
PROMOTING NEW MEDIA LITERACY IN INTERNET USAGE AMONG YOUTHS: A CONCEPTUAL PAPER

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ABSTRACT

The rapid progress of Internet technology has profoundly influenced multiple aspects of life. The proliferation of the Internet has sparked worries over its ethical use and ensuing repercussions, particularly among youths in Malaysia. Suicide, fraud, harassment, and Internet scams underscore the potential dangers. The study aims to enhance theoretical understanding of the topic by emphasizing the significance of promoting new media literacy in the context of Internet usage. The study uses quantitative methodology, entailing surveys on youths aged 18 to 30 living in Shah Alam, Selangor. The findings are expected to contribute to the theoretical knowledge of the importance of promoting new media literacy while using the Internet.

Keywords: *new media, literacy, Internet usage, youth, impact*

INTRODUCTION

Internet access has become increasingly important in this age of globalisation for fostering social contact, delivering entertainment, and gaining information and knowledge (Ugurhan et al., 2020). The advent of the Internet has profoundly influenced multiple domains including the corporate landscape, modes of communication, and global popular culture throughout the 21st century (Aser et al., 2022). Furthermore, the Internet serves as a means to obtain information, stay updated on current events, and facilitate learning and education, particularly among younger individuals (Chupradit et al., 2021; Szymkowiak et al., 2021).

As a prominent means of communication, Kemp (2021) reported a 2.8% growth in Internet users, i.e., an increase of 738 thousand individuals from 2020 to 2021. It is expected

that there will be 30 million Internet users by 2025. There has also been a notable surge in Internet usage, with over 28.6% of respondents in Malaysia dedicating a considerable amount of time utilising the Internet regularly (Joschka, 2021). At the commencement of 2023, the number of Internet users in Malaysia amounted to 33.03 million, with an Internet penetration rate of 96.8%. In January 2023, Malaysia recorded 26.80 million active social media users or around 78.5% of the population. In early 2023, Malaysia had 44.05 million active cellular mobile connections, representing 129.1% of the country's population (Kemp, 2023).

In 2023, the most active Internet users are individuals between the ages of 25 and 34, i.e., those born during the Internet boom. Approximately 8.4 million users fall into the group, accounting for 31.5% of Malaysia's total population. With 28.6% users under 25, young people in Malaysia make up over a quarter of the country's total population who are heavy users of the Internet (Kemp, 2023). The issue of problematic Internet usage has been a subject of concern and scrutiny in academic circles. The term "use" refers to the utilization of the Internet that gives rise to a range of challenges (Kozybska et al., 2022). The amount of time dedicated to smartphone usage and Internet consumption has shown a significant and continuous rise, particularly among the younger demographic (Raveendran et al., 2021) and has been observed to reduce the users' sleep duration and working hours. In India, smartphone usage has increased the susceptibility to health risks among the younger population (Archana & Balaji, 2020). Meanwhile, the utilisation of social media in Malaysia has resulted in the adoption of unhealthy lifestyles. High social media addiction is linked to Internet usage, which indirectly influences the interests, activities, and time allocation of young individuals (Andrew et al., 2020).

The advent of the Internet coincides with a growing awareness of ethical considerations and the potential impact on its users. Numerous social issues have arisen among the younger generation in Malaysia, including homicide, sexual assault, physical aggression, harassment, substance misuse, and various other concerns (Johari et al., 2020; Sari Rumra & Agustina Rahayu, 2021). In 2019, an incident occurred in Batu Kawah, Sarawak, involving young individuals who tragically took their own lives after obtaining online votes from Internet users encouraging them to commit suicide (Khalik, 2019). Additionally, Astro Awani reported on a case involving a woman who fell victim to a fraud syndicate and lost RM 38,000 after giving her bank cards and personal bank data to strangers online. It is thought that the syndicate uses the Internet to sell gifts and valuables from overseas (Bernama, 2023). Moreover, since 2016, the Malaysian Communications and Multimedia Commission (MCMC) has received 15,238 complaints on online harassment entailing bullying, sexual harassment, threats, and the misuse of personal data and private pictures to victimise or humiliate targets (Veena Babulal, 2021). Interestingly, due to lack of literacy, Malaysians have suffered a total loss of RM302 million due to online scams on Facebook and Instagram from 2021 to June this year (Malay Mail, 2023). As for young adults, it is important to be more sensitive and careful when using the Internet for communication and posting online contents (Tengku Mohd Azzman, 2023). This highlights the multifaceted challenges and risks associated with online activities, and underscores the need for heightened awareness and protective measures.

Furthermore, Prof. Dr. Zulikha Jamaludin of Universiti Utara Malaysia (UUM) asserted that individuals are readily drawn to the Internet as a result of its design, whereby feelings of emptiness are induced when not engaging with it (Laupa Junus, 2020). According to a news report by Kosmo (2022) taken from the MailOnline Seoul news portal study, researchers from the Red Cross College of Nursing in Seoul found that increased Internet usage among

students is associated with a higher susceptibility to mental health issues and a propensity towards suicide ideation.

Additionally, the proliferation of the Internet has led to increased dissemination of negative information, hence exerting an influence on the attitudes and emotions of users (Wardatul & Peng, 2021). Internet utilisation has been linked to several mental health issues, including melancholy, fear, and anxiety (Ahmed et al., 2021). In a news report by UtusanTV journalist, Farhan (2022) reported that Egyptian police had arrested two youths in connection with a suicide case involving a school student accused of threatening a suspect with a digitally modified picture on the Internet. The case of Internet bullying and the loss of a teenage girl's life sparked the anger of social media users in Egypt against the perpetrators, leading to the demand for their prosecution.

In addition, it should be noted that several programmes and initiatives have been implemented by reputable organisations like UNICEF Malaysia, Cybersecurity Malaysia, and Malaysian Communications and Multimedia Commission (MCMC) to enhance young individuals' awareness regarding online threats and to promote digital literacy. However, the efficacy of these programmes remains to be seen (Waheed, 2019).

The level of Internet literacy exhibits variations based on factors such as age, gender, and educational attainment. Notably, the percentage of young people who use the Internet is higher than that of any other age group (Castillo-Gutiérrez et al., 2021). The current study aims to identify disparities in Internet usage and literacy among youths based on age, gender, and educational background. While prior research has examined the effects of the Internet on users, there is a notable gap in the literature about the importance of new media literacy and usage of the Internet.

For a more comprehensive view, this concept paper sums up the research questions into the following:

RQ1: What is the frequency of Internet usage among the youth?

RQ2: How do new media literacy and Internet usage correlate to young individuals?

LITERATURE REVIEW

History of the Internet in Malaysia

Military goals focused on national security and defence were the main drivers of the Internet's early development in the United States. The Advanced Research Project Agency (ARPA), a division of the United States Department of Defence and the United States Army, oversees the Internet, formerly ARPANET. Internet development in Malaysia centred around research and communication rather than military applications (Adnan & Kamaliah, 2000).

