

Factors Influencing Social Media Platform Engagement among Thai Students: A Quantitative Study

Khanittha Jitsaeng ¹, Wirapong Chansanam ^{1*}, Suparp Kanyacome ²,
Umawadee Detthamrong ³, Chunqiu Li ⁴

¹ Faculty of Humanities and Social Sciences, Khon Kaen University, Khon Kaen 40002, Thailand.

² Faculty of Science and Engineering, Kasetsart University, Sakon Nakhon 47000, Thailand.

³ College of Local Administration, Khon Kaen University, Khon Kaen 40002, Thailand.

⁴ School of Government, Beijing Normal University, Beijing 100875, China.

Abstract

This study delves into the complex landscape of social media utilization among undergraduate students in higher education institutions in Thailand, investigating the pivotal factors that shape their engagement with these platforms. Employing a quantitative research approach, the investigation utilizes a meticulously crafted multi-stage sampling methodology coupled with a robust data collection process. Through applying multi-correlation and multiple-regression analyses, the research unveils significant insights into the determinants of social media usage among Thai youth. Notably, motivation for social media use, access, creativity, and participation through these platforms emerge as substantive predictors. This aligns seamlessly with existing research, underscoring the critical roles played by motivation and accessibility in influencing online engagement. The resultant predictive equation is a pragmatic instrument for comprehending and forecasting social media engagement patterns among Thai undergraduate students. The findings underscore the importance of motivation, access, and creativity as driving forces behind social media utilization. This research equips educators, policymakers, and researchers with valuable insights, emphasizing the imperative of fostering responsible and effective use of social media within this demographic. The study's contribution to the academic landscape is noteworthy because it sheds light on unexplored facets such as cultural dynamics, peer networks, and individual traits, enriching our understanding of the intricate social media landscape among Thai undergraduate students.

Keywords:

Predicting, Digital Technology;
Factors;
Influencing;
Social Media;
Thai Undergraduate Students.

Article History:

Received:	04	January	2024
Revised:	19	March	2024
Accepted:	23	March	2024
Published:	01	April	2024

1- Introduction

The cohort most receptive to modern communication innovations comprises individuals within the school and early working-age demographic, typically aged 18 to 29, that is, they are adolescents [1]. This observation aligns with the findings from a study conducted by Levinson in 2019 [2], which underscored the heightened propensity for mobile phone usage among youth aged 17 to 22, while the ubiquity of smartphones continues to grow. Koff & Moreno [3] examine the accuracy of college students' self-reported internet use, including computers and smartphones. It found that participants tend to need to pay more attention to their actual internet use. They reported checking the internet an average of 7.8 times per day via smartphone and 10.4 times per day via computer, while the calculated use indicated 0.84 hours per day on a smartphone and 6.5 hours per day on a computer. This suggests challenges in

* **CONTACT:** wirach@kku.ac.th

DOI: <http://dx.doi.org/10.28991/ESJ-2024-08-02-011>

© 2024 by the authors. Licensee ESJ, Italy. This is an open access article under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<https://creativecommons.org/licenses/by/4.0/>).

accurately self-reporting daily internet use among college students. Smart devices have become integral to users, enhancing their functionality and dividing their attention between the digital world and physical reality. Participants expressed mixed sentiments, acknowledging the benefits of their devices while remaining cautious about their effects on individuals and society [4].

In the contemporary digital landscape, the Internet serves as an expansive repository of information across diverse domains, including but not limited to news, political awareness, and civic responsibilities, which individuals should be cognizant of as engaged members of society. Furthermore, empirical investigations have consistently revealed a rising trend in using social media platforms for interpersonal interactions and peer communication [5]. Social media, as a medium of communication between individuals and within various interest-based groups, encourages the acquisition, exchange, and dissemination of information, ideas, and opinions on issues of societal significance, including political matters. Consequently, the Internet and social media networks emerge as novel, transformative mediums that hold the potential to invigorate and advance the landscape of Thai politics and governance. They facilitate increased public access to information and promote active participation in political discourse, reinforcing the democratic ideal wherein individuals can engage as informed citizens of society.

1-1-Motivation for Using Social Media (MOV)

In the digital age, social media has become an integral part of our daily lives, revolutionizing the way we communicate, share information, and connect with others. Platforms like Facebook, Twitter, Instagram, and LinkedIn have attracted billions of users worldwide. Al-Menayes's [6] study explored social media motivations among university students by surveying 1327 undergraduates. Four key motivations emerged: entertainment, information seeking, personal utility, and convenience. User experience, time spent, and satisfaction were correlated with these motivations. Future research should incorporate cultural values and explore additional motivations within the context. Meanwhile, Lau's [7] study examined social media motivations in 348 university students in Hong Kong, finding no significant differences based on demographic variables. Most students use social media to seek free information and stay updated. Educators can promote personal learning environments and integrate formal and informal learning with social media. Incidentally, Hussein et al. [8] explore the use of contrarian analysis to uncover factors influencing user engagement on social media. A large-scale survey of 388 U.S. social media users tested a re-defined technology acceptance model (TAM). Z-score analysis revealed that perceived enjoyment, connectedness, attitude, and social media images significantly drive user engagement in this context.

Furthermore, Alsalem's [9] study compares Snapchat, Instagram, and Twitter in terms of use intensity and motivations among college students in Kuwait. Instagram is the most popular platform; Snapchat has the highest use intensity. Users utilize Snapchat for passing time, self-expression, self-presentation, and entertainment, while they employ Twitter for self-presentation, entertainment, and social interaction. On Instagram, motivations encompass passing time, social interaction, self-presentation, and entertainment. Likewise, Alhadabi & Karpinski's [10] study explores the creation and validation of a scale measuring university students' motives for using social media. Study 1 (N = 316) identified five motive scales: self-actualization, purposeful motives, enjoyment, self-enhancement, and convenience. Study 2 (N = 200) confirmed this structure and found significant motive differences among productive, consuming, and disinterested users. Indeed, Throuvala et al. [11] explored adolescent motivations for social media use through focus groups with 42 UK secondary school students. Six motivational themes emerged, including the need for control over content and relationships, emotional regulation, and peer comparison. These findings provide insights into normative adolescent social media behavior and suggest the need for interventions targeting excessive or problematic screen time and specific social media use aspects.

The research in Trang's (2023) [12] study in Vietnam examines the impact of social media on undergraduate students' academic motivation and engagement. Through regression analysis, the study identifies positive connections between motivation, engagement, study habits, and the utilization of social media, underscoring the constructive impact of motivation on academic achievement. Notably, the findings highlight the significance of seamlessly integrating technology into learning environments, with no discernible evidence of adverse effects identified in the study. Most previous studies explored the multifaceted motivations that drive individuals to use social media, shedding light on the psychological, social, and cultural factors that underpin this pervasive phenomenon. One of the most fundamental motivations for using social media is the human need for social connection and interaction. Social media platforms provide a virtual space where individuals can connect with friends, family, acquaintances, and even strangers from around the world. These platforms facilitate the maintenance of relationships, allowing users to stay updated on the lives of their loved ones, share experiences, and offer support during times of joy or distress. The motivations for using social media are diverse and multifaceted, reflecting the complex interplay of human psychology, societal dynamics, and technological advancements. Whether driven by a desire for social connection, self-presentation, information consumption, or activism, individuals navigate this digital landscape with unique intentions and experiences. Recognizing these motivations allows us to better understand the profound impact of social media on our lives and society at large, while also highlighting the importance of responsible and mindful usage in an ever-evolving digital era.

1-2- Social Media Access (ACC)

In the 21st century, social media has become an integral part of our daily lives, profoundly shaping how we communicate, access information, and engage with the world. However, with this newfound digital connectivity comes a pressing need for social media literacy. Ahn et al. [13] examine the challenges and policy forces surrounding the use of social media in K–12 education. It highlights the conflicts between evolving technology and traditional educational institutions, which can hinder students' access to and learning with new media tools. The results found the key policy controversies and offered suggestions for K–12 institutions to create policies supporting technology in schools while safeguarding students. Meanwhile, Karpman and Drisko [14] explore the gap between the rapid growth of social media use and the development of corresponding program policies. It reviews current social media policies and identifies six key domains for such policies, including ethical and legal obligations, personal and professional online presence, and productivity implications. They propose a model of social media policy, emphasizing the necessity for further policy development in this area. Likewise, Martin et al.'s [15] study surveyed 593 middle school students to assess their use of social media and digital footprints. The results indicated that many students began using social media at a young age, accepted friend requests from strangers, and lacked parental monitoring. They primarily used Instagram, Snapchat, and YouTube to connect with friends and share content. Concerns included inappropriate postings, hacking, privacy, bullying, and negativity, highlighting the need for cyber-security education and parental involvement in social media use among middle school students.

