

Leaving No One Behind in the Digital Era: Opportunities and Challenges

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How to eliminate poverty is one of the major problems faced by human society in the process of development. The Internet-based technological revolution is promoting the human society into the digital era, which has a great impact on residents' economic behavior and may have a poverty reduction. In recent years, the rise of digital technologies represented by Internet access services, cloud computing, and mobile applications has significantly enhanced the availability of digital technology services around the world. Higher Internet access and use typically go hand in hand with technological change and higher productivity, playing a key role in improving residents' living conditions and eradicating absolute poverty. However, the non-homogeneity of its diffusion has brought convenience and opportunities for residents who have access to the digital technology, and crowded out the resources of the residents who have no such access, which leads to a digital divide between residents and further widening the gap between residents near and below the poverty line and rest of the population. It could be argued that in the digital era, relative poverty has gradually become the dominant form of poverty as social welfare rises. For example, miracle reductions in absolute poverty led China to announce, in late 2019, the strategic change from targeting absolute poverty to targeting relative poverty. Thus, analyzing the impact of individual digital use on relative poverty to find effective ways to address relative poverty is of great significance to poverty governance in the digital era.

Relative poverty has a stronger connotation of social comparison than absolute poverty, and is seen by traditional political economy and many structurally oriented sociological theories as a result of imbalances in the social structure. However, existing research on relative poverty has generally adopted a relative poverty line approach based on median or average income. This approach, while reflecting comparative implications, fails to adequately discuss the marginalization and inequalities caused by social structures. To improve this, the paper discusses relative poverty within the theoretical framework of social hierarchy and constructs a social space model (SSM) based on Bourdieu's theory of hierarchy. This model describes social stratification using a two-dimensional coordinate system: the vertical axis corresponds to the total amount of capital an individual possesses, and the horizontal axis corresponds to the structure of an individual's capital. The entire social space is divided into three classes (bottom, middle and top), each of which is subdivided into three groups (culturally biased, balanced development and economically biased). We consider individuals in the bottom class as relatively poor and discuss the mechanisms of digital technology's role in poverty governance by estimating the impact of individual digital use on class divisions based on 2SLS and IV-quantile regression methods.

Using data of approximately 29,000 individuals from the China Family Panel Studies (CFPS) 2018 wave, we found the following results. (1) In 2018, approximately 31.71% of China's individual residents were in relative poverty, mainly older rural females. (2) Within relatively poor individuals, economically biased individuals have the poorest digital use, and the increase in cultural capital can significantly improve individuals' digital use. (3) Digital use can raise the total amount of capital of an individual, thus raising the absolute position of the individual in the social space. (4) As a result of the digital gap, individuals at the bottom receive lower returns from digital use, implying that digital technologies exacerbate relative poverty by widening the class gap.

Our study makes several contributions to the literature on poverty. By constructing a Social Space Model, we propose a new perspective for discussing poverty to fill the gap in the focus on social structure in traditional poverty studies. Our study also has strong policy implications to anti-poverty work in the digital era. The findings suggest that while digital technologies offer additional opportunities for individual development, disparities in individual digital use can widen class gaps and exacerbate relative poverty. Anti-poverty work in the digital era should focus on relative poverty and address it by prioritizing the cultivation of the digital capabilities of individuals at the bottom class to narrow the class gap caused by digital inequality. This study's findings are useful for the design and assessment of anti-poverty policy.