In Malaysia, Internet connectivity can be traced back to 1983, when Dr Mohamed Awang-Lah, a former OUM Board of Directors member, played a pivotal role in establishing Malaysia's connection to the global network. Dr Awang-Lah, affectionately known as the father of the Malaysian Internet, spearheaded this initiative at the University of Malaya (UM) research facility, where he served as a respected academic staff member in the Faculty of Electrical/Electronics. In 1984, Dr Mohamed Awang-Lah was assigned to MIMOS (Malaysian Institute of Microelectronic Systems), where he established a comparable Internet connection. The establishment of MIMOS by the government provided technologically-skilled Malaysians

in information technology with the opportunity to enhance Internet connectivity (Fadzil & Hashim, 2009).

In 1987, the Institute initiated the Malaysian Internet project by introducing the RangKom project (Rangkaian Komputer Malaysia or Malaysia Computer Network) to select user groups. In 1989, MIMOS collaborated with the Ministry of Education to promote and implement Computer Integrated Education within the framework of the national educational programme. As a result of this development, the nation introduced its inaugural training literature tool, COMIL, designed to aid instructors in creating educational materials in Bahasa Malaysia. During that period, Internet utilisation was primarily limited to educational institutions, specifically universities. However, other sectors fully embraced its use in the mid-1990s (Fadzil & Hashim, 2009).

In response to the growing customer base and the need to deliver optimal services, Telekom Malaysia Berhad established TMNet on November 1, 1996, as Malaysia's subsequent Internet Service Provider (ISP) following the acquisition of a government license (Fadzil & Hashim, 2009; Hashim & Yusof, 1999). In Malaysia, towards year-end in 2000, several firms including DiGi Telecommunications Sdn Bhd (formerly known as Mutiara), Maxis Communications Berhad, and Time dotCom Berhad were among those that provided Internet Service Provider (ISP) benefits. The utilisation of the Internet is experiencing a significant surge, serving as the primary medium for global interactive communication in the 21st century.

In 2008, the government implemented a policy to provide broadband services, emphasising high-speed broadband and its accessibility to the wider public. In 2010, Telekom Malaysia (TM) implemented the provision of high-speed broadband services. In the subsequent year, the Malaysian government initiated a national broadband effort to facilitate Internet access for the Malaysian populace. The year 2018 witnessed more progress in Internet development in Malaysia, as seen by the implementation of the national fiberisation and connection plan. This initiative aimed to enhance global Internet connectivity by providing high-speed broadband services (Gong, 2020).

As the Internet continues to advance, Malaysia faces the fundamental challenge of effectively embracing the full potential of Internet technology while also acknowledging its inherent limitations. The advent of Internet infrastructure in Malaysia has presented Malaysians with the prospect of engaging with and harnessing the potential of the Internet, thereby acquiring the necessary competencies to integrate technology into their everyday routines. Moreover, the proliferation of Internet connectivity enhances the overall user experience (Niqotaini, 2021).

Internet Users

The prevalence of Internet usage in Malaysia witnessed a notable surge according to International Telecommunication Union (ITU), with approximately 89.55% of the country's population identified as active Internet users (ITU, 2020). According to Müller (2021), the Internet penetration rate in Malaysia experienced a significant growth of 88% in 2020. Based on projections from the Department of Statistic Malaysia (DOSM, 2021), this rate is expected to further climb to 89.6%. In contrast to its neighbouring country, Indonesia, Malaysia has emerged as the fourth largest global consumer of Internet services, with a substantial user base of 171.26 million individuals in 2019 (Syam & Nurrahmi, 2020). Prior research indicated

a notable surge in Internet accessibility inside Malaysia, with over 50% of the population actively engaging with online platforms.

The Internet User Survey (IUS), initiated in 2012 by the Malaysian Communications and Multimedia Commission (MCMC), monitors Internet utilisation among Malaysians. In the year 2020, the proportion of individuals who utilise the Internet amounted to 88.7%, while the remaining 11.3% did not engage with online platforms. The demographic profile of non-Internet users entails 4.7% individuals below the age of 20; 24.4% between the ages of 20 and 50, and 51.8% individuals aged 50 and beyond (MCMC, 2021).

In terms of Internet usage time span, it is observed that the global population dedicates an average of 8 hours and 6 minutes, irrespective of the device used (Kemp, 2023). Conversely, the proliferation of the Internet in individuals' daily routines has led to a corresponding rise in its utilisation throughout the course of time (Koçak et al., 2021). The preceding discourse provided a concise overview of the increase in Internet users and the many activities conducted through Internet utilisation.

Purpose of Using the Internet

The Internet is an extensive platform that is used for diverse purposes such as gaming, entertainment, and acquiring information (Mohammed Abubakar & Al-zyoud, 2021). Furthermore, Internet usage encompasses a range of activities including online conversations, e-commerce transactions, financial investments, and online gambling. The use of the Internet by youths in informal and social activities has been recognized by previous research as constituting a component of leisure and amusement (Jo et al., 2020).

Patterns in youths' Internet usage have been changing over time, reflecting a rising prevalence of internet engagement in diverse activities (Hashemi et al., 2022). Numerous scholars have documented the primary objective of the Internet, which is to facilitate connectivity and interpersonal engagement (Ergun Basak & Aydin, 2019). Youths connect to the Internet through a diverse range of gadgets including smartphones, personal computers, laptops, tablets, and other similar technological tools, accessible across various locations. Moreover, the utilisation of the Internet has had significant impacts on individuals (Tanti, 2022).

New Media Literacy

Historically, the term "new media literacy" was often used interchangeably with "media literacy" to advocate for the cultivation of a more informed society, promoting critical analysis and responsible consumption of media content. Traditional media literacy previously focused on the proper use and reception of media materials (Ugurhan et al., 2020) with the objective to promote media literacy among users. The concept of traditional media literacy empowers individuals to engage with media sources effectively. However, it is essential to acknowledge that this approach has certain limitations, particularly its emphasis on actively creating and disseminating media materials especially among youths (Celik et al., 2021).

In light of technological advancements and the emergence of Information and Communication Tools (ICT) in the 21st century, commonly known as the Digital Age, it becomes imperative to reconsider the terminology associated with media literacy. Furthermore, contemporary media literacy necessitates the production of self-generated

content (Ugurhan et al., 2020). Media literacy refers to the capacity to effectively access, critically analyse, evaluate, and generate media messages across diverse contexts (Xiao et al., 2021). Gaining an understanding of the factors that precede the development of new media literacy can provide valuable insights into effective strategies for fostering new media literacy abilities among youths. In essence, the consideration of these elements holds significance in the formulation of measures aimed at mitigating the spread of misinformation (Celik et al., 2021). As the Internet facilitates interaction and information attainment, being Internet literate and proficient can help users in producing good contents and filtering the negative ones.

The new media idea encompasses the principles of interaction and connectedness, wherein messages are generated and disseminated through a specific medium (Ugurhan et al., 2020). The emergence of Web 2.0 has significantly enhanced the Internet's capacity as a platform for generating and disseminating knowledge on a broader scale. Historically, individuals have mostly engaged in accessing and consuming media messages. However, in contemporary times, there has been a notable shift towards active participation by youths in producing and distributing message contents (Tengku Mohd Azzman, 2023). Furthermore, it is noteworthy that the 21st century has witnessed significant transformations and progress in the realm of new media, which have permeated individuals across the globe (Dalne & Moundekar, 2023).

Youths in Malaysia

The age range of youths is typically between 15 and 24 years old as set by the United Nations. Ensuring the well-being and development of future generations is of paramount importance, since they represent the future of the nation. The United Nations emphasizes the significance of young individuals being independent from their childhood as well as their personal growth and well-being (United Nations, 2014).

