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PSYCHOSOCIAL CAUSAL RELATIONSHIPS OF COMMUNICATION BEHAVIOR ON SOCIAL MEDIA AMONG HIGH SCHOOL STUDENTS IN THAILAND

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Abstract

This research employs a quantitative methodology utilising a comparative correlational design, integrating correlation analysis and path analysis to verify the alignment of actual data with the suggested model. The sample comprised 860 high school pupils, chosen by a multi-stage quota sampling technique. The research findings corroborated all eight assumptions and disclosed four principal conclusions; The model exhibited structural linkages and aligned with empirical data, evidenced by a Chi-Square Value of 31.511, Degrees of Freedom of 21, a p-value of 0.065, RMSEA of 0.024, CFI of 0.996, TLI of 0.990, and SRMR of 0.017. Two sub-variables, namely safe communication in the digital realm, non-bullying communication, and communication that fosters learning, exhibited statistically significant, moderate positive associations. An elevation in any of these variables correlated with a commensurate elevation in the others. The application of Interactionism Theory and the Theory of Planned Behaviour as basic frameworks facilitated the identification of causally relevant variables. The model established by the researchers elucidates that communication behaviour on social media arises from interactions among three variable categories: psychological features, situational factors,

and psychological states. This comprehension facilitates the formulation of protocols to enhance constructive and secure conversation on social media.

Keywords: Causal Relationships, Psychosocial, Communication, Social Media, High School Students, Thailand.

1. INTRODUCTION

Communication is deemed vital and indispensable in contemporary culture as it encompasses the conveyance of knowledge, emotions, ideas, and diverse forms of information. The articulation of attitudes is essential for others to comprehend one's objectives or wants. Consequently, modes of communication have been modernised. The incorporation of information technology has facilitated interconnected worldwide communication, converting society into the digital age. In Thailand, technology has been utilised to enhance internet-based communication through many mediums, including email, chat, web forum interactions, e-learning, and obtaining news and information (Apsorn, Sisan, & Tungkunan, 2019). The globalisation trend impacting Thai culture has rendered the acquisition of knowledge and communication via social media a crucial aspect of daily life. Rapid communication through online social networks affects recipients' emotions and behaviours, perhaps resulting in the imitation of media behaviours without critical evaluation of the information's veracity. Furthermore, worldwide network connectivity has become increasingly prevalent, particularly among students who utilise technology for educational purposes and information acquisition in the New Normal age. This has emerged as a crucial avenue for improving education and adjusting to societal needs. A survey on the utilisation of information and communication technology (ICT) in Thai households from 2011 to 2015 indicated that the proportion of computer users aged six and older rose from 32% to 34.9% (Charoen, 2018). The percentage of mobile phone users increased from 66.4% to 79.3%, while the percentage of internet users rose from 23.7% to 39.3%. The 15–24 age group had the highest proportion of internet users, rising from 51.9% to 76.8%. The 6–14 age demographic experienced a notable increase in internet usage, rising from 38.3% to 58%, with this trend persisting in its growth. The principal impetus for engaging online was identified as participation in social media platforms, including Facebook, X, Line, and Instagram, with social media cited as the predominant online activity (88.6%), exceeding the activities of watching movies, listening to music, and playing games (87.4%), as well as uploading data and photos, and sharing images and videos (75%). A 2014 survey on internet consumption behaviour in Thailand, undertaken by the Ministry of Information and Communication Technology, revealed that average daily internet usage increased from 4.6 hours per day (32.3 hours per week) to 7.2 hours per day (50.4 hours per week) (Suphasawat et al., 2016). This corresponds with the study "Trends in Media Use among U.S. Adolescents from 1976 to 2016," which demonstrated that digital media (internet, messaging, social media, and games) has supplanted or augmented traditional media (print media including books, magazines, and newspapers, as well as television and films). In 2016, 82% of adolescents indicated daily social media usage, with the trend persisting upward (Twenge, Martin, & Spitzberg, 2019). Moreover, global data on adolescent internet usage indicates that over 75% of teenagers (ages 13–17) consistently engage with social media, with older adolescents (ages 15–17)

utilising it more frequently than their younger counterparts (ages 13–14), at 81% compared to 68%. Over 70% of adolescents reported utilising multiple social media platforms (Lenhart et al., 2015). A national survey in the U.S. of adolescents aged 8–17 revealed that 66% of individuals aged 13–17 possessed a Facebook page, with over 20% indicating they checked their profile more than five times daily (Lauricella et al., 2014).

The high school years are a pivotal phase for identity formation and the establishment of social interactions, with social media significantly influencing and mirroring these processes. High school kids utilise internet media for communication, self-expression, and the pursuit of peer approval. The utilisation of social media yields both advantageous benefits, such as the enhancement of digital competencies and chances for online education, and detrimental ones, including self-comparison. Consequently, social media functions as both a tool and a social environment that inevitably impacts teenage behaviour and development. Moreover, research has revealed insights into adolescents' perceptions of cyberbullying. Samoh et al. (2019) discovered that cyberbullying is frequently regarded as a commonplace phenomenon among adolescents, and that young individuals often opt not to communicate these matters with their parents. This issue underscores the necessity for the government, educational institutions, and families to adopt a proactive approach in delivering constructive information and comprehension. Furthermore, several scholars have expressed apprehensions that excessive dependence on technology could diminish self-esteem in adolescents (Dienlin & Johannes, 2020).

