

## **Analysis Of The Influence Of Digital Awareness, Security, And Ethical Responsibility In Student Interaction In Aviation Educational Institutions**

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### **ABSTRACT**

*This study aims to analyze communication dynamics within student WhatsApp groups and the influence of digital ethics on awareness, security, openness, orderliness, and responsibility. A qualitative approach was employed through in-depth interviews and participatory observation involving 20 students. The ethics findings indicate that appropriate implementation of digital enhances communication effectiveness, strengthens trust, and fosters a conducive learning environment. This aligns with Chen (2019), who emphasizes the importance of rules in managing online group dynamics and fostering accountability. Smith and Duggan (2016) also highlighted the role of messaging platforms like WhatsApp in improving peer collaboration.*

**Keywords:** Digital Communication, Students, Medan Aviation Polytechnic

### **INTRODUCTION**

The development of digital technology has changed the way humans communicate, including in educational environments. WhatsApp is often used by students as a medium for academic discussion, activity coordination, and information sharing. However, this platform presents challenges such as the spread of false information, privacy violations, and ineffective communication (Santoso, 2020). In addition, Alim and Habib (2022) added that low digital literacy is often the root of ethical communication problems in the digital space.

The purpose of this research:

1. How are the communication dynamics in student WhatsApp groups?
2. How does digital ethics affect aspects of awareness, security, openness, order, and responsibility?
3. What are the recommendations for improving the quality of digital interactions in educational institutions?

### **LITERATURE REVIEW**

#### **Digital Communication**

Walther (1996) through the theory of "hyperpersonal communication" explains that digital media interactions can strengthen or weaken relationships between individuals depending on communication management. In the context of WhatsApp, Church & de Oliveira (2013) note that digital communication often switches between synchronous and asynchronous, allowing flexibility but increasing the risk of miscommunication.

#### **Digital Ethics**

Digital ethics includes norms and principles that govern individual behavior in digital spaces (Floridi, 2010). Widiastuti and Pratama (2021) stated that digital ethics education should include

training in good practices, such as maintaining data security and complying with social norms, to increase responsibility in digital communication.

### WhatsApp Group Dynamics

Chen (2019) stated that clarity of rules in online groups helps reduce conflict and increase order in interactions. Boyd (2014) also highlighted the need for understanding context to avoid "context collapse" in online group communication.

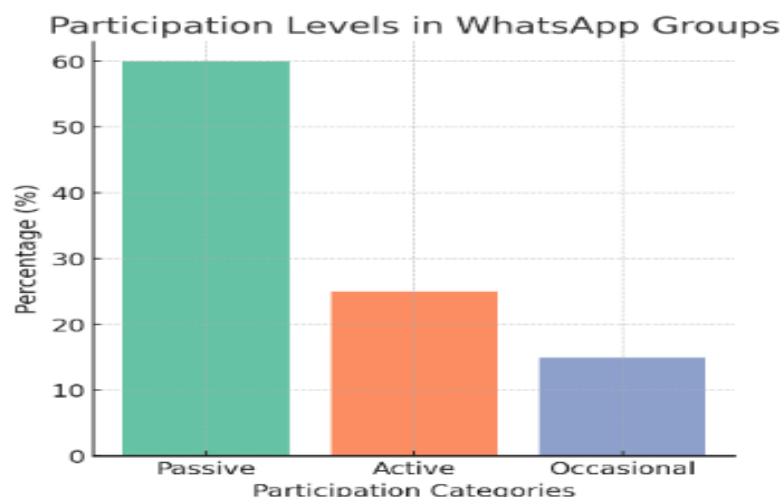
### METHODS

This study aims to explore the relationship between time management, ethics, integrity, competence, professionalism, and communication in student discipline education at the Medan Aviation Polytechnic. In an effort to understand the experiences, perceptions, and social dynamics that influence the behavior of students and lecturers in the context of digital ethics in interactions at educational institutions, this study uses a descriptive qualitative approach with a research location at the Medan Aviation Polytechnic. This approach was chosen because it is able to provide an in-depth understanding of the dynamics of communication in a particular context and capture the subjective meaning of student experiences. The study population was 109 students, consisting of 62 students on campus (on-campus) and 47 students who were undergoing On Job Training (OJT).

#### Bar Chart (Participation Rate):

Shows the distribution of student participation in WhatsApp groups:

- 60% passive (only read messages).
- 25% active (discussion drivers).
- 15% occasional participation.