Different nations have distinct interpretations of youth, and in the case of Malaysia, the Ministry of Youth and Sports through the National Youth Development Policy (1997) defines youths as individuals falling within the age range of 15 to 40 years. However, the youth development programme involves those within the age range of 18 to 25 years old. In other Southeast Asian nations such as Singapore and Vietnam, the age limit for certain activities is typically set between 15 and 35 years old. Conversely, in Western countries like the United Kingdom, the age limit for the same activities is generally between 14 and 25 years old. The age and definition of youth in Malaysia were recently changed by the Ministry of Youth and Sports to encompass those between the ages of 15 to 30 years old, with the age policy in Malaysia reviewed in 2018 (Arfa & Esther, 2019).

THEORETICAL FRAMEWORK

The theoretical framework employed in this study is grounded in the researcher's chosen topic of investigation, which encompasses Internet usage and acceptance as well as new media literacy among youths. The identification of variables for the current research is facilitated by the underlying theoretical framework which consists of the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) and New Media Literacy (NML).

UTAUT 2 originated from the Technology Acceptance Model (TAM) which was expanded by Venkatesh et al. (2003) by incorporating eight more theories or models of technology

namely the Theory of Reasoned Action, Technology Acceptance Model, Motivational Model, Theory of Planned Behavior, Combined Technology Acceptance Model (TAM) and TPB, Model of PC Utilization (MPCU), Innovation Diffusion Theory, and Social Cognitive Theory, which ultimately led to the development of the Unified Theory of Acceptance and Use of Technology (UTAUT).

Originally, UTAUT has four key constructs namely performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003) which are the factors influencing the intention and usage of information technology. Venkatesh et al. (2003) then incorporated three other constructs into UTAUT namely hedonic motivation, price value, and habit, extending it into UTAUT 2 as shown in Figure 1.0.

Previous studies have employed the concept across various domains of study. The variables within UTAUT 2 exhibited noteworthy impacts on users' behaviour and utilisation of technology (Kurniawati et al., 2021). The relationship between the adoption of media technology in educational settings and many factors such as performance expectancy, effort expectancy, facilitating conditions, social influence, hedonic motivation, price value, and habit has been explored, with findings indicating that these factors influence users' intention to use technology (Niqotaini, 2021). The present study examines the patterns of Internet usage among youths and their likelihood to accept and use it.

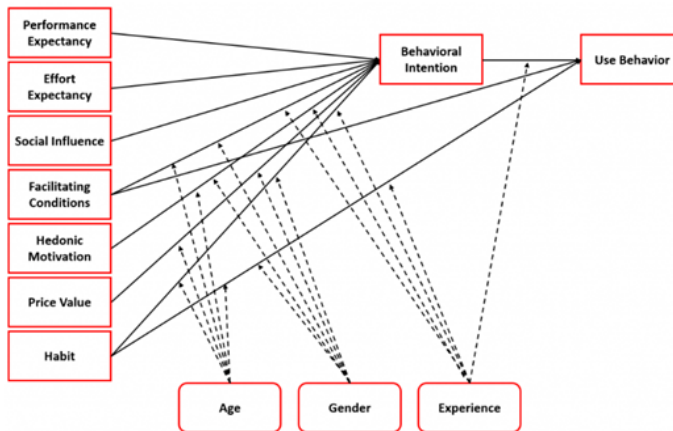


Figure 1: Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) (Venkatesh et al., 2012)

Meanwhile, New Media Literacy (NML) is the notion that literacy undergoes transformation alongside the progression of media, commencing from conventional forms and extending to the contemporary advancements of new media within the realm of the Internet. The integration of new technology into popular culture has resulted in its widespread adoption and utilisation (Ugurhan et al., 2020). This has facilitated the simple accessibility of new media and the popularity of functions such as media content sharing and production. According to Lin et al. (2013), within the context of Web 2.0, individuals assume dual roles as both content consumers and content producers.

Lin et al. (2013) added the significance of the participatory culture that arises within the context of Web 2.0 in their theoretical framework. The NML framework as shown in Figure 1.2 encompasses a set of skills that can be categorised into 10 indicators. Consuming skills (1) and understanding (2) include technical skills and grasping abilities when an individual

consumes media content. Analysis (3) and synthesis (4) consist of skills to deconstruct, reconstruct, and remix media content by incorporating various viewpoints. Evaluation (5) indicates the ability to query, criticise, and judge the trustworthiness of media contents.

The other skills under new media literacy are prosuming skills (6), distribution (7), and production (8) which address the technical skills to produce, disseminate, and duplicate media content. Participation (9) shows the ability to contribute proactively and critically to new media platforms. Lastly, creation (10) comprises skills to produce media content with a critical consideration of socio-cultural values and ideologies (Lin et al., 2013).

Functional consuming literacy encompasses the abilities required to effectively engage with media content. This includes comprehending the textual information and interpreting the intended message of the content. The ability to deconstruct messages is an essential aspect of critical literacy in consumption. The capacity to generate content encompasses a collection of competencies within the realm of functional literacy, whereas distribution refers to the behaviours involved in the broadcast of information (Yusaputra et al., 2022). The production aspect entails either replicating the existing material or integrating various forms of media content. The act of actively engaging with the media is sometimes referred to as critical media literacy, which involves analysing and interpreting media content while considering the underlying values and ideologies that shape its development (Rizkuloh et al., 2021).

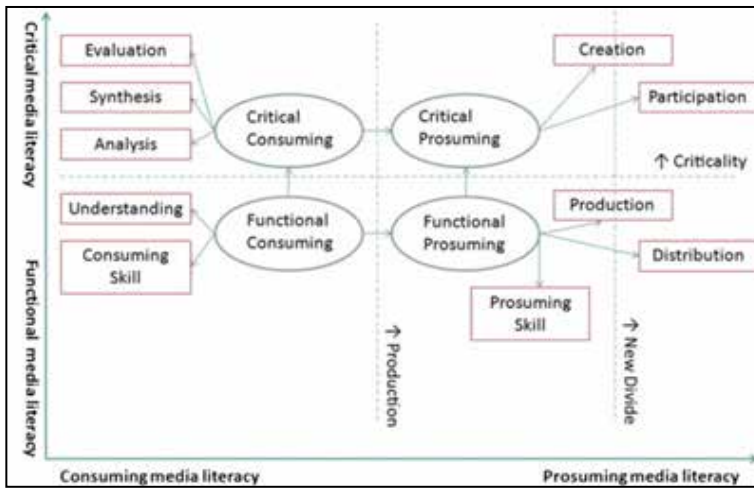


Figure 2: New Media Literacy (NML) Framework (Lin et al., 2013)

Research has been undertaken on the topic of new media literacy about the issue of false news. This body of research focuses on the efforts made by libraries to encourage users to critically evaluate materials before adopting any news presented through media platforms (Haigh et al., 2021). However, the study conducted by Shabani and Keshavarz (2021) suggests that the extent of media literacy has the potential to influence an individual’s assessment of social media.

The current study investigates the role of new media literacy in relation to Internet functional consumption, specifically focusing on how young individuals comprehend and utilise Internet-related abilities. The utilisation of the Internet by young individuals for content creation falls within the purview of Internet functional prosumerism, particularly

in terms of production, distribution, and the development of presumptive abilities (Arbab & Arbab Abbasi, 2020).

