Examining the Digital Technology Usage of Older Adults as Determinants of Life Satisfaction in the Digital Divide

Abstract

The digital divide has become a growing source of inequality, as **older adults** face challenges in adopting and using digital technologies in daily life. Few studies have explored how different types of digital technology usage in various life domains among **older adults** impact their overall well-being. This study addresses this gap by suggesting effective directions for reducing the cross-generational digital divide. To this end, it analyzed de-identified secondary data from **864 South Korean adults above** 65 years, surveyed by the National Information Society Agency (NIA). The findings show that digital efficacy positively affects **older adults'** life satisfaction, mediated by their perceptions of digital technology. Additionally, social networking through digital technology positively influences their life satisfaction through the same mediation. Our findings suggest that policymakers should prioritize the development of educational programs to improve digital efficacy and social networking, which will ultimately enhance **older adults'** well-being.

Keywords: Quality of Life, Technology, Social Networks, **Older Adults,** Digital Efficacy

What the paper adds to existing literature

- We examined how digital technology usage in different life domains, economic activities, social networking, and digital efficacy influences **older adults'** perceptions and life satisfaction.
- The mediating role of perceptions of digital technology in the relationship between social networking through digital technology and life satisfaction is noteworthy.
- In contrast to digital efficacy and social networking, economic activities using digital technology do not have a notable influence on **older adults'** life satisfaction.

Applications of study findings

- Policymakers and practitioners should prioritize the development of educational programs to improve digital literacy, which will help **older adults** develop positive perceptions of digital technology.
- Enabling **older adults** to develop and manage their social relationships with others through digital technology, such as social media designed with uncomplicated basic features, will ultimately enhance their well-being.
- A re-evaluation of the focus of current older adult support programs is needed, along with redirecting resources toward other important programs to refine **older adults'** digital literacy and social relationships.

Introduction

Digital technology has become an essential part of daily life. The COVID-19 pandemic accelerated the shift toward an online, remote-based life, rapidly disseminating a digital culture across all generations (Hantrais et al., 2021; Visaria et al., 2023). While the shift to digital-based activities is a welcome change for the younger generation, which has embraced digital use as a part of daily life, it poses challenges for **older adults** who are more accustomed to in-person and offline daily activities (Morrison et al., 2023). This digital gap, commonly termed the *digital divide*, has become a growing source of inequality, as **older adults** face challenges in adopting and using digital technologies for various aspects of daily life, including economic, social, and cultural activities (Zhao et al., 2023). The digital divide refers to the phenomenon in which differences arise in the access, skill, and usage of digital technologies in the information age (Van Dijk, 2006). Although digital technologies have the potential to improve individuals' daily experiences, their limited accessibility has resulted in a significant disparity between those who can access and leverage them and those who cannot (Van Dijk, 2017).

According to Van Deursen et al. (2017), the benefits of digital technology are evident across five domains: economic, social, political, institutional, and educational. These five domains are linked to overall well-being. For **older adults** aged 65 years and older, who often experience a decline in physical and economic capabilities, the degree of digital utilization can have a significant impact on satisfaction across various domains of life. For example, research has shown that digital technology enables communication and emergency support for older adults, enhances their physical and mental well-being, and facilitates aging in place (Cotton et al., 2014; Czaja et al., 2018). Furthermore, increased social connections through the Internet have been found to reduce loneliness and depression among older adults and strengthen their cognitive abilities (Ollevier et al., 2020; Kim et al., 2017). Thus, digital inequality in the use of technology, and its intensification, exacerbates social and economic disparities, ultimately undermining the overall well-being and quality of life of **older adults**.

