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A Causal Model of the Factors Affecting E-participatory Decision-Making among Thai Youth in the Public Policy Process

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Abstract

E-participatory decision-making among youths in the public policy process still lacks understanding, especially in relation to government agencies. As a result, young people are not able to make informed decisions, potentially leading to conflict and mistrust in the government sector. Therefore, this study aims to test a causal relationship model of the factors affecting the e-participation decisions of youths in the public policy process. Data were obtained through a survey of 846 youths aged 18–25 years in Bangkok, Thailand, analyzed using structural equation modeling. The Cronbach's alpha coefficient showed an overall scale reliability of .97. The results of SEM analysis confirmed that the model was consistent with the empirical data ($\chi^2 = 2.59$, $df = 23$, $p\text{-value} = .05$, RMSEA = .06, CFI = .98, SRMR = .02), and has the capacity to explain the level of e-participatory decision-making in youths ($R^2 = .69$). The perceived usefulness factor was found to be the strongest predictor ($\beta = .32$, $p < .001$), while belief orientation and the value of standard factors had no direct influence on decision-making. Furthermore, the perceived benefits of e-participation by youths were not affected by the expectation factor. These findings may contribute to a better understanding of the behavior of young people. The results can be applied as a guideline for government agencies to develop public policies that enhance the intention to improve and promote electronic channels for effective youth participation.

The changing situation in various dimensions around the world, including economic, social, innovative, technological, and emerging diseases, as well as the aftermath of successful developments in various fields, are key factors in the emergence of new challenges (United Nations Economic and Social Council, 2016). The issue of people's participation is fundamental to one of the key challenges government agencies face in solving problems and formulating public policies consistent with the bureaucratic system (OECD, 2020). The introduction of innovative technology could be used as an effective management tool to address these issues through public participation, which has transitioned from a traditional model to a new channel (Rawat & Morris, 2021). This would also be consistent with the development of the new public management paradigm (Hood, 1995). This is evident in the context of Thailand, which is used as a case study in this research, resulting in both policy and management changes within the country's bureaucracy. The Office of the Constitutional Court (2017), shows empirical evidence of the adoption of a new concept in government management. The aim of this concept is to improve the public administration system by focusing on serving the people through increased participation. The study also emphasized the importance of identifying more flexible methods of government administration to enhance efficiency and effectiveness. Hence, in the past, the promotion of participation in Thailand has focused on the development of an open government system in accordance with the digital government policy. This has involved the creation of channels for public participation through electronic means (Committee on Political Development, Mass

Communication, and Public Participation, 2020). The E-Participation Index (EPI) of the United Nations E-Government Survey has become a significant data source for tracking e-participation progress (United Nations, 2022). The latest index (United Nations, 2022) revealed a value for Thailand of 0.78, ranking it 18th out of 193 countries worldwide. This was a result of the Thai government's efforts to enhance electronic public participation, which involved improving the disclosure of information to the public without the need for them to request it (open by default). The government also aimed to provide various channels to improve the efficiency of public access to information, allowing them to express opinions, make suggestions, follow up on issues, and inspect different aspects of the government sector. For example, the citizen portal is an important channel for citizens to access their entitlements and government services. The law portal is a system where citizens can participate in the legislative process by expressing their views. It also promotes easier and quicker access to the provision of the people's laws. The government data exchange serves as a central information exchange, aiming to elevate it into an open and connected government (Digital Government Development Agency, 2022).

With the rapid advancement of technology, there has been a significant increase in the ability of people to express their opinions and connect with others through various channels. This is particularly true for young people, specifically those between the ages of 18 and 25 (The Secretariat of the Cabinet, 2017). These groups have been categorized as late Generation Y and early Generation Z, who were born into a world with abundant amenities in their daily lives, and they have learned to navigate and thrive in a digital society where online communication and various entertainment channels are prevalent. As a result, individuals are now more informed and frequently seek information to compare and address potential issues. Electronic participation (e-participation) has also emerged as a significant factor in shaping public policy and enhancing administrative processes (Kanchanachitra, 2016). As a consequence, this could, in theory, be a positive development for increasing youth participation. However, expressing opinions has many limitations when it comes to legislation, regulations, and channels of communication. Making decisions without sufficient information can hinder the process. Additionally, when it comes to online channels, there is still a lack of credibility and trust due to issues such as fake news, electronic identity verification, and obtaining consent to disclose information online. Consequently, youth groups could find themselves being more susceptible to manipulation or domination due to their tendency to think as a collective, which makes them more vulnerable compared to adults (Puttasri, 2020). In addition, the tools used for the e-participation of government agencies could still be inadequate for meeting the standards and needs of youths. Since government agencies still lack sufficient understanding of youths' decision-making behavior in e-participation, there is a need to identify the factors influencing the decisions made by youths, other members of society, and various sectors, including the behavior of technology usage.

Therefore, this study was undertaken in Bangkok, an area with numerous and diverse educational institutions, with many public spaces utilized as activity centers for political expression and participation in public policies by young people. Moreover, Bangkok has the highest number of mobile phone users (96.3%) (National Statistical Office, 2021). According to the United Nations Local Online Service Index (LOSI), Bangkok is the only local area in Thailand ranked 57 out of the 147 cities studied, with a score of .61 (high LOSI countries) (United Nations, 2022). These facts reflect Bangkok's spatial readiness in promoting e-participation. Accordingly, it is evident that Thai government agencies are actively promoting electronic participation among all segments of the population. This initiative aims to ensure that people can access information, express their opinions, and participate in making public policy decisions. Nevertheless, there are still many challenges and knowledge gaps, meaning that Thai youths tend to prefer using social media public spaces over electronic participation channels provided by government agencies. This creates information gaps and an ideological disconnection between government agencies and the youths. For example, if youth groups announce their intention to use an online social platform to communicate and express political opinions, the Thai government regulator may suspend the application. Similarly, if an online social page contains content that poses a threat to state security, an order may be issued to suspend it (Sinponsaporn, 2020). Thus, the aim of this study is to create new knowledge by analyzing the factors influencing the decision-making

behavior of young people when using electronic channels. It also aims to empirically project the public administration paradigm of new government management and new public governance in a concrete manner in order to confirm and extend the validity of the concept. Furthermore, this could be further developed theoretically in a sustainable manner in the future.