Research Framework

As previously elucidated, the conceptual framework is derived from two prominent ideas namely the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) and New Media Literacy (NML). Internet use encompasses various factors such as Internet performance expectancy, Internet effort expectancy, Internet social influence, Internet facilitating conditions, Internet hedonic motivation, Internet price value, Internet habit, Internet behavioural intention, and Internet use behaviour. New media literacy fields include Internet functional consuming and Internet functional prosumer. The constructs are used in this study to identify Internet acceptance and usage by youths.

In order to ensure understanding of Internet usage, the present study defines performance expectancy as the Internet's performance that could help in daily tasks. The performance covers the user's adaption to using the platform. Thaker et al. (2022) defined performance expectancy as the degree to which an individual believes that using a system will help in attaining job gains. Alarefi (2023) defined effort expectancy as the degree of ease associated with the use of a system. The current study defines Internet effort expectancy as perceived usefulness in using the Internet. Meanwhile, social influence is the belief that a certain technology is important for exerting influence (Alfansi & Daulay, 2021). This research defines Internet social influence as the power of using the Internet to gain status and influence in a group. Facilitating condition is the degree to which an individual believes that organisational and technical infrastructure exists to support the usage of the system (Muhammad Taufik Hidayat et al., 2020). The present study defines Internet facilitating conditions as the support provided or received in using the Internet.

Hedonic motivation refers to the fun or pleasure derived from using a technology, which has been shown to play an important role in determining technology acceptance and use (Niqotaini, 2021). The current study defines Internet hedonic motivation as the preference and happiness in using the Internet and the acceptance towards using it. As price value is important for the user in using a system (Wong et al., 2019), the present study includes the factor of monetary cost required in using the Internet. López-Bueno et al. (2021) mentioned habit as automaticity or prior behaviours due to past experience in using a system. This study defines it as past experience or prior knowledge in using the Internet, as well as the continuation of using the Internet in daily life. Behavioural intention and use are individual actions in using a system (Nordhoff et al., 2020). The current research looks at the individual's intention and behaviour that drives the adoption of the Internet.

Consuming and understanding Internet content is crucial. Internet Functional Consuming is a person's skills in consuming media messages (Balaban-Sali, 2020). Understanding the function of the Internet shows a person's capability in understanding the features available when using the Internet and the skills required to use the Internet. The last construct of Internet functional prosumer entails the creation of media content which is aligned with individual ideology and cultural background (Pieńkowski, 2021). The present study defines functional prosuming as Internet functional prosumer in creating and/or sharing Internet content. Figure 1.2 illustrates the impact of Internet usage on new media literacy in a simplified manner.

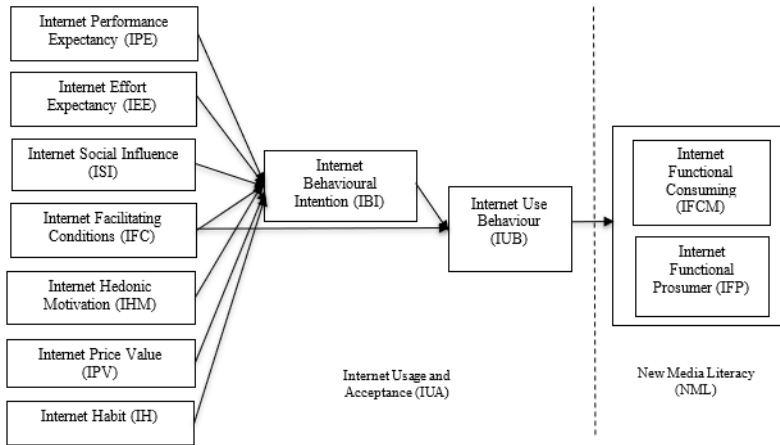


Figure 3: Research Framework

METHODOLOGY

This section provides an overview of the methods employed in the current investigation. Additionally, the section delves into the concepts of population and sampling, exploring their significance within the research context. This chapter focuses on elucidating the research instrument, and further clarifies the topics of pre-testing, reliability measurements, and validity measurement.

A research design elaborates the steps taken by the researcher to achieve the objectives and the end-result as shown in Figure 1.3 for the purpose of addressing the research questions. Subsequently, the population and sample size for the study are determined, followed by the sampling approaches. The number of respondents was determined prior to the development of the instrument, in accordance with the concept. The instrument’s validity and reliability were assessed through pilot testing to ascertain its suitability for distribution. The study progressed with the gathering of data in accordance with the previously determined number of participants. The acquired data was then subjected to statistical analysis using specialised software. Subsequently, the study’s findings are reported here using established procedures.

The current study employs purposive sampling, also known as non-probability sampling, as the sample technique (Kurniasih, 2022). The researcher identified the respondents based on the objectives of the study. The participants in the study are individuals within the age range of 18 to 30 years old, specifically representing the younger demographic. Individuals below the age of 18, commonly referred to as youths, are typically under the care and supervision of their parents or legal guardians. Consequently, they are not included in the sample population for the study (Kerajaan Malaysia, 2016). The selected area is depicted in Figure 1.4 as chosen by the researcher. The selection of respondents is based on the high level of gross domestic industry in the area. Industries with a greater level of development are more likely to incorporate the Internet within their company operations.

The respondents for the study are youths aged 18-30 years old. Following the statistics, the number of youths in Malaysia is 9,794,000 with Selangor having the highest number

of youths totalling 1,558,500 (IYRES, 2020). In particular, Shah Alam was chosen as the research location, with a total of 481,654 youths aged 18-30 years old. Shah Alam is known as an industrial area with high Internet usage. Multinational corporations like Volvo, Nestle, and Cadbury chose to establish their manufacturing operations in this location due to its reputation as an urban hub (Muhaimin, 2019).

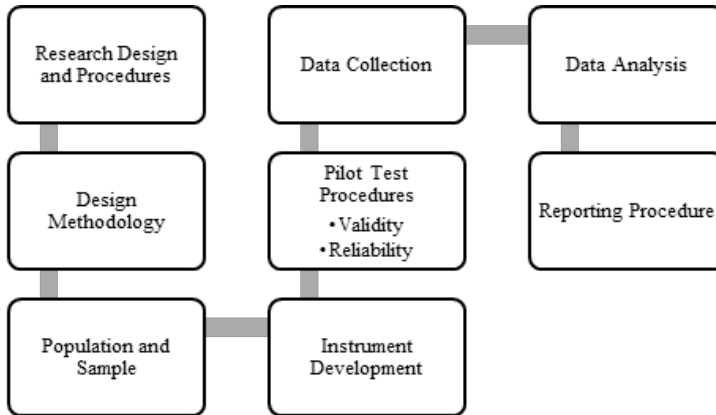


Figure 4: Research Design

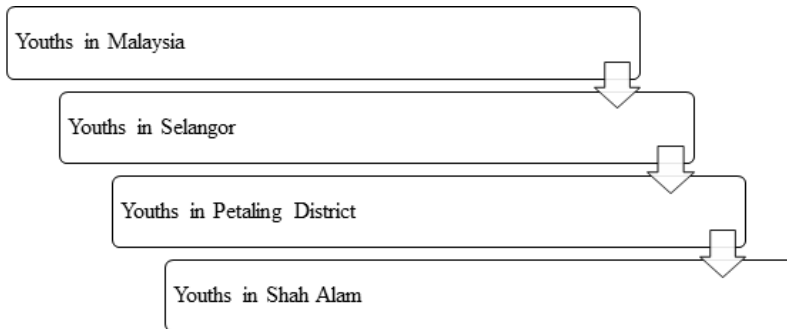


Figure 5: The population and sampling procedure

The G-Power software was employed to calculate and acquire the required sample size for the study at a significance level of .05. G-Power is a tool widely recommended by researchers for its capability to generate suitable sample sizes for studies (Erdfelder et al., 2009; Mayr et al., 2007; McNabb, 2018). The determination of the sample size is based on: (i) the significance level of the test, (ii) the sample size in the study, and (iii) the size effect (Faul et al., 2009).

