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Model of Actors Network for Developing Youth to be Citizens in the 21st Century

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Abstract

This study utilised a quantitative methodology to examine the citizenship of 21st-century kids in the Northeastern area and to build an actor-network model for fostering youth citizenship in the 21st century. The sample was obtained through multistage sampling and categorised into two groups: 1) Upper Northeastern Region, comprising 12 provinces; 5 provinces were chosen. Lower Northeastern Region, comprising 8 provinces; 6 provinces were chosen. The sample size, calculated using Taro Yamane's formula, is 400 individuals. Multiple regression analysis (MRA) is a statistical method utilised for developing forecasting equations in data analysis. The survey findings indicate that the young exhibited a moderate degree of citizenship at 57.2 percent and a high level of citizenship at 39.6 percent in the 21st century. The model of the Actors Network for developing youth into 21stcentury citizens relies on social media literacy. Distillation from the social milieu and group affiliation. It is a model derived from the predictive equation of multiple regression analysis. The predictive equation is Y = 6.916 + 0.312 AUM + 0.260 ACS - 1.373 SG. Upon comparing the impact of variables through the standard multiple regression coefficient (Beta), it was determined that the primary factor influencing 21st-century citizenship is the knowledge and utilisation of social media (8) = 0.462), exhibiting statistical significance at the 0.01 level. Secondly, socialisation from the social environment ($\beta = 0.154$) exhibits statistical significance at the 0.05 level, while social group membership ($\beta = -0.088$) also demonstrates statistical significance at the 0.05 level. All independent variables were included in the analysis. The multiple correlation coefficient (R) indicates that the independent variables significantly account for the variation in 21st-century citizenship at the 0.01 level, explaining 47.2 percent of the variation ($R^2 = 0.472$).

Keywords: Youth, Citizen, 21st century, Actors Network, Level of Citizenship, Social Environment, Social Group Membership.

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Introduction

Background and Rationale

Thailand seeks to cultivate a populace equipped with 21st-century skills and citizenship, elevating its civic standards to align with worldwide benchmarks. The primary target demographic for development is the youth, who will mature into the nation's citizens, with the objective of becoming a valuable human resource for future generations. The five-year operational plan of the Department of Children and Youth Affairs for 2023 to 2027 aligns with the 20-year National Strategy for the ongoing development and enhancement of human resource potential. The objective of development is to enhance individuals across all dimensions and age groups, as outlined in the master plan of the Department of Children and Youth Affairs. This is further elaborated in the sub-plan aimed at equipping youth groups with comprehensive knowledge and skills pertinent to the 21st century, fostering critical thinking, analytical abilities, a passion for learning, civic awareness, ethical fortitude, problem-solving capabilities, adaptability, effective communication, and collaboration (Woods et al., 2022). The conceptual framework of the National Children and Youth Development Plan seeks to fortify social institutions, communities, secure and innovative media, and creative environments. It emphasises the significance of collaboration and the dissemination of participatory knowledge, the support of group formation for social advancement, and the enhancement of the influence and status of networks for children and youth (Yusuf et al., 2016).

In a contemporary post-industrial society, socialisation, particularly political socialisation, constitutes a type of socialisation. Traditional institutions have diminished in significance due to changes, supplanted by new entities and the growing political socialisation of agents such as the media, the Internet, and social networks, particularly the Internet, which is the most favoured and trusted platform among the younger generation (Toc & Alexandrescu, 2022). Consequently, traditional institutions failed to cultivate the requisite level of citizenship in the 21st century. In Thailand, new network forms have emerged that enable youth to articulate their citizenship more effectively than traditional networks. One such example is the Northeastern Activist Network, referred to as the "Dao Din" group, which initiated a movement addressing local issues in the Northeast, including the Potash mine controversy from 2020 to 2021, and successfully escalated their efforts to oppose the coup. Social media platforms utilised by the new generation for media beyond educational institutions, coupled with their adeptness in information retrieval, are rapidly evolving, transforming the new generation of Thai society into digital citizens.