This digital divide poses a significant risk to South Korea, the setting of this study, as it is a super-aged society. According to the "2022 Digital Divide Survey" by the Ministry of Science and ICT and the National Information Society Agency (NIA), the average digital literacy level of the four socially disadvantaged groups (older adults, people with disabilities, farmers and fishermen, and low-income groups) was 76.2% compared to the general population. When focusing solely on older adults, their average digital literacy level was 69%, which was lower than the average of the four vulnerable groups. This indicates that, as South Korea becomes a super-aged society, social disparities and exclusion are likely to intensify. More importantly, while older adults were not significantly different from other age groups in terms of access to mobile devices, their ability to use these devices effectively was significantly lower. This reflects the findings of OECD studies, in which South Korea consistently ranked first in Internet accessibility, with over 99% of households having Internet access. However, the country exhibits the largest generational digital divide. Therefore, based on the global situation of the deepening digital divide, not only in Korea but worldwide, this study explores how the use of digital technology across various life domains affects the overall well-being of **older adults**. In doing so, it aims to provide insights for policy measures designed to reduce this gap. Importantly, while the use of digital technology presents a significant barrier for older adults, enhancing their ability to use digital technology can offer greater positive benefits than for any other social group or generation. Thus, reducing digital inequality among **older adults** is of great importance from both academic and social policy perspectives.

Literature Review and Research Questions

Van Dijk (2006, 2017) proposed that, beyond fundamental physical access to digital technology, there should be a greater focus on social, psychological, and cultural aspects to gain a better understanding of the digital divide. In introducing a new framework for the digital divide, Van Dijk (2017) suggested the resource and appropriation theory to explain its cause. This theory postulates that categorical societal inequalities, such as age, gender, ethnicity, intelligence, personality, and health, produce unequal access to digital technologies. This, in turn, brings about unequal participation in society. Unequal societal participation reinforces categorical inequalities and exacerbates the digital divide. Van Deursen et al.'s economic domain refers to the use of digital channels to seek employment, engage in e-commerce, and utilize online banking services, thus leading to financial benefits, such as increased income (Van Deursen & Helsper, 2015). The social domain involves social interaction through digital channels, demonstrating that individuals can strengthen their networks through social media (Muscanell & Guadagno, 2012). In the educational domain, digital usage provides access to various learning opportunities, ranging from elementary to university levels, or from hobbies to specialized courses (Moore & Kearsley, 2011).

As digital information technologies rapidly integrate into people's everyday lives across domains, inequalities between users who can grasp the benefits of digital technology and those missing these benefits have important implications for users' well-being (Mellon, Firth, & Moore, 2008). In this regard, it is crucial to understand how **older adults** use and perceive technology in the digital divide, which ultimately impacts their well-being (Ihm & Hsieh, 2015). However, previous studies on the digital divide have focused on the effect of digital technology on outcomes, such as digital skills and usage, as a central theme (Van Deursen & Helsper, 2015). Furthermore, it has been revealed that, through digital skills and usage, unequal benefits exist across various domains, including the economic, social, political/civic, cultural, and personal (Helsper & Van Deursen, 2017; Van Deursen, 2020). Few studies have explored how different types of digital technology usage in various life domains among **older adults** impacts their overall well-being. This study filled this gap to suggest effective directions for reducing the cross-generational digital divide.

Regarding life domain and well-being, this study utilized theories from a bottom-up perspective. The needs hierarchy theory and the self-concordance model conceptualize domain satisfaction as a fundamental need (Maslow, 1970; Sheldon & Elliot, 1999). According to these theories, the greater the satisfaction of these needs, the higher the overall life satisfaction, a perspective known as the *bottom-up approach*. Based on this perspective, researchers focusing on subjective well-being (SWB) have proposed that domain satisfaction significantly impacts overall life satisfaction. The consensus among these life domains includes satisfaction with health, family, income, social relationships, leisure time, work, sex life, housing, safety, self-worth, and education, as indicated by various studies (Argyle, 2001; Greenley et al., 1997; Praag et al., 2003). Nevertheless, people's prioritizations of multiple domains change throughout their lives (Cantor & Blanton, 1996; Cantor & Sanderson, 1999). Satisfaction with domains relevant to important life tasks exhibits a stronger correlation with global life satisfaction than with less relevant domains (Harlow & Cantor, 1996). Older individuals' pertinent life domains diverge from those of other generations, especially in the case of those who are retired or nonworking. This study focuses on three domains consistently identified in SWB research as influencing life satisfaction: economic activities, social relationships, and self-worth.