Based on G*Power calculations, the total sample required for the study is 299 youths as shown in Figure 1.5. As suggested by Kassem et al. (2023), a sample size between 250 and 500 is the best for SEM analysis. Past researches that used SEM for data analysis employed sample sizes of 200 and above (Hoelter, 1983; Marsh & Balla, 1986).

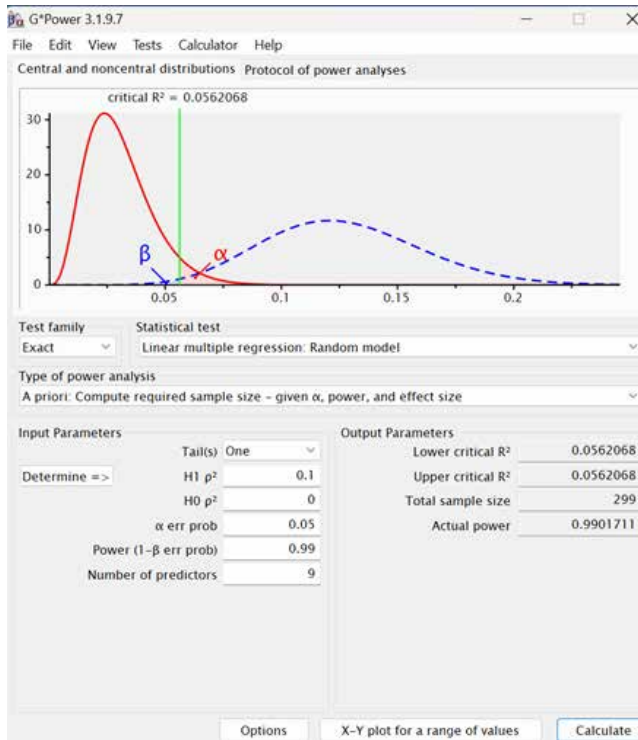


Figure 6: Determining Size Sample using G*Power

In the research instrument, a series of close-ended questions require the respondents to choose their responses from a five-point Likert scale. In this study, the independent variables are Internet performance expectancy, Internet effort expectancy, Internet facilitating conditions, Internet social influence, Internet hedonic motivation, Internet price value, Internet habit, Internet behavioural intention, and Internet use behaviour.

The dependent variable is Internet functional consuming and Internet functional prosumer. The following sub-sections elaborate further on each section of this research instrument. Table 1.1 illustrates the study’s questionnaire structure.

Before the actual data collection, the researcher conducted a pilot study to enhance the clarity and effectiveness of the survey questions. Moreover, conducting a pilot study helps the researcher to identify all problems and weaknesses of the questionnaire before sending it out to the actual respondents (Anuar et al., 2021). In determining the number of respondents, Vogt and Johnson (2023) mentioned that the number of respondents for a pilot study should be between 12-50. More than 50 people may lead to consistency issues for the instrument. Hence, 70 questionnaires were distributed to a selected pool of young respondents; however, only 50 questionnaires were fully completed and usable for further analysis. The pilot study participants were requested to complete the questionnaires to assess their comprehension of the questions, as well as to check the descriptive statistics, reliability, validity, normality, and correlation between the variables prior to the actual data collection (Hair et al., 2019). The comments and feedbacks provided were collected, and certain elements that were deemed unclear by the respondents were subsequently revised prior to the final data collection.

Table 1: Structure of questionnaire

Constructs	Number of Constructs	Number of Items	Measurements	Top Score	Lowest Score	Sources
Demographic profile	1	10	Nominal Scales (Multiple Choices)			(Armstrong, Phillips & Saling, 2000; Amiel & Sargent, 2004)
Internet Usage and Acceptance (IUA) (IV)						
Internet Performance Expectancy (IPE)		6		30	6	
Internet Effort Expectancy (IEE)		5		25	5	
Internet Social Influence (ISI)		5		25	5	
Internet Facilitating Conditions (IFC)		5		25	5	(Salim, 2012; Venkatesh et al., 2012;
Internet Hedonic Motivation (IHM)	9	6	5-point Likert Scale	30	6	Arenas-Gaitán, Peral-Peral & Ramón-Jerónimo, 2015)
Internet Price Value (IPV)		7		35	7	
Internet Habit (IH)		5		25	5	
Internet Behavioural Intention (IBI)		6		30	6	
Internet Use Behaviour (IUB)		5		25	5	
New Media Literacy (NML) (DV)						
Internet Functional Consuming (IFCM)	2	7	5-point Likert Scale	35	7	(Hung, Yang & Luo, 2021; Koc & Barut, 2016)
Internet Functional Prosumer (IFP)		9		45	9	

Finally, after the final data collection, the data was analysed using Analysis of Moment Structures (AMOS). The researcher used SPSS version 28 to analyse the factor of the data, followed by an exploratory factor analysis to evaluate each construct's grouping. The present study analysed the data of mean and covariance structures using AMOS which produced tabular and statistical outputs showing the regression coefficient, standard error estimates, and statistical significance of the hypothesis (Byrne, 2020). The data collected was analysed to answer the research questions.

CONCLUSION

The present study outlines the research framework guiding the study. The underpinning theories are the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) and New Media Literacy (NML). The study focuses on youth usage of the Internet and guided by literacy when using the platform (Arbab & Arbab Abbasi, 2020). The quantitative method used in this study is in the form of a survey. The research design provides a clear description of the study population, sampling, research instrument, and analysis software, leading to the data analysis towards understanding the relationship between new media literacy and youth Internet usage.

This study benefits the government in developing policies and programmes to guide youths in using the Internet mindfully and being literate in viewing or producing Internet content. Policies should cover the advantages and disadvantages of Internet usage, and consequences for violating laws. Literacy support programmes are crucial for young people dealing with depression and anxiety (Omar et al., 2020), and who are easily demotivated by online information.

Several limitations of the study were also identified by the researchers. As the study only surveyed individuals aged 18-30 living in Shah Alam, Selangor, the findings may not be generalizable to other populations or situations. Shah Alam exhibits distinctive traits and cultural elements that might shape the utilization of the Internet and media literacy, consequently impacting the youth population. As a result, caution should be exercised when extrapolating these findings to other communities or cultures. Qualitative research approaches, such as interviews or focus groups, have the potential to provide more in-depth findings (Oliver et al., 2020; Yusaputra et al., 2022) and nuanced understanding of how the Internet is utilised and how new media literacy can be a potential factor in enhancing understanding of Internet usage among youths.

