

# Developing a Hyperpersonal Communication Model in Sexting Behavior: A Mixed Methods Study of Digital Intimacy in Indonesia

Budiawan<sup>1</sup>, Alvianus Dengen<sup>2</sup>

<sup>1,2</sup>Universitas Teknologi Sulawesi, Indonesia

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## ABSTRACT

Sexting as a form of digital sexual self-disclosure has become increasingly common among young people in Indonesia. The Hyperpersonal Communication Model (HCM) theory was originally developed to explain text-based online interaction, while contemporary digital intimacy now involves multimodal communication, risk awareness, privacy concerns, and trust negotiation. This study aims to develop a contextual HCM model by integrating digital sexual self-disclosure, perceived digital intimacy, selective self-presentation, idealized perception, and risk awareness in explaining sexting behavior in Indonesia. This research used a mixed-methods, sequential, explanatory design. The quantitative phase involved a survey of 300 respondents aged 18–35 years in five major Indonesian cities and was analyzed using SPSS Version 27. The qualitative phase involved in-depth interviews with 20 selected participants to explore the subjective meanings of sexting experiences. The findings show that Digital Sexual Self-Disclosure is the strongest predictor of Perceived Digital Intimacy ( $\beta=0.412$ ), while 68.7% of respondents reported having engaged in sexting. Risk Awareness was also positively correlated with Perceived Digital Intimacy ( $r=0.387$ ), suggesting that risk awareness may encourage explicit boundary negotiation and trust-building rather than reduce intimacy. Qualitative findings reveal a gradual escalation pattern from text to photo and video, with each stage shaped by trust tests and privacy considerations. This study expands HCM theory by proposing trust negotiation as a fifth mechanism alongside Walther's four classical mechanisms, emphasizing trust-based gradual disclosure shaped by Indonesian socio-cultural norms. Practically, the findings highlight the need for digital literacy programs that address consent, boundary negotiation, privacy protection, and safer intimate communication among young adults.

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### Corresponding Author:

Budiawan

Universitas Teknologi Sulawesi, Indonesia

Email: [budiawanuts@gmail.com](mailto:budiawanuts@gmail.com)

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## 1. INTRODUCTION

The development of digital technology has transformed the way individuals build, express, and negotiate interpersonal intimacy. Social media and messaging platforms are no longer merely channels for exchanging information, but have become emotional spaces where identity, affection, trust, and intimacy are constructed [1]. In this context, sexting, understood as the voluntary exchange of sexually explicit messages, images, or videos, can be seen as a form of digital sexual self-disclosure. Although it involves privacy and reputational risks, sexting also reveals how young people negotiate intimacy, trust, and morality in technology-mediated relationships [2], [3], [4].

Hyperpersonal Communication Model (HCM) provides a relevant theoretical foundation for understanding intensified intimacy in online interaction through four mechanisms: selective self-presentation, idealized perception, asynchronous interaction, and feedback loops [5], [6], [7]. In sexting practices, however, online intimacy involves multimodal self-disclosure, privacy concerns, risk awareness, and trust negotiation. Therefore, HCM needs to be contextualized to explain how emotional, sexual, and social dimensions interact in digital intimacy [8].

In the Indonesian socio-cultural context, sexting reflects a tension between intimate self-expression and strong moral, religious, and social expectations [9]. Young people may use digital media to build emotional closeness, yet they must also manage stigma, reputational risk, privacy violation, and gendered judgment [10], [11]. This makes sexting more than a deviant behavior. It is a relational practice through which identity, trust, power, privacy, and vulnerability are negotiated.

This study is relevant to the Sustainable Development Goals (SDGs), particularly Goal 5 on gender equality and Goal 16 on peace, justice, and strong institutions. By examining sexting as negotiated digital intimacy, this research contributes to discussions on gender-sensitive communication, privacy protection, and safer digital environments [12].

This study attempts to answer the following questions: 1) How can the HCM theory be developed to explain sexting behavior as a form of digital sexual self-disclosure in technology-mediated interpersonal relationships in Indonesia? 2) How do risk, privacy, and social norms influence the formation of digital intimacy in sexting practices? 3) How can the integration of quantitative and qualitative data produce a contextual HCM model to explain sexting behavior in the digital era?

To examine this phenomenon, this study adopts a mixed methods sequential explanatory design [13], [14]. This design is appropriate because the study not only tests relationships among HCM-related variables but also explores how participants interpret trust, privacy, vulnerability, and intimacy in sexting experiences. The quantitative phase maps the relationships among key constructs, while the qualitative phase explains the subjective meanings behind these relationships.

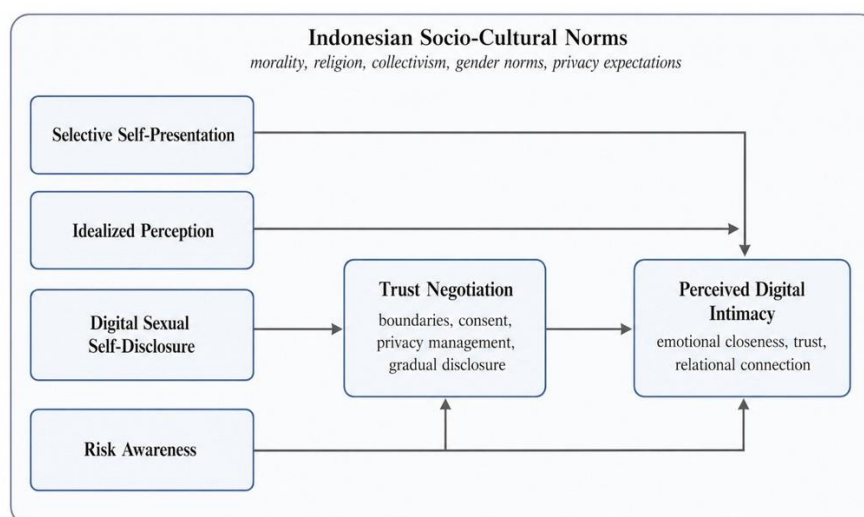
Recent studies confirm that HCM remains influential in explaining how mediated interaction can intensify relational closeness [5], [15]. At the same time, newer digital environments have shifted interpersonal communication from primarily text-based

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interaction toward multimodal and affective exchanges involving images, videos, symbols, and platform affordances [16], [17]. These developments suggest the need to extend HCM beyond non-sexual and Western-centered contexts, particularly when intimacy involves sexual self-disclosure and risk negotiation.

