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# Digital Risk Communication in PP TUNAS Education: Student Responses to Platform Protection and Restrictions

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**Abstract**

*Digital Risk Communication in PP TUNAS Education: Students' Responses to Platform Protection and Restrictions. This study examines how digital risks and PP TUNAS provisions were communicated through an educational seminar and how students responded to different forms of platform protection and restriction. A qualitative bounded single-case study was conducted at SMA Negeri 52 Jakarta using direct observation, seminar materials, audiovisual documentation, recorded interactions, student testimonials, and evaluation records. Thematic analysis was supported by descriptive data from 42 participants with matched pre-test and post-test records. The findings show that PP TUNAS messages were translated through policy, communication, legal, and psychological perspectives into issues relevant to adolescents. Documented student responses showed recognition of digital risks and the formulation of possible actions through time management, communication with parents, and offline social interaction. All five interventions included in the evaluation instrument received majority approval, while reporting mechanisms and parental monitoring were accepted more strongly than total blocking. The seminar primarily functioned as a space for clarification and knowledge reinforcement rather than as evidence of causal effectiveness or long-term behavioral change.*

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## 1. INTRODUCTION

Digital platforms have become part of the social environment of adolescents. Through various digital services, adolescents learn, communicate, obtain entertainment, build relationships, and express their identities. In this process, they not only receive information but also select, interpret, produce, and disseminate messages. This position positions adolescents as active audiences with agency in shaping their digital experiences. Cortesi et al. (2020) view young people not merely as a vulnerable group needing protection, but as subjects who must be empowered to participate safely, meaningfully, and responsibly. Similarly, Choi et al. (2017) place digital ethics, media and information literacy, participation, and critical thinking skills as essential elements of digital citizenship. Therefore, the intensity of technology use cannot be directly equated with adolescents' readiness to understand the risks and consequences of their activities in the digital space.

Digital citizenship extends beyond the ability to operate devices or access information. It encompasses the ability to assess information, maintain personal safety, understand interaction norms, and use technology responsibly. *Analyze, Create, Then Share emphasizes* the importance of analyzing messages before producing and disseminating them to other users (von Gillern et al., 2022). Fernández-Prados et al. (2021) demonstrate that digital citizenship combines technical competence with critical awareness, self-protection, and social participation. In the Indonesian context, digital literacy also relates to critical thinking skills, security, ethics, rights, responsibilities, digital health, and civility in online interactions (Redhana, 2024; Susanto & Budimansyah, 2022). Therefore, digital literacy education needs to help adolescents understand the benefits of technology while recognizing the risks, rights, responsibilities, and consequences of their actions.

Widespread digital participation goes hand in hand with various risks, such as cyberbullying, exploitation, manipulation, misuse of personal data, exposure to age-inappropriate content, *online grooming*, and the uncontrolled use of digital media. Ray et al. (2024) showed that cyberbullying is a complex issue because its definition, forms, and measurement methods are not yet fully uniform. Kasturiratna et al. (2025) found that vulnerability to cyberbullying is not only related to individual characteristics, but also to the intensity of internet use, family relationships, school environment, and social conditions. These findings show that digital risks are formed through the relationship between users, their social environment, and the technology used.

Child protection in the digital space cannot be solely the responsibility of the child or family. Nursyahbani et al. (2026) position child protection as a rights-based approach that requires the involvement of the state, family, educators, and digital platforms. Sutiyono (2026) also explains that children's digital literacy encompasses an understanding of rights, risks, privacy, security, ethics, and reporting mechanisms. Within this framework, children are positioned not merely as objects of protection but as rights holders who need to obtain information, assistance, participation space, and security systems appropriate to their age and risk level.

The risks of digital media use cannot be fully explained by weak user self-control. The way platforms are designed and operated also influences adolescents' usage patterns and digital experiences. Bhargava and Velasquez (2021) explain that the attention economy business model incentivizes social media companies to maintain user engagement for as long as possible. Castelló et al. (2025) show that the logic of profit, data collection, recommendation systems, and prioritizing emotional engagement influence the circulation of information on digital platforms. Zuboff (2019) positions the processing of user experiences and behavior into commercial data as part of surveillance capitalism. Therefore, the uncontrolled use of digital media needs to be interpreted in light of the relationship between user decisions, service design, data processing, recommendation systems, and the platform's economic interests.

These conditions require risk communication that goes beyond conveying dangers or prohibitions. Risk communication needs to explain the nature of the risk, its source, potential consequences, action options, and the division of responsibility between children, families, schools, governments, and platform providers. In this research, digital risk communication is understood as the process of translating the risks of technology use and protective options into educational messages that students can recognize, understand, and respond to. Students' responses are measured by how they connect the messages to their everyday experiences, formulate possible actions, and evaluate the proposed interventions.