The 2022 survey on online media user behaviour in Thailand indicates that Generation Z (ages 13–28) exhibits the highest consumption, averaging over 8 hours per day (Taneerat & Dongnadeng, 2024). High school students aged 15 to 18 constitute a demographic that has matured in an environment where digital technology and social media are predominant influences. Consequently, media literacy is crucial for adolescents to critically assess and comprehend the information they obtain from digital media. Nevertheless, despite the extensive availability of the internet, gaps in information access persist among various demographic groups. This indicates a disparity in access to information and expertise. Insufficient internet literacy and disparate levels of media literacy can impede successful internet utilisation. Moreover, secure communication is a significant concern. Acquiring knowledge on safeguarding personal data and exercising caution in the utilisation of online information will augment communication security and avert adverse outcomes from the improper use of digital media.

This study investigates the psychosocial causative factors affecting online communication behaviour among high school students. The research employs the Interactionism Model alongside the Theory of Planned Behaviour as a conceptual framework to synthesise literature and investigate the causes from a multidisciplinary viewpoint. These encompass elements such as social contexts, the educational setting, familial connection dynamics, and interactions with older peers, consistent with Social Learning Theory and Environmental Learning Theories (Bandura & Walters, 1977). Internal psychological characteristics, including future orientation coupled with self-control, the desire for social acceptance, and mental health, are variables linked to decision-making and expectations, as outlined in Cognitive and Decision-Making Theories (Kabassi & Virvou, 2014) and Social Behaviour Theories (Mullen & Goethals, 2012). These frameworks collectively assist in identifying critical characteristics that influence online communication behaviour and can serve as a guideline to enhance awareness and foster positive online communication among high school students.

2. LITERATURE REVIEW

The aim of the study within the context of Interactionism Theory (Endler & Magnusson, 1976) is to investigate the psychosocial causal links that affect the interaction between individuals and their social environment, influencing psychological development and individual behaviour. This research employs the Interactionism Theory framework to examine the relationship between students' communication on social media and their families, schools, societies, and communities. The research examines the types of contacts that induce these effects and the degree to which they affect emotional alterations and communicative behaviour in the digital realm. This research incorporates the Theory of Planned Behaviour (Conner, 2020), facilitating a more profound analysis of the decision-making process underlying communication expression on social media. Critical elements evaluated encompass behavioural goals, shaped by attitudes and social influences. The elements are psychological and socially interacting. The application of Interactionism Theory elucidates the impact of environmental factors and social interactions on communication behaviour across multiple dimensions. Prior research has demonstrated analogous findings. Cheewakoset, Ngamcharoen and Sakdapat (2024) discovered that effective communication cultivates interpersonal trust, diminishes organisational conflict, and improves collaboration and cohesion among organisational members. Furthermore, the study conducted by Sakdapat (2024a) demonstrated that effective communication and interpersonal engagement enhance academic achievement and innovative problem-solving. The subsequent section will delineate the operational definitions of each variable to ensure clarity in the study and to guarantee that the generated instruments thoroughly encompass the precise meanings of each concept. This will facilitate a precise and comprehensive assessment of the study outcomes. The researchers have classified the variables into five categories:

(1) Dependent variable, (2) Psychological traits, (3) Situations, (4) Psychological states, and (5) Biosocial background features, in accordance with the Interactionism Theory framework. The dependent variable in this study is social media communication behaviour among high school students. This pertains to communication using diverse internet platforms such as Facebook, Instagram, Twitter, TikTok, or LINE. It includes various forms of expressive behaviours, such as publishing messages, uploading photographs or videos, commenting, liking, and sending direct messages. The unique characteristics of social media communication behaviour include rapid communication, extensive information dissemination, informal contacts, identity and self-expression, social engagement, and opinion exchange. These behaviours exert both beneficial and detrimental influences on social connections, learning, and public expression, particularly in the cultivation of social skills and identity development among contemporary teenagers. Furthermore, social media significantly facilitates educational communication. It can function as a medium for disseminating educational content, facilitating research, and promoting collaborative learning, thus enhancing the flexibility and accessibility of education. A further examination reveals that, in addition to learning knowledge, online media serves as a crucial platform for adolescents to speak with peers and establish new social relationships. A study by Len-Rhos et al. (2016) revealed that 73.40% of adolescents access their social media pages "constantly" or "frequently," while 71.70% read social media posts with the same frequency. Additionally, up to 57.20% of adolescents express their opinions on friends' posts, status updates, or photos. This signifies that this demographic assigns considerable value to, and allocates the majority of their time to, the digital realm. Yıldız Durak (2020) indicated that

problematic social media usage is highly associated with social anxiety, self-regulation, and academic procrastination in high school pupils. Inappropriate or excessive social media usage can result in diminished self-control and increased social anxiety, subsequently impacting students' daily lives and academic experiences. Prior research has examined issues associated with internet media usage among high school students, underscoring this as a significant domain for additional inquiry. These kids encounter anxiety associated with social media stemming from inappropriate posts, hacking, emotional distress, privacy violations, unsuitable imagery, bullying, negative attitudes, and stalking (Erreygers et al., 2017). Moreover, a study on perceptions of cyberbullying (Samoh et al., 2019) indicated that adolescents frequently assume their close friends would never engage in bullying behaviour. Furthermore, many regard purpose as the exclusive criterion for ascertaining whether an action constitutes bullying. This indicates a misconception regarding secure communication in the digital realm and underscores the necessity for enhanced awareness and education in this domain. Young individuals said that, when faced with difficulties, they would prefer to confide in peers or address the challenges independently. This underscores the importance of consultative behaviour among peers in teenagers' decision-making (Ojanen et al., 2014). Moreover, there are escalating concerns around the tripling of suicide rates among adolescents (ages 10–17) from 1990 to 2017, a statistic that may be substantially associated with the increased hours spent online (Odgers & Jensen, 2020). This has sparked concerns that technology may be exacerbating teenage health difficulties, necessitating preventive strategies or awareness initiatives to foster positive online communication behaviours among high school students. Through an examination of pertinent literature, the researchers identified three sub-variables inside the dependent variable to ensure thorough coverage in this study as follows.

