Beyond Material Access: A State-Level Analysis of the Multifaceted Relationship Between Digital Divide Levels and Multivariable Determinants of Internet Use

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Abstract

Although the world claims to be in an alleged digital era – and the US, the most dominant country of this era – the digital divide remains a significant yet overlooked problem, especially in the US. This study adopts a holistic approach to conduct a state-level analysis of the digital divide. This study explores all three levels of the divide and compares the results for top- and bottom-ranked states of Internet use, to illustrate the overall scheme of the digital divide in the US. This study analyzes data from two sources: the National Telecommunications and Information Administration (NTIA) and an online survey. While the former is a public social dataset, the latter is an empirical survey conducted in July through August 2023, from 50 randomly sampled respondents in the top- and bottom-ranked states. The results show that while the first- and second-level divides can be perceived positively, the third level remains a significant problem. In other words, the findings reveal that access and usage are insufficient to bridge the digital divide. These findings warrant future research on the third-level divide and remind policymakers to thoroughly consider the third level to bridge the digital divide in the US.

Keywords: Digital Divide, ICT Access, ICT Use, State-Level Difference