Furthermore, Rodgers et al.'s [16] study aimed to measure adolescents' motivations for social media use, particularly focusing on appearance-related motivations. The resulting Motivations for Social Media Use scale (MSMU) showed a four-factor structure: Connection, Popularity, Appearance, and Values and Interests. The MSMU demonstrated reliability and validity, making it a valuable tool for assessing appearance-related motivations in adolescent social media use. In the backdrop of the COVID-19 crisis, Abd Malik & Derioh [17] investigated the interplay between intrinsic and extrinsic motivation and student engagement. This research, involving 275 undergraduate students, employed correlation analysis to unveil noteworthy associations between intrinsic and extrinsic motivation and student engagement within this unique context. In addition, Wickramanayake's [18] study examines the impact of social media on adolescents in Sri Lanka across various aspects of their lives, including education and communication. The study found that YouTube was the most preferred platform among adolescents, and while social media had a positive impact on education and communication, it did not significantly disrupt their social or academic lives. This research addresses a gap in the literature on social media use in Sri Lanka and provides valuable insights for policymakers and educators. These studies delve into social media literacy, its significance in the modern age, and strategies to enhance it. Social media literacy refers to the ability to critically navigate, evaluate, and participate in the digital information landscape effectively. It encompasses a range of skills, knowledge, and attitudes that empower individuals to make informed decisions when consuming and creating content on social media platforms. To illustrate the impact of social media literacy, this section explores real-world examples of initiatives and individuals effectively leveraging their digital skills to combat misinformation, promote civic engagement, and contribute to a more informed and responsible digital society. In a world increasingly shaped by social media, social media literacy is no longer optional but a necessity. As digital citizens, we must equip ourselves with the skills, knowledge, and attitudes required to navigate the complex digital information landscape responsibly. By recognizing the significance of social media literacy and implementing strategies to enhance it, we can harness the potential of social media for positive change while safeguarding ourselves and our communities against the pitfalls of the digital age. In doing so, we contribute to a more informed, empowered, and resilient society in the digital era.

Meanwhile, Duan & Li [19] investigate the effects of social media overload on learning engagement among undergraduate students at Chinese colleges. The study explores various dimensions of overload, including social, communication, and system feature overload, and examines their impact on ego depletion. The research reveals positive associations between social overload, communication overload, system feature overload, and ego depletion. Furthermore, it uncovers the negative effects of social and system feature overload on learning engagement, with ego depletion partially mediating. This contribution extends the application of ego depletion theory within the context of information technology research and provides empirical insights for effectively managing social media usage among college students.

1-3- Social Media Content Analysis (ANA)

Social media has evolved into a dynamic and influential platform for communication, information sharing, and social interaction. As billions of users engage with diverse content on these platforms, the need for understanding and analyzing social media content has become increasingly vital. Stellefson et al.'s [20] study analyzes public diabetes Facebook groups and their content to understand their role in diabetes self-management support. It found that these groups mainly focus on providing instrumental support, particularly related to nutrition. Engagement leaders' frequent posts were likelier in inactive groups, suggesting potential challenges in maintaining group activity. Health educators should consider practical ways to utilize engagement leaders for disseminating valid health information in these online forums.

In addition, Fox and Singh's [21] study analyzed posts in orthodontic Facebook groups to understand user engagement strategies. It found that posts related to course and product promotion were shared but needed more engagement—posts with clinical content and photographs generated higher engagement than other types of content. Overall, orthodontic Facebook groups had a substantial number of members, with varying levels of engagement depending on post content and media modality. Likewise, Kordzadeh & Young's [22] study analyzed Facebook posts from 17 US hospitals to understand their content and activities on social media. It identified 13 health-related themes, with "sharing health information" being the most common (35.81% of posts). Other themes included recognizing special days and employees. Hospitals use Facebook to educate the public on health topics and communicate varied information. The study highlights the potential for hospitals to use social media as a cost-effective tool for engaging with the community and sharing health-related content.

Additionally, Hefler's et al. [23] study examined the impact of Facebook posts by Aboriginal Community Controlled Health Services (ACCHOs) in the Northern Territory, Australia, aimed at smoking prevention and cessation. Posts with content from sources other than health services had a greater reach, reactions, and shares. Additionally, posts with local First Nations content had more reactions. The findings suggest that nonlocally produced content can enhance the effectiveness of social media campaigns in health promotion, especially for indigenous communities. Furthermore, Pócs's et al. [24] study analyzed the interactions of Facebook users with smoking cessation support content on a public health page. Surprisingly, the "like" reaction exhibited a negative correlation with organic reach, whereas positive correlations were evident with reactions such as "haha," comments, and "love." Different interactions had varying effects on engagement, suggesting that specific interactions may increase or decrease engagement in Facebook-based smoking cessation interventions. All the above studies explore the multifaceted realm of social media content analysis, elucidating its methodologies, applications, and implications for understanding the digital discourse that shapes our world. Social media content analysis is a systematic examination and interpretation of the content shared, posted, and disseminated on social media platforms. It involves the quantitative and qualitative examination of text, images, videos, and other forms of content to extract valuable insights and understand patterns within the digital landscape. Social media content analysis has emerged as a powerful tool for understanding the digital discourse that shapes our world. By combining qualitative and quantitative methodologies, researchers and professionals can gain insights into public sentiment, market trends, and societal shifts. In the context of digital engagement learning among undergraduate students, Papaioannou [25] investigates the dynamics of obesity discourse within a media literacy course. The study focuses on the analysis of plus-size model Tess Holliday's Instagram posts, where students discern frames like self-validation and injustice. By critiquing activist responses to body norms, students actively engage by creating online content to reshape the narrative surrounding obesity on social media. This research offers valuable insights into the contextualized practices of youth digital engagement and learning.

In addition, Jamaludin et al. [26] investigate the influence of social media usage and addiction on the self-esteem of international business students. The study, involving 97 participants, uncovers a positive correlation between social media addiction and self-esteem. The results underscore the imperative for additional research and propose recommendations to promote healthier digital habits among teenagers. However, as the field continues to evolve, it is essential to navigate the ethical and methodological challenges, ensuring that content analysis remains a valuable and responsible tool in our digital age. As we move forward, the synergy between technology, research ethics, and interdisciplinary collaboration will pave the way for a deeper understanding of the digital narratives that define our times.

1-4-Evaluating Social Media Content (EVA)

The proliferation of social media has ushered in an era of unparalleled access to information, news, and content. While this digital landscape offers numerous benefits, it also presents significant challenges when it comes to discerning the reliability, credibility, and value of the content that floods our feeds. Diaz et al. [27] assessed online interest in kidney stone surgical interventions and evaluated the quality of popular online resources on social media. Ureteroscopy (URS), Percutaneous Nephrolithotomy (PCNL), and Extracorporeal shock wave lithotripsy (ESWL) were the top search terms, with PCNL content receiving the most engagement on social media. The quality of online resources regarding stone surgery indicated a need for urologist involvement in creating accurate and engaging content. Likewise, Jarrahi & Safari's [28] study addresses the challenge of detecting fake news on social media by examining publisher features, including credibility, influence, sociality, validity, and lifetime. The authors propose CreditRank for evaluating publisher credibility and FR-Detect, a multi-modal framework for fake news detection using user- and content-related features. Experimental results demonstrate that considering publisher features can significantly enhance the performance of content-based models in fake news detection. Social media's impact on wildlife conservation involves both benefits and risks. It can boost pro-conservation behaviors, funding, and policy changes, contributing to species exploitation and misinformation. Content sharing on social media often lacks a detectable conservation impact, but this study offers examples of positive outcomes. Recommendations include improving messaging and addressing online misconduct to maximize conservation benefits while minimizing risks [29].

Meanwhile, Han et al.'s [30] study explores the role of user-generated content (UGC) on social media in promoting pro-environmental norms among tourists. In a Chinese context, UGC significantly activated pro-environmental norms, fostered an online pro-environment community, and increased tourist engagement in pro-environmental social media activities. UGC on social media effectively encourages sustainable behaviors. Furthermore, Pierce et al. [31] conducted a study to ascertain whether specific drug-adverse event pairs were reported on social media before users reported them to the US FDA Adverse Event Reporting System (FAERS). They analyzed social media data from Facebook and Twitter for ten recent FDA safety signals. While one case was reported earlier on social media than in FAERS, more research is needed to explore the potential of social media for pharmacovigilance. They were studies that delved into the critical process of evaluating social media content, exploring the strategies, tools, and principles that empower individuals to navigate this digital information age effectively. The digital age has ushered in an era of information abundance, where social media platforms serve as conduits for an overwhelming volume of content. Promoting digital literacy and media literacy is integral to enhancing one's ability to evaluate social media content effectively.

The research investigation by Zainuddin et al. [32] explored the influence of social media on the self-esteem of 381 undergraduate students, employing the Rosenberg Self-Esteem Scale. Despite scrutinizing various factors, such as the daily duration of social media engagement, the findings revealed a lack of significant impact on self-esteem. The study advocates for additional research to delve into the principal determinants of university students' self-esteem. Additionally, Chaitali et al. [33] focus on evaluating the influence of social media on the health of 367 medical college undergraduates in Mysuru. The results indicate a distress prevalence of 72.4%, with 3.27% experiencing severe psychological distress. Although no significant associations were found between specific factors and distress severity, the study highlights the imperative for educational, counseling, and support interventions to mitigate the adverse effects of social media on students' behavior. These literacies empower individuals to think critically about the information they encounter. This section explores real-world examples of how individuals and organizations have effectively employed the principles and tools discussed to evaluate and respond to social media content, ranging from misinformation about public health to disinformation campaigns. The ability to evaluate social media content critically is a vital skill in today's digital age. Information consumers must navigate the challenges posed by information overload, filter bubbles, and sensationalism to make informed decisions and contribute to a more responsible and accountable online community. By adhering to principles of source credibility, content accuracy, context awareness, and timeliness, coupled with fact-checking, digital literacy, and responsible sharing, individuals can harness the potential of social media while minimizing the pitfalls. Ultimately, cultivating a society of discerning and media-literate citizens is essential for the responsible consumption and dissemination of information in the digital age.