The Indonesian government strengthened child protection through Government Regulation No. 17 of 2025 concerning the Governance of Electronic Systems for Child

Protection (PP TUNAS). This regulation expands the responsibility for protection from the family sphere to the governance of digital products, services, and features intended for or potentially accessed by children. The regulations cover risk assessments, user age management, child privacy and data protection, reporting mechanisms, and the obligation of electronic system providers to protect in accordance with the characteristics of their services (Republic of Indonesia, 2025). Children are thus positioned not only as users who must exercise caution, but also as rights holders who must be protected through the design and operation of electronic systems.

The Academic Study on Child Protection in Electronic Systems Management places risks to development, health, safety, content exposure, exploitation, and data breaches as the basis for developing a risk-based policy. The document emphasizes the principle of *safety by design*, namely that protection needs to be considered from the design and development stages of services, not only after harm has occurred (Ministry of Communication and Digital of the Republic of Indonesia, 2025a). Tunaspedia's materials then translate the substance of the policy into more operational messages, including filtering harmful content, age verification, technical safeguards, reporting mechanisms, and restrictions on the use of children's data for commercial purposes (Ministry of Communication and Digital of the Republic of Indonesia, 2025b). These two documents serve as important references for interpreting the process of translating the PP TUNAS policy into educational activities.

The protection measures associated with PP TUNAS vary in their level of intervention. Some mechanisms maintain user access through safety features, data security, mentoring, and reporting mechanisms. Others regulate monitoring, duration of use, available features, or access to specific services. This discrepancy creates communication challenges because actions intended to protect may be interpreted by adolescents as assistance, mentoring, supervision, restrictions, or removal of access. Aaron and Berlianto (2026) emphasize the importance of balancing protection, access, and children's rights to participation through shared responsibility. PP TUNAS education therefore needs to explain the purpose, benefits, methods, limits, and proportionality of interventions, rather than simply conveying that an action is being taken for children's safety.

Several studies have addressed digital risks and child protection from different perspectives. Alturif and Alsand (2024) examined the impact of cyberbullying on students and educational environments. Susanto and Budimansyah (2022) emphasized the importance of civility, empathy, and responsibility in digital interactions. Nursyahbani et al. (2026) outlined rights-based child protection through collaboration between the state, families, educators, and platforms. In the context of PP TUNAS, Ichsan et al. (2026) conducted outreach on social media risks, parental supervision, access restrictions, and stakeholder collaboration. These studies demonstrate that schools and educational environments hold a strategic position in strengthening digital literacy, security, and citizenship.

However, the sources reviewed primarily discuss digital risks, digital citizenship, rights-based protection, or the socialization of PP TUNAS as separate areas. Discussion of how the substance of child protection policies is translated into risk communication messages in schools remains limited. Similarly, little attention has been paid to the differences in student responses to mechanisms that maintain access and interventions that limit platform use. The existence of regulations does not in itself guarantee that students understand the objectives of protection as intended by policymakers. Students' interpretations can be influenced by the relevance of examples, language choice, the form of interaction, the credibility of the communicator, the space for clarification, and the level of intervention offered.

The novelty of this research lies in its analysis of digital risk communication as a process of policy translation and audience interpretation in the school environment. The research not only examines students' knowledge of the TUNAS PP but also examines how policy messages, communication, law, and psychology are connected to adolescents' digital experiences. Furthermore, the research compares students' responses to interventions that maintain access, such as reporting mechanisms, age verification, and parental monitoring, with interventions that reduce or eliminate access. The categories of protection and restriction are used as analytical tools in the research, not as official classifications within the TUNAS PP.

This study examines the PP TUNAS educational seminar conducted by the Master of Communication Studies Program team at Paramadina University at SMA Negeri 52 Jakarta on June 23, 2026. The seminar was part of a community service activity that was subsequently analyzed as a digital risk communication research case. The activity was carried out through the delivery of material from the perspectives of policy, communication, law, and psychology, accompanied by discussions, questions and answers, pre-tests, and final tests. Evaluation data was used as supporting descriptive data, while the main analysis was directed at the process of message delivery and documented student responses.

Based on the description, the research problem is formulated in the question: how are digital risks communicated in PP TUNAS education, and how do students of SMA Negeri 52 Jakarta respond to messages regarding platform protection and restrictions?

This study aims to analyze how digital risks and the substance of the TUNAS PP are translated into educational messages, identify forms of student engagement and practical meanings, and explain variations in responses to platform protections and restrictions. Academically, this study is expected to expand the study of digital risk communication by including the process of policy translation and adolescent responses in educational settings. Practically, the research results are expected to provide input for the government, schools, educators, and literacy activity organizers in designing PP TUNAS education that is contextual, proportionate, and still recognizes adolescent agency and participation rights.