Literature Review

This section describes the relevant literature, theories, concepts, and previous studies to support the assumption that the relationship between the factors and causal pathways influence the e-participation of youth in Bangkok, Thailand in the public policy process, with the decision theory by Reeder (1971) applied to the technology adoption model-3 (TAM 3). This study describes the causal factors predicting human decision-making behavior in individual and collective participation. An individual's decision-making depends on personal factors, as well as exogenous impulses that influence their decision to participate in activities. Additionally, the factors determining the perceived usefulness and ease of use expand the definition of decisions relating to the adoption and use of electronic systems for youth participation in the public policy process. Such factors would also include those indirectly contributing to individual decision-making according to the situation and conditions. The dependent variable for this study is the decision level of youths toward e-participation in the public policy process (DECISION) under the international association for public participation (IAP2) (2018). This is consistent with the theoretical concept of the public policy process covering decision-making behavior, involving five levels: information provision (to inform), consultation (to consult), assuming a role (to involve), cooperation (to collaborate), and empowerment of the people (empower), respectively.

The Decision Theory by Reeder

Reeder (1971) discusses the theory of decision-making, which suggests that a person's behavior or actions are influenced by their beliefs. Reeder (1974) specifically defined participation as the act of engaging in both individual and group activities influenced by three major factors that impact a person's decision-making.

Influence of the Pull Factors on Decision-Making Behavior

The pull factors, namely goals, belief orientations, value standards, and habits and customs, are the reasons or intentions that drive people to take action to achieve the desired results. In other words, the pull factors directly influence personal decision-making. In this study, this concept is used to provide the foundation for assuming the pull factors that directly influence the e-participatory decision-making of youths in the public policy process.

Goals or objectives (GOA) are anticipated to impact young people's decisions to participate electronically in the public policy process. This is congruent with the decision theory by Reeder (1971) and the theory of social action by Weber (1987), which indicate that people would consider the goals according to Weber as the first characteristic of adequate actions. In addition, goal attainment relates to the theory of functionalism by Parson (1961) and the theory of reasoned action (TRA) by Ajzen and Fishbein (1980) (goal-directed); namely, if the individual believes something needs to be done, they will act under that belief. Moreover, Chainan (2012) found that political goals, or the perceived capacity for political change and the ability of political systems to respond to their objective participation, were statistically significant direct influences on political participation and citizenship in the online context of 18–30-year-olds living in Thailand. This finding was consistent with Oumnoi et al. (2016), who showed that the factors had a positive and statistically significant correlation level of .01 with the participation behavior in voluntary activities of high school students in Pathum Thani Province, Thailand. The factor of self-efficacy, in other words, the intentions and goals that students set, were expressed through cognitive behavior and judgments about their ability to shape volunteer behavior toward others and society.

Belief orientation (BEL) is a factor anticipated to impact young people's decisions to participate electronically in the public policy process. This is congruent with the decision theory by Reeder (1971) and consistent with study conducted by Kaewmorakot (2017), which defined the characteristics of political participation desired by adolescents, one being elections, since youths believe them to be a crucial aspect of democracy.

Value standards (VAL) are anticipated to impact young people's decisions to participate electronically in the public policy process. This is congruent with the decision theory by Reeder (1971) and the theory of social action by Weber (1987) as the second characteristic of value-related actions. In addition, the research by Common (2013) demonstrated how the way new media conveyed values played a negative role in relation to one specific reason, as exemplified in the recent political unrest in Thailand. Moreover, the study by Kaewmorakot (2017) demonstrated how values that encouraged young people to value their rights had a significant impact in terms of the political participation attitude of youths in Thepha District of Songkhla Province.

Habits and customs (HAB) are anticipated to impact young people's decisions to participate electronically in the public policy process. This is congruent with the decision theory by Reeder (1971) and the theory of social action by Weber (1987) as the third characteristic of customary behavior. In addition, HAB relate to the theory of functionalism by Parson (1961) in terms of pattern maintenance and the TRA by Ajzen and Fishbein (1980). This affects the factor of conformance with the reference group (subjective norm) influenced by tradition and the attitude toward behavior (attitude) resulting from the habits exhibited through behavior. Likewise, Khantikul (2010) found that the correlation coefficient between political participation and psychological factors in terms of political interest, political behavior, and political refinement of a sample group in the Dusit area of Bangkok was in the same direction as that revealed by Rathachatranon and Lampai (2020). These authors pointed out that the root cause of young people's political participation was largely motivated by political interest, a feeling that democracy was the government of the people, by the people, for the people, and that such sovereignty enabled young people to become involved in politics by joining in political or public discussions, including expressing their political opinions via social media and influencing direct decisions.

In this study, GOA, BEL, VAL, and HAB were grouped as the pull factors. Previous studies have demonstrated that other similar factors and traits play a significant role in influencing various human decision-making behavior (Chainan, 2012; Common, 2013; Kaewmorakot, 2017; Khantikul, 2010; Oumnoi et al., 2016; Rathachatranon & Lampai, 2020). Therefore, based on this evidence, the following hypothesis was proposed.

H1: The pull factors, namely goals, belief orientation, value standards, and habits and customs, directly influence the e-participation decisions of youths in the public policy process.

Influence of the Push factors on Decision-Making Behavior

The push factors, namely expectation, commitment, and forces, directly influence personal decision-making and provide a motivator for making decisions more quickly. This concept is used here to provide the foundation for assuming that push factors directly influence the e-participation decision-making of youths in the public policy process.