2.1 Secure Communication in the Digital Realm: This pertains to the comprehension and fundamental knowledge of internet safety, encompassing awareness of threats from malevolent individuals online, and engaging in prudent communication on social networking platforms to mitigate dangers such as cyberattacks and other risks linked to digital technology utilisation (Orr, 2012; Rehman & Asghar, 2023).

2.2 Non-Bullying Communication: This entails utilising communication technologies constructively and meaningfully, including the provision of encouragement and the dissemination of accurate, impartial information via diverse channels such as email, cell phones, SMS, and online chat rooms. These activities facilitate constructive communication and cultivate an environment of optimistic thought and social reinforcement (Strom & Strom, 2021).

2.3 Educationally Beneficial Communication: This denotes the transmission of information, knowledge, and experiences between educators and students or among students themselves. The emphasis is on comprehending academic material and cultivating academic competencies efficiently (Sakdapat, 2024a). This sort of communication employs precise and contextually relevant language while choosing platforms or technologies that facilitate learning. This approach corresponds with the Constructivist Learning Theory (Hein, 1991), which perceives learning as a process emerging from significant interactions between learners and their environment, facilitated by communication that fosters critical thinking, analysis, and collaborative idea exchange.

The internal factors of social media communication behaviour, comprising three sub-variables, exhibit a significant correlation with one another at a moderate to high statistical level. The influence pathways of the initial model and the analysed model align with the

actual data. The model fit indices satisfy the established conditions. Psychological features denote individual characteristics or mental attributes that elucidate behaviours, thoughts, emotions, and reactions in diverse contexts. These characteristics are generally consistent within individuals and affect their interactions with the external environment. Psychological characteristics are mental attributes that exhibit regular patterns across time. This category comprises three variables.

2.4 Future Orientation and Self-Control: This process entails acknowledging the significance of future rewards in preference to immediate satisfaction. Individuals possessing this feature engage in behaviours that exemplify patience and the capacity to defer gratification, showcasing self-discipline and a conviction that present acts will yield favourable future results. Future orientation and self-regulation provide psychological stability and the ability to navigate the desire for social validation. These attributes enhance mental well-being and influence decision-making in life. They are interconnected and affect the cultivation of successful long-term communication practices. This variable corresponds with Psychomoral Strength (Bhanthumnavin & Bhanthumnavin, 2021).

2.5 Necessity for Social Acceptance: This pertains to an individual's conduct motivated by the aspiration to belong to a social group, therefore influencing their self-image and self-esteem. Humans possess an intrinsic motivation to establish enduring and stable relationships. A deficiency in acceptance can adversely affect psychological well-being, potentially resulting in emotions of loneliness, anxiety, or sadness (Sparling, 2002).

2.6 Mental Health denotes an individual's capacity to adapt and thrive contentedly within society and their environment. It encompasses fostering positive relationships with people and leading a balanced, contented existence. It encompasses the ability to fulfil human requirements in a swiftly evolving environment without internal psychological discord (World Health Organization & Mental Health Determinants and Populations Team, 2005). Psychological qualities including three factors exhibit a statistically significant correlation with other variables at a moderate to high degree. Psychological qualities directly influence social media communication behaviours.

Situations denote the context or environment that affects an individual's behaviour, ideas, and emotional responses at a specific moment. Both external and internal influences can influence an individual's perception and behaviour in many situations. Social contexts significantly influence an individual's values and behaviour, particularly throughout adolescence, when familial upbringing establishes a foundational base for imposing attitudes and core ethics. Peer and senior support fosters confidence in social adaptation, whereas social media role models profoundly impact behavioural patterns and modern ideals. The interaction among these elements substantially influences individual behaviours and identity in the digital age. This category comprises three variables:

2.7 Parental Upbringing: The family is the primary institution that significantly influences an individual's personality and development. Parental guidance and education cultivate attitudes, beliefs, and social conventions that shape the personality and behaviour of adolescents, particularly in the digital era. It also significantly contributes to establishing the groundwork for the responsible and safe use of social media (Begić, Tadić-Lesko, & Katić, 2024).

2.8 Peer and Senior Student Support: Adolescents frequently derive value transmission and behavioural patterns from their contemporaries, which may either align with social standards or diverge from adult ideals. Interactions and discourse among peers might exert

greater effect than adult counsel, as adolescents frequently perceive their contemporaries as possessing analogous perspectives and experiences relevant to contemporary society. Research on cyberbullying (Whittaker & Kowalski, 2015) reveals that negative comments or messages indicative of online aggression predominantly originate from peers, seniors, or acquaintances, whereas randomly directed negative remarks are less likely to be issued by individuals with whom one has minimal familiarity. This highlights the significant impact of peers on the development of both positive and bad behaviours in teenagers.

2.9 Role Models from Social Media: Prominent individuals on social media, including celebrities and influencers on platforms such as YouTube, TikTok, Instagram, and Facebook, serve as conduits through which adolescents frequently derive influence in shaping their identity, beliefs, and behaviours. Interaction through these platforms can influence daily decision-making and play a role in forming an individual's identity within the online community (Kearney & Levine, 2020).

H5: The variables in the scenarios comprise three variables that exhibit statistically significant correlations with other variables at moderate to high levels.

The situational variable directly affects online communication behaviours and indirectly influences them through psychological qualities. Psychological States denote mental or psychological traits that vary according to the environment or scenario encountered by an individual, illustrating the flexibility and adaptability of personality across diverse circumstances. This may encompass audacity in familiar contexts or apprehension in novel circumstances. This concept is grounded in the Person-Situation Interaction Theory (Furr & Funder, 2018), which posits that an individual's behaviour is shaped by both their personality traits and the contextual factors or pressures of their environment. This category comprises two variables as shown below.