## 2. RESEARCH METHOD

This research uses a qualitative approach with a bounded single case study design. The qualitative approach was chosen because the research focuses on the process of translating digital risk messages, forms of student engagement, and meanings that emerge during educational activities. Case studies are used to examine contemporary events in depth in a real-life context by utilizing various data sources (Creswell, 2017; Yin, 2018). The case is limited to a digital literacy education seminar, and PP TUNAS was held at SMA Negeri 52 Jakarta, Cilincing, North Jakarta, on June 23, 2026. The case boundaries include one location, one implementation time, one group of participants, one series of activities, and one policy context. The unit of analysis of the research is the process of translating digital risks into educational messages and students' responses to forms of protection and platform restrictions.

This study is a follow-up analysis of data generated during community service activities. Ninety-seven students completed a pre-test at the seminar. Forty-seven students completed a post-test, and 42 pre-test and post-test data were matched based on shared email addresses. These numbers reflect the completeness of the evaluation documentation and are not considered qualitative informants. The primary corpus of the study includes six question-and-answer sessions, two oral response fragments, two student testimonials, one principal testimonial, materials from four speakers, implementation notes, photo and video

documentation, and evaluation documents. The principal's testimony was used to explain the institutional context and school support, not as student response data.

Data were obtained through direct observation, document review, audiovisual documentation, and evaluation documents. Observations focused on how speakers framed digital risks, selected examples, explained the responsibilities of users and platform organizers, and provided clarification to student questions. Documents reviewed included activity proposals, event schedules, presentation materials, questionnaires, implementation reports, pre- and post-test results, and intervention acceptance instruments. Audiovisual documentation included audio and video recordings, photos of activities, excerpts from question-and-answer sessions, spontaneous responses, and participant testimonials.

The seminar material was presented through four perspectives analyzed as a risk communication architecture. The policy perspective discussed the PP TUNAS (National Regulation on Digital Security), digital risks for children, and the obligations of electronic system administrators. The communication perspective outlined adolescents' social media behavior, privacy, ethics, and critical thinking skills. The legal perspective explained the relationship between rights, obligations, freedom of expression, and the consequences of actions in the digital space. The psychological perspective discussed the uncontrolled use of digital media, its impact on daily activities, and the protective actions adolescents can take. These four perspectives were read as a series of messages that translated the language of policy, law, communication, and psychology into situations close to students' experiences.

Data were included in the corpus if the source and context were identifiable, the content of the speech or writing was sufficiently understandable, and its substance was relevant to the research question. Portions of recordings that could not be accurately heard were marked as "indistinct speech" and were not completed based on the researcher's suspicions. Student identities were disguised, while quotations were presented using data codes without including names, email addresses, or other personal information. This procedure was implemented to ensure accuracy of transcription and prevent interpretations that go beyond the available data.

Evaluation documents were used as supporting descriptive data to describe student knowledge, digital media usage patterns, and acceptance of the five interventions associated with PP TUNAS. Data from 42 matched participants were analyzed through frequencies, percentages, and comparisons of pretest and posttest responses. These data were not used to test causal relationships, experimentally assess the seminar's effectiveness, or infer long-term behavioral changes. Their use as supporting data was intended to clarify the context of the qualitative findings, not to replace analysis of the communication process and student responses.

The five acceptance points are grouped into two analytical categories: platform protection and restrictions. The protection category includes emergency reporting mechanisms, parental monitoring, and data or age verification. The restrictions category includes restrictions on app or game use at night and the complete blocking of services deemed to encourage heavy use. These groupings are used to interpret variations in student acceptance based on the level of intervention. The protection and restrictions categories are not official classifications in the PP TUNAS, but rather analytical constructs based on the characteristics of the interventions in the evaluation instruments.

Data analysis was conducted using thematic analysis through six stages: familiarization with the data, initial coding, potential theme development, theme review, theme definition and naming, and report preparation (Braun & Clarke, 2022). The analysis process was iterative, moving between recordings, transcripts, documents, codes, themes, case context, and research questions. Coding combined deductive and inductive

orientations. Deductive codes were derived from the research focus, including digital risk, protection, platform restrictions, time management, communication with parents, social activities without devices, and reflection on media use. Inductive codes were used to capture meanings emerging from student responses that were not yet covered in the initial categories.

The coding results were developed into themes that explain communication and response patterns within the cases. These themes included the translation of policy into adolescents' digital experiences, the formulation of practical actions by students, variations in receptivity to intervention levels, and the function of seminars as spaces for clarification and knowledge reinforcement. Themes were identified not solely based on frequency of occurrence but also on their relevance to the research questions, their interconnectedness with other data sources, and their ability to explain meaningful patterns across the cases.

