

Competency Profiles in Digital Information Judgment and Use Across Countries: Digital Empowerment or Structural Constraints?

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Digital capabilities are widely recognized as the key to promoting social participation, enhancing information judgment and realizing individual empowerment. However, the formation of competence is not only influenced by individual factors, but also rooted in the distribution of institutional arrangements, cultural traditions and structural resources. Based on Giddens' structuration theory and the classical information behavior model, this paper combines the research on digital empowerment pathways to construct an analytical framework of "structure-empowerment-competency portrait", from which this study explores how factors such as gender, age, and geographic location shape the individual's ability in the digital environment. In this framework, we explore how factors such as gender, age, and geography shape the performance of individuals in digital environments.

Using data from 61 countries released by the ITU, the study identifies the impact of structural variability on key competency dimensions such as "information judgment," "content generation," and "collaboration and communication" through descriptive statistics, principal component analysis (PCA), and regression modeling. The results show that different social groups have significant influence on the key competency dimensions of "information judgment", "content generation" and "collaboration". The results show that different social groups face unequal empowerment opportunities in the construction of digital competence, and that there are deep-rooted institutional logics and cultural mechanisms behind the differences. The findings of this study not only provide a theoretical basis for the formulation of educational policies and optimization of technological platforms but also provide empirical references for the construction of future transnational competency assessment frameworks.

Index Terms—Digital Competence, Information Judgment, Structuration Theory, Empowerment Pathways