Studies on digital intimacy and sexual communication in Indonesia show that anonymity, fantasy, affection, and platform-mediated interaction can shape hyperpersonal forms of intimacy [18], [19], [20], [21], [22]. Methodologically, mixed methods research has been recommended for studying sexting because it can combine measurable behavioral patterns with participants' subjective meanings [23]. Other studies emphasize that self-disclosure, risk perception, self-image, and gender relations are central to understanding intimate digital practices [24], [25], [26], [27]. In the local context, socio-cultural norms remain important in framing how Indonesian young people interpret sexting, privacy, and intimacy [28]. Taken together, these studies indicate the need for an HCM-based model that integrates sexual self-disclosure, risk awareness, and Indonesian socio-cultural norms.

Despite these contributions, previous studies have not sufficiently integrated HCM, digital sexual self-disclosure, and perceived digital intimacy within the Indonesian socio-cultural context. This study addresses this gap by offering three forms of novelty. First, it provides theoretical novelty by extending HCM through the integration of digital sexual self-disclosure and trust negotiation. Second, it offers methodological novelty by applying a sequential explanatory mixed methods design that connects statistical relationships with participants' lived experiences. Third, it offers contextual novelty by developing an HCM-based model grounded in Indonesian moral, social, and cultural realities, in which extending is understood as a negotiation of identity, privacy, trust, and digital intimacy [29].



*Trust negotiation is positioned as the fifth HCM mechanism in the formation of digital intimacy.*

Figure 1. Proposed Contextual Hyperpersonal Communication Model in Sexting Behavior

As shown in Figure 1, selective self-presentation and idealized perception represent the classical HCM mechanisms that contribute to perceived digital intimacy. Digital sexual

self-disclosure and risk awareness are added to reflect the specific dynamics of sexting behavior. Trust negotiation is positioned as a fifth mechanism that connects sexual self-disclosure and risk awareness with the formation of perceived digital intimacy. Indonesian socio-cultural norms provide the context that shapes how young people manage privacy, consent, and gradual disclosure.

This study is expected to contribute to communication theory by developing a contextual HCM model for explaining sexting as digital sexual self-disclosure and digital intimacy. It also offers practical relevance for digital literacy, privacy protection, gender-sensitive communication, and ethical digital relationship practices in Indonesia [30].

## **2. METHOD**

This study employed a mixed-methods, sequential explanatory design that combined quantitative and qualitative approaches. The quantitative phase was conducted first to identify statistical relationships among variables in the expanded Hyperpersonal Communication model. The qualitative phase was then conducted to explain and deepen the quantitative findings, especially the meanings of trust, privacy, risk awareness, and digital intimacy in sexting practices. The integration of both phases was carried out at the interpretation stage by comparing regression and correlation results with interview themes [31]. In this way, the qualitative findings were used to clarify why certain quantitative relationships occurred, particularly the positive relationship between risk awareness and perceived digital intimacy.

The population of this study was active digital media users in Indonesia who had or were currently engaging in sexting in technology-mediated interpersonal relationships. Inclusion criteria included individuals aged 18–35 years, residing in five major Indonesian cities, namely Makassar, Jakarta, Yogyakarta, Surabaya, and Medan, and having experience voluntarily sending sexually explicit messages, images, or videos to partners or intimate acquaintances via digital platforms [32]. The sampling technique for the quantitative phase was purposive, targeting 300 respondents, distributed proportionally to the digital population in each city. For the qualitative phase, 20 participants were selected from survey respondents using maximum variation sampling. Selection was based on variation in perceived digital intimacy and risk awareness scores, including participants with high, moderate, and low scores. This strategy was used to obtain diverse experiences regarding sexting, privacy management, trust negotiation, and perceived intimacy. Participants who agreed to be contacted for interviews were approached separately, and their participation remained voluntary.

The data collection instruments consisted of two types: a quantitative survey questionnaire and a semi-structured interview guide for the qualitative phase. The survey questionnaire was structured based on the theoretical constructs of the Extended Hyperpersonal Communication Model, encompassing five main variables: selective self-presentation (6 items), idealized perception (5 items), digital sexual self-disclosure (8 items), perceived digital intimacy (6 items), and risk awareness (5 items). All items used a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Before use, the questionnaire was tested for content validity through expert judgment by three experts in

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digital communication and social psychology, and for reliability through a pilot test with 50 respondents with characteristics similar to those of the research sample, with Cronbach's alpha values for each construct above 0.80. The semi-structured interview guide was developed based on the results of the preliminary analysis of the quantitative data, focusing on the meaning of sexting experiences, privacy negotiation strategies, constructions of digital intimacy, and the influence of social and gender norms on such behavior [33].