Expectation (EXP) is anticipated to impact young people's decisions to participate electronically in the public policy process. This is congruent with the decision theory by Reeder (1971) and consistent with the TRA by Ajzen and Fishbein (1980) in terms of the factors affecting an individual's decision-making and behavioral expression, which is consistent with the reference group (subjective norm). In other words, decision-making and behavioral expression are affected by a person's perception of the demands or

expectations of society. Moreover, Kaewmorakot (2017) revealed the impact of socialization on youths in terms of conforming characteristics and expectations of their social partners' behavior. This was consistent with the study results revealed by Mathayyanan (2018), who showed the factors affecting the behavioral patterns of high school students at Samsenwittayalai School, Bangkok, toward their political participation in the Thai government. This was because the refinement and political expectations of the family affected the behavioral patterns of 26% of students toward their political participation in the Thai government, which was statistically significant at the level of .01.

Commitment (COM) is anticipated to impact young people's decisions to participate electronically in the public policy process. This is congruent with the decision theory by Reeder (1971) and consistent with the concept of the theory of functionalism by Parsons (1961) in terms of adaptation. The system could be adapted to fit the environment or vice-versa in response to the demands, responsibilities, or promises affecting how people behave. Furthermore, the TRA of Ajzen and Fishbein (1980) in relation to adaptability in terms of the reference group (subjective norm) would be a person's perception of the needs or expectations of society and its effect on the person's decision-making and behavioral expression.

Forces (FOR) would be anticipated to impact young people's decisions to participate electronically in public policy processes. This is congruent with the decision theory by Reeder (1971) and consistent with the theory of functionalism by Parsons (1961) in the integration (the function of integration), namely that the supervision may be caused by any other controlling, regulating, or ethical system. In addition, the study by Htet (2022) used the theory of planned behavior (TPB) to create a conceptual framework for research on social media using variables about the social, political, and legal results of regression analysis to examine its effects, social, political, and legal factors on the community participation of youth affairs committee members in Mon State, Myanmar. Social, political, and legal factors were revealed to have a positive effect on the community participation of those committee members, thus reinforcing that social and political regulations influenced decision-making, and if they fostered participation, young people would become more involved in politics, policies, and government management.

In this study, EXP, COM, and FOR are grouped as the push factors. Previous studies demonstrate that other similar factors and traits play a significant role in influencing various human decision-making behavior (Htet, 2022; Kaewmorakot, 2017; Mathayyanan, 2018). Therefore, based on this evidence, the following hypothesis was proposed.

H2: The push factors, namely expectation, commitment, and forces, directly influence the e-participation decision-making of youths in the public policy process.

Influence of the Support Factors on the Decision-Making Behavior

The support factors, namely opportunity, ability, and support, are additional elements that do not directly affect a person's choice. Instead, they assist in decision-making under the right circumstances. In other words, the support factors directly influence the pull and push factors and indirectly influence personal decision-making. This concept is used to provide the foundation for assuming the support factors indirectly influencing the e-participation decision-making of youths in the public policy process through the pull and push factors.

Opportunity (OPP) directly influences the pull and push factors while indirectly influencing personal decision-making. According to Kaseya and Kihonge (2016), the educational opportunities of sample citizens in Nairobi County, Kenya, played a statistically significant role in the effectiveness of public participation in local governance when having access to channels enabling them to obtain information about their right to participate in local affairs. They tended to become more involved and

demanded more rights. Therefore, local governments should offer incentives to the public to encourage their participation, using a variety of methods such as establishing a forum, allocating more funds to provide opportunities for civic education, and creating policies to guide citizen participation.

Ability (ABI) directly influences the pull and push factors while indirectly influencing personal decision-making. Juma et al. (2020) collected data from 181 youth respondents in Zanzibar, using descriptive statistics to analyze the data. The coefficients showed the extent to which young people could participate in economic development depending on their level of education, potentially helping them to make more informed decisions. Consequently, they would have more opportunities to be involved in the government's decision-making process.

Support (SUP) directly influences the pull and push factors while indirectly influencing personal decision-making. A study conducted on the factors affecting youth political participation in Ethiopia by Sabu (2020) examined the impact of promoting democratization. The findings demonstrated the significance of the causal factors affecting the interest of youths toward political participation and the lack of importance they attach to it due to the lack of motivation and support from the relevant authorities. This indicates that the support factor plays an important role in determining the participation behavior of youths, both positively and negatively. If such support is insufficient to meet the needs of young people, it will adversely affect their decision-making behavior toward taking some action.

In this study, OOP, ABI, and SUP are classed as the support factors. Previous studies demonstrate that other similar factors and traits play a significant role in influencing various human decision-making behavior (Juma et al., 2020; Kaseya & Kihonge, 2016; Sabu, 2020). Therefore, based on this evidence, the following hypothesis was proposed.

H3: The support factors, namely opportunity, ability, and support, directly influence the pull and push factors. Moreover, they indirectly influence the e-participation decision of youths in the public policy process through the pull and push factors.

The Technology Adoption Model 3 (TAM 3)

Ajzen and Fishbein (1980) developed the *Technology Acceptance Model (TAM)* as an extension of their *Theory of Reasoned Action (TRA)* (Davis, 1989; Payakpong, 2017). The TAM explains that two main factors, namely perceived usefulness and perceived ease of use, influence a person's acceptance of technology. An individual's attitude towards using technology can influence their intention to use that technology. Furthermore, there is a correlation between computer acceptance behavior, attitude toward computer usage, and actual computer use. The TAM 3 was later developed by incorporating factors influencing an individual's perception of technology usability divided into two groups. The primary factor group (anchors) included computer self-efficacy, perception of external control, computer anxiety, and computer playfulness. The second factor group consisted of perceived enjoyment and objective usability adjustments (Raeisi & Lingjie, 2016; Venkatesh & Bala, 2008).

Influence of the Adjustment Factor on Decision-Making Behavior

Adjustment (ADJ) relates to and has a direct effect on the perceived ease of use and an indirect effect through the perceived ease of use on the e-participation decision of youths in the public policy process. Simultaneously, it has an indirect effect through the perceived ease of use on perceived usefulness before affecting the e-participation decision of youths in the public policy process based on the concept of the TAM 3. Therefore, based on this evidence, the following hypothesis was proposed as follows.