1-5- Creativity and Participation through Social Media (CRE)

The advent of social media has transformed the way people engage with each other and the world around them. Beyond being platforms for communication and information-sharing, social media networks have become powerful tools for fostering creativity and participation. Wang et al. [34] explored the relationship between social media and Knowledge Management (KM) in improving employee creativity and fostering organizational innovation. The findings indicate that social media and KM are closely associated, contributing to enhanced employee creativity and innovation in business operations. In addition, Ustyuzhanina [35] explored the social and creative practices of new media users within the network society context. It considers creativity a communicative act involving creating something new and integrating it into the social context. Social creativity transforms social space, creating new practices, norms, values, and organizational forms. The study classifies these practices based on individual or collective engagement and the production of digital artifacts, socially active activities, or social samples, emphasizing their role in fulfilling social and communicative needs in the virtual world. Likewise, Sigala & Chalkiti [36] explore the connection between social media use and employee creativity from a knowledge management perspective, emphasizing the impact of social networks on cognitive and creative processes. Data from Greek tourism professionals indicates that engaging with social media for information search, sharing, and co-creation positively influences employee creativity. The findings suggest the importance of managing creative social networks at the meso level to enhance organizational creativity.

Additionally, Rialti et al. [37] showed how brands contribute to co-creating consumer experiences within social media brand communities. By conducting a digital investigation, they identify four primary types of co-created experiences: individual product usage experiences, auto-celebrative experiences, communal product usage experiences, and collective celebration experiences. The study emphasizes the significance of involving social media brand community members in stimulating these co-creation experiences, highlighting the impact of interactions between community members and the brand. Meanwhile, Zhong [38] examines the impact of virtual influencers' endorsements on consumer brand engagement on social media. It investigates how various characteristics of virtual influencers' endorsements influence consumer motivations for engagement. The research identifies factors such as visibility, authenticity, brand fit, interactivity, creativity, and brand storytelling positively correlated with consumer brand engagement on social media. It also highlights the internal motivations related to audience needs for belongingness, cognitive engagement, and self-actualization. These findings offer insights into the growing role of virtual influencers in social media marketing. In

addition, Hynes et al. [39] delved into the realm of activism engagement within a sample of 93 white undergraduate women. The study sheds light on the impact of gendered microaggressions, color-blind racial attitudes, and political efficacy on their participation in political activism on social media. Notably, the findings reveal significant influences from these factors, yet they fail to account for the variance observed in in-person political activism.

Additionally, Immanuella et al. [40] delve into the engagement of undergraduate students within Southeast Asian higher education institutions. The exploration identified dimensions such as cognitive, emotional, behavioral, and agentic engagement, with a particular emphasis on the influential roles of self-determination and social cognitive theory. External factors strongly impact student engagement, while demographic factors, encompassing age, generation group, university type, and cultural aspects, emerge as noteworthy contributors. Mostly, they explore the multifaceted relationship between social media, creativity, and participation, shedding light on how these digital platforms have empowered individuals and communities in the digital age. This section delves into real-world case studies that exemplify the intersection of creativity and participation on social media. Examples include art movements, citizen journalism, online activism, and creative collaborations. Social media has ushered in an era of unprecedented creativity and participation, enabling individuals and communities to express themselves, engage in social and political causes, and collaborate on a global scale. However, it also presents challenges related to privacy, misinformation, and ethical considerations. Navigating this digital landscape requires not only technological proficiency but also a commitment to responsible online behavior, digital literacy, and critical thinking. As we continue to harness the power of social media for creative expression and participation, it is essential to strike a balance between the benefits and challenges, fostering a digital environment that empowers and enriches our lives in the 21st century.

1-6- Taking Advantage of Social Media (USE)

Libraries, particularly academic ones, have embraced various social media platforms like Facebook, Instagram, Twitter, and more to engage with users, share information, and collaborate. These platforms facilitate collaboration among library workers, students, teachers, and patrons, enabling information sharing and resource gathering. While social media is unofficial, it is an effective means of disseminating information, and there is potential for even more library services in the future, such as lending digital materials and addressing library-related challenges. Officializing social media for library collaboration is recommended [41]. Usino & Murtiningsih's [42] study investigates the influence of social media marketing on student loyalty and competitive advantage, as well as the impact of competitive advantage on student loyalty. The research also examines the role of customer relationship management in competitive advantage and student loyalty. The findings indicate that social media marketing alone does not directly affect student loyalty but does influence competitive advantage. Competitive advantage, in turn, affects student loyalty. Customer relationship management impacts competitive advantage but does not directly influence student loyalty, with competitive advantage mediating the relationship between customer relationship management and student loyalty.

Meanwhile, Mphahlele's et al. [43] study explores the impact of the digital divide (DD) on first-year students' use of social media for learning in tertiary education institutions. The research found that students from disadvantaged backgrounds had lower computer access and usage but higher mobile device usage. Personal factors played a role in students' adoption of social media for studies. The prevalence of social media helped mitigate the lack of computer resources and internet connectivity in disadvantaged areas, highlighting the complexity of the DD. The study recommends promoting computer and internet access, especially in disadvantaged regions. In addition, ElSayed's et al. [44] study introduces a novel approach to measure higher education students' adoption of Self-Regulated Learning (SRL) strategies. Traditional methods rely on extensive or limited questionnaires administered at the beginning of the term. The new approach administers questions in small chunks over the term using social media platforms like Facebook. The findings suggest that this approach yields more reliable and internally consistent results, with less influence from gender differences, and emphasizes the positive role of social media in enhancing student participation.

Incidentally, Ana & Istudor [45] examine the role of social media and User-Generated Content (UGC) in influencing millennial consumers' travel behavior and their decisions to visit specific tourist destinations. It utilizes an online questionnaire, documentary analysis, statistical analysis, and personal observation. The study focuses on the impact of social media on the travel choices of Romanian Millennials and suggests ways for travel businesses to adapt their marketing strategies in response to these trends. These studies highlight social media's significant influence and potential in various aspects of education, marketing, and library services, emphasizing the need for effective utilization and adaptation to meet evolving user needs and challenges. Furthermore, Boonlue & Silence [46] explore the influence of self-compassion, psychological resilience, and social media utilization on the overall well-being of university students from Thailand and the United Kingdom. The study delves into the predictive factors of self-compassion, considering variables such as gender, study years, and social media engagement. Additionally, it investigates how social support and perceived success contribute to psychological resilience. Notably, the research sheds light on shared challenges encountered by both groups while highlighting distinctive coping strategies, particularly the varying roles of family, friends, teachers, and social media in their experiences.

Moreover, Caoili-Tayuan & Ching [47] delve into the examination of Facebook's influence as a collaborative platform for college learning within the UST-IICS student community. Employing the Honeycomb model, the study explores various factors that shape academic performance and evaluates key concepts related to social software. The results uncover optimistic perspectives among students, although notable gender differences emerge in attitudes toward the effective utilization of social media.

Previous studies indicate a growing interest in understanding the dynamics of social media usage among university students, especially within the context of the younger demographic. Several studies have explored motivations for social media use (MOV), social media access (ACC), social media content analysis (ANA), evaluating social media content (EVA), creativity and participation through social media (CRE), and taking advantage of social media (USE). The previous research reveals that university students, particularly those in the 18 to 29 age group, are highly receptive to modern communication innovations, with smartphones playing a central role in their online activities. Challenges in accurately self-reporting internet use among college students have been identified, emphasizing the need for a nuanced approach to studying online behaviors. Motivations for social media use, such as entertainment, information seeking, personal utility, and convenience, have been explored across diverse cultures. Cultural nuances are acknowledged as potential influences on these motivations, suggesting the necessity of incorporating cultural values in future studies. Studies on social media access shed light on challenges and policy considerations, particularly in educational settings. The research result emphasizes the need for effective social media literacy to navigate the evolving technology landscape responsibly. Social media content analysis studies demonstrate the diverse applications of content analysis, ranging from health-related discussions to conservation efforts. The findings underscore the importance of analyzing user-generated content for insights into public sentiment, market trends, and societal shifts. Evaluating social media content emerges as a crucial aspect, with studies emphasizing the need for tools and frameworks to discern the reliability and credibility of information on social media platforms.

Initiatives and individuals effectively leveraging digital skills to combat misinformation are highlighted, emphasizing the role of responsible online behavior. The investigated relationship between social media, creativity, and participation is explored in various contexts, showcasing how individuals and communities leverage these platforms for self-expression, activism, and global collaboration. The studies recognize the challenges related to privacy, misinformation, and ethical considerations in this creative landscape. Taking advantage of social media in libraries, education, and marketing is a recurring theme, showcasing the transformative impact of these platforms on user engagement, competitive advantage, and learning strategies. In the contemporary landscape of higher education, Feroz et al. [48] conducted a seminal investigation into the intricate dynamics between information overload, social media engagement, peer interaction, academic engagement, and knowledge acquisition among students in Pakistan. Noteworthy findings from the study revealed positive correlations between social media and academic engagement, fostering knowledge acquisition. Conversely, peer engagement exhibited a negative association, suggesting a nuanced relationship. The research emphasizes the pervasive impact of information overload, which impedes positive associations and detrimentally influences students' educational outcomes. This significant contribution to the academic discourse underscores the imperative for a balanced integration of technology in educational practices, advocating for innovative pedagogical approaches and collaborative learning strategies to navigate and facilitate the challenges of information overload in contemporary higher education contexts. The potential for social media to bridge digital divides and enhance self-regulated learning strategies is acknowledged. The research aims to address gaps in the previous study by focusing on the strategies employed by Thai university students, contributing valuable insights to the evolving landscape of social media usage in the digital era. The emphasis on social media literacy and responsible utilization underscores the potential impact of the research on empowering students to navigate the digital world effectively.

