Developing and Validating Constructs: A Pragmatic Measurement of Financial Inclusion as a Tool for Sustainable Growth

T. K. Murugesan 1, Edwin Ramirez Asis 2,*, Jaheer Mukthar K.P. 1, Juan Villanueva Calderón 2, Felix Julca Guerrero 3, Jorge Castillo Picon 4 and Guillermo Pelaez Diaz 5

1 Kristu Jayanti College Autonomous Bengaluru, Bengaluru 560077, India
2 Faculty of Business Sciences, Universidad Señor de Sipán Chiclayo, Chiclayo 14000, Peru
3 Faculty of Law, Universidad Nacional Santiago Antunez de Mayolo, Huaraz 02001, Peru
4 Faculty of Economics and Accounting, Universidad Nacional Santiago Antunez de Mayolo, Huaraz 02001, Peru
5 Faculty of Management and Tourism, Universidad Nacional Santiago Antunez de Mayolo, Huaraz 02001, Peru
* Correspondence: ramirezas@crece.uss.edu.pe

Abstract: Given the ubiquity of sustainability, the study attempts to develop and validate measurement constructs for financial inclusion. Further, it empirically examines the statistical relationship between validated constructs of financial inclusion and financial empowerment of blue-collar migrant workers. This empirical study proposes an exclusive research framework to inspect the development and validation of measurement scales for financial inclusion in the context of sustainable growth in India. The primary data were collected using the structured interview schedule among 268 blue-collar migrant workers. The Exploratory Factor Analysis (EFA) was employed to validate measurement constructs of financial inclusion and examine their hypothetical and conjectural relationships with the help of multiple correlation analysis. This paper identified eight valid and reliable underlying constructs of financial inclusion with the help of an exploratory factor study. The underlying constructs are ease of access, usage, availability, affordability, physical proximity, awareness and knowledge, financial literacy, and financial empowerment. Further, the outcomes of this study also confirmed that the underlying constructs of financial inclusion have a significant positive influence on the financial empowerment of blue-collar migrant workers.

Keywords: financial inclusion; sustainability; exploratory factor analysis; underlying constructs; blue-collar migrant workers: financial empowerment

1. Introduction

In the global pecuniary environment, financial inclusion plays a crucial role in a nation’s extensive, inclusive, and sustainable growth. Since the economic and business opportunities are integrated to access various financial products and services globally, people from developing countries can avail of financial inclusion schemes mainly to save, invest, and benefit from these schemes [1]. Moreover, the majority of people from developing countries like India would have swift access to financial technology, products, and services, and financial inclusion is one of the core policy matters of the Government of India (GoI) as a tool for contributing profoundly to the overall efficiency of the nation’s economy and financial system [2]. Therefore, the promotion of financial inclusion has been considered one of the key priorities by the GoI on a larger scale basis with perseverance for developing society and people [3–5]. Creating inclusive development of the people and society through financial inclusion has posed policy challenges on a large scale, emphasizing the nation’s integral and sustainable growth [6]. In developing countries and emerging markets like India, it is estimated that more than 50% of people do not have access to financial technology,
products, and services rendered by commercial banks and financial institutions [7]. Thus, financial inclusion is considered one of the nation’s key priorities.

One of the studies conducted by Sarma [8] revealed that the measurement of financial inclusion was done through the awareness and knowledge of financial inclusion schemes offered by the GoI. However, the significance of financial inclusion was well enunciated by the GoI; a consensus approach is needed to measure the success of the financial inclusion schemes more accurately. The financial inclusion schemes are designed and offered by the GoI for inclusive and sustainable growth of the country. Therefore, a proper measure of financial inclusion is required to monitor the progress of the policy initiatives taken by the government to reach out to rural people with the help of financial inclusion schemes [3].

The Multidimensional Composite Financial Inclusion Index (MCFII) has been developed and constructed based on core indicators that pragmatically quantify the extent of financial inclusion, and some of the constructs of financial inclusion are Availability (A), Ease of Access (EA), Usage (U), Unequal Distribution (UD) and Deficiency in Services (DS), Financial Literacy (FL), and Consumer Protection (CP). All these constructs of financial inclusion are required to pursue the ultimate goal of a sustainable future and growth for all [4].