H4: The adjustment factor indirectly affects the perceived ease of use on perceived usefulness before having an effect on the e-participation decision of youths in the public policy process.

Influence of Perceived Ease on Decision-Making Behavior

The perceived ease of use (EAS) is anticipated to impact young people's decisions toward e-participation in the public policy process. The EAS factor is conceptualized from the TAM 3. Moreover, it is consistent with the decision theory by Reeder (1971) in terms of belief orientation, in that if someone believes something to be easy to use or effortless, their decision to participate would be influenced by their expectation of enjoyment and fun. The EAS factor is related to and has a direct effect on the perceived usefulness and an indirect effect through the perceived usefulness on the e-participation decision of youths in the public policy process based on the TAM 3 concept. According to the results of a study concerning the influence of programs in new media on the worldview of children and youths by Raksakaew and Dounghummes (2017), communication through various media channels should involve methods that match the interests of children and young people, such as the use of easy-to-understand language, cartoons, various animation techniques, etc. In this way, Thai children and young people would have the skills to use media correctly and appropriately. Previous studies demonstrate that other similar factors and traits play a significant role in influencing various human decision-making behavior. Therefore, based on this evidence, the following hypothesis was proposed.

H5: The perceived ease of use directly influences the e-participation decision of youths in the public policy process, as well as having an indirect effect through perceived usefulness on the e-participation decision-making of youths in the public policy process.

Influence of Perceived Usefulness on Decision-Making Behavior

Perceived usefulness (USE) is anticipated to impact young people's decisions toward their e-participation in the public policy process, conceptualized from the TAM 3. This is consistent with the decision theory by Reeder (1971) in terms of belief orientation, which involves people's attitudes toward objects, such as thoughts, perceptions, or interpretations. It is also consistent with the results of a study by Sangaram (2009) in terms of the perception of political information through the Internet; for example, useful political information websites via e-mail and forums, which show a relationship with the political participation of university students in Thailand. Likewise, the study by Chainan (2012) reveals that the perception of attitude toward the potential of Internet media to promote communication and political participation is a factor directly influencing political participation and citizenship in the online context of youths aged 18–30 years living in Thailand. Previous studies demonstrate that other similar factors and traits play a significant role in influencing various human decision-making behavior. Therefore, based on this evidence, the following hypothesis was proposed.

H6: Perceived usefulness directly influences the e-participation decision-making of youths in the public policy process.

Relationship between the Decision Theory of Reeder and the TAM 3

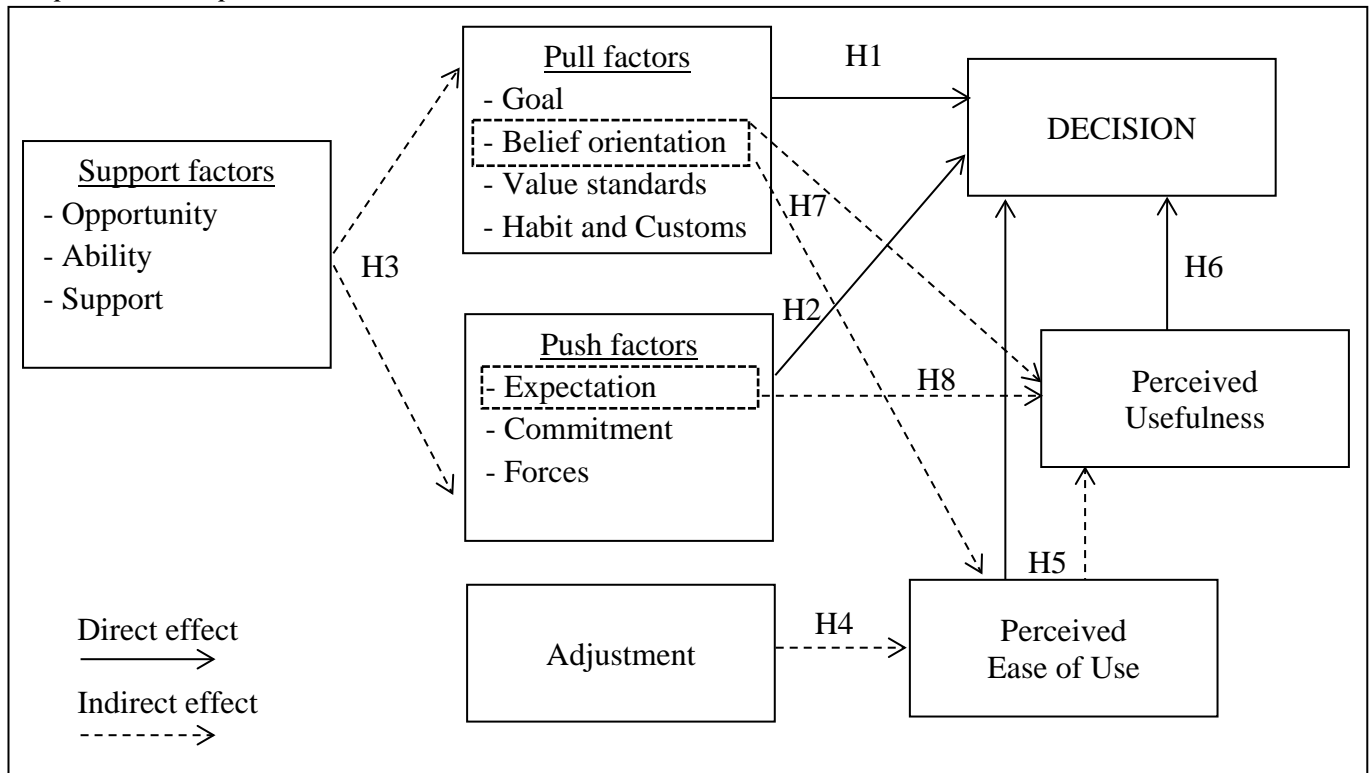
The theoretical background of the TAM is based on the decision theory by Reeder (1971) and could also be extended to include the adoption and use of electronic systems to encourage young people's participation in the public policy process. Therefore, a hypothesis model depicting the structure of causal pathways influencing young people's e-participation decisions in the public policy process assumes it to be consistent with the empirical evidence. The following hypotheses were therefore proposed.

