

# The Influence of Digital Literacy on Digital Financial Inclusion

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## Abstract

Digital literacy is the knowledge possessed by an individual with respect to the available digital gadgets and technologies. Whereas the term digital financial inclusion attempts to measure the ability of an individual to include themselves in the process of accessing financial products and services digitally. This study is conducted to find out the levels of digital literacy and inclusion with special reference to the usage of digital financial products and services among the young-adults of Coimbatore city. This study is designed in a way that it concentrates equally on both these concepts simultaneously aiming at measuring those two among the targeted population. Through analysis, it was found that there is adequate amount of literacy among the respondents and it positively impacts the digital financial inclusion.

## 1. INTRODUCTION

It is important for an individual to acquire certain amount of literacy towards anything before using it regardless of what it is. So is the case for digital financial inclusion too, if not one may get into trouble in any way.

Not limiting to the gathering of such literacy, but it is necessary for an individual to apply the literacy acquired by him or her in the financial process to reap the benefits out of it. Digital literacy measures the ability of an individual in the usage of digital devices and the ability to adopt themselves to the modern-day technologies.

To put it in simple words, it is just the skills acquired by the individuals with regard to usage of the technology and its oriented components. It is considered important because it has emerged as a basic need for almost everything in this digital-era such as ..., modern day employments, Social connectivity, Communication etc ...;

It tends to contribute to the improvement of digital financial inclusion rate. This is inferred from the layman's point of view as, digital financial inclusion refers to the usage of financial products and services in a digital form, without strong digital literacy, digital financial inclusion may improve but the potential positive outcome may not be certain which may lead to a decline in the adoption of digital financial inclusion in long-term.

To gain a clear view about this and to arrive at a conclusion supported by statistical results this study has been conducted.

## 2. REVIEW OF LITERATURE

- 1) Krish Chetty, Liu Qigui, Nozibele Gcora, Jaya Josie, Li Wenwei, and Chen Fang (2018) conducted a study to explore the G20 policies related to Digital literacy and attempted to provide a standardized multi-dimensional index to measure the same. A systematic review of literature has been carried out and core elements has been derived out which led to findings such as, digital literacy acts as a critical enabler of economic transformation through employment generation, a lack in spreading awareness of cognitive and ethical concerns, insufficient attention towards developing digital skills, the existing proxies of digital literacy is often misleading and not appropriately measuring the complexities of it. To address these issues, a framework holding five disciplines and three perspectives have been designed to measure the conceptual components of digital literacy. The recommendation include, establishing a commonly accepted approach and an index by type of literacy and perspective with the help of multi-disciplinary data collection instrument which will assist the latter one.
- 2) ALLAN MARTIN, through reviewing literature reviews, identified six important dimensions of digital literacies viz., Computer literacy, Technological literacy, Information literacy, Media literacy, Visual literacy and Communication literacy. Simultaneously the author identifies that these literacies can be conceived on three levels namely, Digital competence, Digital usage and Digital transformation. The primary recommendation from the author is, it is important to build socio-cultural pattern which provides an understanding regarding digital literacy and sense of control in this unstable age. For this construction it is necessary for an individual to believe their life plays a vital part in this process. Also one should view him/herself as a person who develops digital literacy and the one who reflects on the implications of that for their identity.
- 3) Naumenkova et al. (2019) examined the influence of digitalization on financial inclusion and measured the level of financial inclusion in Ukraine. On analysis, it was found that there was a gradual decrease in the level of financial exclusion but still there prevails certain percentage of population who are financially excluded which may be due to lack of trust, accessibility issues. The findings of the study include, The Ukrainian population holds a backward place in relation to other countries and the major reason was found to be the country's financial service infrastructure which was unbalanced during the period.
- 4) Khera et al. (2021) developed a novel index to measure the digital financial inclusion among fifty-two countries by taking payments data into account. Seven indices were constructed and three stage principal component analysis was used to weigh each indicator. Further analysis depicts that Latin America, Asian and Pacific countries, Emerging Europe and the Caribbean are found to have high degrees of traditional financial inclusion. Most of the countries had faced an increase in the digital financial inclusion index between 2014 and 2017 where African and Asian countries tend to have the greater improvement. Thus, the created measure indicates that fintech had positive impact on digital financial inclusion.
- 5) Gallego-Losada et al. (2023) conducted a bibliometric analysis on the available literature related to digital financial inclusion, which helped to identify that around two billion people were still remain unbanked. Potential reasons identified by the previous authors for this lack includes the components viz..., geographical access, financial and digital illiteracy, transaction costs, lack of suitable financial products. To overcome these limitations of traditional banking, digital financial inclusion has been emphasised to remove barriers of

different nature which were identified by various authors such as reducing income inequality, reducing financial exclusion and eliminating poverty. Further it was found that achievement of high degree of digital financial inclusion can be achieved through technological development and establishment of adequate economic policies and regulatory frameworks. The researchers strongly believe that the component is a driving force in sustainable development.