Nevertheless, the explosion of using smartphones globally is increasing gradually in recent years, principally in developing nations like India. Smartphone penetration is considered an opportunity for accessing e-financial services rendered by commercial banks and financial institutions [9]. Consequently, payments through electronic gadgets have become a key aspect of conducting financial transactions for many households in developing nations [10].

In recent times, the term financial inclusion has received a greater response from researchers, research scholars, academicians, policymakers, and practitioners [11–13]. Financial inclusion is “the delivery and dispersal of financial products and services to underprivileged people at a reasonable cost transparently and fairly [14]. It comprises the provisions of affordable financial services, payments, remittance facilities, insurance, savings, and credit services rendered by commercial banks and financial institutions in India [15–17].

**Pradhan Mantri Jan Dhan Yojana (PMJDY)**

The notion of financial inclusion was first proclaimed in India in the year 2005 by the Reserve Bank of India (RBI). Approximately 192.1 million accounts were successfully created and opened under the Pradhan Mantri Jan Dhan Yojana (PMJDY) in India. These basic no-frills banking accounts have been progressively accompanied by 165.1 million debit cards, a life insurance cover of Rs.30,000, and an accidental insurance cover of Rs.1 lakh. Other than PMJDY, there are several other financial inclusion schemes in India: (i) Pradhan Mantri Vaya Vandana Yojana (PMVVY), (ii) Pradhan Mantri Suraksha Bima Yojana (PMSBY), (iii) Jeevan Suraksha Bandhan Yojana (JSBY), (iv) Pradhan Mantri Mudra Yojana (PMMY), (v) Venture Capital Fund (VCF) for Scheduled Castes under the social-sector initiatives, (vi) Stand-Up India Scheme (SIS), (vii) Varishtha Pension Bima Yojana (VPBY), (viii) Atal Pension Yojana (APY), (ix) Credit Enhancement Guarantee Scheme (CEGS) for scheduled castes, and (x) Sukanya Samriddhi Yojana (SSY). These financial inclusion schemes aim to provide loans and credits to the marginalized segments of the people for their economic upliftment in the particular and sustainable development of the nation in general.

2. Review of Literature

The conception of financial inclusion has received significant attention from research scholars, academicians, policymakers, regulators, and economists in the international financial environment [18]. Financial inclusion is defined as a strategic mechanism of offering financial and banking products and services to people for the nation’s sustainable growth. Financial inclusion schemes attempt to include everyone by providing basic banking and financial products and services irrespective of their savings or income [19].

The prime objective of financial inclusion is to offer financial solutions to economically underprivileged people. The term is generally used to designate the provisions of savings and micro-loan services to marginalized sections of society in a low-cost and easy-to-
use form [20]. Through financial inclusion, the poor and marginalized segments of the
country make the best use of their money and achieve financial education on the banking
and financial products offered by commercial and financial institutions. With the drastic
improvements in FinTech and digital transactions, technological startups are now reaching
the underprivileged people through financial inclusion [4].

The financial system of any nation is to thrive well because it serves as a strategic
mechanism for offering a wide range of financial and banking services such as credit
facilities, savings schemes, insurance products, and financial inclusion schemes to the
penurious sections of the nation in general and society in particular [21,22]. One of the
studies by Nandru and Rentala showed that financial inclusion is considered the key tool
for achieving financial access by rural people across the nation [23,24]. To achieve this goal,
the Government of India (GoI) has made enormous attempts to launch the national level
financial inclusion schemes such as “Pradhan Mantri Jan Dhan Yojana (PMJDY)”, “PM
Jeevan Jyoti Bima Yojana (PMJJBY)”, “PM Suraksha Bima Yojana (PMSBY)”, “Atal Pension
Yojana (APY)”, and “Sukanya Samriddhi Yojana (SSY)”. Moreover, RBI, the Central Bank of India, is also constantly taking initiatives along
with the GoI to reach out to the mass segment of the unbanked population in rural areas
and facilitate them with the mainstream formal banking system [24]. The recent review of
literature on financial inclusion emphasized the major issues, prospects, challenges, and
penchants from the perspectives of accessibility of financial services by the marginalized
sections of society. Providing banking and financial services to obliterate corners of the
nation is one of the crucial responsibilities of GoI [5].

Most of the research studies on financial inclusion in India said that financial inclusion
is a key tool and that the Government of India considered to reach out to rural people with
accessible financial services for sustainable national growth. Many researchers have discussed
and deliberated major problems of offering financial inclusion services to the underprivileged
sections of the nation [25]. Blue-collar migrant workers are recognized as one of society’s
marginalized sections. This study attempts to validate and develop the constructs of financial
inclusion and their implications on the financial empowerment of blue-collar workers in the
context of financial inclusion schemes offered by the Government of India [26].

