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The Digital Divide and Life Satisfaction:
Focused on the Digital Supporters and Outcomes of Digital Device Use

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Introduction

➢ Rapid integration of digital technology into various fields of daily life.

➢ Increase in non-face-to-face services due to COVID-19.

➢ Blurring boundaries between offline and online experiences.

➢ Emergence and seriousness of the digital divide issue.

Introduction

➤ Prior research has focused on factors influencing access to digital devices and the impact on life satisfaction.

➤ This study will adopt a comprehensive approach using the definition of **Digital Informatization Level**.

➤ **Outcomes of Digital Use**, as the third digital literacy, play a crucial role in addressing the contemporary digital divide

➤ Additionally, the role of **digital supporters** in aiding consumers' digital device usage will be examined.

Introduction

➤ This study will adopt a comprehensive approach using the definition of **Digital Informatization Level**.

Variables		Items
Skills Access		
	PC skills	Software management capability; Internet setup skills, except IP; Capable of customizing web browser settings; Adept at connecting various external devices to a computer; Skilled in online file sharing from a computer; Capable of scanning and repairing computer malware; Proficient in creating documents using office applications
	Mobile skills	Skilled in mobile device settings; Capable of setting up Wi-Fi; Skilled in mobile-to-PC file transfer; Capable of sharing files/photos; Adept at managing apps; Malicious code(virus, spyware, etc.) scanning/repairing ability; Proficient in creating documents
Usage Access	**SNS**	SNS; Messenger; Blog; Community
	Social participation	I have expressed my opinion on social concerns through the Internet
		I have made policy proposals, suggestions, policy evaluations, and complaints to the government/local governments/public institutions through the Internet
		I have participated in online voting, opinion polls, and signatures through the Internet
	Information production and sharing	I have uploaded content that I made myself or modified/edited what others made
		I have uploaded content I saw on the Internet or shared a link
	Using Content	Media content; Educational services; Life Information Service; Public services
	Using e-commerce	e-commerce services; Financial Transaction Services; Engaged in cost-saving activities
Motivational Access		
	Motivation	I want to get a lot of information through digital devices
		I want to make many people through digital devices (including participation in meetings, clubs, etc.)
		I want to get interesting entertainment through digital devices
		I want to develop myself through digital devices
		I want to express my opinion to others through digital devices

Introduction

➤ **Outcomes of Digital Use**, as the third digital literacy, play a crucial role in addressing the contemporary digital divide

Variables		Items
Outcomes of Digital Use (ODU)	**Information outcomes (IFO)**	I was able to find out about news and new information more quickly through the use of digital devices.
		I have gained access to more information and knowledge through the use of digital devices.
		The efficiency of work and education has increased due to remote work and mobile learning facilitated by digital devices.
	Interaction with others' outcomes (ITO)	Through the use of digital devices, I have had many opportunities to develop an interest in and actively participate in social issues.
		Through the use of digital devices, I have had numerous opportunities to engage with new people, exchange opinions, and learn from them.
		Through the use of digital devices, I have had numerous opportunities to share and communicate daily events with my family, friends, and loved ones.

➤ Additionally, the role of **digital supporters** in aiding consumers' digital device usage will be examined.

Variables	Items
Digital Supporters	When I encounter difficulties or face issues while using digital devices, I rely on my family for assistance.
	When I encounter difficulties or face issues while using digital devices, I seek help from my friends for assistance.
	When I encounter difficulties or face issues while using digital devices, I seek assistance from my colleagues at work or acquaintances.

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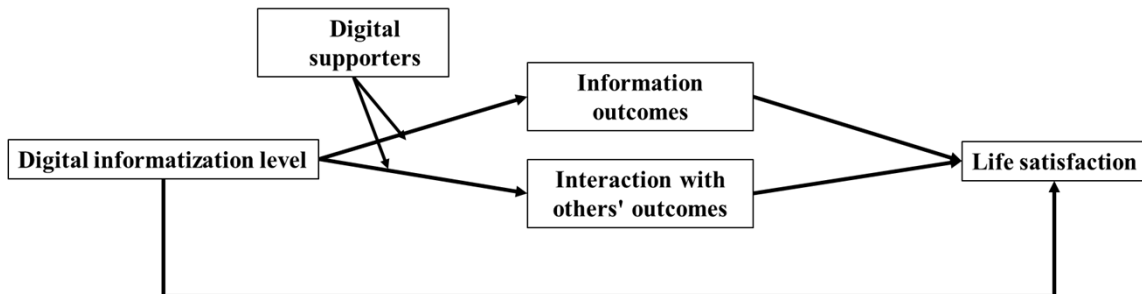
Method

➢ The number of 5,968 adult observations from the Digital Divide Survey.