Moreover, prior to the march, the digital realm has emerged as a significant platform for youth to articulate their political views and engage in power dynamics with the Thai government. Non-political social networks have emerged as a form of social capital that aids the younger generation in orchestrating political assemblies both digitally and in physical spaces. The network of artist fan clubs, comprising both Thai and international members, consists of a new generation affiliated with Baan Base, representing fans who share a passion for the same artist or band, and actively contributed to the movement of this new generation throughout 2020 to 2021. This network facilitated concert viewing to assist in their preparation for engaging in political demonstrations (Liu et al., 2021).

Currently, the network has fostered political awareness in the new generation, transitioning from responsible citizenship to self-actualized citizenship. This indicates that traditional social networks may not effectively

engage youth in citizenship in the 21st century; rather, contemporary networks or actor networks are crucial in facilitating youth expression of citizenship. This study focused on analysing the networks of actors involved in fostering citizenship in the 21st century, as well as evaluating the qualities and appropriate models of these networks that will facilitate the development of youth citizenship in this era.

Objective of the study

- 1. To investigate the level of citizenship in the 21st century of youth in the Northeastern region of Thailand
- 2. To develop a network model of actors in youth development for citizenship awareness in the 21st century

The Conceptual Framework Development

The research utilised the conceptual framework of Actor Network Theory (ANT) alongside 21st-century citizenship principles, coupled with pertinent studies as follows:

Actor Network Theory (ANT)

Originating in the 1980s, it was pioneered by science and technology studies and subsequently integrated into the social sciences by prominent theorists such as Bruno Latour, Michel Callon, and John Law. Subsequent to the 1990s, the idea commenced exerting a more significant influence on societal thought and research methodologies. The sociological science of knowledge has been profoundly influential in elucidating social order without resorting to essentialist notions of society. Instead, it emphasises the intricate web of connections among human and non-human entities, as articulated by actor-network theory. This network encompasses nature, technology, social norms, and other elements that facilitate interactions among individuals, including communication via devices, internet signals, and satellite connections (Usher & Denis, 2022). The advent of the Actor-Network Theory (ANT) as a theoretical framework for research has influenced the process of social science inquiry in two primary ways: a) The theory merges the disciplines of natural science with anthropology and sociology by examining them collectively, b) the concept creates analytical opportunities for non-human actors, positing that all entities are interrelated within a dynamic network, perpetually exchanging and evolving through interaction. In these networks, both human and non-human actors, including ideology, innovation, and the establishment of special economic zones at borders—such as cross-border bridges, telecommunications networks, and transportation systems—exert influence on other participants within the relational system that facilitates the exchange and creation of new knowledge. Furthermore, people within this relational framework not only serve as agents or creators of meaning but also as individuals affected by non-human entities, interpreting these influences into diverse actions. Consequently, Latour has introduced the term Actant to supplant the term Actor, which traditionally pertains solely to human agents, so offering a novel framework for social analysis within the social sciences and humanities (Edirisinghe et al., 2021).

Another significant aspect of actor-network theory, as posited by Bruno Latour, diverges from classical theories that seek to establish a rigid analytical framework with fixed criteria and details to elucidate phenomena by examining the interactions among actors within the social practice process. This theory does not conform to a rigid framework of definitions or theories requiring the network to possess a specific shape, role, or elements; instead, it adopts a fluid framework that examines real phenomena in the

field prior to seeking a set of explanations through the interaction system related to that issue (Thammawat & Chamaratana, 2022). According to Robert D. Putnam, the conceptual framework is characterised as a structure that highlights the phenomenon and the practical understanding prior to the decoding or interpretation of the meaning-making process occurring during interactions, focusing on the analysis of relational pairs within the phenomenon (Edirisinghe et al., 2021; Latour, 2005).

The primary premise of the Actor-Network Theory (ANT) has broadened the analysis of social phenomena, enabling researchers to transcend the constraints of viewing phenomena in isolation. This approach reconciles the dichotomy between structure and agency, which characterises the traditional social science framework that examines objects, structures, or phenomena independently, akin to dissecting phenomena from their broader social contexts. This idea may contradict the fundamental concepts of the School of Development Studies, which subscribes to System idea, positing that all entities are interconnected and interrelated as a cohesive collection of systems. In this regard, Actor-Network Theory (ANT) is regarded as congruent with the development sciences approach, as the network-actor concept does not seek to elucidate any object in isolation (Puritan), but rather posits the study hypothesis on the interconnectivity of all elements within the relational network, asserting that objects or actors can serve as catalysts or instigators of actions at various junctures within the relational network (Node).