Thus, we examined how digital technology usage among **older adults** in these three life domains is perceived and, in turn, how it impacts their life satisfaction. The following section develops two research questions to address this issue and provides the structural path model shown in Figure 1.

RQ 1) How does digital technology usage by **older adults** in terms of distinct life domains influence their perceptions of digital technology?

RQ 2) How do **older adults'** perceptions of digital technology influence their life satisfaction?

[Insert Figure 1]

Method

Participants and Procedure

This study used de-identified secondary data from "*A Report on the Digital Divide*" derived from a 2022 survey conducted by the National Information Society Agency (NIA), a government-supported institution in Korea. The survey aimed to understand the level of digital divide among the digitally disadvantaged, focusing on access, capability, and utilization, as reflected in the questionnaire data. The data were analyzed for 864 adults aged 65 and older who used smartphones. Additionally, the analysis focused on **older adults** who had used the Internet within the past month. To test the research questions, this study used SmartPLS 4, a program based on Partial Least Squares (PLS-SEM), an exploratory structural equation modeling method appropriate for this research model.

The demographic characteristics of the participants were as follows. There were 431 males (49.9%) and 433 females (50.1%). Regarding age distribution, 436 participants were in their 60s (50.5%), 405 were in their 70s (46.9%), and 23 were in their 80s (2.7%). Regarding their level of education, 134 participants had only elementary education (15.5%), 284 had completed middle school (32.9%), 374 had graduated from high school (43.3%), and 72 had a university degree (8.3%). Further details are presented in Figure 2.

[Insert Figure 2]

Measures

This study addresses the role of digital technology in improving older adults' quality of life. Therefore, this study suggests the use of different types of digital technology across various life domains in terms of economic, social, and digital efficacy. To examine the role of these three factors, we adopted variables such as economic activity, social networking, and digital efficacy using digital technology. We also studied the relationships among the three factors and perception and life satisfaction. Specifically, we focused on the mediation of digital technology perceptions in these relationships. The operational definitions and measurements of the variables used in this study follow. Detailed measurements for each construct and the labels corresponding to the measurements are presented below. All the questions were measured on a 5-point scale.

Older adults use digital technology to engage in economic activities and obtain economic opportunities. Economic activity is defined as employment, starting a business, or activities that are helpful in earning money, as well as the degree to which these things occur. We assessed this usage using the following items. ECON 1): I have engaged in job searches, job changes, or promotion activities on the Internet. ECON 2): I conduct marketing activities (such as marketing, advertising, and sales promotion) on the Internet to assist in starting a business or engaging in business operations. ECON 3): I have used the Internet to search for or acquire information and engage in activities such as investments that help increase (or maintain) my income. ECON 4): I have engaged in Internet activities to assist me in saving money (such as in making group purchases, purchasing directly from overseas, or comparison shopping).

Social networking refers to the maintenance or formation of new relationships. It is measured based on the extent to which social relationships are maintained and expanded through wired and wireless Internet. The relevant survey items were as follows. SOC 1): Interacting with people makes me feel connected to the larger world. SOC 2): When interacting with people, I feel that everyone is connected. SOC 3): Interacting with people allows me to converse with new individuals. SOC 4): Interactions lead to meetings with new people.

Digital efficacy is the degree of an individual's perceived ability to use digital devices effectively. Digital efficacy primarily involves an individual's belief in their ability to use digital devices such as smartphones, computers, and tablets. This confidence is based on belief in one's skills and competencies in handling digital technology. Digital efficacy was measured using the following items. DE 1): I am confident about learning how to use digital devices. DE 2): I feel confident when using digital devices. DE 3): I can quickly learn how to use new digital devices. DE 4): I want to use digital devices more frequently.