2.10 Attitude Towards Online Communication Behaviour: This pertains to the perception and emotional reaction to communication styles and methods on digital platforms, including posting, commenting, or sharing information. These responses are manifested through three primary components: the emotive component, the cognitive component, and behavioural intention (Ledbetter, 2009). These beliefs profoundly affect decision-making and communication practices on social media. The interpretation and comprehension of media content will influence attitudes and methods of communication in the digital society. This aligns with the Attitude Theory, which emphasises the connection between attitudes and behaviours in online communication (Yeo, Goh, & Rezaei, 2017).

2.11 Intention to Communicate on Social Media: This pertains to the reasons or objectives underlying an individual's decision to utilise online platforms for purposes such as information exchange, emotional expression, self-image construction, or relationship development. The Uses and Gratifications Theory, articulated by Ruggiero (2000), posits that media consumers choose diverse media forms to satisfy individual needs, including information acquisition, amusement, or social engagement. The desire to communicate affects the format and technique of communication in the digital realm, mirroring the behaviour of media selection and utilisation based on individual requirements in each context.

The variables in the psychological states, comprising two elements, have a statistically significant correlation with other variables at a moderate to high level.

H8: Psychological qualities and/or situational variables exert an indirect influence on

communication behaviours in social media through psychological state variables. Biosocial background factors encompass fundamental data regarding pupils, including gender, age, year level, GPAX, and familial context. These elements serve as fundamental variables that affect communication and interactions across diverse contexts, both individually and environmentally.

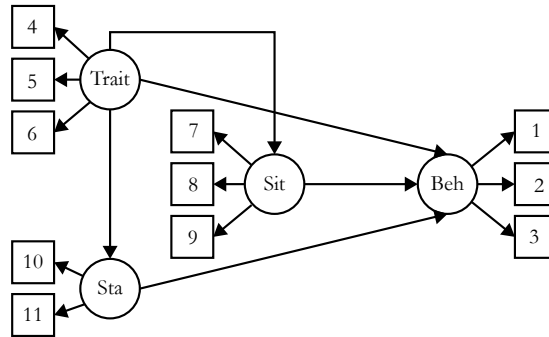


Figure 1: Conceptual Model.

*Note Sit: Situations, Trait: Psychological traits, Sta: Psychological states, Beh: Communication Behavior in Social Media among High School Students, 1: Safe Communication in the Digital World, 2: Non-Bullying Communication, 3: Educationally Beneficial Communication, 4: Future Orientation and Self-Control, 5: Need for Social Acceptance, 6: Mental Health, 7: Parental Upbringing, 8: Support from Peers and Student Seniors, 9: Role Models from Social Media, 10: Attitude Towards Online Communication Behavior, 11: Intention to Communicate on Social Media

3. METHODOLOGY

3.1. Research Design

This is a quantitative research using path analysis by Garson (2013) to examine linear relationships and directional influences among psychosocial variables. The analysis is based on a structural equation model synthesized from a literature review and grounded in the Interactionism Model and the Theory of Planned Behavior. The model estimation employs the maximum likelihood estimate technique (Chernoff & Lehmann, 2011), enabling the determination of causal directions and effects among variables. Besides, the study aims to test the validity of the structural equation model whether it aligns with the hypotheses and is supported by empirical data, and to what extent. This research project has been ethically approved by the University of the Thai Chamber of Commerce, under project code Expedited/A04016. Throughout the research process, the researchers have placed utmost importance on the protection of participants' rights and strictly adhered to ethical standards in human research. All participants provided informed consent before participating, ensuring their voluntary involvement. Confidentiality and anonymity were maintained throughout the study, and data were used solely for research purposes.

3.2. Sample

The research sample included high school students aged 16 to 18 years. The researchers calculated the sample size utilising the G*Power software (Faul et al., 2007). The computation revealed that the optimal sample size was roughly 800 participants (Table 1). To reduce errors and inconsistencies in students' questionnaire responses, the researchers augmented the sample size by an additional 5%, hence enhancing data accuracy and quality.

Table 1: Statistical Parameters used for Sample Size Calculation.

Factor Analysis	Sample Calculation Method		
	Input Parameters		Output Parameters
Test family	t tests - formula	δ	3.60
Statistical test	Linear multiple regression	t	1.96
Tail(s)	Two	df	788
α err prob	0.05	fi	0.01
Power (1 - β err prob)	0.95 (Actual power)	Sample size	800

This study first utilised the Multi-Stage Quota Sampling Method (Burger & Silima, 2006) comprising the subsequent steps; 1) Stratified Random Sampling conducted in two regions, comprising six randomly selected schools from the Bangkok Metropolitan area and six randomly selected schools from provincial areas, with one school from each of the following regions: North, Northeast, West, Central, East, and South. Purposive selection was implemented, categorised into four groups: Science-Mathematics, Arts-Mathematics, Arts-Language, and Arts-Social Studies. 3) Quota selection was employed for year levels, categorised into three groups: Matthayom 4, Matthayom 5, and Matthayom 6. A systematic random sample procedure was employed, utilising student lists to determine the number of students. The researcher developed two versions of the questionnaire, altering the item sequence to mitigate extraneous influences and reduce response bias or inaccuracy associated with the order of responses. Prior to distributing the surveys, the researchers elucidated the research objectives, methodologies, and anticipated advantages to encourage volunteer involvement. Data gathering occurred throughout the first and second semesters of the 2024 academic year. A total of 893 replies were gathered (refer to Table 2). Following a thorough review for completeness, 860 questionnaires were selected for study, while 33 replies were discarded due to insufficient data on critical factors.