Through the examination of actor-network theory, the researchers determined that it liberates the concept of actors from solely human entities by illustrating that scientific processes resemble networks, wherein not only humans but also objects, technologies, and regulations can function as actors. Thus, anything that can be modified or adapted for implementation within the system is regarded as possessing the status of an actor. Actor-network theory deconstructs the influence of key characters by illustrating the negotiation and sustenance of ties among various actors for their individual advantages inside the network. The fundamental tenets of actor-network theory can be encapsulated as follows: 1) Emphasise the significance of "non-human" perpetrators as comparable to "human" actors, including the formation of meaning, the characterisation of actors within the network, and the diverse interactions that manifest within the network. The intensity of an actor's involvement may fluctuate based on the actor's nature, whether as a direct cause, promoter, preventer, or influencer. The network of actors is perpetually active and exchanges roles without temporal constraints. Occasionally, certain actors exhibit ambiguity inside the network while yet maintaining their presence in it.

The concept of citizenship in the 21st century:

The term Citizen (Citoyen) was first introduced in 1789 during the French Revolution. The populace successfully dismantled the dictatorship and the class structure, proclaiming the equality of all French citizens. Subsequently, the term Citoyen evolved into the English word Citizen, denoting an individual who is a member of a state. Historically, citizenship was a privilege reserved for the upper class, who possessed the economic and social autonomy to engage in civic responsibilities, including candidature for elections and military service. During that period, the majority of individuals, particularly women and slaves, were denied citizenship rights. Subsequently, throughout the Middle Ages or the period of absolute monarchy in Europe, the notion of citizenship evolved to prioritise allegiance to the monarch. The citizens lacked the right to participate in politics. Nonetheless, throughout the French and American revolutions, a movement emerged on citizenship that highlighted the connection between citizens and the state. Consequently,

political principles supplanted allegiance to the monarchy. In the 19th and 20th centuries, citizenship evolved into a concept centred on rights and freedoms, embodying values of equality and liberty, but with legal equality as the sole consideration. Post-World War II, civil, political, and social rights demonstrated that legal equality did not yield genuine equality. Consequently, the state bore a responsibility to safeguard citizens inside the societal context as well. The emergence of the welfare state influenced public perceptions, leading many to believe they owed nothing in return to the state (Bahari et al., 2023).

What does citizenship signify in the 21st century? There are three categories of definitions, namely: Traditional citizenship refers to the legal membership inside the framework of the nation-state to which an individual belongs. Global citizenship, often referred to as legal citizenship, denotes an individual who recognises global connectivity and interdependence, possessing a communal awareness (Mihailidis & Thevenin, 2013). To tackle global challenges, Digital citizenship refers to the capacity of individuals to utilise the internet for effective societal and economic participation, exercise self-regulation, discern ethical considerations, and possess the acumen necessary for the responsible and appropriate use of digital technology, while also learning to engage with technology judiciously and securely. Moreover, digital citizen identity must effectively establish and manage a positive identity in both virtual and physical realms. The digital citizen possesses critical thinking abilities for both disseminating and receiving news, articulating viewpoints, demonstrating compassion within the online community, and assuming responsibility for their activities. Engaging in illegal and immoral activities online, including copyright infringement, harassment, or the use of hate speech against others, is forbidden (Westheimer & Kahne, 2004).

Likewise, other research regarding citizenship in Thailand are as follows: Citizens who uphold traditional values prioritise cultural customs, referred to as traditionalists or minimalists (Shearer et al., 2025). For instance, exercising the right to vote, honouring the elderly, committing to public service, adhering to the law, practicing religion, taking pride in Thai identity, and fulfilling tax obligations through honest labour.

2) Citizens possessing civic awareness, including the ability to compare the policies of parties and candidates, an understanding of the political systems of various countries, and a willingness to fulfil tax obligations. Citizens engaged in politics or those that prioritise liberty and contemporary advancement. For instance, exercising the right to vote, participating in group membership, attending rallies, monitoring political activities, engaging in social group involvement, undertaking volunteer work, and advocating for environmental stewardship (Slavković et al., 2024).