- 6) E. Li et al. (2024) aimed at evaluating the impact of digital inclusive finance on economic growth. The data is of panel in nature and was collected for a period of ten years. On analysis it was found that, digital inclusive finance can foster high-quality economic development which will have a notable impact. The depth of digital financial usage, internet penetration and the consumption structure individually tend to impact the quality of economic development, Recommendations from the researchers include, the initiation of collaborative efforts among stakeholders, diversification of avenues to widen the growth of economic development more effectively.
- 7) Ray et al. (2022) discussed about digital financial inclusion from a G20 perspective. Various components were used to measure inclusion such as share of internet users, digital skills, resistance to move away from cash and mobile phone ownership. The global pandemic and various government initiative schemes had a positive impact on this component. Fin-techs are considered as the prime component with which better digital financial services can be provided with. The recommendations include, national digital financial education strategies, in-person training and development of user-friendly mobile applications. Policies bridging the gender gap should be implemented more effectively to reduce the same.

### 3. STATEMENT OF THE PROBLEM

The digital advancements happening in this current era are unimaginable. So it is necessary for an individual to be literate in all terms, if not one may end up in losing all the resources accumulated by him or her over-time. The primary problem is the inability to equally compete equally with the pace of advancements taking place in this digital era. Through extensive review of literature it is inferred that there is a significant lack of digital literacy and it's up gradation over- time. The secondary issue is that even though there is certain amount of literacy with respect to digital components, it is not always converted to reap potential rewards of digital financial inclusion. To know the existing levels of the selected components, the study is conducted aiming at measuring the above said concepts viz ..., digital literacy and digital financial inclusion. The study also attempts to find the impact of former variable on the latter one.

### 4. OBJECTIVES OF THE STUDY

To assess the level of digital literacy and digital financial inclusion among individuals

To analyze the impact of digital literacy on digital financial inclusion

### 5. HYPOTHESIS OF THE STUDY

Hur: There is no significant relationship between digital literacy and digital financial inclusion

Ho2: There is no significant impact of digital literacy on digital financial inclusion

## 6. RESEARCH METHODOLOGY

The primary data collected for this study encompasses of responses from the young adults of Coimbatore city. The data has been collected through questionnaire by adopting purposive sampling method as the population of the target population is unknown. The responses accumulated for the analysis comprises of data from 50 individuals. Followed by the conduction of statistical analysis through correlation, regression and mean score analysis

## 7. ANALYSIS AND INTERPRETATION

### Mean Score Analysis

#### Mean

Sr. No.	STATEMENTS	SCORES
DIGITAL LITERACY		
1	I am open enough to adopt to the usage of digitalized financial products and services	3.96
2	I do use various financial service available in digital form more ethically	4.04
3	It enables me in integrating the digital technologies into my personal financial activity	4.24
4	There is always a possibility of exploiting a computer system or a private network in a computer to get the unauthorized control over it.	3.94
5	I do use various financial services available in digital form more ethically	4.04
6	It enables me in integrating the digital technologies into my personal financial activity	4.24

Sr. No.	STATEMENTS	SCORES
DIGITAL LITERACY		
1	I do evaluate the gathered finance related information before applying it in my life	4.16
2	Spending cannot be avoided, but I do ensure efficient spending on necessary things	4.18
3	I do critical thinking of how the investment avenue works and will it suitable for the personal characteristic	3.74
4	I do evaluate the external factors which could cause a negative effect on the result of an investment	3.64
5	I evaluate my own level of risk tolerance above which I do not invest/borrow money	4.06
6	I do in-depth analysis of each and every decision available before arriving at a decision	3.98
7	I do brainstorm potential financial decisions to overcome financial decisions dilemma	3.76
8	I do make decision in a way that the returns from an avenue does not create tax related issues	3.52

The above table comprises the statements constructed by the researcher for the respective constructs and all the scores were found to be more than 3, which depicts the individuals hold a fair amount of knowledge with respect to these aspects.

### Correlation Analysis

Correlations			
		DIGITAL LITERACY	DIGITAL FINANCIAL INCLUSION
DIGITAL LITERACY	Pearson Correlation	1	.704
	Sig. (2-tailed)	.000	
	N	50	

From the above table, it is inferred that there exists a high positive correlation between digital literacy and digital financial inclusion. The significance value denotes a value less than the cutoff value of 0.05. through which null hypothesis is rejected and the relationship is found to be significant.

## Regression Analysis

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the	Change Statistics				
					R Square Change	F Change	Df1	Df2	Sig. F Change
	.704 <sup>a</sup>	.495	.485	.435		47.083	1	48	.000
a. Predictors: (Constant), DL									

Through the above table, it is inferred that the Independent variable which in this case is Digital literacy explains 49.5% of change in the Digital financial inclusion.

ANOVA <sup>a</sup>						
Model	Sum of Squares	Df	Mean Square	F	Sig.	
Regression	8.897	1	8.897	47.083	.000b	
Residual	9.070	48	.189			
Total	17.968	49				
a. Dependent Variable: DFI, b. Predictors: (Constant), DL						

It is inferred that the proposed model for this study is found to be significant as the P-Value is less than 0.05. Following which the null hypothesis has been rejected and concluded that there is an effect of digital literacy on digital financial inclusion.