➢ Using **model 4 and model 7 of Process Macro** to test hypothesis.

| Variables		N	%
Gender	Male	3,038	50.9
	Female	2,930	49.1
Age (years)	19–34	1,710	28.7
	35–49	1,801	30.2
	50–64	1,724	28.9
	65 or higher	733	12.3
Monthly Income (KRW)	less than 4 million	2,336	39.1
	4 million and higher	3,632	60.9
Education level	below undergraduate	3,558	59.6
	undergraduate or higher	2,410	40.4

Note. KRW 1 million = USD 762.29

Results   *The mediation effect of Outcome of Digital Device Use*

Variables	Information Outcomes			Interaction Outcomes			Life Satisfaction		
	B	SE	t	B	SE	t	B	SE	t
Constant	2.419***	0.047	51.675	2.342***	0.048	48.768	1.718	0.064	26.741
Age	-0.004***	0.001	-7.754	-0.003***	0.001	-5.275	0.0002	0.001	0.406
Gender(Male = 1)	0.007	0.012	0.535	-0.011	0.012	-0.913	0.004	0.013	0.330
Education (Undergrauate or higher = 1)	0.039**	0.013	2.968	0.038**	0.013	2.855	0.033*	0.014	2.323
Income (4 million and higher = 1)	0.020	0.013	1.620	0.006	0.013	0.469	0.028*	0.014	2.042
Digital Informatization Level	**1.138*****	0.044	25.820	**1.037*****	0.045	22.939	0.463***	0.051	9.033
Information outcomes							**0.079*****	0.016	4.991
Interaction outcomes							**0.118*****	0.015	7.707
R^2	.230			.176			.0895		
F	355.21***			254.55***			83.69***		

	Effect	SE	t
Total effect	0.6749	0.0486	13.89***
Direct effect	0.4628	0.0512	9.033***

	Effect	BootSE	95% CI	
			BootLLCI	BootULCI
Indirect effect				
Information Outcomes	0.0894	0.0187	0.0536	0.1272
Interaction Outcomes	0.1227	0.0176	0.0885	0.1577

Results — *The moderated mediation effect of Digital Supporter*

Variables	Information Outcomes			Interaction Outcomes			Life Satisfaction		
	B	SE	t	B	SE	t	B	SE	t
Constant	3.240***	0.024	134.46	3.090***	0.025	125.34	2.052***	0.058	35.129
Age	-0.004***	0.001	-7.621	-0.002***	0.001	-5.099	0.0002	0.001	0.406
Gender(Male = 1)	0.008	0.012	0.737	-0.001	0.012	-0.716	0.004	0.013	0.330
Education (Undergrauate or higher = 1)	0.039**	0.013	3.040	0.039**	0.013	2.933	0.033*	0.014	2.323
Income (4 million and higher = 1)	0.014	0.012	1.134	-0.001	0.013	-0.077	0.028*	0.014	2.042
Digital Informatization Level	1.119***	0.044	25.736	1.016***	0.045	22.839	0.463***	0.051	9.033
Digital Supporter	0.085***	0.009	9.320	0.094***	0.001	10.139			
Digital Informatization Level * Digital Supporter	-0.544***	0.051	-10.687	-0.609***	0.052	-11.700			
Information Outcomes							0.079***	0.016	4.991
Interaction Outcomes							0.118***	0.015	7.707
R^2	.251			.204			.0895		
F	285.78***			217.59***			83.69***		
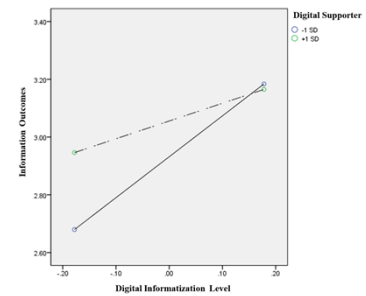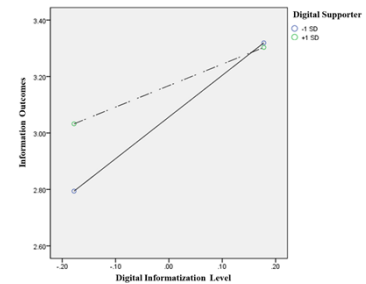
Conclusion

✓ Consumers using digital devices are ultimately closely related to successful life experiences.

✓ This study has important implications for observing the role of digital supporters
  - When the level of digital informatization is low, improving outcomes through digital supporters is beneficial.
  - If an individual has a certain level of digital informatization, the intervention of a supporter will rely on help instead, making it impossible to develop one's power, and the outcomes will decrease compared to consumers who solve problems and use digital devices by themselves.

✓ It is essential to balance initial help with providing opportunities for consumers to develop their skills and power.

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Thank you!