Furthermore, Guerrero Puerta (2023) presented a framework for citizenship education, categorising it into three sorts of excellent citizens: 1) The Personally Responsible Citizen comprises individuals who adhere to the law, take responsibility for their actions, and exhibit kindness towards the impoverished, with an emphasis on cultivating excellent character and habits. The Participatory Citizen comprises individuals who understand the governmental systems, the legislative process, and the responsibilities of citizenship, together with the means to fulfil them. 3) The Social-Justice Orientated Citizen comprises those who contemplate justice, investigate the root causes of issues, and are inquisitive about means for social change, demonstrating an awareness of social justice.

Related studies

Literature reviews and prior investigations demonstrate that networks of actors encompass both human

and non-human entities, and that diverse forms of network linkages exist. Alodat et al. (2023) examined the novel structure of hybrid rice networks and discovered that the culprits have leveraged the advantages of both human and non-human agents in their dealings with rice industry firms that are required to oversee all production processes. The research examined the ritual of changing white monk robes in Lamphun province and identified key non-human elements: the monk's body, the annually changed robes, and the sacred objects that significantly contribute to the perpetuation and expansion of the monk's network of disciples and adherents. A study examining the role of actor networks in community adaptation within the special economic zone bordering Mukdahan province identified two primary categories of key actors: those within the community livelihood network, which represents the original network structure in the pre-development area comprising community members and land, and the new actors integrated into the network through the establishment of special economic zones as dictated by national strategic policy. These new actors include institutional committee mechanisms and government agencies responsible for implementing policies and physical infrastructure development projects. The investigation into green city development through actor networks revealed that the activities fostering a green city stemmed from three specific initiatives: tree planting, vegetable cultivation, and waste reduction (Outila & Kiuru, 2020). Each instance has demonstrated the interconnections inside the network of human and non-human agents in six distinct patterns. Upon reviewing the concepts, theories, and pertinent research, it can be concluded that the network theory of actors emphasises that "non-human" actors possess equivalent power to "human" actors, and societal understanding is derived from analysing the relationships and transformations within the network (Keiff, 2024). The participants in this study comprise four primary components: 1) personal factors, 2) familial considerations, 3) socialisation factors, and 4) social media literacy factors (Freires et al., 2024). The determinants of citizenship in the 21st century include individuals who possess social responsibility awareness, exhibit social engagement, embody a sense of social justice, and possess digital competencies while actively participating in political processes, as illustrated in the conceptual framework in Figure 1.

Personal facto 1. Gender 2. Age 3. Education 4. Course/Majo 5. Place of residence 6. Income 7. Social group membership 8. Daily information source: 9. News following frequency 10. Types of information followed 11. Daily use of various media platforms* 12. Role models 13. Types of role models Citizenship Levels in the 21st Family factors 1. Parents' marital status 2. Father's occupation 3. Mother's occupation 5. Family upbringing Socialization factors 2. Educational institution 3. Media institution 4. Socialization from s Social media literacy factors 1. Selection of social media 2. Sharing information 3. Expressing opinion 4. Participating in online activities

Figure 1: Schematic Representation of the Conceptual Framework

Research Methodology

Research Design

This study employs a quantitative research methodology and conducts the unit of analysis at the person level. The population consists of youth, both male and female, aged 18 to 25 years in the Northeastern area of Thailand, totalling 2,439,906 individuals. In multistage sampling, the sampling is categorised into two groups: 1) Upper Northeastern Region Group: 12 provinces, with 6 picked; 2) Lower Northeastern Region Group: 8 provinces, with 6 selected. The sample size was determined using Taro Yamane's formula for computation. The two variables that must be identified are N, representing the population size, and e, denoting the error value (i.e., error). In the equation, e should be expressed as a decimal, such as e = 0.05 (indicating an error of 5%). The calculation of the sample size is presented as follows:

From the formula

om the formula
$$n = \frac{N}{1 + Ne^2}$$

$$\frac{n = 2,439,906}{1 + 2,439,906 \times 0.0025}$$

$$\frac{n = 2,439,906}{60,100.765}$$

$$n = 399.9$$

The calculated sample size was 399.9 individuals; hence, the researcher augmented the sample size to 400 individuals for the sake of study management. This study used a questionnaire as the quantitative research instrument, constructed based on the following criteria: 1) Formulate the questionnaire based on concepts, theories, and pertinent research. 2) Evaluate the instrument through expert analysis by assessing the consistency index of the IOC instrument. 3) Administer the questionnaire to 20 youngsters possessing identical characteristics to the sample group. 4) Evaluate the reliability of the questionnaire using the reliability coefficient of 0.926. 5) Develop a questionnaire for submission to the Human Research Ethics Committee. 6) Revise and update the questionnaire, then construct it in Google Forms to facilitate online data collection. Furthermore, data analysis utilised Bivariate analysis to examine the relationship between independent and dependent variables, as well as Multivariate Analysis with Multiple Regression Analysis (MRA) for the formulation of forecasting equations (Swart, 2023).

Results

Context of the sample group

The research findings indicated that the sample group comprised predominantly female kids at 64.0 percent, male youth at 29.5 percent, and individuals of alternative gender (LGBTQ) at 6.5 percent, respectively. The predominant age group of the sample was 18-20 years, comprising 63.0 percent, with most participants engaged in university or vocational studies, while secondary education represented 76.8, 11.8, and 11.5 percent, respectively. The sample group comprised 68.7 percent studying arts and social sciences, and 31.3

percent in science and health sciences, respectively. The sample group resided in their hometown across three primary provinces: Khon Kaen province, including 17.5 percent; Nakhon Ratchasima province, comprising 13.7 percent; and Udon Thani province, comprising 12.5 percent. The monthly income of youngsters primarily derives from parents, with 60.8 percent earning less than 5,000 baht, followed by 27.5 percent earning between 5,001 and 10,000 baht. The survey revealed that 50.5 percent of the sample were not members of a social group, whereas 49.5 percent were members. The sample group obtained daily news via alternative media (social media) at a rate of 93.5 percent, followed by entertainment at 99.5 percent, social information at 99.5 percent, and knowledge of interest at 99.0 percent. Moreover, among diverse online media channels, the sample identified role models, with 76.5 percent comprising musicians, celebrities, and singers at 75.0 percent, activists and social advocates at 16.8 percent, and politicians at 8.3 percent, respectively.

Citizenship level in the 21st century of the Northeastern Youth

The investigation revealed that 57.2 percent of the sample group exhibited a moderate degree of 21st-century citizenship, while 39.6 percent demonstrated a high level of citizenship. The sample group demonstrated adherence to social norms, with 70.0 percent compliance, exhibited consideration for the public interest at 66.9 percent, acknowledged the feelings and rights of others at 66.2 percent, safeguarded their personal information and online safety at 71.3 percent, engaged in ethical technology use at 69.6 percent, refrained from discussing political issues at 40.7 percent, abstained from monitoring state power at 36.9 percent, participated in national political assembly freedoms at 25.6 percent, and expressed opinions via social media regularly at 31.1 percent, with occasional participation at 52.0 percent.

Network models of actors in developing youth towards citizenship in the 21st century

The findings indicated that the determinants affecting citizenship levels in the 21st century were as follows: the primary influence was social media literacy and usage ($\beta = 0.462$), statistically significant at the 0.01 level; the secondary influence was social contextualisation ($\beta = 0.154$), statistically significant at the 0.05 level; and the tertiary influence was social group membership ($\beta = -0.088$), also statistically significant at the 0.05 level. Upon analysing all independent variables, as elucidated by the multiple correlation coefficient (Multiple Correlation: R), it was determined that these variables significantly account for the Transformation of Citizenship in the 21st century at the 0.01 level, thereby elucidating the variation. 47.2 percent ($R^2 = 0.472$), as illustrated in Table 1.

Table 1: Factors influencing the development of youth towards citizenship in the 21st century

Variable	b	Beta	Sig.	Order
Gender (1)	0.735	0.043	0.277	
Age (2)	-0.068	-0.004	0.916	
Field of study (Science) (3)	1.530	0.091	0.089	
Field of study (Humanities) (4)	0.937	0.059	0.212	
Social group membership (5)	-1.373	-0.088	0.022	3
Information sources (6)	-0.669	-0.021	0.592	
Frequency of following news (7)	0.259	0.016	0.670	
Having a role model (8)	-1.186	-0.042	0.273	
Father's occupation (9)	0.361	0.012	0.775	

Table 1: Factors influencing the development of youth towards citizenship in the 21st century (Cont.)