Table 2: Basic Information of the Sample Group.

Questionnaire set	Set A (430 respondents) (50.00%)		
	Set B (430 respondents) (50.00%)		
Sample group	Total of 860 high school students (100%)		
Gender	Male = 381 (44.30%)	Female = 479 (55.70%)	
Grade point average index (GPAX)	3.26 (S.D = 0.69)		
Average age (years)	16 years 9 months (S.D = 0.82)		
Age	16 years old = 293 students (34.10%)	17 years old = 281 students (32.70%)	18 years old = 286 students (33.30%)
Year level	Matthayom 4 = 302 students (35.10%)	Matthayom 5 = 270 students (31.40%)	Matthayom 6 = 288 students (33.50%)
Educational program	Science-Mathematics = 249 students (29.00%)	Arts-Mathematics = 259 students (30.10%)	Arts-Social Studies = 95 students (11.00%)
	Arts-Languages = 257 students (29.90%)		
Experience in using social media	More than 5 years 490 students (57.00%)	Between 3 - 5 years 307 students (35.70%)	Less than 3 years 63 students (7.30%)
Residence	Living in a dormitory = 231 students (26.90%)	Living with parents = 486 students (56.50%)	Living with relatives = 111 students (12.90%)
		Living with friends = 32 students (3.70%)	
Father's education	Below bachelor's degree = 705 students (82.00%)	Bachelor's degree or higher = 155 students (18.00%)	
Mother's education	Below bachelor's degree = 633 students (73.60%)	Bachelor's degree or higher = 227 students (26.40%)	

3.3. Data Analysis

This study utilised two categories of statistical techniques for data analysis. The initial

statistics employed to assess the quality of questionnaire items comprised: 1) Independent – Sample t-test (Sedgwick, 2010) and Pearson’s Correlation Coefficient Analysis (Sedgwick, 2012); 2) Confirmatory Factor Analysis (Brown & Moore, 2012; Hair et al., 2010; Harrington, 2009). Secondly, Inferential Statistics encompassed Correlation Analysis, Path Analysis, and the Linear Structural Relationship Model (Pan & Fang, 2002).

3.4. Instruments

This study included 11 sets of questionnaires and one biosocial background questionnaire (Table 3). The questionnaires comprised multiple assertions evaluated on a 6-point Likert scale, from “Most True” to “Not True at All” (Desselle, 2005). The mean dependability coefficient was 0.80. Each questionnaire item was produced through a synthesis of literature and pertinent research, emphasising the distinct qualities of each variable to guarantee a comprehensive and precise comprehension of the content. All questionnaires were evaluated for content validity and the Index of Item-Objective Congruence by five behavioural science specialists. The IOC values varied between 0.80 and 1.00 (Rovinelli & Hambleton, 1977). A pilot test was administered to 160 actual individuals from the target sample group to assess the quality of the questionnaires. The acquired data was examined by Confirmatory Factor Analysis. A questionnaire was considered acceptable for usage only if it satisfied a minimum of 3 out of 5 evaluation criteria.

Table 3: Research Variable Measurement Instruments.

Research Questionnaires	Initial Number of Items	Actual Number of Items Used	t-range of Values	α	ω	GLB	Confirmatory Factor Analysis						
							χ^2	df	p-value (>0.05)	RMSEA (≤ 0.06)	CFI (≥ 0.95)	TLI (≥ 0.95)	SRMR (≤ 0.08)
1. Safe communication in the digital world*	22	14	3.15 – 8.17	0.82	0.82	0.83	61.265	50	0.062	0.053	0.984	0.986	0.059
2. Non-bullying communication*	22	14	4.09 – 9.65	0.81	0.81	0.82	61.637	51	0.063	0.052	0.985	0.987	0.057
3. Educationally beneficial communication*	22	14	3.41 – 8.24	0.81	0.81	0.82	61.758	50	0.064	0.053	0.983	0.984	0.058
4. Attitude towards online communication behavior*	22	12	3.28 – 7.53	0.79	0.80	0.80	55.243	45	0.061	0.049	0.985	0.985	0.054
5. Intention of communication on social media*	22	12	2.35 – 9.75	0.80	0.81	0.81	55.546	46	0.062	0.047	0.987	0.986	0.055
6. Future orientation and self-control	16	10	3.24 – 7.56	0.82	0.82	0.83	48.619	38	0.057	0.043	0.979	0.980	0.049
7. Need for social acceptance*	22	12	2.29 – 6.39	0.78	0.79	0.81	51.565	46	0.062	0.046	0.981	0.982	0.053
8. Mental health	16	10	2.36 – 5.51	0.84	0.84	0.85	48.752	39	0.059	0.041	0.978	0.984	0.048
9. Parental upbringing*	22	12	3.48 – 6.54	0.79	0.79	0.81	52.632	43	0.062	0.053	0.984	0.985	0.051
10. Support from peers and student seniors*	22	12	4.52 – 7.63	0.80	0.81	0.82	52.587	47	0.061	0.052	0.982	0.983	0.052
11. Role models from social media*	22	12	2.46 – 6.30	0.78	0.78	0.79	52.319	49	0.059	0.052	0.983	0.985	0.053

Note: *This is a questionnaire developed by the researchers for this study. **In this research, greater importance is given to the t-value rather than the r-value. The selection criteria are: $t \geq 2.00$ and $r \geq 0.20$. CFA is considered acceptable when at least 3 out of 5 criteria are met, especially when the χ^2 value is not statistically significant. ***The r-value is presented in Appendix A of the research report.