The research procedure consisted of six sequential stages: (1) preliminary study and instrument development (literature review of HCM, digital sexual self-disclosure, and digital intimacy; drafting a questionnaire; initial validity and reliability testing); (2) quantitative data collection via Google Forms for eight weeks (disseminated through social media and online groups); (3) quantitative analysis with descriptive statistics and correlation testing (SPSS 27); (4) qualitative data collection through online interviews (60–90 minutes per participant, recorded as written summaries); (5) qualitative analysis with thematic analysis (themes of sexting, privacy negotiation, digital intimacy); (6) data integration through triangulation to produce a conceptual model of HCM in the Indonesian context. All stages of the study implemented informed consent, confidentiality, protection of anonymity, and participants' right to withdraw. Before completing the survey or participating in interviews, participants received information about the study objectives, the sensitive nature of the topic, voluntary participation, and data protection procedures. Participants were informed that they could refuse to answer any question or withdraw at any stage without consequence. All data were stored anonymously, and interview participants were identified using codes rather than real names.

### **3. RESULTS AND DISCUSSION**

#### **3.1 Results**

This study involved 300 respondents who completed the questionnaires, out of a total of 387 distributed, resulting in a response rate of 77.5%. Respondents came from five major cities in Indonesia with the following distribution: Jakarta (23.3%, n=70), Surabaya (20.7%, n=62), Yogyakarta (20.0%, n=60), Makassar (18.7%, n=56), and Medan (17.3%, n=52). The demographic characteristics of the respondents showed a predominance of women (58.7%, n=176) compared to men (41.3%, n=124). The largest age group was 22–25 years old (42.0%, n=126), followed by 26–30 years old (30.7%, n=92), 18–21 years old (17.3%, n=52), and 31–35 years old (10.0%, n=30). The respondents' education level was dominated by undergraduate education (S1) at 64.7% (n=194), diploma (D3/D4) at 18.7% (n=56), postgraduate (S2/S3) at 10.0% (n=30), and secondary education (SMA/equivalent) at 6.7% (n=20).

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Table 1. Distribution of Respondents' Demographic Characteristics

Characteristics	Category	Frequency (n)	Percentage (%)
<b>City of Domicile</b>	Jakarta	70	23.3
	Surabaya	62	20.7
	Yogyakarta	60	20.0
	Makassar	56	18.7
	Medan	52	17.3
<b>Gender</b>	Man	124	41.3
	Woman	176	58.7
<b>Age</b>	18-21 years old	52	17.3
	22-25 years old	126	42.0
	26-30 years old	92	30.7
	31-35 years old	30	10.0
<b>Education</b>	High school/equivalent	20	6.7
	Diploma (D3/D4)	56	18.7
	Bachelor degree)	194	64.7
	Postgraduate (S2/S3)	30	10.0

The frequency distribution of sexting behavior shows that 68.7% of respondents (n=206) have sexted at least once in the past six months. The highest frequency of sexting occurred in the range of 2-5 times per month (34.7%, n=104), followed by 1 time per month (22.7%, n=68), 6-10 times per month (8.0%, n=24), and more than 10 times per month (3.3%, n=10). The most frequently used platforms for sexting were WhatsApp (82.3%, n=247), followed by Telegram (45.7%, n=137), online dating apps (31.3%, n=94), and Instagram Direct Message (28.0%, n=84). The most frequently sent types of sexting content were sexually explicit text messages (91.3%, n=274), followed by nude photos (62.7%, n=188), nude photos (44.3%, n=133), and videos (28.7%, n=86).

Table 2. Frequency Distribution of Sexting Behavior

Behavioral Variables	Category	Frequency (n)	Percentage (%)
<b>Ever Sexted</b>	Yes	206	68.7
	No	94	31.3
<b>Frequency per Month</b>	1 time	68	22.7
	2-5 times	104	34.7
	6-10 times	24	8.0
	>10 times	10	3.3
<b>Main Platform</b>	WhatsApp	247	82.3
	Telegram	137	45.7
	Dating app	94	31.3
	Instagram DM	84	28.0
<b>Content Type</b>	Text	274	91.3
	Non-nude photos	188	62.7
	Nude photos	133	44.3
	Video	86	28.7

Demographic data shows that sexting behavior in Indonesia is evenly distributed across five major cities, not concentrated in Jakarta, indicating that digital intimacy has

become a widespread part of the communication culture of urban youth. The predominance of female respondents (58.7%) contradicts the stereotype that sexting is more often done by men, indicating that Indonesian women actively use it as a form of agency and self-expression despite facing a greater risk of social stigma. The 22-25 age group (42.0%) reflects the transition from education to the workforce as a period of intensive exploration of intimate relationships. The bachelor's degree (64.7%) confirms that sexting is not a behavior of the less educated, but rather occurs among educated people. The frequency of sexting reached 68.7%, indicating that this practice is common and requires a more adequate theoretical understanding.

WhatsApp's dominance (82.3%) is explained by its end-to-end encryption, ephemeral messaging, and extensive user base in Indonesia, which provides a sense of security and privacy control. The high use of text as a content type (91.3%) indicates that, despite the availability of multimodal technology, sexual disclosure is more often done verbally because it is perceived as more risk-controlled than images or videos, which are easily disseminated.

Table 3. Descriptive Statistics of Research Variables

Variables	N	Minimum	Maximum	Mean	Standard Deviation
Selective Self-Presentation (SSP)	300	1.83	5.00	3.87	0.654
Idealized Perception (IP)	300	1.60	5.00	3.92	0.712
Digital Sexual Self-Disclosure (DSSD)	300	1.25	5.00	3.45	0.823
Perceived Digital Intimacy (PDI)	300	1.50	5.00	3.78	0.698
Risk Awareness (RA)	300	2.00	5.00	4.12	0.587

The results of the normality test using the Kolmogorov-Smirnov test showed that all research variables had a significance value  $>0.05$ , indicating that the data were normally distributed. The linearity test showed a linear relationship between variables with a deviation from linearity value  $>0.05$ . The heteroscedasticity test using the Glejser test produced a significance value  $>0.05$  for all independent variables, which means there was no heteroscedasticity in the regression model. The multicollinearity test showed a Tolerance value  $>0.10$  and VIF  $<10$  for all variables, with the highest VIF value in the Selective Self-Presentation variable (2.847) and the lowest in Risk Awareness (1.563), so no multicollinearity problem was found.