Variable	b	Beta	Sig.	Order	
Mother's occupation (10)	0.383	0.013	0.746		
Parent information sources (11)	0.189	0.011	0.774		
Family upbringing style (12)	1.054	0.058	0.136		
Refining from the family institution (13)	0.122	0.094	0.091		
Refining from educational institutions (14)	0.074	0.050	0.375		
Refinement from the media institution (15)	0.081	0.046	0.422		
Refinement from social context (16)	0.260	0.154	0.013	2	
Social media literacy and use (17)	0.312	0.462	0.001	1	

 $R^2 = 0.472 F = 18.936 Sig. of F = 0.001$

Remarks:

- (1) Male reference group) GEN (
- Subject reference group studying science (P1)
- (5)Reference group is a member of a social group (SG)
- (7) Reference group: Frequency of following news every day (Fre)
- (9) Reference group: Father's occupation (OF)
- (11) Reference group: Parents' information source is alternative media (DSP)
- (13) Refining from the Family Institution (AFS)
- (15) Polishing from the Institute of Mass Media (16) Social Contextual Skills (ACS) (AMS)
- (17) Social Media Literacy and Usage (AUM)

- (2) Reference group aged 20 years and above) AGE)
- **(4)** Subject reference group studying humanities and social sciences (P2)
- (6) Reference group is a source of information, alternative me (DS).
- Reference group, having a role model (RM)
- (10) Reference group: Mother's occupation (OM)
- (12) Reference group: Democratic parenting style (TS)
- (14) Academic Excellence (AES)

From the analysis, it can be concluded that the network model of actors in developing youth towards citizenship in the 21st century depends on social media literacy and refinement from the social context, and social group membership, which is a model from the prediction equation of the multiple regression analysis, as shown in the equation.

$$Y = 6.916 + .312 \text{ AUM} + .260 \text{ ACS} - 1.373 \text{ SG}$$

Discussion

The findings indicated that the actor network model for cultivating 21st-century citizenship relies on social media literacy, social contextualisation, and social group affiliation. According to Dussel (2020), the network is always evolving due to the interactions between established and emerging actors, which are influenced by temporal and situational factors. This study indicated that historically, family and

school institutions served as social networks that facilitated the socialisation of youth into citizens aligned with societal norms. However, family institutions, educational institutions, and other primary institutions still retain the old actors, albeit with diminished roles due to evolving socioeconomic situations. New entities are emerging to supplant them with social media literacy, which significantly impacts citizenship levels in the 21st century and constitutes a network of non-human actors. The network theory of actors expands the capacity to examine social events beyond the influence of living organisms or humans, with actors exhibiting varying degrees of intensity, including direct causation, facilitation, prevention, or influence (Latour, 2005). Consequently, social media literacy is the primary determinant in enhancing citizenship levels in the 21st century. Students with media literacy may readily comprehend media messages and discern the underlying aims and perspectives embedded within them. During the COVID-19 pandemic, adolescents utilised Twitter (X) to disseminate information by retweeting several tweets regarding medical facts (Celik et al., 2021). In certain nations, such as India, adolescents are encountering exposure to misinformation across several platforms. Media literacy is essential for training and empowering young to comprehend and critically evaluate media information and disseminate it thoughtfully (Sachdeva & Tripathi, 2019). Indonesian youth embrace the advantages of social media, exhibit extensive media usage and comprehension skills, however still demonstrate deficiencies in media evaluation and production skills (Atmi et al., 2018). Consequently, social media literacy represents a significant concern that numerous nations strive to cultivate among youth to foster their development as responsible citizens. For instance, the United States is contemplating the Digital Citizenship and Media Literacy Act to empower citizens to utilise information and communication technology tools and platforms safely, responsibly, and ethically, thereby facilitating access to accurate information through diverse channels (Corpuz, 2025). Florida mandates state education agencies to incorporate media literacy into the K-12 public school curriculum, while Ohio has revised its education law, directing the State Board of Education to enhance and evaluate academic content and skills to align with 21st-century requirements.