Several studies throw certain empirical evidence on the effect of financial inclusion on
the well-being of the people. Most of these studies investigated the key facets of financial
inclusion and their implications on societal development. The results of the previous
studies showed that individuals accessing financial services and products are more likely
to experience a better life. These studies also witnessed that greater access to financial
services, continuous usage of financial services, and quality financial services are significant
indicators of people’s overall well-being [17].

3. Problem Statement and Study Objectives

A major portion of earlier research studies in financial inclusion shed light on the signifi-
cant factors concerning the financial inclusion of the marginalized sectors of society. The factors
which the previous authors documented through the construction of the multi-dimensional
scales mainly focused on various dimensions of financial inclusion only, and there were
diminutive studies found emphasizing the key dimensions of financial inclusion in the context
of sustainable growth of the nation and the significant linkages between financial inclusion
and financial empowerment of the blue-collar migrant workers. Thus, the current study
intends to close this research gap by proposing a pragmatic research framework with the
significant antecedents which are associated with financial inclusion and their influence on
the financial empowerment of blue-collar migrant workers. In view of this current research
gap, the study is pragmatically designed to achieve the following two broad objectives:
(a) To explore and validate the antecedents which are associated with financial inclusion
in the context of sustainable growth of the nation;
(b) To analyze the significant influence of the underlying contracts of financial inclusion
on the financial empowerment of blue-collar migrant workers.
4. Methodology of the Study

To analyze underlying constructs of financial inclusion in the context of sustainability, this study is empirically designed to explore and validate the research constructs that underpin financial inclusion and to examine the substantial relationship between reliable and valid research constructs of financial inclusion and their logical influence on financial empowerment of the sample respondents. An exclusive structured interview schedule was effectively instrumented with the multi-dimensional scale items for the antecedents, which are linked with financial inclusion in the context of sustainability. The structured interview schedule was individually administered among 268 blue-collar workers judgmentally selected from select urban areas of Karnataka State.

On the basis of sample data from the field survey, an Exploratory Factor Study (EFS) was applied to certify that measurement scale items in each scale evidently replicated the contextual scope of each research construct. The internal consistency analysis has been applied by the researchers to confirm the consistent reliability of financial inclusions. Indeed, the construct validity and criterion-related validity were statistically measured to confirm that the measurement dimensions underpinning financial inclusions in the context of sustainability and the degree to which these dimensions are absolutely free from non-random error or any systematic error. This study methodology clearly includes the research framework, the hypotheses formulation, the research instrument development, the instrument validity and reliability, the sampling procedure and design, and the sample frame and units.

4.1. Research Framework

As specified earlier in this study, the basic objective of this study is to explore pragmatically and validate underlying constructs which are significantly associated with financial inclusion in the context of sustainability. In order to realize this broad objective, the research scheme was designed and applied by researchers as depicted in Figure 1. This research scheme is a lucid, coherent framework for exploring the underlying constructs of financial inclusion, and it is further extended to analyze a logical linkage between the underlying constructs explored and validated with the help of the exploratory factor study as predictor variables such as ease of access, usage, availability, affordability, awareness and knowledge, physical proximity, and financial literacy and a contingent dependent variable as financial empowerment of the blue-collar migrant workers. The logical arrows in Figure 1 represent the proposed model of the study, and they are to be empirically tested with the help of multiple regression analysis in order to achieve one of the research objectives of this study.

**Figure 1.** Significance of valid and reliable predictors of financial inclusion in the achievement of financial empowerment of blue-collar migrant workers.
4.2. Hypotheses Formulation

The nitty-gritty of this study is to investigate the reliable and valid measurement constructs of financial inclusion. This research study is further extended to analyze those underlying constructs of financial inclusion were pragmatically or statistically significant in the financial empowerment of blue-collar migrant workers. In order to attain this study objective, the following research hypotheses were developed and tested by the researchers:

**H1.** Ease of access has a significant influence on the financial empowerment of blue-collar migrant workers.

**H2.** Usage has a significant influence on the financial empowerment of blue-collar migrant workers.

**H3.** Availability has a significant influence on the financial empowerment of blue-collar migrant workers.

**H4.** Affordability has a significant influence on the financial empowerment of blue-collar migrant workers.

**H5.** Awareness and knowledge have a significant influence on the financial empowerment of blue-collar migrant workers.

