Differences in digital capital according to socio-demographic characteristics of the elderly
J. H. Ko, K. H. Kim

Purpose The term "capital" traditionally has been used to mean economic capital such as wealth or assets, but the scope of its application has been expanded to explain complex and diverse social phenomena, such as social capital, cultural capital, and human capital. In particular, as the influence of digital technology is rapidly increasing due to digital transformation, the discussion of digital capital as new capital has been emerging. As we summarize previous studies, digital capital can be defined as "a set of internalized abilities and aptitudes" (digital competencies) as well as "externalized resources" (digital technology) that can be historically accumulated and transferred from one arena to another(Ragnedda, 2018; Lee, 2021). The reason why the discussion of digital capital draws attention is that digital capital, a bridge capital between online and offline life chances, can be a link between digital inequality and social inequality by reflecting or deepening the inequality of existing offline resources (Ragnedda, Ruiu, and Addeo, 2020). Therefore, this study aims to empirically analyze the relationship between digital inequality and social inequality by showing how the digital capital of the elderly differs according to socio-demographic characteristics.
Method The data of 1,088 Internet users over 60 years of age in the <2019 Digital Divide Survey> by National Information Society Agency (NIA) was used. Digital capital was measured by two sub-dimensions of digital access and digital competence. The digital access dimension consists of questions related to possession of digital devices and internet connectivity, while the digital competence dimension consists of items related to the use of information for communication and collaboration, social participation, and the ability to keep online safety and behave responsibly. We used gender, age, education, income, and residential area as socio-demographic characteristics variables. In order to examine the relationship among digital access, digital competence, digital capital, and socio-demographic factors, we adopted correlation analysis, T-test, and ANOVA methods. **Results and Discussion** The analysis shows that digital capital is related to all socio-demographic variables. That is, male, younger, high-education, high-income, or urban-dwelling elders have higher digital capital than females, older elders, low-education, low-income, and rural elders. These results suggest that policy efforts should be strengthened to expand the digital capital of the vulnerable among the elderly.

References
Lee, S. M. (2021). The role of public libraries in the formation of digital capital. *Journal of the Korean Library and Information Science*, *55*(1), 521-540.
Ragnedda, M. (2018). Conceptualizing digital capital. *Telematics and Informatics*, *35*(8), 2366-2375.
Ragnedda, M., Ruiu, M. L., & Addeo, F. (2020). Measuring digital capital: An empirical investigation. *New Media & Society, 22*(5), 793-816.
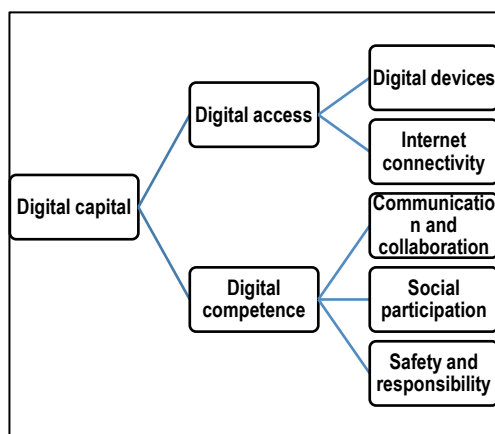
Figure 1. Constitutive components of Digital capital

Table 1. Relationship between digital capital and socio-demographic Characteristics (**Correlation is significant at the .01 level)

Variable		Digital Capital		Total(Mean(SD))
		Access	Competence	
Age	-	**-.340****		Correlation
		-.318**	-.215**	
Gender	Male	**65.7(19.46)**		61.93(20.28) (F=2.148, Sig=.000)
		80.00(29.14)	51.44(17.54)	
	Female	**58.4(20.42)**		
		72.11(32.60)	44.70(17.75)	
Education	Middle school or lower	**54.56(20.96)**		61.93(20.28) (F=97.211, Sig=.000)
		66.67(33.83)	42.46(17.91)	
	High school graduate	**67.44(16.75)**		
		83.09(26.20)	51.79(15.85)	
	College or higher	**80.30(11.76)**		
		97.22(14.26)	63.37(16.02)	
Income (won)	< 1 million	**48.16(22.05)**		61.93(20.28) (F=58.816, Sig=.000)
		54.49((35.30)	41.83(16.38)	
	1 million - 2 million	**52.79(19.89)**		
		63.60(32.41)	41.98(16.20)	
	2 million - 3 million	**60.17(19.89)**		
		72.30(30.26)	48.05(19.89)	
	3 million - 4 million	**68.77(17.56)**		
		85.43(27.77)	52.10(15.86)	
	> 4 million	**73.64(13.35)**		
		94.02(17.53)	53.26(16.83)	
Area	Urban areas	**62.86(20.03)**		61.93(20.28) (F=18.673, Sig=.000)
		76.94(30.86)	48.78(17.99)	
	Rural areas	**54.41(20.88)**		
		67.65(32.93)	41.18(16.30)	