Table 4. Results of the Classical Assumption Test

Assumption Test	Variables	Mark	Information
<b>Normality (KS)</b>	SSP	0.082	Normal
	IP	0.075	Normal
	DSSD	0.094	Normal
	PDI	0.088	Normal
	RA	0.071	Normal
<b>Multicollinearity</b>	SSP	Tolerance=0.351; VIF=2.847	There isn't any
	IP	Tolerance=0.402; VIF=2.488	There isn't any
	DSSD	Tolerance=0.489; VIF=2.045	There isn't any
	RA	Tolerance=0.640; VIF=1.563	There isn't any

The results of the multiple linear regression test showed that the research model had significant predictive ability ( $F=47.832$ ,  $p<0.001$ ) with an R Square value of 0.611. This means that the variables Selective Self-Presentation, Idealized Perception, Digital Sexual Self-Disclosure, and Risk Awareness together explained 61.1% of the variance in Perceived Digital Intimacy. The remaining 38.9% was explained by other factors outside the model, such as past experiences, the quality of offline relationships, or social support from peers. The Adjusted R Square value of 0.603 indicates that the model remains robust even after being corrected for the number of predictor variables.

Table 5. Multiple Linear Regression Test Results

Model	R	R Square	Adjusted R-Square	Standard Error of the Estimate	F	Sig.
1	0.782	0.611	0.603	0.436	47,832	<0.001

All four predictors had positive and significant effects on Perceived Digital Intimacy. Digital Sexual Self-Disclosure showed the strongest effect ( $\beta = 0.412$ ,  $p < 0.001$ ), followed by Selective Self-Presentation ( $\beta = 0.287$ ,  $p < 0.001$ ), Idealized Perception ( $\beta = 0.189$ ,  $p = 0.002$ ), and Risk Awareness ( $\beta = 0.114$ ,  $p = 0.023$ ). These findings indicate that the higher a person's level of digital sexual self-disclosure, the higher their perceived digital intimacy. Conversely, higher Risk Awareness also contributes positively to perceived intimacy, indicating that risk awareness does not necessarily reduce intimacy but rather becomes part of the negotiation in building trust.

Table 6. Partial Regression Test Results (Coefficients)

Variables	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
<b>(Constant)</b>	0.487	0.218		2,234	0.026
<b>Selective Self-Presentation</b>	0.306	0.072	0.287	4,250	<0.001
<b>Idealized Perception</b>	0.186	0.059	0.189	3,152	0.002
<b>Digital Sexual Self-Disclosure</b>	0.350	0.051	0.412	6,863	<0.001
<b>Risk Awareness</b>	0.135	0.059	0.114	2,288	0.023

Among the research variables, Risk Awareness had the highest mean score ( $M=4.12$ ,  $SD=0.587$ ), while Digital Sexual Self-Disclosure had the lowest mean score ( $M=3.45$ ,  $SD=0.823$ ). This indicates that respondents reported high awareness of sexting-related risks, while levels of sexual self-disclosure varied more widely across individuals. Conversely, the lowest mean value for Digital Sexual Self-Disclosure (3.45) as the strongest predictor of Perceived Digital Intimacy indicates that, despite its central role, this practice is carried out carefully. The highest standard deviation (0.823) reflects large variations between individuals, from very closed to very open, influenced by internal factors (personality, trauma) and external (family norms, community).

The largest regression coefficient for Digital Sexual Self-Disclosure ( $\beta=0.412$ ) confirms that the Hyperpersonal Communication theory needs to be expanded to include the sexual dimension as a central component, with self-disclosure extending to desires, fantasies, and body visualizations, enriching the selective self-presentation mechanism in HCM. Meanwhile, Idealized Perception has a smaller contribution ( $\beta=0.189$ ), indicating

that in sexting, the reality of repeated interactions is more decisive for intimacy than simply the ideal projection at the beginning of the relationship.

Table 7. Correlation Matrix Between Variables

Variables	SSP	IP	DSSD	RA	PDI
<b>Selective Self-Presentation (SSP)</b>	1				
<b>Idealized Perception (IP)</b>	0.621**	1			
<b>Digital Sexual Self-Disclosure (DSSD)</b>	0.543**	0.498**	1		
<b>Risk Awareness (RA)</b>	0.312**	0.287**	0.245**	1	
<b>Perceived Digital Intimacy (PDI)</b>	0.587**	0.534**	0.672**	0.387**	1

\*\*p<0.01

The correlation matrix shows a significant positive relationship between all variables at the 99% confidence level (p<0.01). The highest correlation between Digital Sexual Self-Disclosure and Perceived Digital Intimacy (r=0.672, p<0.01) confirms that the more a person discloses sexual aspects digitally, the higher the perceived intimacy. This relationship is reciprocal, creating a positive feedback cycle that strengthens hyperpersonal relationships, thus expanding the feedback loop mechanism in HCM theory from mere confirmation of self-presentation to escalation of sexual openness. The correlation between Selective Self-Presentation and Perceived Digital Intimacy (r = 0.587, p < 0.01) indicates that selective self-image management contributes significantly to perceived digital intimacy. In the practice of sexting, this strategy differs from the context of ordinary friendships because it places more emphasis on choosing physical aspects and language that arouses arousal without being vulgar, indicating the need to differentiate the concept of selective self-presentation based on the type of relationship.