In conclusion, this research explores the utilization of social media among Thai youths in higher education institutions, with a particular emphasis on students within Thailand's universities. Given that a significant proportion of these students belong to the younger generation, and considering the relative scarcity of prior research focused on this specific demographic, it is imperative to investigate their strategies for harnessing the potential of social media through digital technology. By comprehensively addressing these factors and fostering social media literacy among university students, we can significantly contribute to their proficiency in digital technology. The result of the research will empower them to make well-informed decisions regarding the effective and responsible use of social media platforms.

2- Research Methodology

This study employed the quantitative research method to investigate the demographic and behavioral patterns of undergraduate students in Thailand, aged 18-22 years, who were enrolled in higher education institutions [49]. The total population under scrutiny encompassed 3,401,148 undergraduate students. A multi-stage sampling approach was utilized to ensure the sample's representativeness. Initially, a stratified sampling method was employed to categorize Thailand into four regions: central, northern, northeastern, and southern. These regions were chosen to capture young individuals' diverse media consumption habits and political communication behaviors. Subsequently, purposive sampling was executed, selecting the foremost universities from each region. These universities were chosen based on their reputation for imparting knowledge and fostering political engagement among students within a democratic framework.

The sample size was determined in proportion to the population within each region. To obtain a representative sample, a cluster sampling technique was implemented within each educational institution. This entailed randomly selecting students by field of study and academic year. Educators administered the process of simple random sampling through an online questionnaire. Data collection spanned from December 2021 to April 2022, focusing on the utilization of social media for political communication. Rovinelli & Hambleton [50] determined the content validity of the questionnaire using the Index of item-objective congruence (IOC), with each question achieving an IOC value ranging from 0.6 to 1.0. Subsequently, the questionnaire underwent a rigorous review process by three content experts, who provided recommendations to enhance its quality. After the necessary improvements were made, the questionnaire's reliability was assessed through responses from 30 students at a selected university in northeastern Thailand (anonymity was maintained for reviewers). The resulting Cronbach's alpha coefficient was calculated to be 0.95, indicating the questionnaire's high quality and suitability for data collection [51]. In total, 400 questionnaires were collected, omitting any incomplete responses.

The data collection process was conducted with the full authorization of each university and was further coordinated by the research team in collaboration with program instructors and students through email correspondence. The questionnaire was developed based on established concepts, theories, and previous research concerning the use of social media in political communication among young individuals.

We performed correlation analysis, multiple regression analysis, and predictive equation construction to investigate the factors affecting taking advantage of social media for the Thai youth in higher education institutions in Thailand. This study was analyzed using SPSS software and Python programming. The assumptions of the study were that the factors were correlated with each other, that the factors could be used to predict taking advantage of social media, and that the predictive equation was accurate. The methodology used in the present study involved a rigorous sampling process, data collection, analysis, and ethical considerations to provide valuable insights into the factors influencing social media engagement among Thai undergraduate students. The research methodology process is shown in Figure 1.

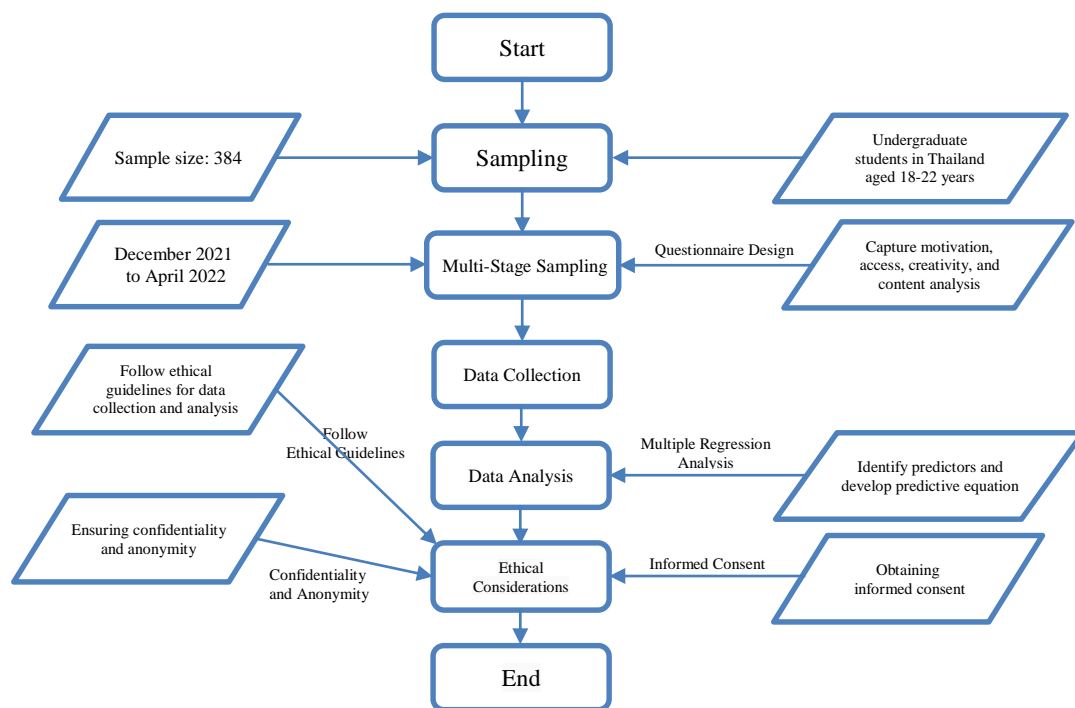


Figure 1. The research methodology process

This research is eligible for an exemption for human research ethics from the Human Research Committee of Khon Kaen University, Khon Kaen, Thailand on November 3, 2021, authorized under Registration Number HE643221.

Hypothesis of the study

H1: Motivation for using social media is statistically predictive of taking advantage of social media.

H2: Social media access is statistically predictive of taking advantage of social media.

H3: Social media content analysis is statistically predictive of taking advantage of social media.

H4: Evaluating social media content is statistically predictive of taking advantage of social media.

H5: Creativity and participation through social media are statistically predictive of taking advantage of social media.

This research on factors influencing social media engagement among Thai undergraduate students employs a theoretical approach integrating key concepts from social psychology, communication studies, and digital media research. The study's theoretical framework provides a lens to understand the motivations, access, and creativity that drive social media utilization within this demographic.

1. **Social Psychology:** The theoretical approach draws on social psychology to explore the individual and social factors influencing social media engagement. This includes examining the role of motivation as a driver of behavior, the impact of social influence on online participation, and the interplay between individual attitudes and social norms in shaping digital interactions [52-54].
2. **Communication Studies:** The study incorporates concepts from communication studies to understand the dynamics of online engagement and the role of social media in facilitating interpersonal communication, information sharing, and community building. This theoretical lens allows for an exploration of the communicative functions of social media platforms and their impact on user behaviors.
3. **Digital Media Research:** Drawing from digital media research, the theoretical approach considers the evolving nature of digital technologies, the affordances of different social media platforms, and the implications of technological advancements on user experiences. This perspective enables an examination of the intersection between technology, user behavior, and societal trends in the context of social media utilization.
4. **Cultural Dynamics and Peer Networks:** The theoretical approach also acknowledges the potential influence of cultural dynamics and peer networks on social media engagement among Thai undergraduate students. By considering the socio-cultural context in which social media use occurs, the study aims to capture the nuanced interplay between individual behaviors and broader cultural influences.
5. **Content Analysis Methodologies:** The study integrates content analysis methodologies within its theoretical framework to explore the impact of social media content on user behaviors. This involves examining the nature of user-generated content, the dissemination of information, and the potential effects of content consumption on social media engagement.

By integrating these theoretical perspectives, the present research aims to comprehensively understand the factors influencing social media engagement among Thai undergraduate students. This theoretical approach allows for a multi-faceted exploration of individual motivations, social dynamics, technological affordances, and cultural influences that shape the utilization of social media platforms within this demographic.

3- Results

We conducted a comprehensive analysis to evaluate the presence of multicollinearity among the independent variables within our model. This involved a meticulous examination of Pearson correlation coefficients, correlation matrices, and the execution of the Variance Inflation Factor (VIF) test. The results, which are presented in Table 1, reveal that the two pair highest correlation coefficient were observed between EVA and CRE, standing at 0.825, as well as between EVA and ANA, with a coefficient of 0.805. This substantial correlation implies the existence of multicollinearity, as the coefficient values surpass the commonly accepted threshold of 0.80 for identifying multicollinearity [55].

Table 1. Correlation analyses matrix

Variables	MOV	ACC	ANA	EVA	CRE	USE	VIF
\bar{X}	4.189	4.030	4.044	4.101	4.928	3.721	
S.D.	0.481	0.624	0.569	0.575	0.707	0.565	
MOV		0.539*	0.582*	0.577*	0.547*	0.536*	1.657
ACC			0.737*	0.631*	0.624*	0.553*	2.306
ANA				0.805*	0.767*	0.528*	4.032
EVA					0.825*	0.540*	4.134
CRE						0.506*	3.510
USE							

* Correlation is significant at the 0.01 level (2-tailed).

Consequently, we proceeded to identify the specific variables contributing to this heightened multicollinearity. Our analysis pinpointed that the EVA variable played a central role in this phenomenon, arising from the high correlation between two or more independent variables within our regression model. Subsequently, we evaluated the significance of these variables in the context of our research question. It was determined that the EVA variable was less important in addressing our research objectives. Therefore, a strategic decision was made to combine EVA with the CRE and EVA with the ANA, then exclude the EVA variable from the model. Subsequently, we conducted a follow-up analysis to re-evaluate the presence of multicollinearity.