**Figure 1. Chart Participation Level**

#### Pie Chart (Discussion Topic):

Sharing discussion topics in WhatsApp groups:

- 45% related to academic tasks.

- 30% about organizational activities.
- 25% non-academic topics.



**Figure 2. Pie Chart**

**Line Chart (Effectiveness of Digital Ethics Aspects):**

Demonstrate the effectiveness of digital ethics in five aspects:

- Awareness: 80%
- Security: 75%
- Transparency: 70%
- Regularity: 85%
- Responsibility: 90%



**Figure 3. Effectiveness Of Ethic**

## RESULTS AND DISCUSSION

### Communication Dynamics in WhatsApp Groups

Communication in student WhatsApp groups shows diverse dynamics with the following characteristics:

- **Congruent and Incongruent Interactions:** Students can participate at any time that is convenient for them. For example, one on-campus student stated, "I often respond to messages at night because it is quieter and I am not distracted by my class schedule." However, 60% of students tend to just read messages without actively participating. This phenomenon is in line with Boyd's (2014) findings on "context collapse," where the diversity of group contexts can cause individuals to be reluctant to engage.
- **Various Discussion Topics:** Discussions in the group range from academic material to social activities. Data shows that 45% of discussions focus on college assignments, 30% on coordinating organizational activities, and 25% on non-academic discussions. This finding is in line with Ahmad et al. (2021), who stated that academic collaboration increases with theme-based group management.
- **Varying Levels of Participation:** As many as 60% of students were passive participants (only reading messages), 25% were the main drivers of the discussion, and 15% participated occasionally.

### The Influence of Digital Ethics

Digital ethics plays an important role in improving the quality of communication in student WhatsApp groups in the following five aspects:

- **Awareness:** Students with high digital literacy better understand the impact of their messages, thus showing caution in communicating (Alim & Habib, 2022).
- **Security:** Features such as end-to-end encryption help maintain privacy, but breaches such as the distribution of screenshots still occur frequently (Santoso, 2020).
- **Openness:** Transparency in communication increases trust, but also carries the risk of over-sharing, especially when sharing personal information.
- **Regularity:** Groups with clear rules show more organized communication. Chen (2019) and Sukarwoto et al. (2023) noted that group rules help reduce conflict and increase communication efficiency.
- **Responsibility:** Students who feel responsible for their contributions maintain communication ethics, which has a positive impact on group harmony.

### Challenges

However, this study also found several challenges that affect the quality of communication in WhatsApp groups, namely:

- **Lack of Digital Ethics Awareness:** There are still many students who do not understand the importance of maintaining ethics in digital communication.
- **Conflict Due to Message Interpretation:** Different interpretations of messages often trigger conflicts between members.
- **Spread of Unverified Information:** Unverified information spreads quickly, reducing trust within the group.

1. Improving Digital Literacy: Training programs such as “Digital Ethics Awareness Week” have been successful in increasing awareness by up to 40% (Ahmad et al., 2021).
2. Creating Group Rules: The implementation of collaborative rules reduces conflict by up to 30% (Santoso, 2020).
3. Curriculum Based Education: The "Digital Citizenship" program increases students' digital responsibility (Boyd, 2014).

## CONCLUSION

This study shows that the dynamics of communication in student WhatsApp groups are greatly influenced by the implementation of digital ethics. The five main factors of awareness, security, openness, order, and responsibility, have been shown to have a significant role in creating productive interactions and supporting educational goals. Students' awareness of the impact of their digital behavior helps create more careful and meaningful communication. Security, which involves protecting privacy and personal data, is an important aspect in maintaining trust between group members, although there are still challenges such as the spread of information without permission.

Openness in communication, while it can increase trust, must be balanced with an awareness of privacy limits to avoid over-sharing. Order in a group governed by clear norms and rules can increase communication efficiency, while a sense of responsibility for each group member towards the impact of their positive contribution to group harmony.

However, this study also found various challenges, such as low digital literacy, conflicts due to different interpretations of messages, and the spread of unverified information. Therefore, a systematic approach is needed to improve the quality of communication in WhatsApp groups, such as conducting digital literacy training, setting clear group rules, and utilizing supporting technology to optimize interactions.

Overall, the results of this study provide valuable insights for educational institutions to understand and improve the dynamics of students' digital communication. By incorporating digital ethics education into the curriculum and conducting regular evaluations of digital communication patterns, institutions can create a more conducive, effective learning environment that supports the development of students as responsible digital citizens. This conclusion is expected to be the basis for further research and practical application in managing digital communication in educational institutions. Bottom of Form.

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