The relationship between Risk Awareness and Perceived Digital Intimacy (r=0.387, p<0.01) was moderate but significant, which is interesting because, intuitively, risk awareness would be expected to reduce intimacy, yet the results showed the opposite. The explanation is that couples who are both risk-aware tend to explicitly negotiate boundaries and safety mechanisms before sexting, which actually builds trust and a sense of security as the foundation of intimacy. Furthermore, sharing risk creates a stronger emotional bond because both parties feel equally vulnerable and trust each other.

Table 8. Summary of Hypotheses and Test Results

Hypothesis	Connection	Coefficient	p-value	Decision
<b>H1</b>	SSP → PDI	0.287	<0.001	Accepted
<b>H2</b>	IP → PDI	0.189	0.002	Accepted
<b>H3</b>	DSSD → PDI	0.412	<0.001	Accepted
<b>H4</b>	RA → PDI	0.114	0.023	Accepted

The qualitative research involved 20 participants selected based on extreme scores on the variables Perceived Digital Intimacy and Risk Awareness. Of the 20 participants, 12 were female, and 8 were male, aged 19-34 years. All participants underwent in-depth online interviews via video conference application. Based on the interview results, five main themes were identified related to the formation of digital intimacy in sexting

behavior, namely: (1) initial negotiation and boundary setting, (2) gradual escalation from text to visual, (3) use of privacy features as a bridge of trust, (4) post-delivery anxiety management, and (5) the impact of sexting on the quality of offline relationships.

Table 9. Main Themes of Qualitative Interview Results

Theme	Frequency Called	Representative Participants	Illustrative Quotes
<b>Initial negotiations and boundary setting</b>	18 of 20	P03 (F, 24 years), P11 (M, 27 years)	"Before sending anything, we first discuss the limits. We decide how long the photos are allowed to be, whether they can be kept or deleted immediately."
<b>Gradual escalation from text to visuals</b>	17 of 20	P07 (F, 22 years), P15 (M, 29 years)	"At first, it was just intimate chats using words, but after a while, I dared to send photos of my underwear. After I trusted him, I became more open."
<b>Using privacy features as a bridge of trust</b>	16 of 20	P01 (F, 26 years), P19 (M, 31 years)	"Telegram's disappearing messages feature makes me more confident because I know the photo will disappear after it's viewed."
<b>Post-delivery anxiety management</b>	15 of 20	P05 (P, 21 years), P14 (M, 25 years)	"Every time I send something, I'm nervous. I keep checking to see if he screenshots it. I only calm down when I get a positive response."
<b>The impact of sexting on the quality of offline relationships</b>	19 of 20	P02 (F, 28 years), P20 (M, 33 years)	"Sexting makes us more open when we meet in person. So we know each other's preferences and boundaries."

Participant P03 (female, 24 years old, Yogyakarta) emphasized that negotiating boundaries before sexting is an absolute and ongoing requirement (ongoing consent), not a one-time permission. P11 (male, 27 years old, Surabaya) acknowledged that women are actually more careful and more likely in follow rules, contrary to the stereotype that men are more dominant. Women play the role of boundary maintainers and risk managers. Initial negotiations (18/20 participants) indicated that sexting was a planned act with careful risk calculations, including content type, retention duration, screenshot prohibition, and consequences of leaks. This enriches HCM theory by adding a pre-communication stage in the form of a social contract. The gradual escalation from text to visual (17 participants) was gradual (text, nude photos, nude photos, videos) as a strategy to reduce uncertainty, expanding the HCM feedback loop from verbal to multimodal. Privacy features (disappearing messages, screenshot notifications, encryption) served as a bridge of trust and "technical assurance" (16 participants). P01 was only willing to sext on platforms with screenshot notifications. Platform technical characteristics need to be included as moderating variables in an expanded HCM model.

Table 10. Integration Matrix of Quantitative and Qualitative Findings

Quantitative Variables	Quantitative Findings	Qualitative Theme	Convergence/Divergence
<b>Digital Sexual Self-Disclosure</b>	$\beta=0.412$ (the largest)	Gradual escalation from text to visuals	Convergence: openness is done strategically, not just frequency
<b>Risk Awareness</b>	Mean=4.12 (highest)	Initial negotiations and privacy features	Convergence: heightened awareness drives mitigation strategies
<b>Selective Self-Presentation</b>	$r=0.587$ with PDI	Post-delivery anxiety management	Convergence: self-presentation continues to be managed even after delivery
<b>Perceived Digital Intimacy</b>	61.1% of the variance is explained by the model	The impact of sexting on offline relationships	Convergence: digital intimacy strengthens physical intimacy

The integration of quantitative and qualitative data through triangulation yielded an expanded Hyperpersonal Communication (HCM) model of sexting behavior, in which quantitative findings indicated that Digital Sexual Self-Disclosure was the strongest predictor of Perceived Digital Intimacy ( $\beta=0.412$ ). In contrast, qualitative data deepened that sexual self-disclosure occurs through a gradual escalation controlled by trustworthiness, so that the HCM model needs to distinguish between "depth" (text to visual) and "breadth" (variety of content types). The quantitative finding that Risk Awareness is positively correlated with Perceived Digital Intimacy ( $r=0.387$ ), which seems counterintuitive, is explained by qualitative data through the theme of initial negotiation and use of privacy features: participants who are risk-aware actually communicate explicitly about boundaries before sexting, making risk awareness a "trust catalyst" rather than a barrier to intimacy. Thus, in the context of sexting, the feedback loop mechanism in HCM not only reinforces idealized perceptions but also perceptions of trustworthiness toward the partner.