4. RESULTS

This study utilised data from 860 upper secondary school students, with 55.70% identifying as female. The mean age was 16 years and 9 months, with a standard deviation of 0.82. A majority of 57.00% possessed over five years of experience in social media. The examination of the correlation coefficients among variables in the whole group (Table 4) indicated that the three factors associated with social media communication behaviour were moderately and positively connected, hence corroborating Hypothesis 1. Specifically, Variable 3 (Communication that supports learning) and Variable 2 (Non-bullying communication) exhibited the highest correlation coefficient of 0.674 ($p < .01$), followed by Variable 3 (Communication that supports

learning) and Variable 1 (Safe communication in the digital world), which had a correlation coefficient of 0.605 ($p < .01$). A thorough analysis indicates that these three factors are positively correlated; an increase in one typically leads to increases in the others. Among the psychological trait variables, Variable 5 (Need for social acceptance) and Variable 6 (Mental health) had the highest correlation value of 0.763 ($p < .01$). In this sample, the variables exhibited statistically significant moderate to strong relationships in nine pairs, corroborating Hypothesis 3. In the set of situational variables, Variable 9 (Modelling from individuals on social media) and Variable 7 (Parental advice) had the highest correlation value of 0.576 ($p < .01$). In this sample, 8 pairs of variables exhibited statistically significant moderate to strong associations, hence corroborating Hypothesis 5. Within the psychological states variable group, Variable 10 and Variable 11 had a low correlation coefficient of 0.298 ($p < .01$). This sample exhibited five pairs of variables with statistically significant moderate to high associations, hence corroborating Hypothesis 7: In summary, the study of correlation coefficients across the variable groups revealed that Variable 8 (Support from peers and seniors) was notably uncorrelated with both the psychological qualities variable and the settings variable.

Table 4: Mean, Standard Deviation, and Correlation Coefficients of Variables in the Overall Group (N=860).

No.	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1	67.76	0.97	1										
2	68.95	0.81	.575**	1									
3	62.01	0.88	.605**	.674**	1								
4	58.12	0.65	.383**	.361**	.238**	1							
5	54.41	0.72	.591**	.524**	.590**	.548**	1						
6	54.35	0.80	.488**	.242**	.259**	.592**	.763**	1					
7	53.79	0.49	.527**	.556**	.553**	.575**	.582**	.543**	1				
8	53.17	0.67	.016	.109**	.042	-.035	.019	-.151**	.512	1			
9	53.51	0.42	.491**	.379**	.381**	.156**	.422**	.334**	.576**	.226**	1		
10	54.21	0.53	.462**	.235**	.373**	.322**	.541**	.520**	.526**	.183**	.429**	1	
11	53.14	0.48	.291**	.315**	.312**	.181**	.536**	.154**	.519**	.125**	.170**	.298**	1

Note: * $p < .05$, ** $p < .01$, Variables (No.) 1: Safe Communication in the Digital World, 2: Non-Bullying Communication, 3: Educationally Beneficial Communication, 4: Future Orientation and Self-Control, 5: Need for Social Acceptance, 6: Mental Health, 7: Parental Upbringing, 8: Support from Peers and Student Seniors, 9: Role Models from Social Media, 10: Attitude Towards Online Communication Behavior, 11: Intention to Communicate on Social Media

The path analysis results of the initial model indicated that it exhibited a structural link (Figure 2) and aligned with the actual data. The model fit indices satisfied standard criteria, corroborating Hypothesis 2 (Table 5); Chi-Square Value = 31.511, Degrees of Freedom = 21, p -value = 0.065, RMSEA = 0.024, CFI = 0.996, TLI = 0.990, SRMR = 0.017. Analysis of the direct influence pathways on social media communication behaviour revealed that the variable of psychological states exerted the most substantial impact ($\beta = 0.647$), followed by psychological traits, which also demonstrated a statistically significant effect ($\beta = 0.464$). The situational variable exerted an indirect effect via psychological qualities ($\beta = 0.611$) on social media communication behaviour ($\beta = 0.406$).

The findings on the components of the causal relationship model of social media communication behaviour (Table 6) are as follows. Initially, within the three sub-variables of social media communication behaviour, the highest internal factor loadings were observed in Communication that supports learning ($\beta = 0.624$), Non-bullying communication ($\beta = 0.436$), and Safe communication in the digital realm ($\beta = 0.339$), with a predictive coefficient ($R^2 = 0.601$). Secondly, among the

psychological qualities, the variables exhibiting the highest internal factor loadings were Mental health ($\beta = 0.909$), Need for social approval ($\beta = 0.839$), and Future orientation and self-control ($\beta = 0.645$). An examination indicates that psychological features directly impacted social media communication behaviour ($\beta = 0.464$), hence corroborating Hypothesis 4, and also exerted a direct influence on psychological states ($\beta = 0.752$). Thirdly, in the Situations variable, the sub-variables with the highest internal factor loadings, in descending order, were Modelling behaviour from individuals on social media ($\beta = 0.631$), Parental guidance and upbringing ($\beta = 0.593$), and Support from peers and seniors ($\beta = 0.006$). The analysis of influence pathways corroborates Hypothesis 6, indicating that Situations exert a direct impact on social media communication behaviour ($\beta = 0.406$) and also get an indirect influence via Psychological qualities ($\beta = 0.611$). The prediction coefficient was $RI = 0.574$. Fourthly, within the psychological states variable, the sub-variables exhibiting the highest internal factor loadings in descending order were Attitudes towards social media communication behaviour ($\beta = 0.767$) and Intention to communicate on social media ($\beta = 0.374$). The prediction coefficient was $RI = 0.566$. Upon examining the influence pathway, it was determined that psychological features exerted a direct effect through psychological states ($\beta = 0.752$) on social media communication behaviour, hence corroborating Hypothesis 8.