Perceptions of digital technology are defined as individuals' perceptions, beliefs, and feelings regarding digital devices. This construct includes how one perceives the usefulness, ease of use, and overall benefits of digital devices in daily life. These perceptions were gauged using the following survey items. PER 1): Digital technology is useful for this purpose. PER 2): Digital technology makes life more convenient. PER 3): Digital technology is effective. PER 4): I want to use digital technology.

Life satisfaction is a key component of subjective well-being. It is defined as the overall level of satisfaction with life rather than focusing on current feelings. This evaluation encompassed dimensions such as personal achievement, personal relationships, and overall life contentment. We used the following statements to assess **older adults'** life satisfaction. LS 1): In most cases, my life is close to my ideals. LS 2): My life is excellent. LS 3): I am satisfied with my life. LS 4): So far, I have realized the most important things I want to do in life. LS 5): If I could live my life again, I would change almost nothing.

Results

Data analysis was conducted using SPSS 24.0, while Smart PLS 4.0 was employed to evaluate both the measurement and structural model. To verify the normal distribution of the measurement items, skewness and kurtosis were computed (Table 1). Since this study used partial least squares structural equation modeling (PLS-SEM), we used confirmatory composite analysis (CCA), as proposed by Hair et al. (2020), to confirm the measurement model. Additionally, a bootstrapping method incorporating 5,000 iterations was applied for testing. CCA is a methodological process used to confirm the measurement models using PLS-SEM (Hair et al., 2020). As confirmatory composite analysis is also used for exploratory purposes and can confirm the measurement model, we present the results of the CCA analysis to confirm this study's measurement model.

[Insert Table 1]

Results of the Measurement Model

Table 2 presents the results of the reflective measurement models using CCA. Standardized indicator loadings had a value of over 0.708 and an associated t-statistic above +1.96. This was significant at the 5% level after executing 5,000 bootstraps (Hair et al., 2011; Hair et al., 2012). Indicator reliability had a value greater than 0.5. Based on these results, convergent validity was confirmed. Additionally, convergent validity can be measured using the Average Variance Extracted (AVE) value (Hair et al., 2020). All constructs had a score of 0.5, which supported the criterion. The reliability of the construct can be measured in two ways: Cronbach's alpha and composite reliability (CR). Table 2 shows that the reliability of the construct is below 0.95 and confirmed its reliability. Discriminant validity evaluates the distinctiveness of a construct. The heterotrait-monotrait ratio of correlations (HTMT) measures discriminant validity. Table 3 shows that the HTMT ratios met the cutoff score of 0.85 needed to interpret our HTMT results (Hair et al., 2020).

[Insert Table 2]

[Insert Table 3]

Structural Equation Model Results

The structural equation model analysis examined economic activities, social networking, and digital efficacy as antecedents that directly impact the quality of life of **older adults** and the mediating effect of perceptions of digital technology. We used the model proposed by Hair et al. (2020) to assess the structural model results. First, the variance inflation factor (VIF) was used to check for multicollinearity among the variables (Table 2). Multicollinearity can lead to incorrect estimates of regression coefficients or reversed signs. The results of our analyses showed that the VIF was below five, implying that there was no collinearity issue (Bowerman & O'Connell, 1990). Therefore, we examined the size and significance of the path coefficients.

Second, the results for the size and significance of the path coefficients are presented. Table 4 shows how the three types of digital technology use affected perceptions of digital technology. Economic activities had a marginal effect on digital technology perceptions (β=0.049, t=1.803, p=0.072). Social networking and digital efficacy had a direct positive effect on the perception of digital technology (β=0.128, t=3.367, $p<0.05$; β=0.505, t=17.636, $p<0.05$). Moreover, **older adults'** perceptions of digital technology and its impact on life satisfaction were positive (β=0.163, t=3.539, $p<0.05$).

[Insert Table 4]

Third, we tested the R^2 to assess the model's prediction performance. After checking the coefficient of determination (R^2) to evaluate the explanatory power of the independent variables on the dependent variable, the R^2 values for perception and life satisfaction were 0.328 and 0.173, respectively. This indicated an explanatory power of more than 10%. Therefore, we concluded that there were no problems with the research model.