It is recommended for future research to explore additional variables such as motivation, social culture, interest, satisfaction, and engagement, which have the potential to impact both behavioural intention and use behaviour. Future research is also suggested to conduct a longitudinal study which could potentially yield dependable findings to establish causal relationships (Cherry, 2022). Furthermore, it is possible to conduct repeated monitoring of the respondents over an extended duration, thus enabling the acquisition of valuable insights into cause-and-effect linkages.

REFERENCES

- Adnan, H., & Kamaliah, S. (2000). Penggunaan teknologi komunikasi-informasi di kalangan ahli akademik di Malaysia. *Jurnal Komunikasi ; Malaysian Journal of Communication*, 16, 119–130.
- Ahmed, A., Ali, N., Giannicchi, A., Abd-alrazaq, A. A., Ahmed, M. A. S., Aziz, S., & Househ, M. (2021). Mobile applications for mental health self-care: A scoping review. *Computer Methods and Programs in Biomedicine Update*, 1(November), 100041. <https://doi.org/10.1016/j.cmpbup.2021.100041>
- Alarefi, M. (2023). Internet of things in Saudi public healthcare organizations: The moderating role of facilitating conditions. *International Journal of Data and Network Science*, 7(1), 295–304. <https://doi.org/10.5267/j.ijdns.2022.10.004>

- Alfansi, L., & Daulay, M. Y. I. (2021). Factor affecting the use of e-money in millennial generation: Research model UTAUT 2. *Jurnal Manajemen Dan Pemasaran Jasa*, 14(1), 109. <https://doi.org/10.25105/jmpj.v14i1.8212>
- Amiel, T., & Sargent, S. L. (2004). Individual differences in Internet usage motives. *Computers in Human Behavior*, 20(6), 711–726. <https://doi.org/10.1016/j.chb.2004.09.002>
- Andrew, F. T., Tahir, Z., Malek, J. A., & Yusof, A. R. M. (2020). Ketagihan penggunaan media sosial terhadap gaya hidup belia. *E-BANGI: Jurnal Sains Sosial dan Kemanusiaan*, 17(9), 126–139.
- Anuar, N. F. A., Fauzi, N. F., Ab.Halim, H. Z., Khairudin, N. I., Ahmad Bakhtiar, N. S., & Shafii, N. H. (2021). Role of effective communication in enhancing leadership skills among students of Bachelor of Management Mathematics in UiTM Perlis. *Journal of Computing Research and Innovation*, 6(4), 70–79. <https://doi.org/10.24191/jcrinn.v6i4.236>
- Arbab, N., & Arbab Abbasi, N. (2020). Digital media literacy: Social media use for news consumption among teenagers in Pakistan. *Global Media Journal*, 18(35), 1–7. <https://www.globalmediajournal.com/open-access/digital-media-literacy-social-media-use-for-news-consumption-among-teenagers-in-pakistan.php?aid=87981>
- Archana, G., & Balaji, P. (2020). Prevalence and psychological intervention of internet and smart phone addiction. *International Journal of Recent Technology and Engineering*, 8(4S4), 273–276. <https://doi.org/10.35940/ijrte.d1072.1284s419>
- Arenas-Gaitán, J., Peral-Peral, B., & Ramón-Jerónimo, M. A. (2015). Elderly and internet banking: An application of UTAUT2. *Journal of Internet Banking and Commerce*, 20(1), 1–23.
- Arfa, Y., & Esther, L. (2019, July 3). “Youth” now defined as those between 15 and 30. <https://www.nst.com.my/news/nation/2019/07/501288/youth-now-defined-those-between-15-and-30>
- Armstrong, L., Phillips, J. G., & Saling, L. L. (2000). Potential determinants of heavier Internet usage. *International Journal of Human Computer Studies*, 53(4), 537–550. <https://doi.org/10.1006/ijhc.2000.0400>
- Aser, F. G., Paramita, S., & Sudarto. (2022). Fenomena cyberbullying di media sosial TikTok. *Kiwari*, 1(3), 449–453. <https://doi.org/10.24912/ki.v1i3.15763>
- Balaban-Sali, J. (2020). New media literacies of communication students. *Contemporary Educational Technology*, 3(4), 265–277. <https://doi.org/10.30935/cedtech/6083>
- Bernama. (2023). Wanita keldai akaun ditahan sebabkan kerugian RM38,000. <https://www.astroawani.com/berita-malaysia/wanita-keldai-akaun-ditahan-sebabkan-kerugian-rm38000-443474>
- Byrne, B. M. (2020). Chapter Bootstrapping as an aid to nonnormal data. In *Structural Equation Modeling With AMOS*. <https://doi.org/10.4324/9780203805534-23>
- Castillo-Gutiérrez, S., Estudillo-Martínez, M. D., & Lozano-Aguilera, E. D. (2021). Influence of the fitted straight line for confidence bands algorithm in Q-Q Plots. *Open Journal of Statistics*, 11(06), 925–930. <https://doi.org/10.4236/ojs.2021.116054>
- Celik, I., Muukkonen, H., & Dogan, S. (2021). A model for understanding new media literacy: Epistemological beliefs and social media use. *Library and Information Science Research*, 43(4), 101125. <https://doi.org/10.1016/j.lisr.2021.101125>
- Chen, D. T., Lin, T. Bin, Li, J. Y., & Lee, L. (2018). Establishing the norm of new media literacy of Singaporean students: Implications to policy and pedagogy. *Computers and Education*, 124, 1–13. <https://doi.org/10.1016/j.compedu.2018.04.010>