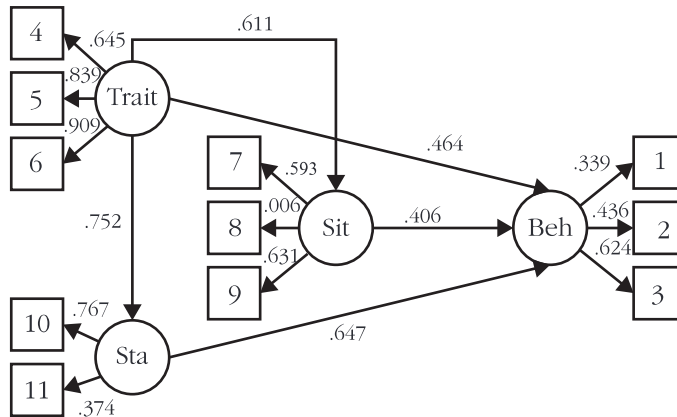


Figure 2: Results of the Test on the Consistency of Social Media Communication Behavior Model of High School Students in Thailand in the Overall Group (*N=860 students. All path coefficients and factor loadings were statistically significant at the .05 level.).

*Note Sit: Situations, Trait: Psychological qualities, Sta: Psychological states. Beh: Communication Practices on Social Media among High School Students. 1: Secure Communication in the Digital Realm, 2: Non-Aggressive Communication, 3: Pedagogically Advantageous Communication, 4: Future Orientation and Self-Regulation, 5: Desire for Social Acceptance, 6: Psychological Well-Being, 7: Parental Guidance, 8: Assistance from Colleagues and Senior Students, 9: Exemplars from Social Media, 10: Perspective on Online Communication Conduct, 11: Intent to Engage on Social Media.

Table 5: Fit Indices of the Latent Model.

Statistics	Criteria	Model Fit Indices
Chi-Square Value	No Statistical Significance	31.511
Degrees of Freedom	No Statistical Significance	21
p-value	No Statistical Significance	0.065
Root Mean Square Error of Approximation	≤ .06	0.024
Comparative Fit Index	≥ .95	0.996
Tucker – Lewis Index	≥ .95	0.990
Standardized Root Mean Square	≤ .08	0.017

Table 6: Presents Parameter Estimates and Pertinent Information for Assessing the Validity of the Causal Relationship Model Concerning Communication Behaviour on Social Media among High School Students in Thailand.

Cause Variables and Effect Variables	Parameter Estimates			
	Raw Scores (b)	S.E.	Standard Scores (β)	t
Measurement Model				
Psychological Traits (R ² = 0.464)				
Future orientation and self-control	1.000	0.022	0.645	29.149***
Need for social acceptance	1.446	0.015	0.839	55.623***
Mental health	1.751	0.014	0.909	66.919***
Situations (R ² = 0.574)				
Parental upbringing	1.000	0.037	0.593	15.880***
Support from peers and student seniors	0.014	0.047	0.006	0.133
Role models from social media	0.903	0.038	0.631	16.443***
Psychological States (R ² = 0.566)				
Attitude towards online communication behavior	1.000	0.043	0.767	17.835***
Intention of communication on social media	0.442	0.038	0.374	9.856***
Communication behavior on social media (R ² = 0.601)				
Safe communication in the digital world	1.000	0.029	0.339	11.515***
Non-bullying communication	1.125	0.039	0.436	11.178***
Educationally beneficial communication	1.854	0.041	0.624	15.300***
Structural Equation Model				
Psychological Traits → Situations	0.429	0.038	0.611	15.952***
Psychological Traits → Psychological States	0.726	0.045	0.752	16.588***
Psychological Traits → Communication behavior on social media	0.063	0.137	0.464	11.205***
Situations → Communication behavior on social media	0.223	0.086	0.406	4.745***
Psychological States → Communication behavior on social media	0.258	0.124	0.647	5.237***

Note: *p<.05, ***p<.001

5. DISCUSSION AND CONCLUSION

The research findings elucidate the relationships among variables via Correlation Analysis, a statistical method employed to investigate intricate relationships and precisely ascertain statistically significant associations, including their directionalities, which may also facilitate prediction or forecasting. The mean values of all variables varied from 53.14 to 68.95, suggesting that the variables exhibited roughly comparable averages. Variable 2 (Non-bullying communication) exhibited the highest mean at 68.95, whilst Variable 11 (Intention to connect on social media) recorded the lowest mean at 53.14. The standard deviations (SD) of the variables varied from 0.42 to 0.97, indicating that the values for each variable were not significantly separated from their averages. Variables exhibiting strong associations included Variable 1 (Safe communication in the digital realm), which shown statistically significant correlations with other variables, including non-bullying communication and communication that facilitates learning. Variable 5 (Need for social acceptance) exhibited strong associations with other factors, including future direction, self-control, and parental supervision. Conversely, Variable 8 (Support from peers and seniors) exhibited modest correlations with other variables and lacked statistically significant connections with several variables, including safe communication in the digital realm ($r = 0.016$). This research corroborates hypothesis 1, 3, 5, and 7 based on the comprehensive association analysis. According to the statistical principle established by Hair et al. (2010), there exist authentic psychosocial causal linkages in online communication behaviour. Further analysis is required on Variable 8 (Support from peers and seniors) to ascertain the reasons for its lack of statistical significance. Upon examining the specifics of the variable group,