Table 11. Conceptual Model of Data Integration Results

Main Construct	Dimensions	Empirical Indicators	Data source
<b>Digital Sexual Self-Disclosure</b>	Depth	Text escalation→non-nude photos→nude photos→video	Qualitative
	Extent	Variation of message types, sending frequency	Quantitative
<b>Risk Awareness</b>	Consequence awareness	Knowledge of the distribution of illegal content, blackmail	Quantitative
	Mitigation strategies	Use of disappearing messages, negotiation of boundaries	Qualitative
<b>Perceived Digital Intimacy</b>	Emotional intimacy	Feeling close, trusted, and understood	Quantitative & Qualitative
	Physical intimacy	The impact of sexting on the quality of offline relationships	Qualitative

The integrated findings support the proposed contextual HCM model presented in Figure 1. The model positions Trust Negotiation as a relational mechanism linking Digital Sexual Self-Disclosure and Risk Awareness with Perceived Digital Intimacy.

Gender-based analysis showed that women had higher Risk Awareness scores ( $M = 4.28$ ) than men ( $M = 3.92$ ), with a significant difference ( $t = 4.872$ ,  $p < 0.001$ ). Men had higher Digital Sexual Self-Disclosure scores ( $M = 3.67$ ) than women ( $M = 3.29$ ), also with a significant difference ( $t = 3.945$ ,  $p < 0.001$ ). No significant gender difference was found in Perceived Digital Intimacy ( $t = 0.612$ ,  $p = 0.541$ ). Conversely, men had higher Digital Sexual Self-Disclosure scores (mean=3.67) than women (mean=3.29) with a significant difference ( $t=3.945$ ,  $p<0.001$ ). These findings indicate that in the extended HCM model, gender acts as a moderating variable that influences the strength of the relationship between the independent and dependent variables. Women rely more on risk mitigation strategies in building intimacy, while men rely more on self-disclosure initiation.

Table 12. Differences Based on Gender

<b>Variables</b>	<b>Male (n=124)</b>	<b>Women (n=176)</b>	<b>t</b>	<b>Sig.</b>
<b>Risk Awareness</b>	3.92	4.28	4,872	<0.001
<b>Digital Sexual Self-Disclosure</b>	3.67	3.29	3,945	<0.001
<b>Perceived Digital Intimacy</b>	3.81	3.76	0.612	0.541

Overall, the results show that Digital Sexual Self-Disclosure was the strongest predictor of Perceived Digital Intimacy, Risk Awareness had a positive relationship with intimacy, and qualitative themes explained how trust negotiation and gradual disclosure shaped sexting experiences.

### 3.2 Discussion

This study extends the Hyperpersonal Communication Model (HCM) by showing that digital intimacy in sexting is not formed only through selective self-presentation, idealized perception, asynchronous interaction, and feedback loops, but also through digital sexual self-disclosure, risk awareness, and trust negotiation. Digital Sexual Self-Disclosure emerged as the strongest predictor of Perceived Digital Intimacy, while Risk Awareness showed a positive relationship with intimacy. These findings indicate that sexting-based digital intimacy is shaped by vulnerability, privacy management, and negotiated trust.

The central role of Digital Sexual Self-Disclosure shows that intimate digital communication involves more than ordinary self-presentation. In sexting, self-disclosure includes the sharing of sexual thoughts, desires, preferences, and textual or visual expressions of the body. This form of disclosure carries a higher level of vulnerability than general personal disclosure. Therefore, the finding supports Social Penetration Theory, which explains that intimacy develops through the increasing depth and breadth of disclosure, while also extending it to a multimodal, risk-sensitive digital context. The positive relationship between Risk Awareness and Perceived Digital Intimacy is one of the most important theoretical findings of this study. While previous studies often interpret risk awareness as a factor that discourages sexting [34], [35], [, this study shows that risk awareness may function as a trust catalyst by encouraging boundary negotiation, privacy management, and partner reliability testing. This finding contributes to Social Exchange

Theory by showing that digital intimacy is formed through a balance between relational rewards and perceived risks. When risks are mutually recognized and managed, shared vulnerability can become a basis for trust rather than merely a source of fear.

The results of this study differ significantly from those of [37], [38], who concluded that most subjects had low risk awareness, whereas in Indonesia, the mean risk awareness was the highest (4.12 out of 5). This difference is caused by strong moral and religious norms regarding sexuality, which make individuals develop hypersensitivity to risk as a psychological defense mechanism, while also enriching the perspective of [27] by proving that Indonesian women play an active role as boundary maintainers, contrary to the stereotype of passive women. The findings regarding the gradual escalation from text to visuals go beyond previous studies that still categorize sexting dichotomously; this study adopts a more nuanced approach, in line with the recommendations [39]. In addition, this study extends the hyperperception model [40] by showing that in sexting, observers and actors engage in a reciprocal negotiation in contrast to the usual social media context, where observers consume content without engaging in boundary negotiations.