As presented in Table 2 and illustrated in Figure 2, the findings indicate the absence of multicollinearity. This conclusion is drawn from the fact that the coefficient values have fallen below the commonly utilized threshold of 0.80, which is a reliable indicator for the absence of multicollinearity in our analysis [55].

Table 2. Correlation analyses matrix adjusted

Variables	MOV	ACC	CRE	ANA	USE	VIF
\bar{X}	4.189	4.030	4.044	4.928	3.721	
S.D.	0.481	0.624	0.569	0.707	0.565	
MOV		0.539*	0.547*	0.582*	0.536*	1.622
ACC			0.624*	0.737*	0.553*	2.306
CRE				0.767*	0.506*	2.551
ANA					0.528*	3.424
USE						

* Correlation is significant at the 0.01 level (2-tailed)



Figure 2. Correlation analyses matrix graph

Moving on, we analyzed the correlation coefficient between the independent and dependent variables. The results revealed a significant positive relationship between these variables, with correlation coefficients ranging from 0.506 to 0.767. These coefficients were statistically significant at 0.05, indicating a robust association between the independent and dependent variables, providing evidence that the independent variable serve as a predictive factor for the dependent variable [56]. To reinforce this conclusion, we further calculated the variance inflation factor (VIF). The VIF values, shown in Table 2, were within the acceptable range of 1.622 to 3.424 for the taking advantage of social media independent variable, indicating no multicollinearity issues. This means that the independent variables in our regression model were not collinear and were not affecting the reliability of the results. To further explore this relationship, we proceeded with multiple regression analysis.

The value of R-squared in Table 3 shows the proportion of variance in the dependent variable, taking advantage of social media, that can be explained by the independent variables, specifically taking advantage of social media acquired during surfing the internet. The calculated R-squared value ($R^2 = 0.402$; sig = 0.000) indicates that approximately 40.2% of the variance in taking advantage of social media is explained by the independent variables in the model. The remaining 59.8% of the variance is attributed to factors not included in the current model or random error. It is worth noting that as the number of independent variables in the model increases, the R-squared value tends to rise. An ANOVA test was conducted to determine the model's overall significance. The results obtained from the statistical analyses reveal the model's significant importance across all levels, a conclusion supported by the robust F statistic. This study's findings strongly imply that engaging with social media, particularly the utilization acquired during internet browsing, emerges as a noteworthy predictor of further social media utilization. Furthermore, the research posits that the developed model exhibits substantial predictive capabilities concerning the propensity to take advantage of social media, rooted in the identified variables. The results show that the model is reliable and accurate in predicting and measuring how students use social media. They also show how students' internet browsing habits and subsequent use of different social media platforms are intricately connected.

Table 3. Multiple linear regression analysis

Model	Taking advantage of social media (USE)		t	p-value
	β	Std. Error		
Intercept	0.567	0.203	2.793	0.005*
Motivation for using social media (MOV)	0.327	0.058	5.628	0.000*
Social media access (ACC)	0.250	0.054	4.647	0.000*
Creativity and participation through social media (CRE)	0.112	0.050	2.243	0.025*
Social media content analysis (ANA)	0.056	0.071	0.777	0.438
R-squared = 0.402, AdjR ² = 0.395, SE _{est} = 0.439, F = 66.260				

* Regression is significant at the 0.05 level (2-tailed).

In Table 3, it is observed that motivation for using social media (MOV), social media access (ACC), and creativity and participation through social media (CRE) exhibit a positive relationship and impact on taking advantage of social media as a whole. Conversely, the constant variable shows a positive relationship and impact. The statistical significance of all these variables is 0.05, except for social media content analysis (ANA). This implies that ANA does not have a significant relationship and impact on taking advantage of social media. The findings of this study suggest that motivation for using social media (MOV), social media access (ACC), and creativity and participation through social media (CRE), and constant are important factors in taking advantage of social media. However, ANA does not play a significant role in taking advantage of social media.

The results of the multiple regression analysis strongly support the idea that three factors—motivation to use social media (MOV), access to social media (ACC), and creativity and participation through social media (CRE)—along with the constant term are key to getting the most out of social media. These results reinforce the understanding that these identified factors play a substantial role in optimizing the utilization of social media platforms. Moreover, these factors exhibit predictive capacity, implying that they contribute significantly to current utilization and can serve as reliable indicators for forecasting future engagement with social media. The empirical validation of these factors underscores their instrumental role in strategically leveraging social media and highlights their potential utility in developing predictive models for optimizing social media usage.

The equation for forecasting factors affecting taking advantage of social media can be defined as follows:

$$USE = 0.567 + 0.327 \times MOV + 0.250 \times ACC + 0.112 \times CRE \quad (1)$$

where USE is Taking advantage of social media, MOV is Motivation for using social media, ACC is Social media access, CRE is Creativity and participation through social media.

The presented equation offers valuable insights into the determinants of taking advantage of social media, revealing a positive influence stemming from motivation for using social media, social media access, creativity, and participation through social media. Including a negative coefficient for the intercept term suggests a baseline level of taking advantage of social media that is not accounted for by the specified variables. Drawing implications from this study's findings, one can deduce that motivation for using social media, access to social media, and engagement through creative participation are pivotal factors that contribute significantly to the phenomenon of taking advantage of social media. Furthermore, the derived equation serves as a predictive tool, enabling the estimation and forecasting of how much individuals are likely to capitalize on social media based on their motivations, access, and engagement levels. This predictive model enhances our understanding of the nuanced interplay between individual behaviors and social media utilization, offering practical applications in anticipating and strategizing for the effective utilization of these platforms.

3-1-Drawing the Multiple Regression Models

The dataset consists of three continuous variables. The slopes of one variable remained consistent, while the intercepts varied based on the values of the other variables. The mean values and standard deviations of the variables MOV, ACC, and CRE for the taking advantage of social media (USE) variable were 4.189, 4.030, and 4.928, respectively.

To analyze the interactions between the predictor and moderator variables, the SPSS software and Linear Regression function from `sklearn.linear_model` in Python were utilized. This function calculated the mean and $\text{mean} \pm 1 \times \text{sd}$ values using provided Python code and computed the equation for the predictor variable considering the moderator variable's mean and standard deviation. The predictor variable (pred) and the moderator variable (modx) played distinct roles in the model, resulting in varying slopes and intercepts for each variable based on the values of the others. Due to the complex interactions among the three continuous variables in this model, the determination of intercepts and slope values becomes more intricate. Consequently, the regression plot also becomes more intricate.

3-2- Checking for Regression Assumptions

To check the regression assumptions, we used several diagnostic plots. The histogram plot was examined to assess the linearity assumption. A horizontal line with no discernible pattern indicates a linear relationship. The normal P-P plot was employed to evaluate the normal distribution of residuals. In this plot, if the residuals fall along a straight line, it suggests normality. The scale-location plot was employed to evaluate the homogeneity of variance in residuals. A horizontally aligned line with evenly dispersed points is a reliable indicator of homogeneity of variance. Additionally, the Mean Squared Error (MSE) and Mean Absolute Error (MAE) provide valuable insights into our model's performance, used in conjunction with other evaluation metrics and domain knowledge to make informed decisions about the model's suitability for our particular problem.

Figure 3 is a graphical method for assessing the distribution of residuals from a regression model. The residuals are the differences between the observed values and the predicted values. A normal P-P plot of regression standardized residuals is a graphical tool used in statistics to assess whether the residuals (the differences between observed and predicted values in a regression model) follow a normal distribution. The normal P-P plot helps you check the assumption of normality for the error terms in a regression model. It's essential because many statistical techniques, including linear regression, assume that the residuals are normally distributed. The plot compares the observed cumulative distribution function (CDF) of the standardized residuals to the expected CDF of the normal distribution. If the points in the P-P plot closely follow a straight line, it indicates that the residuals are approximately normally distributed, supporting the model's assumptions. Deviations from a straight line suggest departures from normality in the residuals, which may indicate issues with the regression model. Statisticians and data analysts use normal P-P plots to diagnose potential problems with regression models and make necessary adjustments. In summary, a normal P-P plot of regression standardized residuals is a visual tool to check if the residuals from a regression model exhibit a normal distribution, a crucial assumption for accurate statistical inference.