Fourth, the effect size f^2 was the contribution of the independent variables to the R^2 of the dependent variable, and the effect size of digital efficacy on perception was the highest at 0.327 (Table 5). The effect size of social networking on perception and of perception on life satisfaction had medium effect sizes (Cohen, 2013). However, the effect size of economic activity on digital self-efficacy was 0.003, indicating that it did not contribute to R^2 (Hair et al., 2020; Cohen, 2013).

[Insert Table 5]

Fifth, Q^2 is an evaluation criterion that determines the predictive fit of a structural model for a specific endogenous latent variable. If the Q^2 value was greater than zero, the exogenous latent variable was judged to have an overall predictive fit with the endogenous latent variable. The analysis showed that the latent variable, perception, had a value of 0.321, and life satisfaction had a value of 0.147. Therefore, it had predictive power (Fornell & Cha, 1994; Hair et al., 2020).

Additionally, digital technology perception acted as a mediating variable in this relationship (Table 6). Social networking and digital efficacy positively affected quality of life through the mediation of the perception of digital technology (β=0.021, 95% CI [0.006, 0.040]; β=0.082, 95% CI [0.038, 0.128]). However, the mediating effect of the perception of digital technology on the relationship between economic activity and life satisfaction was not statistically significant (β=0.008, 95% CI [-0.001, 0.020]).

[Insert Table 6]

Discussion

Summary of Findings

The digital divide has become a noticeable social issue for older adults owing to their unequal access to digital technology. This causes unequal societal participation among **older adults,** reinforcing digital inequality (Van Dijk, 2017). In this regard, there have been attempts to ascertain the main determinants of the digital divide among **older adults** to suggest solutions to social issues stemming from the digital divide (Friemel, 2016; Van Dijk, 2017). However, previous studies on the digital divide have focused on the effects of digital technology use on specific digital outcomes, as previously described (Van Deursen & Helsper, 2015). The extant literature suggests the necessity of identifying how **older adults** use digital technology in their everyday lives despite the digital divide and finding ways to improve their well-being using digital technology. Thus, we examined how digital technology usage in different life domains— economic activities, social networking, and self-efficacy—influences **older adults'** perceptions and life satisfaction.

First, this study highlights the significant mediating role of digital technology perspectives in the relationship between social networking through digital platforms and quality of life. This suggests that **older adults'** perceptions of digital technology critically shape the extent to which they benefit from it, particularly in terms of maintaining and enhancing social relationships (Hill et al., 2015). These findings align with previous research, underscoring the importance of positive attitudes toward technology in facilitating digital inclusion among older adults (Hill et al., 2015; Kite & Wagner, 2002). This study contributes a new insight to the discussion by demonstrating that these perceptions are pivotal in enhancing life satisfaction.

Second, the results reveal an interesting contrast between the impacts of digital efficacy, social networking, and economic activities. The results show that, while digital efficacy and social networking are positively associated with life satisfaction, economic activities using digital technology do not appear to have the same relationship. This difference raises important questions regarding the nature of digital engagement among **older adults**. Economic activities such as employment, starting a business, or activities that are helpful in earning money are perceived as less connected to personal fulfillment or social integration, which are critical components of life satisfaction (Diener & Seligman, 2004). This finding challenges the assumption that all forms of digital engagement are equally beneficial and suggests that interventions aimed at improving **older adults'** life satisfaction through technology should focus more on enhancing social connectivity and self-efficacy than solely on economic participation.

Contributions

The results illustrate the importance of digital efficacy in enhancing quality of life among **older adults**. This finding suggests that interventions aimed at improving digital skills and confidence may be highly beneficial for **older adults**. Additionally, the mediating role of the perception of digital technology in the relationship between social networking through digital technology and quality of life is noteworthy. The positive mediating effect of digital technology perception implies that fostering a positive perception of digital technologies can enhance the beneficial effects of social networking on life satisfaction among **older adults**.