- Cherry, K. (2022). What Is a Longitudinal Study?
- Chupradit, S., Takham, J., & Chupradit, P. W. (2021). Association between internet usage behaviour and self-esteem of university students. *Systematic Reviews in Pharmacy*, 12(1), 515–519. <https://doi.org/10.31838/srp.2021.1.74>
- Dalne, S., & Moundekar, J. (2023). Impact of social media in student's psychology. *Journal of Psychology and Political Science*, 33. <https://doi.org/10.55529/jpps.33.46.49>
- DOSM. (2021). Prime Minister's Department Department of Statistics Malaysia Press Release. November, 1–4.
- Erdfelder, E., Faul, F., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Ergun Basak, B., & Aydin, M. (2019). Problematic Internet use in terms of the purposes of internet use, irrational beliefs, feelings of inferiority, and gender. *Addicta: The Turkish Journal on Addictions*, 0(0), 471–496. <https://doi.org/10.15805/addicta.2019.6.3.0017>
- Fadzil, M., & Hashim, R. (2009). CMOE I fundamentals of multimedia communication. Meteor Doc. Sdn. Bhd.
- Farhan, A. (2022). Remaja bunuh diri jadi mangsa ejekan internet, netizen Mesir menuntut keadilan. *Utusan TV*. <https://utusan.com/2022/01/06/remaja-bunuh-diri-jadi-mangsa-ejekan-internet-netizen-mesir-tuntut-keadilan/>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G * Power 3 . 1 : *Behavior Research Methods*, 41(4), 1149–1160. <https://link.springer.com/content/pdf/10.3758/BRM.41.4.1149.pdf>
- Gong, R. (2020). Digital inclusion: Assessing meaningful internet connectivity in Malaysia. Khazanah Research Institute, Discussion(September), 1–37. www.KRIInstitute.org.
- Haigh, M., Haigh, T., Dorosh, M., & Matychak, T. (2021). Beyond fake news: Learning from information literacy programs in ukraine. *Advances in Librarianship*, 50, 163–182. <https://doi.org/10.1108/S0065-283020210000050007>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hashemi, Y., Zarani, F., Heidari, M., & Borhani, K. (2022). Purposes of internet use among Iranian university students: exploring its relationship with social networking site (SNS) addiction. *BMC Psychology*, 10(1), 1–9. <https://doi.org/10.1186/s40359-022-00745-4>
- Hashim, R., & Yusof, A. (1999). Internet in Malaysia. <http://www.interasia.org/malaysia/hashim-yusof.html>
- Hoelter, J. W. (1983). The analysis of covariance structures: goodness-of-fit indices. *Sociological Methods & Research*, 11(3). <https://doi.org/10.1177/0049124183011003003>
- Hung, S. C., Yang, S. C., & Luo, Y. F. (2021). New media literacy, health status, anxiety, and preventative behaviors related to COVID-19: A cross-sectional study in Taiwan. *International Journal of Environmental Research and Public Health*, 18(21). <https://doi.org/10.3390/ijerph182111247>
- ITU. (2020). Measuring digital development. Facts and figures 2020. In ITU Publications. [https://www.itu.int/en/mediacentre/Documents/MediaRelations/ITU Facts and Figures 2019 - Embargoed 5 November 1200 CET.pdf](https://www.itu.int/en/mediacentre/Documents/MediaRelations/ITU_Facts_and_Figures_2019_-_Embargoed_5_November_1200_CET.pdf)

- Iyres, I. P. P. B. (2020). Statistik peratusan penggunaan internet belia mengikut jantina. <https://ydata.iyres.gov.my/iyresbankdataV2/www/index.php?r=pub/home/readcontent4&id=133>
- Jo, Y. S., Bhang, S. Y., Choi, J. S., Lee, H. K., Lee, S. Y., & Kweon, Y. S. (2020). Internet, gaming, and smartphone usage patterns of children and adolescents in Korea: A c-CURE clinical cohort study. *Journal of Behavioral Addictions*, 9(2). <https://doi.org/10.1556/2006.2020.00022>
- Johari, M. Z., Wee, L. H., Nudin, S. S. H., Ujang, E., Roslan, N. M., Omar, B., & Chinna, K. (2020). High risk health behavior among Malaysian adolescents: A comparison between gender. *Global Journal of Health Science*, 12(11), 152. <https://doi.org/10.5539/gjhs.v12n11p152>
- Joschka, M. (2021). Number of internet users in Malaysia from 2010 to 2020 and a forecast up to 2025(in millions). 10 December 2021
- Kassem, M. A., Radzi, A. R., Pradeep, A., Algahtany, M., & Rahman, R. A. (2023). Impacts and response strategies of the COVID-19 pandemic on the construction industry using Structural Equation Modeling. *Sustainability (Switzerland)*, 15(3). <https://doi.org/10.3390/su15032672>
- Kemp, S. (2021). Digital 2021: Malaysia. <https://datareportal.com/reports/digital-2021-malaysia>
- Kemp, S. (2023). Digital 2023: Malaysia. <https://datareportal.com/reports/digital-2023-malaysia>
- Kerajaan Malaysia. (2016). Undang-Undang Malaysia (Akta A1511): Akta Kanak-Kanak (Pindaan) 2016. Undang-Undang Malaysia, 65.
- Khalik, R. A. (2019, May 14). Remaja bunuh diri selepas dapat 69 peratus undian Instagram. *Astro Awani*. <https://www.astroawani.com/berita-malaysia/remaja-bunuh-diri-selepas-dapat-69-peratus-undian-instagram-207649>
- Koc, M., & Barut, E. (2016). Development and validation of new media literacy scale (NMLS) for university students. *Computers in Human Behavior*, 63, 834–843. <https://doi.org/10.1016/j.chb.2016.06.035>
- Koçak, O., Yılmaz, İ., & Younis, M. Z. (2021). Why are Turkish university students addicted to the internet? A moderated mediation model. *Healthcare (Switzerland)*, 9(8). <https://doi.org/10.3390/healthcare9080953>
- Koźybska, M., Kurpisz, J., Radlińska, I., Skwirczyńska, E., Serwin, N., Zabielska, P., Kotwas, A., Karakiewicz, B., Lebiecka, Z., Samochowiec, J., & Flaga-Gieruszyńska, K. (2022). Problematic Internet use, health behaviors, depression and eating disorders: a cross-sectional study among Polish medical school students. *Annals of General Psychiatry*, 21(1), 1–9. <https://doi.org/10.1186/s12991-022-00384-4>
- Kurniasih, D. D. (2022). Purposive sampling adalah: berikut contoh, tujuan, dan rumusnya. www.detik.com.
- Kurniawati, A., Shivaanii, M., Raj, S., Singh, J., & Singh, K. (2021). The study of customer satisfaction among Grab users in Kuala Lumpur, Malaysia. *Electronic Journal of Business and Management*, 6(2), 30–64.
- Laupa Junus. (2020). Bimbang tiada capaian tanda ketagih internet. *Utusan Malaysia*. <https://www.utusan.com.my/gaya/2020/10/bimbang-tiada-capaian-tanda-ketagih-internet/>