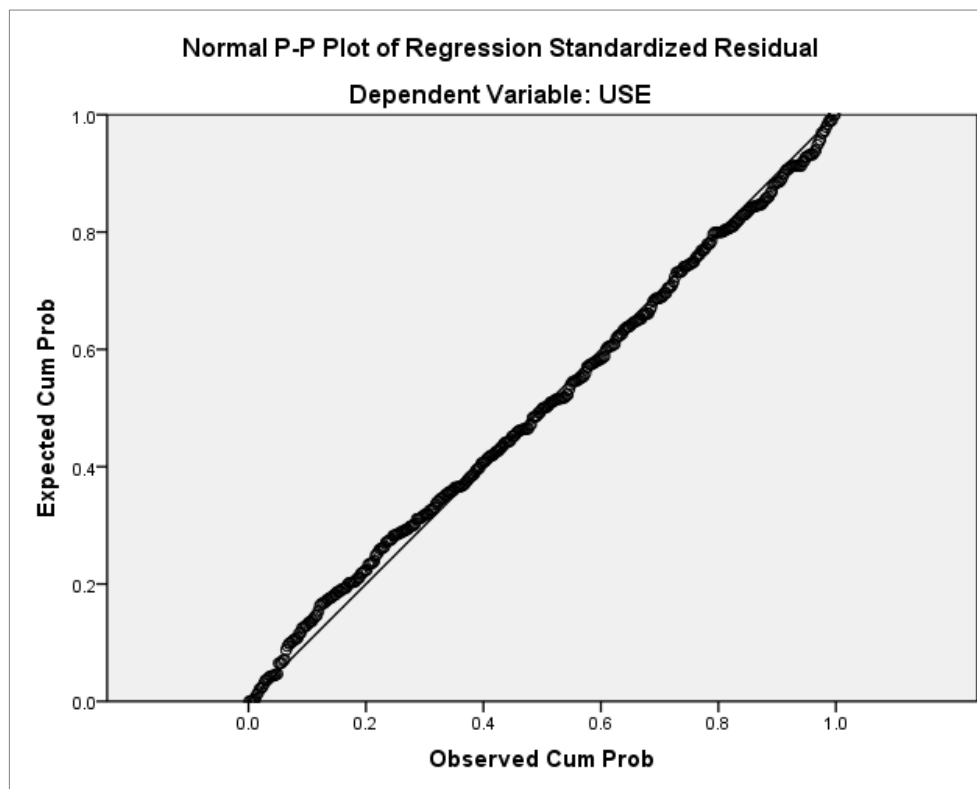


Figure 3. A normal P-P plot of regression standardized residual

A histogram is a graphical representation of the distribution of data. It is a bar graph that shows the frequency of each value in the data set. In regression analysis, histograms are used to assess the distribution of residuals. Residuals are the differences between the observed values and the predicted values. A histogram of residuals should be approximately normally distributed. This means that the residuals should be evenly distributed around 0. If the residuals are not normally distributed, it may be necessary to transform the data or use a different regression model. As visualized in Figure 4, the histogram of residuals is slightly skewed. This means that the residuals are not evenly distributed around 0. However, the skewness is not too dramatic. This suggests that the regression model is still valid. It is important to note that the histogram of residuals is just one of many tools that can be used to assess the validity of a regression model. Other tools include the residuals vs. fitted plot, the Scale-Location plot, and the Cook's Distance plot.

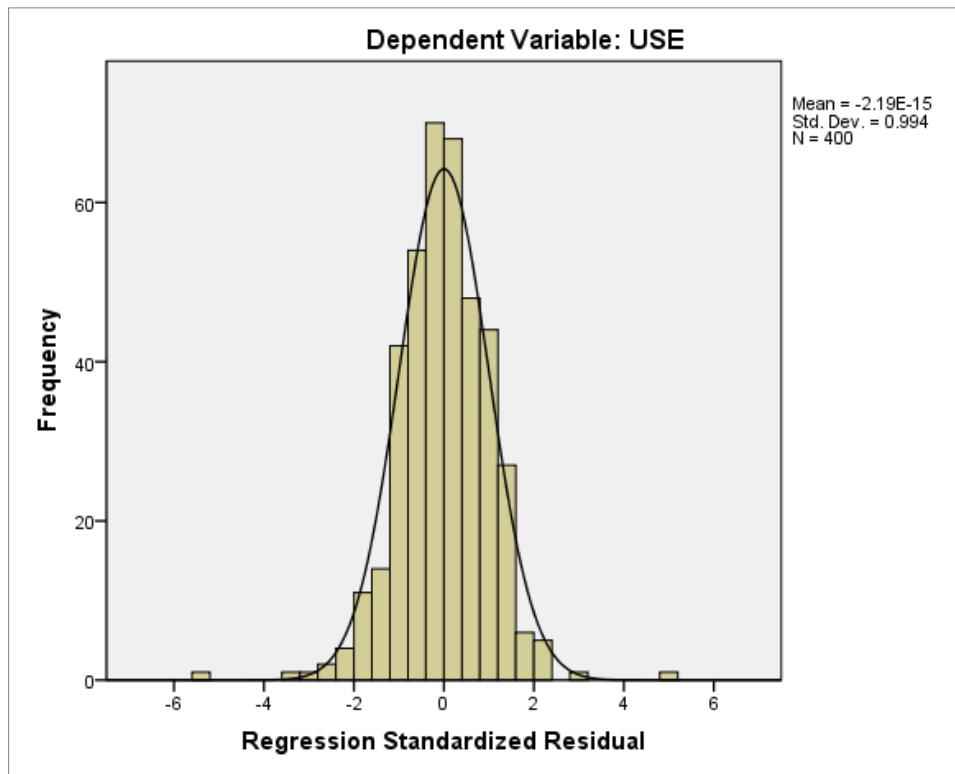


Figure 4. Histogram check for skewness

3-3-Regression Model Evaluation

Evaluating a regression model using MSE and MAE is a common approach to assessing its predictive performance. These metrics provide insights into how well the model's predictions align with the observed values. The regression model evaluated shows that: 1) MSE is 0.1879141056220364, MSE measures the average of the squared differences between predicted and actual observed values. In this study, an MSE of approximately 0.1879 suggests that, on average, the squared difference between our model's predictions and the actual data values is around 0.1879. A lower MSE indicates that our model's predictions are closer to the actual values. 2) MAE is 0.34936426891068373, MAE calculates the average of the absolute differences between the predicted values and the actual observed values. In this study, an MAE of approximately 0.3494 implies that, on average, the absolute difference between our model's predictions and the actual data values is around 0.3494. MAE measures the average magnitude of errors made by our model. A lower MAE indicates that our model's predictions are, on average, closer to the actual values.

In summary, the MSE and MAE values provide insights into how well the regression model is performing. Lower values for both metrics are generally desirable, indicating that the model is making predictions that are closer to the actual data values. However, the specific interpretation of what constitutes a "good" MSE or MAE value can vary depending on the context of your problem and the scale of the dataset. It's often helpful to compare these values to a baseline model or other models if available to assess relative performance.

4- Discussion

The results of the study showed that there was a significant positive correlation between all the factors and taking advantage of social media. The findings of this study shed light on the factors influencing the utilization of social media among undergraduate students in Thailand's higher education institutions. The rigorous methodology employed in this research, including the multi-stage sampling approach and comprehensive data collection process, has provided valuable insights into the dynamics of social media usage among Thai youths. The initial analysis revealed the presence of multicollinearity, primarily driven by the high correlation between certain independent variables, particularly the EVA variable. This issue was effectively addressed by excluding the EVA variable from the model, leading to the absence of multicollinearity in subsequent analyses. This crucial step ensured the reliability and validity of the results obtained in the study. The multiple regression analysis yielded important findings regarding the factors influencing the utilization of social media among Thai youth. Significantly, using social media, having access to social media, and demonstrating creativity and participation through social media emerged as substantial predictors of leveraging social media. These findings align with previous research highlighting the importance of motivation and access to social media platforms in influencing users' engagement [52-53]. Additionally, creativity and active participation in shaping social media usage patterns underscores the dynamic nature of online engagement [54].

However, it is noteworthy that social media content analysis did not exhibit a significant relationship with taking advantage of social media in this study. The complexity of content analysis and the need for more nuanced measures to capture its influence on users' behaviors contribute to this result. Further exploration and refinement of content analysis methodologies may provide deeper insights into their role in social media utilization. The derived predictive equation offers a practical tool for understanding and forecasting social media usage among Thai undergraduate students. The equation highlights the significance of motivation, access, and creativity as drivers of social media engagement, providing educators, policymakers, and researchers with valuable insights into strategies for promoting responsible and effective use of social media within this demographic. However, it is crucial to acknowledge the limitations of this study. While the model explains a substantial portion of the variance in social media utilization (approximately 40.2%), a significant proportion of the variance remains unexplained (about 59.8%). This suggests that other factors not included in the current model may also influence social media usage among this population. These unexplored factors could encompass cultural influences, peer networks, or individual personality traits that warrant further investigation.

The present study contributes to the expanding body of knowledge regarding social media utilization among undergraduate students in Thailand. The study's findings underscore several critical factors, including motivation, access, and creativity, which are pivotal in shaping social media engagement within this demographic. The study also highlights the need for continued exploration and research into the multifaceted dynamics of online engagement in the ever-evolving digital age. Previous studies have explored various factors that shape academic performance and evaluated key concepts related to social software [12]. Several studies have explored motivations for social media use, such as entertainment, information seeking, personal utility, and convenience, across diverse cultures [12, 17, 19, 46, 47]. Cultural nuances are acknowledged as potential influences on these motivations, suggesting the necessity of incorporating cultural values in future studies. Studies on social media access shed light on challenges and policy considerations, particularly in educational settings. The research result emphasizes the need for effective social media literacy to navigate the evolving technology landscape responsibly [25, 33, 40].

Social media content analysis studies demonstrate the diverse applications of content analysis, ranging from health-related discussions to conservation efforts [25, 26, 33]. The findings underscore the importance of analyzing user-generated content for insights into public sentiment, market trends, and societal shifts. Evaluating social media content emerges as a crucial aspect, with studies emphasizing the need for tools and frameworks to discern the reliability and credibility of information on social media platforms [25]. The investigated relationship between social media, creativity, and participation is explored in various contexts, showcasing how individuals and communities leverage these platforms for activism, self-expression, and community building [17]. The study also highlights the importance of exploring content analysis's role in understanding and assessing social media engagement among students [12, 17, 19, 25, 39, 40].