Interestingly, contrary to digital efficacy and social networking, economic activities that use digital technology do not have a notable influence on life satisfaction among **older adults**. In addition, perceptions of digital technology did not significantly mediate the impact of economic activities on life satisfaction. These results suggest that **older adults** are less likely to recognize the benefits of economic activities using digital technology, which does not positively affect their perceptions of digital technology. These results do not necessarily indicate that economic activities are unimportant for **older adults**. However, performing economic activities using digital technology is not beneficial, and **older adults** are less dependent on digital technology for economic activities. Given that economic activities do not contribute significantly to life satisfaction, resources should be better allocated to initiatives that enhance digital literacy and facilitate meaningful social connections through technology. This reorientation could lead to more effective strategies for improving the overall quality of life of **older adults**, particularly as the aging population continues to grow and digital technology becomes increasingly pervasive.

Furthermore, the findings of this study suggest that digital education programs should not only focus on enhancing economic and social capital through skills training but also consider boosting consumers' digital self-efficacy as a crucial element. This highlights the importance of designing educational programs that foster confidence in individuals' ability to use digital technologies.

Finally, these findings provide guidance for the development and promotion of digital technology for **older adults**. Policymakers and practitioners should prioritize the development of educational programs to improve digital literacy, which will help **older adults** develop positive perceptions of digital technology. Programs and initiatives to strengthen their confidence in digital technology are likely to lead to enhanced life satisfaction. In addition, according to the findings, enabling **older adults** to develop and manage their social relationships through digital technology, such as using social media designed with uncomplicated basic features, will ultimately enhance their well-being. Additionally, the non-significant impact of economic activities on the well-being of **older adults** suggests the need to reevaluate the focus of current older adult support programs and to direct these resources toward other important programs to refine digital literacy and social relationships for **older adults.**

Limitations and Future Research

This study analyzed secondary data to examine the relationship between digital technology use and life satisfaction among **older adults**. Due to limited secondary data, we could not investigate the underlying psychological mechanism of why digital efficacy and social networking through digital technology have positive impacts on the well-being of **older adults**, whereas economic activities do not. Further studies should employ experimental research designs to better understand this relationship.

The **older adults** examined in this study were aged 65 years or older, encompassing a wide range of ages, including those in their 60s, 70s, 80s, and beyond. However, specific personal categories were not classified or examined within the research framework. For instance, differences in life stages, health, and activity levels across age groups are likely to influence digital usage motivation and capabilities. Additionally, digital skills may vary depending on factors such as gender, career history, social status, and economic power. Future research should consider these diverse personal characteristics to enable the development of more focused and effective digital divide policies, particularly for marginalized groups or individuals.

Finally, a comparative study of young and older adults may provide more conclusive findings. The findings of this study are based on data collected in South Korea. Further investigations of individuals from diverse cultural backgrounds would provide more generalizable findings.

