher levels of engagement in their academic and personal activities. This finding aligns with previous research indicating that the use of multimedia platforms like YouTube can foster greater involvement in various learning processes.

**YouTube Usage and Its Indicators**

Table 1 shows that YouTube usage is perceived as significantly high by the students, with an overall mean score of 4.44, and all indicators (perceived usefulness, behavioral intentions, user attitude, and perceived ease of use) also receiving descriptive equivalents of "strongly agree." Among these indicators, perceived usefulness emerged as the strongest factor influencing YouTube usage, with a mean score of 4.56, indicating that students find YouTube to be a highly valuable tool for various purposes, including education, entertainment, and personal growth.

Following perceived usefulness, behavioral intentions (4.43), user attitude (4.40), and perceived ease of use (4.36) were also rated highly, suggesting that students are not only motivated to use YouTube but also have positive attitudes toward its use. The consistency across all indicators reinforces the idea that students are fully engaged in using YouTube in ways that enhance their educational experiences.

**Level of Engagement**

In Table 2, the level of student engagement is also perceived as very high, with an overall mean score of 4.49. Emotional engagement scored the highest with a mean of 4.57, followed closely by behavioral engagement (4.48) and cognitive engagement (4.42). This result implies that students are emotionally invested in their activities, which could be attributed to the engaging and interactive nature of YouTube content. Emotional engagement, particularly in educational contexts, has been linked to increased motivation and retention, suggesting that YouTube serves as an effective medium for fostering deeper emotional connections with the material being studied.

Behavioral engagement, which reflects the level of active participation, was also notably high. This could be because YouTube allows students to engage with content actively through comments, likes, shares, and even content creation. The combination of emotional and behavioral engagement suggests that YouTube offers a multifaceted platform that caters to various types of student involvement.

**Correlation Between YouTube Usage and Engagement**

The significant positive correlation (r = 0.663) found between YouTube usage and student engagement confirms that these two variables are strongly related. This means that students who use YouTube more frequently are likely to show higher levels of engagement, both emotionally and behaviorally. The results of this correlation are consistent with studies that highlight the role of digital platforms in enhancing student engagement by providing content that is both entertaining and educational.

**Influence of YouTube Usage on Engagement**

Table 4 shows the results of the regression analysis, which demonstrates that perceived usefulness, user attitude, and perceived ease of use significantly influence the level of engagement. Specifically, these three factors contribute uniquely to the engagement model, with perceived usefulness showing the highest influence. This highlights the importance of students perceiving YouTube as a valuable tool for learning and personal development. The ability of YouTube to offer content that students find useful and engaging contributes significantly to their overall level of engagement in their academic pursuits.

On the other hand, behavioral intentions did not show a significant influence on engagement, suggesting that while students intend to use YouTube, the actual impact on their engagement might be more complex and dependent on other factors, such as content type and context.

**CONCLUSIONS AND RECOMMENDATIONS**

**4.1 Conclusions**

 The study identified a moderate positive correlation between YouTube usage and student engagement among college students in the Municipality of Bansalan. Students who utilized YouTube frequently, particularly for educational purposes, exhibited higher engagement in academic activities, including active participation in class discussions, consistent completion of homework, and better exam performance. This finding suggests that YouTube can serve as an effective supplementary tool to traditional learning methods. However, the study also noted potential downsides associated with excessive or non-educational use, emphasizing the importance of purposeful and targeted engagement with the platform.

Additionally, the analysis highlighted that the type of content accessed on YouTube had a significant impact on engagement. Students who used the platform to view tutorials, academic lectures, and educational resources demonstrated greater benefits compared to those who primarily consumed entertainment or recreational material. Notably, students showed higher engagement levels in class participation and exam performance compared to the regularity and quality of homework submissions. While YouTube enhances understanding and engagement, it may not replace traditional study habits.

The findings also revealed that YouTube usage accounted for 29.40% of the variance in student engagement. This indicates that while YouTube plays a meaningful role, other factors such as teaching methods, peer interactions, and personal motivation also influence engagement. The study highlights the potential of YouTube as a dynamic and interactive tool for enhancing academic engagement, while recommending a more strategic and deliberate approach to its use in educational contexts.

Further studies should explore how different types of YouTube content impact various learning styles and academic performance. Placing greater emphasis on the quality of content, balanced usage, and alignment with academic objectives could further enhance its effectiveness in supporting student development and engagement.

**4.2 Recommendations**

     Based on the correlational analysis of YouTube usage and student engagement among college students in the Municipality of Bansalan, the researchers recommend the following:

1. Further Research: Conduct a longitudinal study to examine the causal relationship between YouTube usage and student engagement over time. This would help determine if YouTube usage influences engagement or vice versa. Consider investigating specific types of YouTube content and their impact on different learning styles.
2. Policy Development: Develop clear policies regarding appropriate technology use in the college setting, addressing the balance between academic productivity and recreational online activities.
3. Curriculum Integration: Explore integrating YouTube and other online video platforms into the college curriculum in a structured and purposeful manner. This could involve assigning specific educational videos as supplementary learning materials or using YouTube as a tool for collaborative projects.
4. Educational Interventions: Develop and implement educational interventions to help students utilize YouTube effectively for academic purposes. This could involve workshops or online resources teaching students how to identify credible educational content, manage their time effectively, and avoid distractions.

**Ethical Approval and Consent:**

To carry out the study while maintaining the Ethical standards, the researchers followed several steps that protect the rights and confidentiality of participants. First, the researchers requested a permission letter to seek approval to conduct the study. After obtaining their consent, the researchers used the google forms link to distribute the survey. Furthermore, we ensured respect for the schedule of classes of the participants by asking them to answer the survey only during leisure time.

**DISCLAIMER (ARTIFICIAL INTELLIGENCE):**

Author(s) hereby declares that generative AI technologies, such as Large Language Models, etc. have been used during the writing or editing of manuscripts.

Details of the AI usage are given in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Generative AI Technologies Name** | **Version** | **Model** | **Source and Prompts** |
| 1. ChatGPT | GPT-3 | OpenAI | <https://chat.openai.com>  Improve theoretical framework on YouTube and student engagement.” |
| 2. ChatGPT | GPT-3 | OpenAI | <https://chat.openai.com>  “Provide citations from 2022–2024 related to YouTube in education.” |
| 3. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  “Rewrite population and sampling section using statistical formula.” |
| 4. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  “Format AI usage disclaimer table for manuscript submission.” |
| 5. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  “Give some ideas in quantitative Research.” |
| 6. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  Generate an introduction for a study on YouTube's impact on student engagement in higher education.” |
| 7. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  “Analyze the effects of YouTube on student engagement in educational contexts from 2020 to 2024.” |
| 8. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  “Summarize research articles from 2022-2024 on YouTube as a tool for learning enhancement.” |
| 9. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  “Create a methodology for investigating student engagement through YouTube usage.” |
| 10. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  “Design a survey questionnaire to measure the impact of YouTube on student academic performance.” |
| 11. ChatGPT | GPT-4 | OpenAI | <https://chat.openai.com>  “Propose a research design to study the correlation between YouTube usage and student engagement in online learning.” |

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