Overall, the present study's findings align with previous research, emphasizing the significance of motivation, access, and creativity in shaping social media engagement among undergraduate students. The study's insights hold valuable implications for educators and policymakers alike, providing a stepping stone for further investigations into the complex relationship between social media, motivation, access, creativity, and user behaviors among undergraduate students in Thailand.

In conclusion, this research significantly contributes to the expanding body of knowledge regarding social media utilization among undergraduate students in Thailand. The findings underscore several critical factors, including motivation, access, and creativity, which play pivotal roles in shaping social media engagement within this demographic. Moreover, the study underscores the ongoing importance of exploring the role of content analysis in understanding and assessing social media engagement among students. These insights hold valuable implications for educators and policymakers alike. By recognizing the significance of motivation, access, and creativity, they can develop and implement more effective strategies to promote responsible and meaningful social media usage among young individuals. These strategies may include educational programs, digital literacy initiatives, and policies encouraging positive online interactions. Furthermore, this research highlights the need for continued exploration and research into the multifaceted dynamics of online engagement in the ever-evolving digital age. Researchers must stay abreast of these changes as social media platforms and digital technologies evolve, providing valuable insights that can inform future educational practices and policy development. Ultimately, this study offers a stepping stone for further investigations into the complex relationship between social media, motivation, access, creativity, and user behaviors among undergraduate students in Thailand. It serves as a reminder of the dynamic nature of digital communication and the importance of adapting educational and policy strategies to harness the potential benefits of social media while mitigating its potential drawbacks for the younger generation.

5- Conclusion

This study contributes to the expanding body of knowledge regarding social media utilization among undergraduate students in Thailand. The study's findings underscore several critical factors, including motivation, access, and creativity, which are pivotal in shaping social media engagement within this demographic. Moreover, the study integrates theoretical perspectives from social psychology, communication studies, and digital media research to comprehensively understand the motivations, access, and creativity that drive social media utilization within this demographic. The study's insights hold valuable implications for educators and policymakers alike, providing a stepping stone for further investigations into the complex relationship between social media, motivation, access, creativity, and user behaviors among undergraduate students in Thailand. The study's contribution to the academic landscape is noteworthy because it sheds light on unexplored facets such as cultural dynamics, peer networks, and individual traits, enriching our understanding of the intricate social media landscape among Thai undergraduate students. The study's predictive equation offers a practical tool for understanding and forecasting social media engagement patterns among Thai undergraduate students. The findings underscore the importance of motivation, access, and creativity as driving forces behind social media utilization, providing educators, policymakers, and researchers with valuable insights into strategies for promoting responsible and effective use of social media within this demographic.

In conclusion, this study offers a stepping stone for further investigations into the complex relationship between social media, motivation, access, creativity, and user behaviors among undergraduate students in Thailand. The study's theoretical approach allows for a multi-faceted exploration of individual motivations, social dynamics, technological affordances, and cultural influences that shape the utilization of social media platforms within this demographic. The study's findings provide valuable insights into the determinants of social media usage among Thai undergraduate students, emphasizing the imperative of fostering responsible and effective use of social media within this demographic. Therefore, this study emphatically motivates the academic community to engage in actionable, practical scholarship to promote responsible and effective use of social media among young individuals.

6- Declarations

6-1-Author Contributions

Conceptualization, K.J., W.C., S.K., U.D., and C.L.; methodology, K.J., W.C., S.K., U.D., and C.L.; software, K.J., W.C., S.K., U.D., and C.L.; validation, K.J., W.C., S.K., U.D., and C.L.; formal analysis, K.J., W.C., S.K., U.D., and C.L.; investigation, K.J., W.C., S.K., U.D., and C.L.; resources, K.J.; data curation, K.J.; writing—original draft preparation, K.J., W.C., S.K., U.D., and C.L.; writing—review and editing, K.J., W.C., S.K., U.D., and C.L.; visualization, K.J., W.C., S.K., U.D., and C.L.; supervision, K.J. and W.C.; project administration, K.J. and W.C.; funding acquisition, K.J. and W.C. All authors have read and agreed to the published version of the manuscript.

6-2-Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6-3-Funding

The Faculty of Humanities and Social Sciences, Khon Kaen University, Thailand, granted this research a research fund for fiscal year 2022.

6-4-Institutional Review Board Statement

Not applicable.

6-5-Informed Consent Statement

Not applicable.

6-6-Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

7- References

- [1] Duggan, M., & Brenner, J. (2013). The demographics of social media users, 2012. Pew Research Center's Internet & American Life Project, Washington, United States.
- [2] Levinson, M. (2013). The digital lives of teens: Mobile is now. Edutopia, California, United States. Available online: <https://www.edutopia.org/blog/digital-teens-mobile-is-now-matt-levinson> (accessed on March 2024).
- [3] Koff, R., & Moreno, M. (2013). Older adolescents' perceptions of personal Internet use. *College Student Journal*, 47(2), 390-393.

- [4] Miller, R. C. (2015). *The Mobile Phone and You: Human Interaction and Integration with Mobile Technology*. Master Thesis, Georgia State University, Atlanta, United States.
- [5] Gross, E. F. (2004). Adolescent Internet use: What we expect, what teens report. *Journal of Applied Developmental Psychology*, 25(6), 633–649. doi:10.1016/j.appdev.2004.09.005.
- [6] Al-Menayes, J. J. (2015). Motivations for Using Social Media: An Exploratory Factor Analysis. *International Journal of Psychological Studies*, 7(1), 43. doi:10.5539/ijps.v7n1p43.
- [7] Lau, W. (2016). Individual differences in motivations for using social media among university students. 33rd International Conference of Innovation, Practice and Research in the Use of Educational Technologies in Tertiary Education, 27-30 November, 2016, Adelaide, Australia.
- [8] Hussein, R. S., Hassan, S. S., & Ashley, D. (2021). Social media continuation intention: a contrarian analysis. *Journal of Marketing Theory and Practice*, 29(2), 175–188. doi:10.1080/10696679.2020.1807366.
- [9] Alsalem, F. (2019). Why do they post? Motivations and uses of Snapchat, Instagram and twitter among Kuwait college students. *Media Watch*, 10(3), 550–567. doi:10.15655/mw/2019/v10i3/49699.
- [10] Alhadabi, A., & Karpinski, A. C. (2020). Development and psychometric assessment of the social media motives scale among university students. *European Journal of Educational Research*, 9(2), 835–851. doi:10.12973/eu-jer.9.2.835.
- [11] Throuvala, M. A., Griffiths, M. D., Rennoldson, M., & Kuss, D. J. (2019). Motivational processes and dysfunctional mechanisms of social media use among adolescents: A qualitative focus group study. *Computers in Human Behavior*, 93, 164–175. doi:10.1016/j.chb.2018.12.012.
- [12] Trang, N. T. Q. (2023). The Role of Social Media in Academic Motivation and Engagement: A Case Study of Undergraduate Students in Vietnam. *International Journal of Social Science and Education Research Studies*, 3(7), 1423–1434. doi:10.55677/ijssers/v03i7y2023-32.
- [13] Ahn, J., Bivona, L. K., & Discala, J. (2011). Social media access in K-12 schools: Intractable policy controversies in an evolving world. *Proceedings of the American Society for Information Science and Technology*, 48(1), 1–10. doi:10.1002/meet.2011.14504801044.
- [14] Karpman, H. E., & Drisko, J. (2016). Social Media Policy in Social Work Education: A Review and Recommendations. *Journal of Social Work Education*, 52(4), 398–408. doi:10.1080/10437797.2016.1202164.
- [15] Martin, F., Wang, C., Petty, T., Wang, W., & Wilkins, P. (2018). Middle school students' social media use. *Educational Technology & Society*, 21(1), 213–224.
- [16] Rodgers, R. F., Mclean, S. A., Gordon, C. S., Slater, A., Marques, M. D., Jarman, H. K., & Paxton, S. J. (2021). Development and Validation of the Motivations for Social Media Use Scale (MSMU) Among Adolescents. *Adolescent Research Review*, 6(4), 425–435. doi:10.1007/s40894-020-00139-w.
- [17] Abd Malik, I., & Derioh, M. M. G. (2021). The Relationship between Motivational Factors towards Students Engagement among Undergraduate Student Amid Covid-19 Crisis. *International Journal of Academic Research in Business and Social Sciences*, 11(6), 847–855. doi:10.6007/ijarbss/v11-i6/10215.
- [18] Wickramanayake, L. (2021). Social media use by adolescent students of Sri Lanka: impact on learning and behavior. *Global Knowledge, Memory and Communication*, 71(1/2), 70–85. doi:10.1108/gkmc-08-2020-0123.
- [19] Duan, N., & Li, H. (2023). An Empirical Study on the Influence of Social Media Overload on Learning Engagement. *Journal of System and Management Sciences*, 13(4), 331–347. doi:10.33168/JSMS.2023.0420.
- [20] Stellefson, M., Paige, S., Apperson, A., & Spratt, S. (2019). Social Media Content Analysis of Public Diabetes Facebook Groups. *Journal of Diabetes Science and Technology*, 13(3), 428–438. doi:10.1177/1932296819839099.
- [21] Fox, K., & Singh, P. (2022). What are dental professionals posting on Facebook? A cross-sectional content analysis. *Journal of Orthodontics*, 49(2), 185–194. doi:10.1177/14653125211033302.
- [22] Kordzadeh, N., & Young, D. K. (2018). Exploring hospitals' use of Facebook: Thematic analysis. *Journal of Medical Internet Research*, 20(5), 9549. doi:10.2196/jmir.9549.
- [23] Hefler, M., Kerrigan, V., Grunseit, A., Freeman, B., Kite, J., & Thomas, D. P. (2020). Facebook-based social marketing to reduce smoking in Australia's first nations communities: An analysis of reach, shares, and likes. *Journal of Medical Internet Research*, 22(12), 16927. doi:10.2196/16927.
- [24] Pócs, D., Adamovits, O., Watt, J., Kovács, R., & Kelemen, O. (2021). Facebook Users' interactions, organic reach, and engagement in a smoking cessation intervention: Content analysis. *Journal of Medical Internet Research*, 23(6), 27853. doi:10.2196/27853.
- [25] Papaioannou, T. (2021). Media, obesity discourse, and participatory politics: Exploring digital engagement among university students. *Journal of Media Literacy Education*, 13(3), 19–34. doi:10.23860/JMLE-2021-13-3-2.