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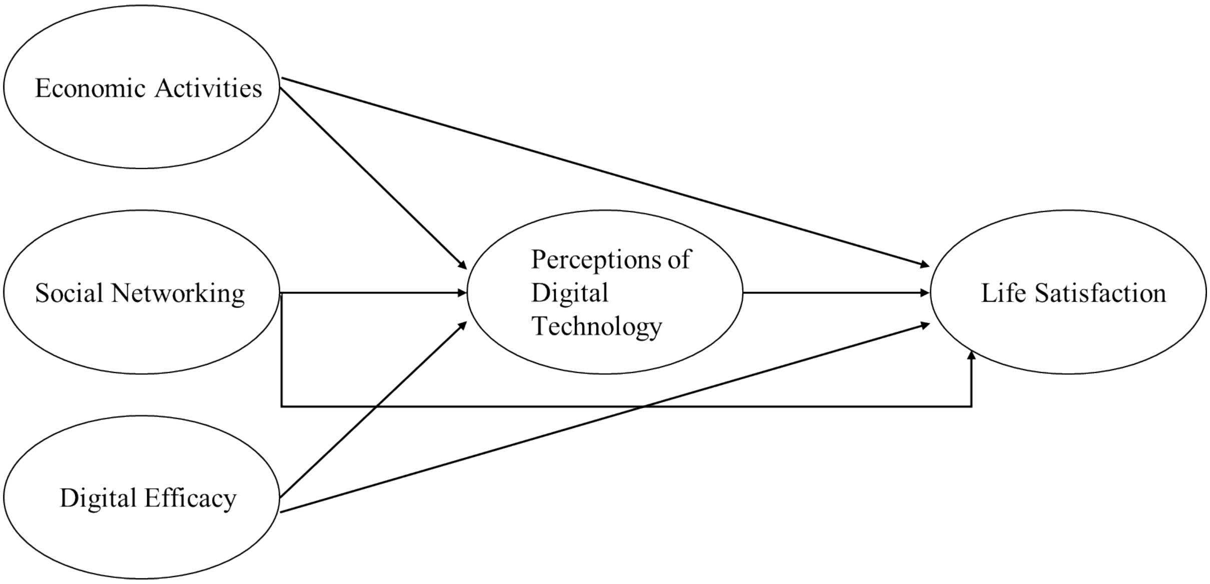

Figure 1. The Structural Path Model

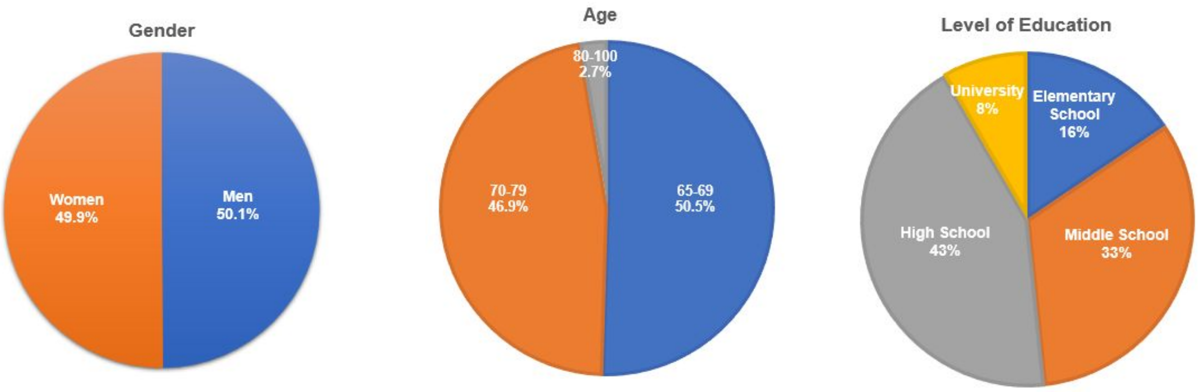

Figure 2. Participant Demographic Characteristics

Table 1 *Descriptive Statistics*

Construct	Item	Item mean	SD	Skewness	Kurtosis
Economic Activities	ECON1	1.39	0.713	1.682	1.660
(*M*=1.420, *SD*=.659)	ECON2	1.36	0.701	1.836	2.340
	ECON3	1.48	0.792	1.335	0.293
	ECON4	1.46	0.771	1.385	0.481
Social Networking	SOC1	2.61	0.766	-0.125	-0.332
(*M*= 2.569, *SD*=.593)	SOC2	2.55	0.769	-0.136	-0.349
	SOC3	2.59	0.715	-0.519	-0.004
	SOC4	2.53	0.710	-0.512	-0.150
Digital Efficacy	DE1	2.09	0.731	0.227	-0.284
(*M*= 2.072, *SD*=.657)	DE2	2.00	0.803	0.535	-0.109
	DE3	1.93	0.778	0.537	-0.119
	DE4	2.27	0.787	-0.122	-0.753
Perceptions of Digital Technology	PER1	2.81	0.593	-0.860	1.628
(*M*= 2.6236, *SD*=.590)	PER2	2.65	0.769	-0.260	-0.240
	PER3	2.56	0.754	-0.246	-0.263
	PER4	2.47	0.765	-0.015	-0.371
Life Satisfaction	LS1	2.46	0.602	0.008	-0.376
(*M*= 2.510, *SD*=.499)	LS2	2.41	0.726	0.275	-0.156
	LS3	2.72	0.651	-0.246	0.078
	LS4	2.66	0.665	-0.261	0.006
	LS5	2.31	0.686	-0.055	-0.343