H7: The pull factors, such as belief orientation, indirectly influence the e-participation decision-making of youths in the public policy process through perceived usefulness and perceived ease of use.

H8: The push factors, such as expectation, indirectly influence the e-participation decision-making of youths in the public policy process through perceived usefulness.

Accordingly, this study aims to test a conceptual model rooted in the decision theory by Reeder (1971) and the TAM 3 to explore the influencing factors affecting the level of e-participatory decision-making of youths (Figure 1).

Figure 1
Proposed Conceptual Framework



Note. DECISION = the level of the electronic participatory decision of youth in the public policy process

Method

Participants

The research population consists of young individuals aged 18-25 years residing in Bangkok, Thailand. With the city's multitude of educational institutions, diverse political activities, and a high level of digital infrastructure, there is a readiness for public participation. This study utilized a sample size that accurately represented the youth population in Bangkok, selected using a multi-stage sampling method, ensuring that each of the 50 districts in Bangkok and various age groups are proportionately represented. The researcher prepared a letter requesting permission to publicize the online questionnaire and collect data from relevant government and private sector agencies. Additionally, the researcher conducted fieldwork to collect data in eight specific areas: Chulalongkorn University, Thammasat University (Tha Prachan campus), Kasetsart University, Srinakharinwirot University (Prasarnmit), Ramkhamhaeng University, King Mongkut's Institute of Technology Ladkrabang, a shopping center in the Bang Khun Thian District, and the Huai Khwang District. The data were collected over a period of eight weeks (between January 9 and March 3, 2023) according to the specified sample size. A total of 846 questionnaires were collected. This number is well-suited for analysis according to the research principles of confirmatory factor analysis, which states that a sample size of no less than 300 is considered adequate for composition analysis (Comrey & Lee, 1992).

Instruments

An online questionnaire was used in this study for data collection, with the hypotheses analyzed using structural equation modeling in path analysis. The study was conducted to develop a measurement of the causal factors and the level of youths' e-participation decision-making, divided into four phases.

Phase 1: Item Generation

In this stage, the causal factors and level of youths' e-participation decision-making were identified through a literature review of related articles and research papers, interviews with three public sector

experts in the field of digital government systems, and representatives from two youth organizations. The interviews aimed to determine whether the causal factors identified in the literature review, namely the group of pull factors, push factors, support factors, and TAM 3 factors, were related to the level of youths' e-participation decision-making. Additionally, the interviews aimed to determine the existence of any other significant factors influencing decision-making. Therefore, the initial item pool was generated based on the literature review and interviews. Item generation was based on the content and thematic analysis of the transcribed interviews, forming the foundation for developing the initial item pool. A list of 87 items was generated.

Phase 2: Item Review

The second stage involved a questionnaire consisting of three sections: a personality measure for youths to obtain basic variables (3 items), a measurement for the causal factors (78 items), and a measurement of the level of youths' e-participation decision-making (6 items). To establish content validity, the items were reviewed by five experts from academia at three universities in Bangkok, Thailand, as well as executives from two public sectors. The initial pool of items was reviewed by experts based on the following criteria. Firstly, the experts rated each behavior according to the definition of the causal factors and level of youths' e-participation decision-making. Secondly, the experts assessed each behavior in terms of consciousness and comprehensibility. Lastly, the experts rated each item based on its relevance to a wide range of youth behaviors. The index of item objective congruence (IOC) results demonstrated validity values ranging from .60 to 1.00, indicating that every question was considered valid and could be utilized (Rovinelli & Hambleton, 1977).

Phase 3: Pre-testing

In this stage, the revised questionnaire, developed based on expert opinions, was tested on a sample group of 42 individuals residing in the surrounding provinces of Bangkok, Thailand, namely Nakhon Pathom, Nonthaburi, Pathum Thani, Samut Prakan, and Samut Sakhon. The results were interpreted based on the weighting of the scores using a five-level rating scale, with responses ranging from "strongly agree" to "strongly disagree." Most of the instruments were self-reported. All instruments had a Cronbach's alpha coefficient greater than .70, and the overall version of the research questionnaire had a reliability value of .97, considered excellent, according to Nunnally (1978).

Phase 4: Confirmatory Factor Analysis

This study analyzed Pearson's correlation coefficients and found concordance by constructing a cross-tabulation table with the purpose of carrying out a component analysis of the factors and patterns of the causal pathways influencing the decisions made by youth groups toward e-participation in the public policy process. The analysis was based on the correlation coefficients of the variables, with all components and overall factors revealed to be less than .85, thus indicating no linearity or multicollinearity issues (Kline, 2010). Therefore, this shows that the data is suitable for this analysis.

Additionally, the researcher analyzed the confirmatory factor analysis (CFA) of the 13 factors influencing the decisions of youths to participate, as well as an overview of these factors. This analysis included an examination of the level of the youths' e-participation in the public policy process (DECISION). The results of Cronbach's alpha indicate that the overall questionnaire had a reliability of .97. After adjusting the model, all the following statistical values met the specified criteria. (1) the chi-square: the p-value should be nonsignificant ($p > .05$). (2) the root mean square error of approximation (RMSEA) value should be less than .07. (3), the comparative fit index (CFI) value should be greater than or equal to .92. and (4) The standardized root mean square residual (SRMR) value should be less than .08 (Diamantopoulos & Siguaw, 2000). The results of confirmatory factor analysis are detailed in Table 1.