Table 13. Comparison of Findings with Previous Research

Aspect	Previous Research	The Findings of This Research	Novelty
<b>The Role of Risk Awareness</b>	Inhibiting sexting (Dodaj et al., 2022)	Facilitating intimacy through negotiation	Risk awareness as a catalyst for trust
<b>Self-Disclosure Pattern</b>	General and linear (Halversen et al., 2022)	Gradual and tiered (text→photo→video)	Multimodal escalation with confidence testing
<b>Gender Roles</b>	Males are more dominant (Bhana et al., 2025)	Women as boundary keepers	Shifting female agency in sexting
<b>Cultural Context</b>	Western, individualistic	Indonesia, collectivist with strong religious norms	The influence of Eastern values on risk mitigation strategies

The Indonesian socio-cultural context plays a central role in shaping the meaning of sexting. Moral norms, religious values, collectivist expectations, and gendered reputational risks influence how young adults understand privacy, consent, and intimacy. This creates a tension between intimate self-expression and fear of social judgment, privacy violation, or reputational damage. In this context, sexting is better understood as a negotiated relational practice rather than simply as deviance or as unrestricted personal autonomy [41]. This research also shows that Western communication theories (such as classical HCM) cannot be imported without modification, as the Indonesian context requires additional risk awareness and explicit negotiation mechanisms, strengthening the argument [42] about the importance of socio-culture.

The gender-related findings provide an important contribution to digital sexuality discourse. Women's higher risk awareness reflects the unequal social consequences attached to sexual self-disclosure in patriarchal and morally conservative contexts. However, the qualitative findings also show that women are not merely passive or vulnerable subjects. Many female participants actively negotiated boundaries, selected

platforms, and controlled the conditions of digital intimacy. This finding challenges stereotypes that frame women only as victims in sexting practices, while still recognizing that women may face greater reputational, emotional, and social risks when intimate content is exposed or misused.

Table 14. Reflection of Findings in the Indonesian Socio-Cultural Context

<b>Dimensions</b>	<b>Socio-Cultural Conditions</b>	<b>Research Findings</b>	<b>Interpretation</b>
<b>Sexuality Norms</b>	Conservative, strong religion	Highest risk awareness (mean 4.12)	Hypersensitivity as a defense mechanism
<b>Gender Relations</b>	Patriarchal	Women are more active in negotiations	Agency shift in the digital space
<b>Collectivism</b>	Strong families and communities	Explicit negotiation before sexting	Internalization of social control into private relations
<b>Digital Stigma</b>	High social sanctions	Use of disappearing messages	Technical adaptations to avoid sanctions

The main theoretical contribution of this study lies in shifting HCM from a self-presentation-centered model toward a trust-negotiated model of digital intimacy. In classical HCM, intimacy is intensified through selective self-presentation, idealized perception, asynchronous interaction, and feedback loops. In sexting, these mechanisms remain relevant, but they are insufficient without considering sexual vulnerability, privacy risk, consent, and trust negotiation. This expanded model contributes to digital communication studies by showing that mediated intimacy is not only cognitively constructed, but also ethically, emotionally, and culturally negotiated. In this new model, digital intimacy is formed when both parties negotiate boundaries, manage risks together, and build trust through concrete actions. This implication enriches discussions on CMC, which have so far focused on technical and cognitive aspects, by integrating emotional and relational aspects in a more balanced way [43].

The practical implications of this study are related to digital literacy and intimate communication education. Digital literacy programs need to be expanded to include relational and affective literacy, not just technical security. Young people need to be equipped with boundary-negotiating skills in intimate digital relationships and risk mitigation strategies without eliminating intimacy [44]. An abstinence-only approach is ineffective, so a harm reduction approach that teaches safer sexting methods is needed. Furthermore, legal policy needs to clearly differentiate between consensual sexting between adults (which should not be criminalized) and the unauthorized distribution of intimate content (non-consensual pornography), which should be subject to severe sanctions, in line with SDG 16.

At the same time, this study must be interpreted with ethical caution. Understanding sexting as a form of digital intimacy does not mean normalizing or promoting sexting as a risk-free practice. Sexting remains associated with serious risks, including coercion, blackmail, unauthorized distribution of intimate content, psychological distress, reputational harm, and gendered victim-blaming. Therefore, the analytical value of this

study lies not in justifying sexting, but in explaining how young adults negotiate intimacy and risk in digital environments.

Table 15. Research Implications Based on Level of Analysis

Level	Implications	Target	Specific Recommendations
<b>Theoretical</b>	HCM Development	Communication academic	Integrate trust negotiation as the fifth mechanism of HCM
<b>Practical</b>	Digital literacy	Educators, parents	Teach a harm reduction approach, not abstinence-only
<b>Policy</b>	Sexting regulations	Government, DPR	Distinguish between adult consensual (non-criminal) and unauthorized distribution (serious criminal)
<b>Clinical</b>	Mental health	Psychologist, counselor	Provide a safe space for judgment-free sexting discussions.

The research results show that digital sexual self-disclosure is the strongest predictor of perceived intimacy because, in the context of intimate relationships, openness about desires and the body carries much greater psychological weight than other personal aspects. According to social exchange theory, disclosing intimate and risky information yields greater relational rewards when the partner responds positively. When the partner responds by respecting boundaries, this sense of vulnerability transforms into trust and a deep understanding of the essence of intimacy. Conversely, selective self-presentation without vulnerable openness will not produce true intimacy because there is no shared risk [45]

Risk awareness is positively correlated with perceived intimacy through the mechanism of "shared vulnerability": when both parties are aware of risks, they tend to communicate explicitly about fears and boundaries, which in turn builds stronger trust. In social psychology, this phenomenon is known as "disclosure reciprocity," which is reinforced by external threats. Gender differences (females have higher risk awareness, males have higher self-disclosure) are explained by socialization in a patriarchal society [46]: Women are socialized to be more cautious due to the greater social consequences (the "double standard" phenomenon), while men are the initiators. This finding is consistent with Butler's theory of gender performativity, in which sexting becomes an arena where gender is both reproduced and challenged, with women actively setting boundaries as a resistance to passive stereotypes.