The credibility of the analysis was maintained through source triangulation, cross-checking transcripts, retracing raw data, and establishing an audit trail. Recordings were compared with observation notes, speaker materials, student responses, testimonials, activity documentation, and evaluation documents. Relationships between data, codes, themes, and interpretations were noted to allow for retracement of the analysis process. These procedures adhere to the trustworthiness principles of thematic analysis, which emphasize credibility, process consistency, transparency of interpretation, and traceability of analytical decisions (Nowell et al., 2017).

Some researchers were involved in the planning and implementation of the seminars. This position provided access to the context of the activities, but it also could have led to a tendency to evaluate them positively. Potential bias was controlled by separating raw data from interpretive notes, limiting the analysis to documented responses, re-examining sources during the coding process, and avoiding using activity evaluations as evidence of behavioral change. The analysis also clearly distinguished between student statements about possible actions and evidence that those actions had been implemented after the seminars.

The activities were conducted with the permission of the school. In this study, data use was limited to verifiable materials, documents, and responses. All student identities are anonymized, and data are presented in aggregate or coded form. Not all question-and-answer sessions were fully documented, and no follow-up interviews were conducted. Therefore, the study does not explain all individual reasons behind student responses, does not demonstrate behavioral changes after the activities, and is not intended to generate statistical generalizations for all high school students.

## 3. RESULTS AND DISCUSSION

### 3.1 Research Results

#### 3.1.1 Case Context and Data Corpus

A digital literacy education seminar and PP TUNAS were held at SMA Negeri 52 Jakarta on June 23, 2026. The event was held offline, with material from speakers from the Ministry of Communication and Digital delivered via Zoom. The series of activities included an initial test, material delivery, quizzes, discussions, questions and answers, participant testimonials, and a final test. The seminar material was presented from the perspectives of policy, communication, law, and psychology.

A total of 97 students completed the pretest, and 47 students completed the posttest. After data matching using the same email address, 42 participants with complete data were obtained for both measurement stages. The matched data group consisted of 40 female students, or 95.2 percent, and 2 male students, or 4.8 percent. Based on age, 19 students were aged 16 and 17, three students were aged 15, and one student was 18. This composition

limits the interpretation of the evaluation data because the results of the study predominantly describe the responses of female students aged 16–17. The findings are not intended to represent all students at SMA Negeri 52 Jakarta or all high school students.

The research corpus is derived from observations of the implementation of activities, materials from four speakers, audiovisual documentation, six sets of questions and answers, two fragments of oral responses, two student testimonials, one principal's testimony, evaluation documents, and institutional documents. Institutional documents include a letter requesting permission for the activity, an implementation agreement between Paramadina University and SMA Negeri 52 Jakarta, a letter inviting resource persons, the activity's terms of reference, the agenda, and the implementation report. These documents are used to verify the context, legality, institutional partnerships, involvement of resource persons, time, place, purpose, and chronology of the activity, not as evidence of changes in students.

Not all conversations during the Q&A sessions were recorded in their entirety. Therefore, the term "student responses" in this study refers to responses that can be verified through recordings, quizzes, testimonials, activity notes, and evaluation documents. Portions of speech that could not be accurately heard were not corrected based on the researcher's assumptions.

The composition of the data corpus used in the study is presented in Table 1.

Table 1. Research Data Corpus

| Data Types | Data load |
|---|---|
| Observation | Stages of activity, delivery of material, interaction, and clarification process |
| Speaker material | PP TUNAS, digital communication, user rights and responsibilities, legal risks, problematic digital use, and self-protection |
| Audiovisual documentation | Photos, videos, Q&A excerpts, oral responses, and testimonials |
| Student response | Documented quiz answers, questions, responses, and spontaneous statements |
| Evaluation document | Pre-test, post-test, media usage patterns, and acceptance of the intervention form |
| Institutional documents | Letter of request for activity permission to SMA Negeri 52 Jakarta, implementation agreement between Paramadina University and SMA Negeri 52 Jakarta, invitation letter for resource persons, activity terms of reference, agenda, implementation report, and principal's testimony |

*Source: Research data, 2026.*

Media usage data provides a snapshot of the participants' digital environments. Twenty-six of the 42 students, or 61.9 percent, used the internet or social media for 5–7 hours per day. Five students, or 11.9 percent, used it for more than seven hours, ten students, or 23.8 percent, for 2–4 hours, and one student, or 2.4 percent, for less than two hours. Thus, 73.8 percent of participants used the internet or social media for at least five hours per day.

WhatsApp was used by 41 students (97.6 percent), Instagram by 39 students (92.9 percent), TikTok by 35 students (83.3 percent), and YouTube by 13 students (31.0 percent). The data show that participants' digital activities were dominated by instant messaging, visual content, and short videos.