Table 1
Results of Confirmatory Factor Analysis

Measurement	CFA					
	χ^2	<i>df</i>	<i>p</i> -value (<i>p</i> > .05)	RMSEA (< .07)	CFI (≥ .92)	SRMR (< .08)
Overview of the factors	48.69	37	.09	.02	.99	.01
Goal (GOA)	11.81	6	.07	.03	.99	.01
Belief orientation (BEL)	4.54	4	.34	.01	1.00	.01
Value standards (VAL)	7.46	6	.28	.02	.99	.01
Habits and Customs (HAB)	8.99	5	.11	.03	.99	.01
Expectation (EXP)	7.95	5	.16	.03	.99	.01
Commitment (COM)	9.29	5	.10	.03	.99	.01
Forces (FOR)	6.27	4	.18	.03	.99	.01
Opportunity (OPP)	5.06	5	.41	.00	1.00	.01
Ability (ABI)	7.38	4	.12	.03	.99	.01
Support (SUP)	7.21	5	.21	.02	.99	.01
Adjustment (ADJ)	10.89	5	.06	.04	.99	.01
Perceived Ease of Use (EAS)	7.06	4	.13	.03	.99	.01
Perceived Usefulness (USE)	3.21	3	.36	.01	1.00	.01
The level of the electronic participatory decision of youth in the public policy process (DECISION)	14.74	8	.06	.03	.99	.01

Ethical Considerations

The research was approved and ethically certified by the committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University, Thailand. Certificate of approval No.2022/187.2312, dated December 23, 2022.

Results

Descriptive Statistics

From a total of 846 participants, the analysis results showed that most of the youths in the sample group were female, equated to 55.56% ($n = 470$), followed by males and individuals who did not want to specify their gender, equating to 41.02% ($n = 347$) and 3.42% ($n = 29$), respectively. Individuals who were studying for a bachelor's degree or lower educational qualification equated to 56.15% ($n = 475$), followed by youths who possessed a bachelor's degree equating to 29.55% ($n = 250$), with individuals who were studying or had a postgraduate degree equating to 14.30% ($n = 121$), respectively. The results were interpreted according to the weighting of the scores on a five-level rating scale of 13 observable variables from a total of 78 questions. All factors were found to have an overall high-level average score. The average score ranged from 3.21 (moderate level) to 4.30 (high level). Moreover, the primary variable or factor influencing the decisions of youths to participate electronically in the public policy process was the support factor ($M = 4.08$, $SD = .57$), followed by the objective or goal factor ($M = 4.05$, $SD = .56$), the perceived usefulness factor ($M = 4.02$, $SD = .59$), and finally, the expectation factor ($M = 3.57$, $SD = .71$). Regarding the e-participation decisions of youths in the public policy process, the overall average was at a high level or cooperation level (to Collaborate) ($M = 3.67$, $SD = .76$). When considering each issue, the youths were found to have a high level of participation in electronic decision-making in the public policy process at the first level, or the level of cooperation for the alternative analysis (policy decision) ($M = 3.79$, $SD = .92$). Details of the statistics are presented in Table 2.

Table 2

Analysis Results for the Overall Average of the Mean, Standard Deviations, and Level of the Observed Variables

Observed Variables	<i>M</i>	<i>SD</i>	Interpretation
Goal (GOA)	4.05	.56	High level
Belief orientation (BEL)	3.72	.61	High level
Value standards (VAL)	3.65	.68	High level
Habits and Customs (HAB)	3.77	.59	High level
Expectation (EXP)	3.57	.71	High level
Commitment (COM)	3.58	.71	High level
Forces (FOR)	3.67	.64	High level
Opportunity (OPP)	3.88	.59	High level
Ability (ABI)	3.85	.59	High level
Support (SUP)	4.08	.57	High level
Adjustment (ADJ)	3.96	.57	High level
Perceived Ease of Use (EAS)	3.95	.58	High level
Perceived Usefulness (USE)	4.02	.59	High level
The level of the electronic participatory decision of youth in the public policy process (DECISION)	3.67	.76	High level

Testing the Hypotheses

The data on the correlation patterns of the variables affecting the components were analyzed using the structural equation modeling approach (SEM = to estimate the path coefficient and examine the direct and indirect influence of the variables on the dependent variable). The correlation between the developed model and the empirical data was considered using the model concordance index, each line parameter, and assessing the reasonableness of the magnitude and direction of each parameter's value along the correlation path. The findings revealed that the causal path model influencing the decision-making of youths in Bangkok had path coefficients for the direct, indirect, and total effects. These theories were in harmony with the empirical data since the model based on the research hypotheses had statistical values which met the specified criteria. The chi-square p-value was .06, the relative chi-square ratio 2.59, the RMSEA .06, SRMR .02, the goodness of fit index .98, the adjusted goodness of fit index .96, and the CFI .99. Therefore, it can be concluded from the results that the causal relationship model is linked to the e-participation decision-making of youths in the public policy process. Details of the results of the hypothesis model are presented in Table 3.

Table 3

Results of the Research Hypothesis Model on the Examination of the Causal Relationship Path

Hypothesis	Path	Estimated parameter Value			Result
		Factor Loading	S.E.	<i>t</i> -test	
H1	GOA → DECISION	.15	.05	3.45***	Accepted
	BEL → DECISION	.05	.05	1.00	Rejected
	VAL → DECISION	-.00	.05	-0.03	Rejected
	HAB → DECISION	.09	.05	1.76*	Accepted
H2	EXP → DECISION	.09	.05	1.90*	Accepted
	COM → DECISION	.09	.05	1.98**	Accepted
	FOR → DECISION	.10	.05	2.13**	Accepted

Table 3 (Continued)