The social context and group dynamics affect the degree of citizenship in the 21st century, as evidenced by Young et al. (2010), which demonstrated that youth obtain news from family, friends, and classmates via social media, alongside methods for assessing media and verifying information through multiple sources for accuracy. Moreover, family, educational institutions, peers, and social media are the primary environmental influences via which adolescents engage in discussions on social and political matters, exchange cultural phenomena, and cultivate opinions and values that may align or diverge (Pandey, 2025; Schwarz et al., 2024). Simultaneously, as members of a social group, the youth must adopt a 21st-century citizenship ideology, as it is a crucial aspect of political involvement among Thai youth, defining their role as citizens in the contemporary day.

This study provides critical insights into the evolution of youth citizenship in Thailand by employing actor-network theory (ANT) in a novel context. This research addresses a vacuum in ANT literature by employing a novel technique to examine social media and community networks for the enhancement of juvenile citizenship, extending beyond traditional domains like healthcare and education. The research conducted by Ryan et al. (2024) illustrates the significance of Actor-Network Theory (ANT) in healthcare by examining the interactions of healthcare stakeholders within their context. Their systematic review procedure evaluates network interactions among various actors but neglects to investigate youth

citizenship and the impact of social media on civic engagement. The authors enhance existing research on ANT by examining the interplay between modern communication channels and social contexts in influencing young citizens.

Wei (2024) undertakes a study on digital social design employing Actor-Network Theory to examine the interrelations among social component actors. This examination delineates certain effects of digitalisation on social design but does not explicitly connect these tools to the growth of youth citizenship. This research demonstrates that social media literacy is crucial for fostering desirable citizenship behaviours, employing a practical ANT method for social development. Schwarz et al. (2024) utilize Actor-Network Theory to examine educational exchanges inside instructional settings. The study enhances understanding of educational interactions but neglects to examine their comprehensive impact on the cultivation of youth citizenship. The project examines socialisation processes alongside actor connections to enhance research on educational environments that fulfil social media functions in cultivating actively engaged citizens (Kanninen et al., 2024). Cresswell et al. (2010) examine the adoption of hospital information technology using the ANT paradigm, underscoring the significance of comprehending actor roles in this setting. The researchers provide significant insights on actor collaboration via their study on technology implementation; yet, their conclusions do not assess juvenile citizenship fairly. The current study advances this concept by employing ANT methodology to analyse the social and media interaction patterns via which young individuals cultivate their civic involvement. This study enhances the use of Actor-Network Theory in youth citizenship research while demonstrating the significant impact of social networks and social media platforms on youth activism. This research examines two domains to establish a theoretical foundation and practical implementations that enhance engaged young citizenship in the contemporary era.

Suggestions

Academic suggestions

The findings indicate that "social media literacy, social contextualisation, and social group membership" are factors that affect the degree of citizenship in the 21st century. This study recommends utilising the models derived from the research for experimental investigations in juvenile development as outlined below: a) Foster expertise in online media literacy, encompassing the safe, responsible, and ethical utilisation of information and communication technology tools and platforms. b) Advocate for social refinement through a holistic network of stakeholders, including family, educational institutions, peers, social groups, and media. c) Promote participation in constructive social groups to enhance the influence of such models on citizenship in the 21st century.

Suggestions for development

The study advocates for the development of knowledge in online media literacy and creative media utilisation for youth, recommending the establishment of courses in educational institutions or accessible online programs. This initiative aims to enable youth to effectively engage with social media, articulate their opinions, and express their identities as responsible citizens, while also fostering social refinement and encouraging participation in community groups. This support would facilitate the opportunity for kids to engage in societal development as citizens in the 21st century.

Suggestions for future research

This research identified significant theoretical models, specifically social media literacy, social contextualisation, and social group membership, which are pivotal elements affecting citizenship levels in the 21st century. Consequently, additional research is necessary to validate the findings from all three models, as the sample population predominantly comprises individuals from the education sector, which may influence the results. Consequently, subsequent study should distinctly delineate the fraction of kids within and outside the education system.

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