- [26] Jamaludin, N. L., Abdullah Sani, N. Z. A., Muhamad Hariri, M. S. C., & Syed Omar, S. A. (2023). The Influence of Social Media on Self-Esteem among International Business Students in One of the Public Universities. *Information Management and Business Review*, 15(3(SI)), 179–186. doi:10.22610/imbr.v15i3(si).3476.
- [27] Diaz, P., Takele, R. A., Thaker, S., Thaker, K. N., Ballon, J., Lucas, M., Kunitsky, K., & Scotland, K. B. (2022). Kidney Stone Surgery: Assessing Public Interest and Evaluating Social Media Content. *Journal of Endourology*, 36(7), 954–960. doi:10.1089/end.2021.0902.
- [28] Jarrahi, A., & Safari, L. (2023). Evaluating the effectiveness of publishers' features in fake news detection on social media. *Multimedia Tools and Applications*, 82(2), 2913–2939. doi:10.1007/s11042-022-12668-8.
- [29] Bergman, J. N., Buxton, R. T., Lin, H. Y., Lenda, M., Attinello, K., Hajdasz, A. C., Rivest, S. A., Nguyen, T. T., Cooke, S. J., & Bennett, J. R. (2022). Evaluating the benefits and risks of social media for wildlife conservation. *Facets*, 7(1), 360–397. doi:10.1139/FACETS-2021-0112.
- [30] Han, W., McCabe, S., Wang, Y., & Chong, A. Y. L. (2018). Evaluating user-generated content in social media: an effective approach to encourage greater pro-environmental behavior in tourism? *Journal of Sustainable Tourism*, 26(4), 600–614. doi:10.1080/09669582.2017.1372442.
- [31] Pierce, C. E., Bouri, K., Pamer, C., Proestel, S., Rodriguez, H. W., Van Le, H., Freifeld, C. C., Brownstein, J. S., Walderhaug, M., Edwards, I. R., & Dasgupta, N. (2017). Evaluation of Facebook and Twitter Monitoring to Detect Safety Signals for Medical Products: An Analysis of Recent FDA Safety Alerts. *Drug Safety*, 40(4), 317–331. doi:10.1007/s40264-016-0491-0.
- [32] Zainuddin, N. A., Ravichandran, V., Rahman, R. A., & Yusof, Z. M. (2022). The Influence of Social Media on University Students' Self-Esteem. *Pertanika Journal of Social Sciences & Humanities*, 30(3), 1037–1048. doi:10.47836/pjssh.30.3.06.
- [33] Chaitali, Gohri, J., Hegde, S., K. S., S., & Doddaiiah, S. K. (2023). Social media and mental health of undergraduate medical students of Mysuru: cross sectional study. *International Journal of Community Medicine and Public Health*, 10(8), 2863–2867. doi:10.18203/2394-6040.ijcmph20232379.
- [34] Wang, G., Destofia, L. A., Nurullah, F., & Bernanda, D. Y. (2019). The influence of social media and knowledge management to improve employees creativity. *International Journal of Advanced Trends in Computer Science and Engineering*, 8(5), 1927–1936. doi:10.30534/ijatcse/2019/17852019.
- [35] Ustyuzhanina, D. (2020). I am Online, Therefore I Exist. New Media as a Sphere of Users' Social Creativity. *Logos et Praxis*, 19(1), 63–73. doi:10.15688/lp.jvolsu.2020.1.7.
- [36] Sigala, M., & Chalkiti, K. (2015). Knowledge management, social media and employee creativity. *International Journal of Hospitality Management*, 45, 44–58. doi:10.1016/j.ijhm.2014.11.003.
- [37] Rialti, R., Caliendo, A., Zollo, L., & Ciappei, C. (2018). Co-creation experiences in social media brand communities: Analyzing the main types of co-created experiences. *Spanish Journal of Marketing - ESIC*, 22(2), 122–141. doi:10.1108/SJME-03-2018-0011.
- [38] Zhong, L. (2022). Analyses of the Relationship between Virtual Influencers' Endorsements and Customer Brand Engagement in Social Media. *Proceedings of the 2022 International Conference on Creative Industry and Knowledge Economy (CIKE 2022)*, 214, 37–41. doi:10.2991/aebmr.k.220404.007.
- [39] Hynes, K., Donnelly, M. E., Banks, B. M., & Horton, A. (2023). Post or protest?: Factors influencing white women's engagement in activism. *Journal of Human Behavior in the Social Environment*, 33(6), 846–858. doi:10.1080/10911359.2022.2096739.
- [40] Immanuella, B. D. U., Kurniawati, F., & Rifameutia, T. (2023). Student Engagement Among Undergraduate Students in Southeast Asia: Systematic Literature Review. *Journal of Innovation in Educational and Cultural Research*, 4(4), 602–615. doi:10.46843/jiecr.v4i4.961.
- [41] Affum, M. Q. (2021). How the library and information workers are taking advantage of social network to perform efficiently and effectively. *International Journal of Computing, Programming and Database Management*, 2(1), 49–52. doi:10.33545/27076636.2021.v2.i1a.45.
- [42] Usino, W., & Murtiningsih, D. (2019). The Implementation of Social Media Marketing and Customer Relationship Management as a Competitive Advantage in Private Higher Education to Increase Student Loyalty. *Proceedings of the Proceedings of the 1st Workshop on Multidisciplinary and Its Applications Part 1, WMA-01 2018, 19-20 January 2018, Aceh, Indonesia*. doi:10.4108/eai.20-1-2018.2281895.
- [43] Mphahlele, M. I., Mokwena, S. N., & Ilorah, A. (2021). The impact of digital divide for first-year students in adoption of social media for learning in South Africa. *South African Journal of Information Management*, 23(1), 1–9. doi:10.4102/sajim.v23i1.1344.
- [44] Elsayed, A. A., Caeiro-Rodriguez, M., Mikic-Fonte, F. A., & Llamas-Nistal, M. (2021). A Novel Method to Measure Self-Regulated Learning Based on Social Media. *IEEE Access*, 9, 93516–93528. doi:10.1109/ACCESS.2021.3092943.

- [45] Ana, M.-I., & Istudor, L.-G. (2019). The Role of Social Media and User-Generated-Content in Millennials' Travel Behavior. *Management Dynamics in the Knowledge Economy*, 7(1), 87–104. doi:10.25019/mdke/7.1.05.
- [46] Boonlue, T., & Sillence, E. (2021). Self-Compassion, Psychological Resilience, and Social Media Use among Thai and British University Students. *Journal of Social Science and Humanities*, 47(1), 9-28.
- [47] Caoili-Tayuan, R., & Ching, M. (2021). Social Media Responsibility: Factors Influencing Academic Performance for Collaborative Learning Among the College Learning Students. *International Conference on Education*, 7(1), 368–378. doi:10.17501/24246700.2021.7137.
- [48] Feroz, H. M. B., Zulfiqar, S., Noor, S., & Huo, C. (2022). Examining multiple engagements and their impact on students' knowledge acquisition: the moderating role of information overload. *Journal of Applied Research in Higher Education*, 14(1), 366–393. doi:10.1108/JARHE-11-2020-0422.
- [49] Ministry of Higher Education (2021). Student information. Division of Strategic Information Systems and Management for Higher Education, Science, Research and Innovation, Thailand. Available online: https://info.mhesi.go.th/homestat_std.php (Available online April 2024).
- [50] Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in the assessment of criterion-referenced test item validity. *Journal for Educational Research*, 2(2), 49–60.
- [51] Hair, J. H., Black, W. C., Babin, B. J., and Anderson, R. E. (2014). *Multivariate Data Analysis*. Pearson Education Limited, London, United Kingdom.
- [52] Preez, M. (2009). Social Networking Communities and E-dating Services: Concepts and Implications. *Online Information Review*, 33(3), 623–624. doi:10.1108/14684520910970068.
- [53] Scheerder, A., van Deursen, A., & van Dijk, J. (2017). Determinants of Internet skills, uses and outcomes. A systematic review of the second- and third-level digital divide. *Telematics and Informatics*, 34(8), 1607–1624. doi:10.1016/j.tele.2017.07.007.
- [54] Bakshy, E., Rosenn, I., Marlow, C., & Adamic, L. (2012). The role of social networks in information diffusion. *Proceedings of the 21st Annual Conference on World Wide Web*. doi:10.1145/2187836.2187907.
- [55] Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics*. McGraw-Hill, New York, United States.
- [56] Al-Jamili, O., Ibrahim, H., & Ahmad, R. (2022). An Integrated Model for Predicting the User Continuance Intention towards Utilizing Open Government Data. *Journal of System and Management Sciences*, 12(4), 295–323. doi:10.33168/JSMS.2022.0419.