Hypothesis	Path	Estimated parameter Value			Result
		Factor Loading	S.E.	t-test	
H3	OOP → GOA	.29	.03	8.40***	Accepted
	OOP → BEL	.24	.03	9.06***	Accepted
	OOP → VAL	.20	.04	5.10***	Accepted
	OOP → HAB	.30	.03	8.98***	Accepted
	OOP → EXP	.16	.04	3.78***	Accepted
	OOP → COM	.20	.04	4.81***	Accepted
	OOP → FOR	.17	.04	4.48***	Accepted
	ABI → GOA	.16	.04	4.51***	Accepted
	ABI → BEL	.27	.03	9.98***	Accepted
	ABI → VAL	.22	.04	5.19***	Accepted
	ABI → HAB	.25	.03	7.22***	Accepted
	ABI → EXP	.35	.04	7.97***	Accepted
	ABI → COM	.37	.04	8.85***	Accepted
	ABI → FOR	.29	.04	7.45***	Accepted
	SUP → GOA	.11	.04	2.91***	Accepted
	SUP → BEL	.14	.03	5.15***	Accepted
	SUP → VAL	.16	.04	3.74***	Accepted
	SUP → HAB	.14	.04	3.93***	Accepted
	SUP → EXP	.13	.05	2.89***	Accepted
	SUP → COM	.15	.04	3.46***	Accepted
	SUP → FOR	.15	.04	3.64***	Accepted
H4	ADJ → EAS	.23	.03	7.42***	Accepted
H5	EAS → DECISION	.10	.05	2.07**	Accepted
	EAS → USE	.54	.05	11.05***	Accepted
H6	USE → DECISION	.32	.05	6.89***	Accepted
H7	BEL → USE	.34	.06	5.54***	Accepted
	BEL → EAS	.84	.07	12.78***	Accepted
H8	EXP → USE	.04	.08	0.60	Rejected

Note. * $p < .01$. ** $p < .05$. *** $p < .001$., GOA = goal, BEL = belief orientation, HAB = habit and customs, EXP = expectation, COM = commitment, FOR = forces, OOP = opportunity, ABI = ability, SUP = support, ADJ = adjustment, EAS = perceived ease of use, USE = perceived usefulness, DECISION = level of the electronic participation decision-making of youths in the public policy process.

As can be observed from Table 4, the path coefficient of the direct, indirect, and total effects of the causal relationship model influenced the e-participation of youths in the public policy process. According to the case study on youth in Bangkok, Thailand, the factor with the highest total influence on their decision-making was perceived usefulness (USE). This factor directly influenced the decision-making of youths to participate, with a total value of .32 ($\beta = .32$, $p < .001$), followed by perceived ease of use (EAS), which also had a direct influence, with a total influence of .27. The ability factor (ABI) had an indirect influence path through the goal, belief orientation, habits and customs, expectation, and commitment factors, with a total influence of .17. Nevertheless, the adjustment factor (ADJ) had the lowest total influence through the indirect influence of perceived ease of use being .02. However, in terms of other relationship paths, the following factors, namely goal (GOA), opportunities (OPP), belief orientation (BEL), forces (FOR), habits and customs (HAB), commitment (COM), expectation (EXP), and support (SUP), the total influence equated to .15, .15, .15, .10, .09, .09, .09, and .09, respectively.

Table 4
Analysis of the Direct, Indirect, and Total Effects

Factors	Direct Effect	Indirect Effect									Total Effect
		GOA	BEL	HAB	EXP	COM	FOR	EAS	USE	Total	
GOA	.15	-	-	-	-	-	-	-	-	-	.15
BEL	-	-	-	-	-	-	-	.04	.11	.15	.15
HAB	.09	-	-	-	-	-	-	-	-	-	.09
EXP	.09	-	-	-	-	-	-	-	-	-	.09
COM	.09	-	-	-	-	-	-	-	-	-	.09
FOR	.10	-	-	-	-	-	-	-	-	-	.10
OOP	-	.05	.03	.03	.01	.02	.02	-	-	.15	.15
ABI	-	.03	.04	.02	.03	.03	.03	-	-	.17	.17
SUP	-	.02	.02	.01	.01	.01	.01	-	-	.09	.09
ADJ	-	-	-	-	-	-	-	.02	-	.02	.02
EAS	.10	-	-	-	-	-	-	-	.17	.17	.27
USE	.32	-	-	-	-	-	-	-	-	-	.32

Note. GOA = goal, BEL = belief orientation, HAB = habit and customs, EXP = expectation, COM = commitment, FOR = forces, OOP = opportunity, ABI = ability, SUP = support, ADJ = adjustment, EAS = perceived ease of use, USE = perceived usefulness

Discussion and Conclusion

Discussion of the Main Results

The purpose of this study was to analyze a causal model of factors affecting the decision-making of youths toward their e-participation in the public policy process. The results confirmed that the hypothesized model of causal factors fitted with the empirical data. The eight research hypotheses are discussed further.

The first finding supported hypothesis 1, which suggests that pull factors, namely goals, habits, and customs, influence the decision-making process of youth e-participation in Bangkok, Thailand. In other words, young people are more likely to engage with electronic government systems if they can assess them to achieve personal and collective goals (Knoll et al., 2020). Meanwhile, the youth in Bangkok were also found to have more habits and customs relating to the use of electronic systems than traditional offline activities. This preference for electronic participation influences their decision to increase engagement on digital platforms. In other words, each individual's personal characteristics and traditions will influence their interest in participating in political activities and engaging with public policies as responsible citizens (Rathachatranon & Lampai, 2020). Young people's preference for electronic channels over traditional channels will naturally influence their engagement with electronic participation (Diehl et al., 2019).

However, in terms of the belief orientation factor, the first hypothesis is rejected, demonstrating that the level of youth e-participation is not directly influenced by beliefs. Therefore, it could be said that the empirical data were not consistent with the decision theory by Reeder (1971). Nevertheless, Reeder further clarified that this belief may not affect a person's actions because the decision to act was not based on any one reason but rather a group of reasons relating to a specific situation (Reeder, 1971). One key finding from the study reveals that youths still had a moderate level of awareness regarding the government agencies' efforts to utilize digital technology for public services. It is often challenging for governments to effectively communicate with young people to enhance their trust and awareness of government agencies' initiatives to promote opportunities through e-participation (United Nations, 2023).