specifically online communication behaviour on social media among high school students, it was determined that the three sub-variables included: 1) Safe communication in the digital realm, 2) Non-bullying communication, and 3) Communication that fosters learning. These factors had a moderate positive connection. This indicates that an increase in the value of any single variable within this group will likely result in a corresponding and proportional increase in the values of the other variables in the group. It is also connected to the findings of Erreygers et al. (2017) and Samoh et al. (2019). The researchers utilised Path Analysis in this work to investigate and compare the causal links among various factors. This facilitated comprehension of the interrelations among various influences and the magnitude of their impacts. The Interactionism Theory and the Theory of Planned Behaviour serve as the theoretical framework for identifying the causally significant factors, with the findings corroborating hypotheses 2, 4, 6, and 8. The model exhibited structural relationships aligned with empirical data, and the fit indices satisfied established criteria. Upon a detailed examination of three major findings, it was shown that 1) Psychological qualities exerted a statistically significant effect on situations, with a standardised coefficient $\beta = 0.611$, $t = 15.952$, $p < .001$, showing a robust influence. 2) Psychological characteristics also influenced online communication behaviour on social media. Despite the standardised coefficient being smaller ($\beta = 0.464$), the effect remained statistically significant ($t = 11.205$, $p < .001$). Both situational factors and psychological states influenced online communication behaviour, with standardised values of $\beta = 0.406$ and $\beta = 0.647$, respectively. This signifies a substantial impact on the manifestation of online communication behaviour on social media among students. Upon analysing Variable 3, which pertains to communication that facilitates learning, it was determined to possess the largest factor loading among the dependent variables. This corresponds with Hein's (1991) Constructivist Learning Theory, which examines how communication emerges from the learning process and individual experiences, engaging with the environment to generate significant information. This investigation revealed high correlation values and factor loadings that aligned in the same direction, indicating causal coherence. This corresponds with the Person-Situation Interaction Theory of Furr and Funder (2018), which elucidates that the interplay between an individual's enduring psychological features and their situational psychological states, influenced by prior experiences, determines the manifestation of behaviour. The research indicated that mental health, the need for social approval, future orientation, and self-control—regarded as stable psychological traits—exert indirect effects on behaviour via psychological states. Furthermore, the research culminated in the identification of three pivotal domains of knowledge: 1) The revelation of interpersonal interaction, exemplified by Interactionism Theory, which asserts that an individual's behaviour is influenced not only by internal traits but also by social interactions and reciprocal influences. Instances encompass interpersonal connection via social media, familial upbringing, role modelling by individuals on social media, and the pursuit of social approval. Socially constructed behaviour is influenced by characteristics identified in the research, including the need for social acceptability and the emulation of individuals on social media. These factors represent behaviours that stem from both internal personal goals and external social contacts, as well as collective social agreements in which individuals engage. This encompasses communication and the development of collective understanding within communities, which then influences individual behavioural expression. The model created by the researchers elucidates and offers insights into the emergence of online communication behaviour on social media among high school students in Thailand, stemming from the interplay of psychological features, situational factors, and psychological

states. This comprehension facilitates the implementation of study outcomes to enhance successful tactics for encouraging safe and constructive online media usage among students.

6. IMPLICATIONS OF THE STUDY

The results of this research can inform the development of communication policies for students in the digital age or facilitate the establishment of programs that encourage safe digital communication practices. Additionally, it can facilitate the creation of initiatives designed to augment the educational advantages of social media communication for students. These programs should concentrate on significantly impactful characteristics revealed in the study, including mental health, emulation of individuals on social media, and attitudes towards online communication behaviour. Additional variables must also be considered. Peer and senior student support, although not statistically significant in this study, has been documented as influential in previous literature. This indicates the necessity for additional comprehensive inquiry. Nonetheless, the researcher advocates for the creation of programs to enhance peer and senior assistance. In educational settings, this may encompass collaborative learning activities, social support seminars, or teamwork development initiatives. It may also encompass self-development activities led by senior students or the utilisation of technology to enhance participation, such as the establishment of reward systems or recognition mechanisms (Wattanavit & Sakdapat, 2024). These initiatives may assume diverse shapes contingent upon the program's objectives, although they must remain contemporary and congruent with the age of artificial intelligence. The formulation of educational programs for social media utilisation must incorporate school-centered instruction designed to foster advantageous and secure engagement with social media in the digital era. The emphasis should be on improving conscious communication abilities and fostering creative learning via online platforms. The program must integrate efforts to mitigate dangerous behaviours that could result in adverse outcomes, including cyberbullying and online frauds. The researchers have created a pertinent questionnaire on cyber safety, suitable for adaptation for student groups (Ngamcharoen, Sakdapat, & Bhanthumnavin, 2024). Cultivating role models and support mechanisms among families and educational institutions is a crucial strategy. This entails cooperation between families and educational institutions to observe students' conduct, focussing on directing and assisting them in developing positive communication behaviours on social media. This entails offering suitable guidance and fostering a conducive atmosphere for secure and responsible online engagement. Furthermore, advocating for positive psychology might provide advantageous outcomes. Assisting students in cultivating favourable attitudes towards social media can promote its use for educational and personal growth. Strategies may encompass cultivating healthy relationships, expressing gratitude and appreciation, facilitating growth and learning, endorsing positive activities, and establishing emotionally safe environments.

7. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This research is a comparative correlational study that elucidates the links between independent variables and the dependent variable. Nonetheless, it cannot unequivocally ascertain that the independent factors are the actual reasons. The dependent variable under examination requires additional investigation through experimental research that complies

with appropriate methodological standards. Furthermore, the sample group employed in this study was notably broad and diverse, which may have led to statistically significant findings that could cloud the clarity of certain parts of the data analysis. Nonetheless, due to the methodical nature of the sampling technique, the chosen sample effectively represented the desired target population. The researchers executed the study with meticulousness and adherence to protocol at every phase. Consequently, the researchers assert that the findings of this investigation are dependable and substantial regarding their confirmatory significance.

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