ECON: Economic Networking, SOC: Social Networking, DE: Digital Efficacy, PER: Perceptions of Digital Technology, LS: Life Satisfaction.

Table 2. *Results of Confirmatory Composite Analysis (CCA) and Variance Inflation Factor (VIF)*

Items	Indicator Loadings	Significance	Indicator Reliability	Cronbach's alpha	Composite Reliability (CR)	Average variance extracted (AVE)	Variance Inflation Factor (VIF)
ECON1	0.883	42.181	0.779689	0.909	0.936	0.785	3.603
ECON2	0.892	46.122	0.795664				3.949
ECON3	0.889	50.929	0.790321				2.761
ECON4	0.881	44.428	0.776161				2.588
SOC1	0.796	41.231	0.633616	0.816	0.878	0.643	1.648

SOC2	0.816	47.416	0.665856				1.693
SOC3	0.784	35.121	0.614656				1.863
SOC4	0.809	40.119	0.654481				1.971
DE1	0.874	103.159	0.763876				2.718
DE2	0.868	107.05	0.753424	0.871	0.912	0.722	2.357
DE3	0.859	88.831	0.737881				2.435
DE4	0.796	62.139	0.633616				1.626
PER1	0.77	41.23	0.5929				1.623
PER2	0.797	52.502	0.635209	0.835	0.890	0.669	1.762
PER3	0.861	98.287	0.741321				2.088
PER4	0.841	83.699	0.707281				1.866
LS1	0.785	53.805	0.616225				1.687
LS2	0.755	39.346	0.570025				1.540
LS3	0.724	36.285	0.524176	0.806	0.866	0.564	1.480
LS4	0.726	34.129	0.527076				1.468
LS5	0.763	48.163	0.582169				1.618

ECON: Economic Networking, SOC: Social Networking, DE: Digital Efficacy, PER: Perceptions of Digital Technology, LS: Life Satisfaction.

Table 3. *Discriminant Validity – HTMT*

	ECON	SOC	DE	PER	LS
ECON					
SOC	0.110				
DE	0.214	0.397			
PER	0.182	0.366	0.638		
LS	0.122	0.215	0.462	0.408	

Table 4. *Path Coefficient Results*

Path	B	t-value	p-value	Confidence Interval 95%	
				LLCI	ULCI
ECON-> PER	0.049	1.803	0.072	-0.005	0.103
ECON -> LS	0.015	0.425	0.671	-0.054	0.078
SOC -> PER	0.128***	3.367	0.001	0.055	0.203
SOC -> LS	0.034	0.892	0.373	-0.038	0.109
DE -> PER	0.505***	17.636	0.000	0.449	0.562
DE -> LS	0.285***	6.689	0.000	0.200	0.366
PER -> LS	0.163***	3.539	0.000	0.076	0.256

Table 5. *Results of f^2*

Path	Effect Size
ECON -> PER	0.003
SOC -> PER	0.022
DE -> PER	0.327
PER-> LS	0.021

Table 6. *Mediating Effects Results*

Path	*Indirection effects*	*t*-value	*p*-value	Confidence Interval 95%	
				LLCI	ULCI
ECON -> PER -> LS	0.008	1.519	0.129	-0.001	0.020
SOC -> PER -> LS	0.021***	2.471	0.014	0.006	0.040
DE -> PER-> LS	0.082***	3.534	0.000	0.038	0.128