Table 16. Explanation of the Mechanism Behind the Findings

Findings	Psychological Mechanisms	Social Mechanism	Supporting Theory
<b>DSSD strongest predictor</b>	Shared vulnerability	Reciprocity norm	Social Exchange Theory
<b>RA is positively correlated</b>	Disclosure reciprocity under threat	Explicit negotiation as bonding	Uncertainty Reduction Theory
<b>Gender differences</b>	Hypersensitivity to risk in women	Double standard of sexuality	Social Role Theory
<b>Gradual escalation</b>	Trust calibration	Multilevel confidence test	Social Penetration Theory

The first step is to revise Indonesia's digital literacy curriculum by including modules on intimate digital communication and relational risk management. The Ministry of Communication and Digital, along with the Ministry of Education, needs to develop teaching materials that focus not only on technical security but also on digital interpersonal negotiation skills [47]. The module covers how to set boundaries before sexting, identifying signs of a trustworthy partner, safe, gradual escalation strategies, and procedures in the event of a content leak. Schools and universities can integrate this module into Civics, Guidance and Counseling, or personality development courses.

The second step is to develop an assessment instrument to identify individuals at high risk for experiencing the negative impacts of sexting, such as victims of unauthorized distribution of content or coercion in relationships. This instrument was developed in collaboration with clinical psychologists and is used by school counselors, practicing psychologists, and online counseling services such as SAPA 129. Early detection of unhealthy sexting patterns (due to pressure, not voluntary) allows for early intervention before serious consequences such as depression, anxiety, or suicide attempts occur [48]. The third step is to establish a long-term research agenda on cross-cultural comparisons of sexting between Indonesia and other Southeast Asian countries (Malaysia, Thailand, Vietnam, and the Philippines). Comparative research is also needed between Generation Z and millennials, as well as longitudinal research to observe changes in sexting patterns over the duration of a relationship, from dating to marriage.

Table 17. Action Plan Based on Research Findings

Action Level	Stakeholders	Specific Actions	Success Indicators
<b>Education</b>	Ministry of Communication and Digital, Ministry of Primary and Secondary Education	Integration of digital intimate literacy modules	Integrated modules in 500 pilot schools
<b>Clinical Services</b>	Psychologist, counselor	Development of a sexting risk assessment instrument	Instrument validated and used in 10 cities
<b>Further Research</b>	Academics, Research institutions	Comparative studies of Southeast Asia	International publication of at least 3 articles
<b>Policy Advocacy</b>	National Commission on Violence Against Women, NGO	ITE Law policy recommendations	Revised article on distribution of intimate content without permission

Overall, the findings show that sexting in Indonesia should be analyzed as a complex form of digital intimacy involving agency, vulnerability, risk, and socio-cultural constraints. The role of communication research is to provide an empirically grounded and ethically balanced understanding of how intimacy is formed, negotiated, and protected in mediated environments. By integrating Digital Sexual Self-Disclosure, Risk Awareness, Trust Negotiation, and Indonesian socio-cultural norms, this study contributes to broader debates in digital communication studies and contextualized communication theory.

#### 4. CONCLUSION

This study concludes that sexting as a form of digital sexual self-disclosure plays a central role in the formation of perceived digital intimacy among young adults in Indonesia. The findings show that Digital Sexual Self-Disclosure is the strongest predictor of Perceived Digital Intimacy, while Risk Awareness contributes positively to intimacy through boundary negotiation, privacy management, and trust-building. These findings expand the Hyperpersonal Communication Model by shifting its emphasis from a primarily self-presentation-oriented model toward a trust-negotiated model of digital intimacy, in which mediated intimacy is shaped not only by selective self-presentation and idealized perception but also by vulnerability, risk awareness, consent, and socio-cultural negotiation. Methodologically, this study demonstrates the value of a sequential explanatory mixed methods design in examining sensitive and complex digital intimacy practices by integrating statistical relationships with participants' lived experiences. This study is limited by its geographical focus on five major Indonesian cities, the use of purposive sampling, and its cross-sectional design; therefore, future research should examine rural contexts, use broader sampling strategies, and adopt longitudinal designs to understand how digital intimacy develops over time. Overall, this study emphasizes the importance of contextualizing Western communication theories such as HCM in non-Western societies, where local moral norms, religious values, collectivist expectations, gendered risks, and privacy vulnerabilities shape the meaning and practice of digital intimacy.

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#### REFERENCES

- [1] V. Pérez-Torres, "Social media: a digital social mirror for identity development during adolescence," *Current Psychology*, vol. 43, no. 26, 2024, doi: 10.1007/s12144-024-05980-z.
  - [2] J. Q. H. Ho, M. Hu, T. X. Chen, and A. Hartanto, "Potential and pitfalls of romantic Artificial Intelligence (AI) companions: A systematic review," *Computers in Human Behavior Reports*, vol. 19, 2025, doi: 10.1016/j.chbr.2025.100715.
  - [3] Budiawan, *COMMUNICATION INTIMACY: A Comprehensive Introduction*. Indramayu, Jawa Barat: PT. Adab Indonesia, 2025.
  - [4] Budiawan, *Communication Intimacy: A Comprehensive Introduction*. Indramayu, Jawa Barat: Penerbit Adab, 2024.
  - [5] Y. L. Cai, "Strengthening perceptions of virtual team cohesiveness and effectiveness in new normal: A hyperpersonal communication theory perspective," *Asian Business and Management*, vol. 22, no. 4, 2023, doi: 10.1057/s41291-023-00225-6.
  - [6] C. J. Carpenter and E. L. Spottswood, "Extending the Hyperpersonal Model to Observing Others: The Hyperperception Model Published by the Communication Technology Division of the Association for Education in Journalism and Mass Communication The Association for Education in Journalism and
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