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Extended Abstract

**THE LAST-MILE DELIVERY OF DIGITAL LITERACY: AN OVERVIEW OF
PRADHAN MANTRI GRAMEEN DIGITAL SHAKSHARTA ABHIYAN (PMGDISHA)**

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THE LAST-MILE DELIVERY OF DIGITAL LITERACY: AN OVERVIEW OF PMGDISHA

Abstract

Digital transformation is driving change at a fast pace in almost every section of society, businesses and government. The Indian government has launched the Digital India Mission to digitalize an array of services. In the context of digitalization, digital illiteracy can create digital inequality which further leads to social exclusion, especially in rural areas. Sensing the growing need for digital literacy to keep up with the pace of digital transformation, the government of India launched the Pradhan Mantri Grameen Digital Saksharta Abhiyan (PMGDISHA). The objective of PMGDISHA was to bridge the existing digital divide by imparting digital literacy in rural areas and helping rural people cope with technological change. I conducted a primary survey with 78 respondents using a previously validated survey questionnaire at the Dindori district of Madhya Pradesh and used Kirkpatrick's (2009) model to measure the effectiveness of training. I also evaluated the effect of training arrangements (facility quality, instructor quality) and demographic characteristics of trainees on training effectiveness. This paper contributes to the digital literacy literature and guides facilitating the adoption of digital technologies in the last mile.

Keywords: Digital Literacy, PMGDISHA, Last Mile Delivery, Kirkpatrick Model

Introduction

Governments across the globe are trying to digitalize every section of society. Following the same path, the Government of India (GOI) launched the Digital India initiative to digitalize various spheres of the society like citizen-centric services, digital financial transactions, digital infrastructure, and digital empowerment. As a part of the digital empowerment vision and the

growing importance of digital literacy at the global level¹. GOI launched Pradhan Mantri Grameen Digital Saksharta Abhiyan (PMGDISHA) in March 2017.

GOI in its seventeenth Lok Sabha's eleventh report presses the need for evaluating the effectiveness of PMGDISHA program². According to Ragnedda et.al. (2019), "Understanding the effectiveness of digital literacy approaches is essential for adopting similar initiatives in the future". Therefore, it becomes important to appropriately measure such programs' effectiveness to understand if the policies designed to address the gap are effective or not (Antoninis, 2018). An effort is made through this paper to understand the policy implementation at the last mile, what are the factors responsible for achieving the learning outcomes of the program by adapting the Kirkpatrick(2009) model.

Theoretical Concept

Digital Literacy is a specific type of literacy concerning the Information and Communication Technology (ICT) (Panos et.al., 2020). There are two arrays of definitions that are prevalent in the literature (Lankshear and Knobel, 2015). First, the conceptual definitions, which deals with certain ideas, principles, and abilities of an individual to be called digitally literate like the "ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital devices and networked technologies for participation in economic, and social life" (Gilster and Gilster, 1997), (Mohammadyari and Singh, 2015) and (Antoninis, 2018). The second array tries to codify these concepts into certain tasks³.

The definition of digital literacy is still evolving. According to Deursen and Dijk, 2014, there are three types of digital literacy, Fundamental Literacy (Finding and Consuming), Information Literacy (Creating Content over the internet) and Collaborative Literacy (Communicating or sharing content).⁴

¹ <http://uis.unesco.org/en/blog/meet-sdg-4-data-indicator-4-4-1-skills-digital-world>

² http://164.100.47.193/lsscommittee/Information%20Technology/17_Information_Technology_11.pdf

³ Global Digital Literacy Council (GDLC) is one such organization which operationalizes what one must have to be called digitally literate. It floats a certification I3C which weighs candidates on these tasks.

⁴ <https://www.edweek.org/teaching-learning/what-is-digital-literacy/2016/11>.

Research Question

What are the factors important for PMGDISHA learning outcomes like Fundamental Literacy, Information Literacy, and Collaborative Literacy?

Conceptual Framework

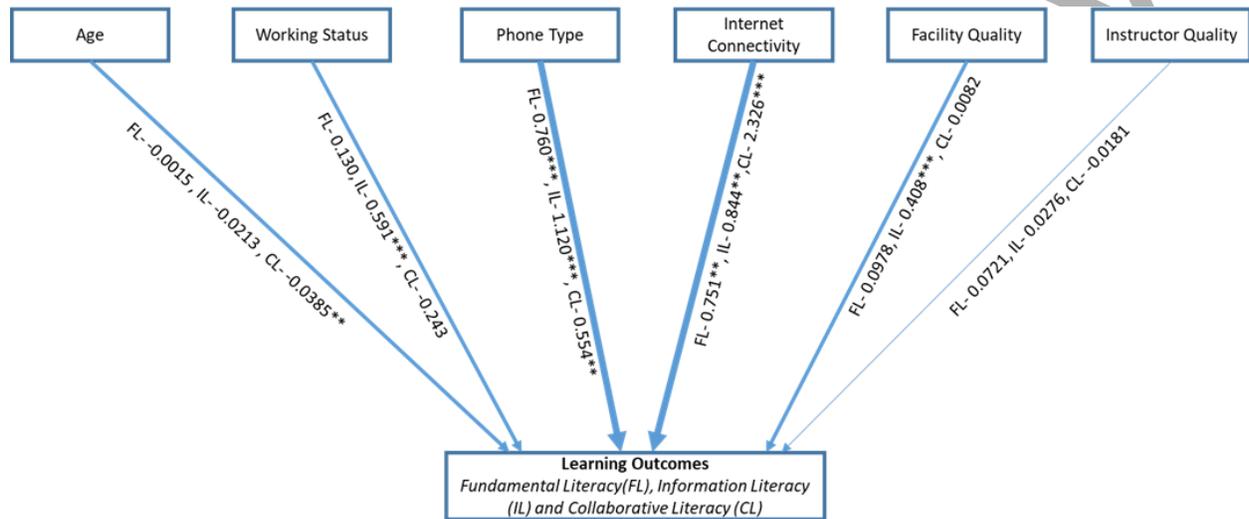


Figure represent Research Model and regression coefficients of independent variables
Source: Author, Adapted from UNESCO's Digital Literacy Global Framework.

Methodology and Data Collection

Data has been collected from 78 certified candidates of the PMGDISHA program in the Dindori District of Madhya Pradesh using a validated questionnaire. The list of ten gram panchayats was given by CSC SPV. These gram panchayats were taken at random from three sub-blocks of the district. The time frame for data collection was from 8th September 2021 till 18th September 2021.

The model is evaluated using the ordinary least square method. OLS is used to simplify the interpretation of change happening due to a particular factor.

Results

The result shows that Phone Type and Internet Connectivity are dominant factors for all three learning outcomes. Age has a negative relationship, although it is significant for only collaborative literacy. Working status and facility quality are positively significant for information literacy. Instructor Quality is insignificant for all learning outcomes.

Conclusion

Possession of smartphones and the availability of the Internet plays a dominant role in achieving these learning outcomes.

Limitations: As the sample size is small, the generalizability of our results is limited. Extending the sample will support more robust conclusions.

Further Extension: In-Depth interviews of 10 VLEs and 5 Certified Students has been taken. A further qualitative enquiry of PMGDISHA policy will be done.

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