Duration of use was not used to determine digital addiction. The study did not use diagnostic instruments and did not measure overall academic, psychological, physical, social, or sleep pattern impairment. The data were used solely to indicate the intensity of

exposure to the digital environment that served as the context for receiving the seminar messages.

### 3.1.2 Digital Risk Messaging Architecture

Analysis of the materials and documentation of the activities shows that digital risk communication is shaped through four perspectives: policy, communication, law, and psychology. These four perspectives are positioned as complementary message architectures.

The policy perspective explains the risks faced by children and the responsibilities of electronic system administrators based on the TUNAS Government Regulation. The communication perspective links risks to social media behavior, privacy, communication ethics, information dissemination, and critical thinking skills. The legal perspective discusses the relationship between freedom of expression, user rights, responsibility for posts, and the consequences of actions on social media. The psychological perspective explains uncontrolled digital use and its impact on physical, psychological, and social activities.

The digital risk message architecture formed through these four perspectives is presented in Table 2.

**Table 2. Digital Risk Message Architecture in PP TUNAS Education**

| Perspective | Risk framing | Protection direction |
|---|---|---|
| PP TUNAS Policy | Exposure to harmful content, risky contacts, exploitation, data misuse, and age-inappropriate services | Age management, privacy, data protection, reporting mechanisms, and platform responsibility |
| Communication | Cyberbullying, *oversharing*, FoMO, echo chambers, digital footprints, social validation, and unverified information | Maintain privacy, check information, apply communication ethics, and consider the consequences of uploads. |
| Law | Freedom of expression that intersects with privacy, insults, intimidation, fraud, and unlawful content | Respect the rights of others, protect personal data, check the accuracy of information, and be responsible for content. |
| Psychology | Difficulty controlling use, repeated use, FoMO, activity disruption, and reduced daily life balance | Managing time, recognizing usage patterns, accepting support, and seeking help when usage becomes disruptive |

*Source: Processed from speaker materials and research documentation, 2026.*

The policy material doesn't position the TUNAS PP as merely a collection of legal provisions. The regulations relate to students' experiences when creating an account, registering their age, managing privacy, providing personal data, receiving content recommendations, and using the reporting feature. This approach translates the substance of the TUNAS PP into situations more closely resembling everyday platform use.

The communication materials address known issues related to social media use, such as cyberbullying, oversharing of personal information, FoMO (FoMo), echo chambers, digital footprints, and the spread of unverified information. Social media is positioned not only as a source of risk but also as a space for obtaining information, expressing oneself, and building relationships. Therefore, protection is directed at the ability to use media critically and responsibly.

The legal material presented by Abdul Manan was entitled *Legally Safe on Social Media. The* material positions freedom of expression in relation to legal regulations and user responsibility for postings, comments, and the dissemination of information. This framing prevents legal education from emphasizing the threat of sanctions solely.

Zenina Zahra Ainaya's psychology presentation discussed digital addiction as a problem of controlling device or internet use that can disrupt physical, psychological, and social activities. The presentation also introduced *internet gaming disorder*, *social media addiction*, nomophobia, and FoMO are forms or concepts related to problematic digital use. These terms are used for educational purposes, not as a diagnosis for participants.

**3.1.3 Introduction to Digital Risks and Regulations**

Documented responses from the quiz and Q&A sessions indicated that several participants could recall the names of regulations, forms of digital risk, and preventive measures discussed during the seminar. When asked about the regulations that were the focus of the activity, participants mentioned PP TUNAS and Government Regulation No. 17 of 2025 concerning the Governance of Electronic Systems for Child Protection.

On the question regarding the dangers of using digital space, the answers recorded included *child grooming*, cyberbullying, exposure to age-inappropriate content, commercial exploitation, and misuse of personal data. Meanwhile, when asked about preventing uncontrolled digital use, participants mentioned parental controls, awareness of quitting, and time limits on social media.

These responses indicate that some key terms and messages from the seminar were recognizable during the interaction. However, the data cannot be used to conclude that all participants fully understood all the provisions of the TUNAS PP. The findings only indicate the ability of some participants to recall the names of the regulations, types of risks, and preventive measures discussed.

**3.1.4 Formulation of Practical Actions**

Documented verbal responses indicate that participants can connect the seminar's message to actions they deem feasible in their daily lives. When responding to questions about how to deal with uncontrolled digital use, participants stated:

"The final solution is to limit gadget use and [indistinct speech] with our parents, so we can be more in control. We can talk about activities again. And we can also socialize with friends outside without using our phones. We can also socialize with friends." (RESP-SIS-01)

The inaudible portion was retained as "[inaudible speech]." Although one portion of the recording was incomplete, the core of the response was still recognizable: limiting device use, parental involvement, and social activities without cell phones.