**H6.** Physical proximity has a significant influence on the financial empowerment of blue-collar migrant workers.

**H7.** Financial literacy has a significant influence on the financial empowerment of blue-collar migrant workers.

4.3. Research Instrument Development

The research instrument used in this study was designed and developed by the researchers on the basis of new scale measurements because they were not able to categorize any preceding studies directly underpinning all the issues deliberated in this pragmatic research study. Indeed, and wherever apparent, the researchers have applied suitable validated measures that were previously used by the research scholars. In order to test the validity of the research instrument, the pre-testing was exactly directed and administered in the two successive rounds to confirm that the sample respondents would apprehend scale measurements used in this research study. First, the research instrument was completely reviewed by the academic experts capable of designing and developing structured questions, and next, the structured questionnaire was effectively piloted with financial and banking specialists dealing with financial and banking services and products.

4.4. Instrument Validity and Reliability

In this study, the validity and reliability tests were effectively carried out to confirm whether the scale measurements assessed by the researchers are statistically valid and reliable for our research study. The validity and reliability of the underlying antecedents and scale measurements of the research instrument were well tested through Cronbach’s alpha and pilot survey. The individual scale measurements, underlying constructs, Cronbach’s alpha, and the factor loadings explored and confirmed with the help of exploratory factor analysis were revealed in the data analysis section of this research paper. The reliability of the research instrument was examined as well by applying one of the reliability tests called Cronbach’s alpha with the help of the SPSS software, and the resultant outcomes obtained thereof were presented in Table 4. The Cronbach’s alpha values of the underlying research constructs would range from 0.824 to 0.984, which clearly indicated the internal consistency of research variables with an alpha value higher than the threshold limit of 0.70. Thus, no scale items were dropped from the research instrument.

4.5. Sampling Procedure and Design

The survey study reported here was piloted in a few rural districts of Karnataka in South India. The sampling design of this study is devised from previous empirical studies. The primary data necessary for this study were obtained by means of the structured interview schedule administered among the blue-collar migrant workers based upon the area-cum judgemental sampling method. This sampling procedure has resulted in
268 suitable questionnaires, or a 62% overall response rate. Consequently, the sample size of this study was restricted to 268 blue-collar migrant workers in select rural districts of Karnataka. The main reason for choosing Karnataka State is that the blue-collar job demand is increasing with the appetite for quick adoption of changes. The Karnataka State has taken enormous steps to add 6.7 lakh blue-collar jobs.

4.6. Sample Frame and Units

The sample frame consists of blue-collar migrant workers who have access to numerous financial and banking products through inclusion schemes offered by the Government of India. It is obvious from the previous study and reports that blue-collar migrant workers have made substantial contributions to the development of the nation’s economy across the world. Often unrecognized and unseen, the blue-collar migrant workers keep our workshops and factories humming, foods produced in estates and farms, goods and services moving through integrated supply chains, build our infrastructure projects and homes, and finally keep our urban areas and metropolitan cities tidy.

Much of the contemporary and modern industrial infrastructure of the nation has been effectively built on the back of blue-collar migrant workers’ laborious work. The fertile research area that is gaining great attention is the financial inclusion of blue-collar migrant workers. Indeed, they often receive their salaries in cash and do all their household transactions using cash only. Since the cash transactions made by blue-collar migrant workers are likely to be unsafe, tiresome, inconvenient, and sometimes expensive, they also lack access to the formal financial and banking services and products offered by the Government of India (GoI). Thus, the current study attempts to explore underlying constructs of financial inclusion and their influence on the financial empowerment of blue-collar migrant workers.

5. Data Investigation, Outcomes, and Discussions

The data investigation, the survey outcomes, and the managerial discussions of this study are precisely summarized in the ensuing section.