Similarly, the value standard factor showed that although youths in the Bangkok area were often encouraged to utilize electronic services for information sharing, expressing opinions, and exercising their decision-making rights in various government agency activities, most retained a moderate belief that these activities represented electronic peer participation. Moreover, very little indoctrination or instruction exists on using the electronic services provided by government agencies. As a result, young people fail to realize the importance of e-participation, which is closely linked to the value standard that motivation is crucial for a meaningful life. In other words, for any aim in life to be worthwhile, it must have a high-value standard. On the other hand, if an objective is not worthwhile, it will have a low-value standard (Mohamud et al., 2018; Rush, 1992). In other words, the value standards in the youth context influencing such decision-making may not directly affect the e-participation decision-making of young people in the public policy process. This is because young people may have different perceptions of value standards but are still free to make their own decisions (UNICEF, 2021). Considering the influence of other variables and their relationships, this could result in insignificant value standards in statistical terms.

The findings support the second hypothesis in that the group of push factors significantly influenced the youths' decision to participate electronically. The expectations of society regarding youth influence on political socialization and public policy make young people more likely to make decisions that align with such expectations (Kaewmorakot, 2017; Mathayyanan, 2018). They are also often more sensitive to social influences based on the expectations and commitments, such as motivation and rewards, of the people around them (Ciranka & van den Bos, 2020). Furthermore, social, political, and legal factors also positively impact youth participation (Htet, 2022), including in public policy processes.

The third hypothesis is accepted, revealing that the support factors had an indirect positive effect on the youths' decision to participate electronically at a significant level through the group of pull and push factors. There has been an increase in educational opportunities, access to digital information, and electronic service systems of government agencies. This will ultimately result in more young people choosing to participate electronically through government platforms (Kaseya & Kihonge, 2016; Watson et al., 2023). The findings also suggest that empowering youths with adequate skills, technology, and financial support will have a positive impact on their e-participation (Dunne & Mahmood, 2022; Juma et al., 2020). On the other hand, insufficient support for youth e-participation will negatively influence their behavior and discourage them from participating in government activities (Sabu, 2020).

Hypotheses H4, H5, and H6, relating to the TAM 3 by Ajzen and Fishbein (1980), are supported. The findings show that if young people are satisfied with the government's electronic channels, they will perceive them to be easy to use, positively influencing their decision-making and willingness to participate in the public policy process. In other words, if young people are aware that government agencies' electronic platforms would enable them to participate in various government activities, such as accessing government information, expressing opinions, and making decisions to exercise their rights more conveniently than before, their engagement could be enhanced (Khamis, 2023; Raksakaew & Doungphummes, 2017). This is consistent with the findings of this study, which revealed a positive relationship between the perceived benefits of young people toward the use of electronic channels for public policy participation and the degree of overall effect. The decision to participate is of utmost importance. Youths will be more likely to engage electronically through digital government services if they perceive them as convenient and significantly beneficial to their individual and collective goals (Chainan, 2012; Omotayo & Folorunso, 2020; Zubir & Abdul Latip, 2023).

The seventh hypothesis is accepted, supporting the findings of this study that the belief orientation factor was directly related to and influenced perceived usefulness and perceived ease of use. It can be said that if young people believe that the electronic channels of government agencies can help them become more involved in government activities, they will realize that the system is effortless and its utilization advantageous to their participation in the public policies of interest (Peng & Xin Yan, 2022).

The eighth hypothesis is accepted, supporting the findings of this study, which contradict the established causal relationship path. In other words, the societal expectations placed on young people have no influence on how skilled they are perceived to be in using electronic systems. This is consistent with the findings of Mohamud and Samantar (2018), demonstrating that factors such as effort expectancy and social influence do not significantly impact individuals' intentions to use an e-participation system. This is because young people in Africa pay more attention to factors other than societal expectations placed on them. Furthermore, the findings of Khongthong and Potongsangarun (2020), who studied the behavioral intentions of technology use among samples of the baby boomer generation and Generation X, revealed that these groups incorporated technology into their daily lives. Factors such as effort expectancy and social influence were found to have no influence on the behavioral intention to use technology among the sample group.

Limitations

This research was primarily conducted among young people in Bangkok, Thailand. This limitation should be taken into consideration before applying research results to individuals or young people outside of Bangkok. The research analyzed empirical data based on the decision theory and combined it with TAM 3. Therefore, other variables may exist that influence the participation decisions of youths that have not been included in this study. Hence, future research could focus on identifying and examining variables that may be correlated with or influence the decision of youths toward electronic participation. This could involve exploring other theoretical concepts and searching for factors to include in an exploratory factor analysis (EFA) to gather information that aligns more closely with the current context.

Implications for Behavioral Science

This research has theoretical and practical implications as a projection of behavioral science given the interdisciplinary relationship between public administration and behavioral science to understand and validate the decision theory by Reeder (1971) and the TAM 3 in describing e-participation decision-making behavior in the public policy process of the sample group of youths in Bangkok, Thailand. In addition, the development of the e-participation decision-making scale as a tool in this research could be used as a framework for further development of applied behavioral theory in the future. Finally, the behavioral science findings of this research could also be used as a guideline for the development of public policy and government management to promote youth participation, thereby reducing the impact of the issues and phenomena in society and creating a mechanism for improving the relations between youths and government agencies under globalization through the understanding of behavioral science.

Conclusion

This research examined the level of e-participation decision in the public policy process using the decision theory by Reeder (1971) and the TAM 3. The findings show that raising awareness of the benefits of e-participation would be the most important factor in young people deciding to engage. Other factors that influence decision-making, such as personal goals and habits, external factors influenced by individuals and external stimuli, and indirect factors like ability, opportunity, and support, all play a role in driving adolescents' decision-making when it comes to electronic engagement. However, in the context of this study, beliefs, values, and expectations of external parties were not found to be statistically significant in determining decision-making behavior. Overall, the findings highlight the significance of the factors that affect e-participatory decision-making among Thai youth and can be utilized to design appropriate public policies.

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