Other responses mentioned time management and self-protection:

"Manage your time, then… manage your time first, then take care of yourself, [unclear speech] and social media." (RESP-SIS-02)

Since the context of the initial question of the second response is not fully documented, the statement is used as supporting data.

Both responses indicated three areas of action: personal management through time management, family support through parental involvement, and offline social activities as an alternative to device use. These findings demonstrate the ability to articulate possible actions, not evidence that these actions were implemented after the seminar.

**3.1.5 Variation in Acceptance of Intervention Forms**

The evaluation document contains five statements regarding interventions related to child protection in digital spaces. The statements were drafted by the activity team in easy-

to-understand language and answered using "Yes" or "No." The results in this section reflect student acceptance of the intervention examples in the instrument, not agreement with the entire provisions of the TUNAS PP.

Variations in student acceptance of the five forms of intervention are presented in Table 3.

**Table 3. Student Agreement on Forms of Intervention Associated with PP TUNAS**

| Statements in the instrument | Of | No | Agreement |
|---|---|---|---|
| Data verification to prevent age falsification | 39 | 3 | 92,9% |
| Restrictions on the use of applications or games at night | 39 | 3 | 92,9% |
| Total blocking of applications or games that are deemed to cause heavy usage | 36 | 6 | 85,7% |
| Parental monitoring features in digital spaces | 41 | 1 | 97,6% |
| Emergency reporting mechanism regarding cyberbullying | 42 | 0 | 100,0% |

*Source: Research data, 2026.*

All interventions received majority approval, but the level of acceptance varied. Emergency reporting mechanisms received full approval, followed by parental monitoring at 97.6 percent. Data verification and nighttime usage restrictions each received 92.9 percent approval. Total blocking received the lowest approval rating, at 85.7 percent.

Descriptively, there is a tendency for interventions providing assistance or support to receive higher approval rates than interventions that deny access. However, the instrument did not ask for reasons for participants' responses, and each statement had different content and consequences. Therefore, the level of restriction cannot be considered the sole factor determining student choice.

### 3.1.6 Seminars as a Space for Reflection, Clarification, and Strengthening of Knowledge

Participant testimonials indicate that the seminar was seen as relevant to the lives of teenagers. One participant stated:

"It makes us as teenagers think better about using social media and using technology." (TEST-SIS-01)

Other participants delivered:

"The event really educated me, because in this teenage phase, we are experiencing what is called the digital generation." (TEST-SIS-02)

Both quotes are taken from parts of the recording that can be heard clearly enough. Other parts that are not clearly audible are not used as direct quotes.

The first testimonial demonstrates the emergence of reflection on how to use social media and technology. The second testimonial demonstrates self-identification as part of the digital generation and acceptance of the seminar's educational function. However, these statements are not used as evidence of behavioral change. The testimonials simply indicate that participants found the material relevant and encouraged rethinking of media usage practices.

The knowledge evaluation provided supporting data for the seminar's function as a space for clarification. Ten multiple-choice questions were analyzed with 42 participants using matched data. The average correct answer rate increased from 97.4 percent in the pretest to 99.0 percent in the posttest. Based on the aggregate calculation, the N-Gain value was recorded at 0.636.

A summary of the knowledge evaluation results is presented in Table 4.

**Table 4. Summary of Knowledge Evaluation**

| Component | Results |
|---|---|
| Participants with matched data | 42 students |
| Number of questions | 10 questions |
| Average correct answers of the initial test | 97,4% |
| Average correct answers on the final test | 99,0% |
| Average difference | 1.6 percentage points |
| N-Gain | 0,636 |

*Source: Research data, 2026.*

An initial score close to the maximum indicates that participants already possess basic knowledge of PP TUNAS and the safe use of media. This situation limits the scope for score improvement. Therefore, the evaluation results are more accurately understood as short-term knowledge reinforcement and clarification rather than a shift from ignorance to knowledge.

Changes were not uniform across all questions. Six out of ten questions achieved 100 percent correct answers on the final test. Knowledge of official reporting channels increased from 92.9 percent to 97.6 percent. Conversely, correct answers regarding the purpose of screen time restrictions decreased from 100 percent to 97.6 percent. Thus, the seminar did not result in improvements on individual items, although the overall average increased.

The N-Gain value is interpreted with limited accuracy because the initial score was already very high, the activity did not use a comparison group, and the evaluation was conducted on the same day. The data is not used to demonstrate causal effectiveness, reduction in digital addiction, behavioral change, or long-term impact.

Institutional support was evident in the testimony of the principal of SMA Negeri 52 Jakarta, who positioned the seminar as an educational collaboration with Paramadina University and expressed the hope that the activity would benefit students. This statement indicates institutional acceptance, not proof of impact.