- Lin, T.-B., Li, J.-Y., Deng, F., & Lee, L. (2013). Understanding new media literacy: An explorative theoretical framework. *J. Educ. Technol. Soc.*, 16, 160–170.
- López-Bueno, R., Koyanagi, A., López-Sánchez, G. F., Firth, J., & Smith, L. (2021). Association between age of first exposure and heavy internet use in a representative sample of 317,443 adolescents from 52 countries. *European Child and Adolescent Psychiatry*, 0123456789. <https://doi.org/10.1007/s00787-021-01869-5>
- Malay Mail. (2023). Malaysians suffer RM302m losses in online scams from 2021 to June 2023, says Deputy Minister. *Malay Mail*. <https://www.malaymail.com/news/malaysia/2023/07/09/malaysians-suffer-rm302m-losses-in-online-scams-from-2021-to-june-2023-says-deputy-minister/78754>
- Marsh, H. W., & Balla, J. R. (1986). Goodness-of-fit indices in confirmatory factor analysis: the effect of sample size goodness-of-fit indices in Confirmatory Factor Analysis: The Effect of Sample Size. *Psychological Bulletin*, 103(3).
- Mayr, S., Erdfelder, E., Buchner, A., & Faul, F. (2007). A short tutorial of GPower. *Tutorials in Quantitative Methods for Psychology*, 3(2). <https://doi.org/10.20982/tqmp.03.2.p051>
- MCMC, M. C. M. C. (2021). Internet users survey 2020. Malaysian Communications and Multimedia Commission (MCMC).
- McNabb, D. E. (2018). Exploring multivariate statistics. research methods. *Public Administration and Nonprofit Management*, 233–250. <https://doi.org/10.4324/9781315181158-21>
- Mohammed Abubakar, A., & Al-zyoud, M. F. (2021). Problematic Internet usage and safety behavior: Does time autonomy matter? *Telematics and Informatics*, 56(March), 101501. <https://doi.org/10.1016/j.tele.2020.101501>
- Mohd Thas Thaker, H., Mohd Thas Thaker, M. A., Khaliq, A., Allah Pitchay, A., & Iqbal Hussain, H. (2022). Behavioural intention and adoption of internet banking among clients' of Islamic banks in Malaysia: an analysis using UTAUT2. *Journal of Islamic Marketing*, 13(5), 1171–1197. <https://doi.org/10.1108/JIMA-11-2019-0228>
- Muhaimin, M. (2019). Petaling: Heart of Selangor. *Selangor Journal*. <https://selangorjournal.com/2019/06/petaling-heart-of-selangor/>
- Muhammad Taufik Hidayat, Qurrotul Aini, & Elvi Fetrina. (2020). Penerimaan pengguna e-wallet menggunakan UTAUT 2 (Studi Kasus). *Jurnal Nasional Teknik Elektro Dan Teknologi Informasi*, 9(3), 239–247. <https://doi.org/10.22146/v9i3.227>
- Müller, J. (2021). Share of population using the internet in Malaysia from 2010 to 2020 and a forecast up to 2025. <https://www.statista.com/statistics/975058/internet-penetration-rate-in-malaysia/>
- Niqotaini, Z. (2021). Analisis penerimaan dan penggunaan media pembelajaran augmented reality dengan menggunakan model UTAUT-2 (Studi Kasus : SMP dan SMA Mutiara Bunda Bandung). *Technologia: Jurnal Ilmiah*, 12(1), 4. <https://doi.org/10.31602/tji.v12i1.4175>
- Nordhoff, S., Louw, T., Innamaa, S., Lehtonen, E., Beuster, A., Torrao, G., Bjorvatn, A., Kessel, T., Malin, F., Happee, R., & Merat, N. (2020). Using the UTAUT2 model to explain public acceptance of conditionally automated (L3) cars: A questionnaire study among 9,118 car drivers from eight European countries. *Transportation Research Part F: Traffic Psychology and Behaviour*, 74(June), 280–297. <https://doi.org/10.1016/j.trf.2020.07.015>
- Oliver, K. M., Williams-Duncan, S., & Kimball, E. M. (2020). Digital literacies for ministry: A qualitative study of theological educators preparing students for new media engagement. *Ecclesial Practices*, 7(1). <https://doi.org/10.1163/22144417-bja10008>

- Omar, S. Z., Zaremohzzabieh, Z., Samah, A. A., Bolong, J., & Shaffril, H. A. M. (2020). Influence of different facets of internet addiction on subjective well-being in Malaysia: A comparison across ethnic groups. *Jurnal Komunikasi: Malaysian Journal of Communication*, 36(2), 196–211. <https://doi.org/10.17576/JKMJC-2020-3602-12>
- Pieńkowski, D. (2021). Rethinking the concept of prosuming: A critical and integrative perspective. *Energy Research and Social Science*, 74(January). <https://doi.org/10.1016/j.erss.2021.101967>
- Raveendran, R., Jose, R., Jacob, S. R., George, A. S., Vinayak, N., Mubashir, K. M., Greeshma, S., Unni, R., & Aswan, K. S. (2021). Internet usage among medical students: prevalence, addiction and health issues. *International Journal Of Community Medicine And Public Health*, 8(8), 4030. <https://doi.org/10.18203/2394-6040.ijcmph20213040>
- Rizkuloh, T., Abidin, Y. Z., & Dulwahab, E. (2021). Literasi media di kalangan masyarakat pedesaan. Annaba: *Jurnal Ilmu Jurnalistik*, 2(1). <https://doi.org/10.15575/annaba.v2i1.590>
- Salim, B. (2012). An application of UTAUT model for acceptance of social media in Egypt: A statistical study. *International Journal of Information Science*, 2(6), 92–105. <https://doi.org/10.5923/j.ijis.20120206.05>
- Sari Rumra, N., & Agustina Rahayu, B. (2021). Perilaku cyberbullying remaja. *Jurnal Ilmiah Kesehatan Jiwa*, 3(1).
- Shabani, A., & Keshavarz, H. (2021). Media literacy and the credibility evaluation of social media information: students' use of Instagram, WhatsApp and Telegram. *Global Knowledge, Memory and Communication*. <https://doi.org/10.1108/GKMC-02-2021-0029>
- Syam, H. M., & Nurrahmi, F. (2020). "I don't know if it is fake or real news" how little Indonesian university students understand social media literacy. *Jurnal Komunikasi: Malaysian Journal of Communication*, 36(2), 92–105. <https://doi.org/10.17576/JKMJC-2020-3602-06>
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65. <https://doi.org/10.1016/j.techsoc.2021.101565>
- Tanti, R. T. (2022). The Role of social media on sexual activity in adolescents. *Journal of Sexual and Reproductive Health Sciences*, 1(1). <https://doi.org/10.26753/jsrhs.v1i1.705>
- Tengku Mohd Azzman, T. S. A. (2023). Generasi muda perlu berani tepis gejala buli siber. *Berita Harian Online*. <https://www.bharian.com.my/rencana/komentar/2023/10/1161736/generasi-muda-perlu-berani-tepis-gejala-buli-siber>
- Ugurhan, Y. Z. C., Kumtepe, E. G., Kumtepe, A. T., & Saykili, A. (2020). From media literacy to new media literacy: a lens into open and distance learning context. *Turkish Online Journal of Distance Education*, 1, 135–151.
- United Nations. (2014). Definition of Youth. <https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>
- Veena Babulal. (2021, December 7). MCMC records 15,238 online harassment complaints since 2016. *News Straits Times*. <https://www.nst.com.my/news/nation/2021/12/752112/mcmc-records-15238-online-harassment-complaints-2016>
- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). Technology Acceptance Model - Research. *MIS Quarterly*.
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/https://doi.org/10.2307/41410412>

- Vogt, W. P., & Johnson, R. B. (2023). *The SAGE Dictionary of Statistics & Methodology: A Nontechnical Guide for the Social Sciences*. Sage. <https://doi.org/10.4135/9781071909751>
- Waheed, M. (2019). Online threats and risky behaviour from the perspective of Malaysian youths. *SEARCH Journal of Media and Communication Research*, 11(2), 57–71.
- Wardatul, H. A., & Peng, Y. (2021). The impact of social media use towards negative emotion and suicidal tendency among students: a systematic review. 2nd International Conference on Media and Social Sciences (ICOMS2021), February, 64–81.
- Wong, S. M., Leong, C. M., & Pua, C. H. (2019). Mobile internet adoption in Malaysian suburbs: The moderating effect of gender. *Asian Journal of Business Research*, 9(3). <https://doi.org/10.14707/ajbr.190069>
- Xiao, X., Su, Y., & Lee, D. K. L. (2021). Who consumes new media content more wisely? examining personality factors, SNS use, and new media literacy in the era of misinformation. *Social Media and Society*, 7 (1). <https://doi.org/10.1177/2056305121990635>
- Yusaputra, M. I., Suriady, I., & Rahmarini, G. M. (2022). Literasi digital dalam mengatasi infodemi pada era new normal. *KINESIK*, 9(1). <https://doi.org/10.22487/ejk.v9i1.344>

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