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.104	.409		2.696	.010
	DL	.708		.704	6.862	.000
a. Dependent Variable: DFI						

From the above table, it is found that, an increase of 1 unit in digital literacy results in an increase of 0.708 units in digital financial inclusion which denotes a positive impact.

## 8. FINDINGS

The level of digital literacy among the respondents was found to be fairly strong. The level of digital financial inclusion among the respondents was comparatively less with the digital literacy acquired by them. There has been a significant strong positive correlation found between digital literacy and digital financial inclusion. The digital literacy among the respondents tends to have a significant positive impact on their digital financial inclusion. The regression model tends to explain 49.5 percentage of the change in the dependent variable which is digital financial inclusion in this case.

## 9. CONCLUSION

Reflecting to the statistical evidence, it is concluded that there has been enough digital literacy among the respondents. But to reap potential benefits from the digital financial inclusion process, an individual must possess or acquire the courage to transform such literacy into a life-changing opportunity by proper application of it in the aforementioned process. For which initiatives from the individuals, awareness programs and strict regulations from the government, transparency from the service providers are the necessary components which should be put into same line to achieve a stable economic development and standard of living of an individual at a longer-run.

## References

- 1) Anderson, C., & Arnoult, L. (1989) An Examination of Perceived Control, Humor, Irrational Beliefs, Positive Stress as Moderators of the Relation Between Negative Stress and Health. *Basic & Applied Social Psychology*, 10 (2), 107-117.
- 2) Ashforth, B.E. & Humphrey, R.H. (1995) Emotions in The Workplace: A Reappraisal. *Human Relations*, 48 (2), 97-125.
- 3) Balaji, R. (2014). Role of Human Resource Manager in Managing Stress of Employees in Manufacturing Concerns, *International Journal of Innovative Research in Science, Engineering and Technology*, 3(4), 11070-11071. Retrieved from: [er\\_in\\_Managing\\_Stress\\_of\\_Employees\\_in\\_Manufacturing\\_Concerns](http://www.ijer.in/Managing_Stress_of_Employees_in_Manufacturing_Concerns).
- 4) Bechr, T. A., & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: a facet analysis, model, and literature review. *Personnel Psychology*, 31. 671-674. Link: <http://dx.doi.org/10.1111/j.1744-6570.1978.tb02118.x>.
- 5) Bloisi, W., Cook, C.W., & Hunsaker, P. L. (2007) *Management and Organizational Behaviour*. 2th Edition. London. McGraw publication
- 6) Fairbrother, K., & Warn, J. (2003). Workplace dimensions, stress and job satisfaction. *Journal of Managerial Psychology*, 18 (1), 8-21.
- 7) Greeshma, B., Priya, G. L., Aswathy, B., & Janani, S. (2018). Stress Management in the Workplace- Challenges Faced by HR. *Journal of Business and Management*, 20(4), 33-36. Retrieved from: <http://www.iosrjournals.org/iosr-jbm/papers/Vol20-issue4/Version-3/F2004033336.pdf>.
- 8) Holman, D., Johnson, S., & O'Connor, E. (2018). Stress management interventions: Improving subjective psychological well-being in the workplace. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. Salt Lake City, UT: DEF Publishers. 2. Retrieved from: <https://nobascholar.com/chapters/44/download.pdf>.
- 9) Jain, P. & Batra, A. (2015). Occupational Stress at Workplace: Study of the Corporate Sector in India. *Journal of Business and Management*, 17(1), 13-21. Retrieved from: <http://www.iosrjournals.org/iosrjbm/papers/Vol17-issue1/Version-3/B017131321.pdf>
- 10) Lazarus, R. S., & Folkman, S. (1984b). *Stress appraisal and coping*. New York: Guilford. Springer.
- 11) Ongori Henry, Agolla Joseph. Occupational stress in organizations and its effects on organizational performance *Journal of Management Research*. 2008; 8: 123-135.
- 12) Panigrahi, A. (2017). Managing stress at workplace. *Journal of Management Research and Analysis*, 3(4), 154-160. DOI: 10.18231/2394-2770.2016.0001.
- 13) Prasad, K. D. V., Vaidya, R., & Kumar, V. A. (2016). Study on The Causes of Stress Among the Employees in It Sector and Its Effect on The Employee Performance at The Workplace with Special Reference to International Agricultural Research Institute, Hyderabad: A Comparative Analysis. *International Journal of Management*, 7(4), 76-98. Retrieved from: <http://www.iaeme.com/ijm/issues.asp?JType=IM&VType=7&IType=4>.
- 14) Selye, H. (1976b). *Stress in health and disease*. London: Butter worth.
- 15) Shukla, H., & Garg, R. (2013). A Study on Stress Management among the Employees of Nationalised Banks. *Voice of Research*, 2(3), 72-73. Retrieved from: [http://www.voiceofresearch.org/Doc/Dec-2013/Dec2013\\_20.pdf](http://www.voiceofresearch.org/Doc/Dec-2013/Dec2013_20.pdf).