Overall, the seminar served as a platform to connect students' prior knowledge with explanations of digital risks, children's rights, privacy, user age, personal data, platform responsibilities, reporting mechanisms, and protective measures. The primary purpose of the activity was not to produce demonstrable behavioral changes at the time, but rather to strengthen, clarify, and contextualize participants' understanding.

## 3.2 Discussion

### 3.2.1 Policy Translation as Digital Risk Communication

The research results show that digital risk communication in PP TUNAS education takes place through a translation process. Policy language is connected to communication, legal, and psychological perspectives so that it can be recognized in students' digital experiences. Relatively abstract concepts are translated into situations such as creating an account, providing age, sharing personal data, receiving inappropriate content, experiencing cyberbullying, using media repeatedly, and reporting violations.

Government Regulation Number 17 of 2025 regulates risk assessment, user age management, child privacy and data protection, reporting mechanisms, and the obligation of electronic system providers to protect according to the characteristics of the products, services, and features they offer (Republic of Indonesia, 2025). Translating these provisions into platform user experiences helps prevent policy education from conveying overly abstract norms.

The Academic Study on Child Protection in the Implementation of Electronic Systems also places risks to development, health, safety, content exposure, exploitation, and

data leakage as the basis for a risk-based policy *safety by design* emphasizes that protection needs to be taken into account from the time the service is designed, not only after the child experiences harm (Ministry of Communication and Digital of the Republic of Indonesia, 2025a).

These findings indicate that risk communication is not simply about conveying dangers or prohibitions. Communication needs to explain the nature of the risk, its source, potential consequences, course of action, and the division of responsibility between users, families, schools, governments, and platforms.

### 3.2.2 Introduction to Risk and Youth Agency

Answers regarding PP TUNAS, *child grooming*, cyberbullying, exposure to age-inappropriate content, commercial exploitation, and misuse of personal data indicated that some key messages were recognizable to some participants. This recognition represents an initial stage of understanding, but it cannot be equated with a thorough understanding of all regulatory provisions.

Participants' ability to formulate time management, awareness of stopping, communication with parents, and social activities without devices demonstrates that students are not simply placed on the receiving end of prohibitions. They are also able to connect messages with actions they consider feasible in everyday life.

Cortesi et al. (2020) positioned young people not merely as a vulnerable group, but as subjects who need to be empowered to participate safely and responsibly. The research findings align with this view, as students' responses demonstrated attempts to assess the situation and formulate action options, although the study did not demonstrate that these actions were actually implemented after the activity.

Framework *Analyze, Create, Then Share* also emphasizes the importance of analyzing messages and their consequences before producing and sharing them with other users (von Gillern et al., 2022). In the context of PP TUNAS education, risk recognition serves as a foundation for students to assess information, interactions, and actions in digital spaces.

### 3.2.3 Proportionality of Platform Protection and Restrictions

Acceptance of the five interventions demonstrates that the same protective goal can be perceived differently when implemented through different mechanisms. Emergency reporting mechanisms and parental monitoring received higher approval than total blocking. However, these differences do not prove that the level of restriction was the sole factor determining participants' responses.

The statement regarding the emergency reporting mechanism is a simplification of the protection message for evaluation purposes. Government Regulation No. 17 of 2025 stipulates the obligation of electronic system providers to provide a reporting mechanism for products, services, or features that violate or have the potential to violate children's rights. This provision should not be interpreted as establishing a technical form, such as a button, that directly connects to law enforcement.

Consent to parental monitoring indicates a receptive space for family involvement. However, monitoring should not be interpreted as unlimited supervision. Its implementation must consider the child's age, risk level, privacy, decision-making capacity, and service characteristics. The official PP TUNAS material positions parents as the parties responsible for guiding device use, utilizing monitoring features, providing valid consent, and developing children's digital literacy (Ministry of Communication and Digital of the Republic of Indonesia, 2025b).

Data verification to prevent age falsification received 92.9 percent approval. The wording regarding facial or student ID scanning in the instrument is a technical example,

not a direct formulation of Government Regulation No. 17 of 2025. Regulations govern user age management, while verification methods must consider accuracy, proportionality, personal data security, and service characteristics.

Restricting nighttime use received the same level of approval as data verification. This form regulates usage time without eliminating access. Conversely, total blocking was the strongest intervention in the instrument and received the lowest level of approval. Because open-ended questions or follow-up interviews were not available, the study could not determine the individual reasons behind these differences in responses.

Nursyahbani et al. (2026) define rights-based protection as an effort to maintain safety without neglecting children's rights to information and participation. Therefore, communication regarding restrictions needs to explain the purpose, benefits, how they work, application limits, data management, and user rights in the event of an error. Protection is not always synonymous with a total ban, but can be realized through privacy settings, data processing restrictions, feature customization, age management, reporting mechanisms, and support based on risk levels.

### 3.2.4 Platform Responsibility and Limits of Self-Control

Research findings show that child protection cannot be solely dependent on students' ability to control media use. Digital risks are also influenced by service design, recommendation systems, data collection, and mechanisms that encourage repeated user engagement.

Bhargava and Velasquez (2021) explain that the attention economy business model incentivizes social media companies to maintain user engagement for as long as possible. Castelló et al. (2025) suggest that the logic of profit, data collection, algorithmic opacity, and prioritization of emotional engagement can exacerbate the risks of platform use. Within the framework of surveillance capitalism, user experiences and behaviors can also be processed into commercial data sources (Zuboff, 2019).

Policies that simply ask children to reduce screen time are insufficient if services are still designed to encourage repeated use. Safeguards need to include age-appropriate design, privacy settings, data processing restrictions, safer recommendation systems, reporting mechanisms, and information that both children and parents can understand.

Thus, risk communication needs to place user self-control alongside the platform's structural responsibilities. Children and families have a role to play in managing usage, but electronic system providers also have a responsibility to create a safer digital environment.

### 3.2.5 Seminars as a Space for Clarification and Strengthening of Knowledge

The initial knowledge score, which reached 97.4 percent, indicates that participants were not completely unaware of the safe use of digital media. An increase to 99.0 percent represents a relatively small change, as room for improvement is very limited.

In such circumstances, seminars are more appropriately understood as spaces for clarification, reinforcement, and the connection of knowledge to everyday experiences. The seminars combine students' prior knowledge with explanations regarding PP TUNAS, privacy, user age, personal data, cyberbullying, platform responsibility, reporting mechanisms, and protective measures.

Participant testimonials stating that the activity made teenagers "think better" indicate the emergence of reflection, while statements that the activity was "truly educational" indicate acceptance of the material's relevance. However, neither statement is sufficient to demonstrate behavioral change.

The N-Gain value of 0.636 also needs to be interpreted with caution because the initial score was very high, the activity did not use a comparison group, and the evaluation was conducted on the same day. Therefore, the evaluation data only supports the

interpretation that the seminar served as a short-term space for strengthening and clarifying knowledge, not as evidence of causal effectiveness or long-term impact.

### 3.2.6 Academic and Practical Implications

Academically, this research demonstrates that digital risk communication is not a one-way process, simply transferring information from the government or a speaker to students. The process includes translation, contextualization, risk recognition, clarification, reflection, assessment of interventions, and audience response. Adolescent agency needs to be placed alongside the responsibilities of families, schools, governments, and platform providers.

Practically, PP TUNAS education in schools needs to use examples relevant to students' daily lives, explain rights and responsibilities in a balanced manner, and provide space for questions and clarification. The material should differentiate between assistance, mentoring, supervision, time limits, and blocking. Each mechanism needs to be explained based on its purpose, how it works, benefits, risks, application limits, data management, and user rights.

The study's findings are limited by the single activity at a single school, the predominance of female participants, incomplete documentation of the questionnaire, and the lack of follow-up interviews and measurements. Therefore, the study does not explain all the individual reasons behind students' responses, does not demonstrate behavioral change, and is not intended to generate statistical generalizations. Future research could involve a more diverse group of participants, utilize interviews or focus groups, and conduct further evaluations to examine knowledge retention and the application of protective messages in digital practice.

## 4. CONCLUSION

This research shows that digital risk communication in PP TUNAS education occurs through the translation of policy substance into issues relevant to adolescents' lives. Policy, communication, legal, and psychological perspectives link child protection to age management, privacy, personal data, communication ethics, uncontrolled digital use, and the responsibilities of platform providers.

Documented responses indicated that some participants were able to recognize PP TUNAS, identify a number of digital risks, and formulate preventative measures through time management, conscious pauses, parental involvement, and device-free social activities. Acceptance of the five interventions also varied, with reporting mechanisms and parental monitoring receiving higher approval than total blocking. These findings suggest that the form and level of intervention need to be proportionately explained, although the study cannot determine the individual reasons behind the differences in participants' responses.

An evaluation of 42 matched participants showed an increase in the average correct answer rate from 97.4 percent to 99.0 percent, with an aggregate N-Gain of 0.636. Because initial scores were near the maximum, these results are best understood as short-term knowledge reinforcement and clarification, rather than as evidence of causal effectiveness, reduction in digital addiction, behavioral change, or long-term impact.

Academically, digital risk communication needs to be understood as a process of translation, contextualization, clarification, reflection, and assessment of interventions. Practically, PP TUNAS education in schools needs to use examples relevant to students' experiences, explain rights and responsibilities in a balanced manner, and differentiate between assistance, mentoring, supervision, restrictions, and blocking. The research findings are limited by the single activity at one school, the predominance of female

participants, incomplete documentation of conversations, and the lack of follow-up interviews and measurements.

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