5.1. Primary Characteristics of the Sample

The primary profile of sample respondents is portrayed in Table 1, and the classification of sample respondents is also described as follows:

In view of sample respondents based on gender, 65.7 percent are male, and 34.3 are female. In regard to the age of the sample respondents, 41.0 percent fall under the age group of 30–40 Yrs., 28.0 percent belong to the age group of 41–50 Yrs., 17.2 percent are in the age group of Above 50 Yrs., 13.8 percent fall under the age group of less than 30 Yrs. Breakdown of the sample respondents based on marital status indicates that a large proportion (47.8 percent) are married, 21.6 percent are unmarried, 17.9 percent are divorced/separated, and 12.7 percent are widowed. With respect to education level, 27.2 percent of sample respondents have completed secondary education, 23.1 have qualified higher secondary/diploma, 19.8 percent have completed primary education, 15.7 percent are graduates, and 14.2 percent are illiterate.

In view of the sample respondents based on monthly income level, 35.8 percent fall under the monthly income category of Rs.10,000–Rs.15,000, 27.2 percent belong to the monthly income level of Rs.15,001–Rs.20,000, 19.4 percent are in the monthly income level of below Rs.10,000, and 17.5 percent are in the monthly income level of more than Rs.20,000. A majority of the respondents have taken Pradhan Mantri Jan Dhan Yojana (PMJDY) (46.3 percent), 17.9 percent have taken Atal Pension Yojana (APY), 12.7 percent have taken PM Jeevan Jyoti Bima Yojana (PMJJBY), 10.4 percent have taken PM Suraksha Bima Yojana (PMSBY), 8.2 percent have taken Sukanya Samriddhi Yojana (SSY), and the remaining 4.5 percent have taken other financial inclusive schemes.
Table 1. The primary profile of the sample respondents.

| Primary Profile | Category | N  | Frequency | Percentage (%) |
|-----------------|----------|----|-----------|----------------|
| 1. Gender       | Male     | 268| 176       | 65.7           |
|                 | Female   | 268| 92        | 34.3           |
| 2. Age (Completed Years) | Less than 30 Yrs. | 268 | 37 | 13.8 |
|                 | 30–40 Yrs. | 268 | 110 | 41.0 |
|                 | 41–50 Yrs. | 268 | 75  | 28.0 |
|                 | Above 50 Yrs. | 268 | 46  | 17.2 |
| 3. Marital Status | Married | 268 | 128  | 47.8 |
|                 | Unmarried | 268 | 58   | 21.6 |
|                 | Divorced/separated | 268 | 48  | 17.9 |
|                 | Widow | 268 | 34   | 12.7 |
| 4. Education Level | Illiterate | 268 | 38   | 14.2 |
|                 | Primary school | 268 | 53  | 19.8 |
|                 | Secondary school | 268 | 73  | 27.2 |
|                 | Higher secondary/diploma | 268 | 62  | 23.1 |
|                 | Graduate | 268 | 42   | 15.7 |
| 6. Monthly income (INR) | Below Rs.10,000 | 268 | 52  | 19.4 |
|                 | Rs.10,000–Rs.15,000 | 268 | 96  | 35.8 |
|                 | Rs.15,001–Rs.20,000 | 268 | 73  | 27.2 |
|                 | More than Rs.20,000 | 268 | 47  | 17.5 |
| 7. Financial Inclusion Schemes | 1. Pradhan Mantri Jan Dhan Yojana (PMJDY) | 268 | 124 | 46.3 |
|                 | 2. PM Jeevan Jyoti Bima Yojana (PMJJBY) | 268 | 34  | 12.7 |
|                 | 3. PM Suraksha Bima Yojana (PMSBY) | 268 | 28  | 10.4 |
|                 | 4. Atal Pension Yojana (APY) | 268 | 48  | 17.9 |
|                 | 5. Sukanya Samriddhi Yojana (SSY) | 268 | 22  | 8.2 |
|                 | 6. Others | 268 | 12   | 4.5 |

Source: Author’s compilation based on primary data.

5.2. Exploratory Factor Study and Key Findings

The nitty-gritty of this pragmatic study is to develop and validate the measurement constructs for financial inclusion in the context of sustainability. In order to accomplish this purpose, an exploratory factor study was performed by applying the latest SPSS Version 22.0. The step-by-step PCA (Principal Component Analysis) with varimax rotation has been employed to explore the underlying constructs that underpin the financial inclusion of blue-collar migrant workers. Total of 50 statements that best reflect the acumen of blue-collar migrant workers on financial inclusion have been exposed to the multivariate data analysis technique to reduce them to a few uncorrelated constructs. Initially, all 50 measurement items were subjected to an exploratory factor study, which effectively mined nine factors. This analysis clarifies that some measurement indicators were not appropriately loaded on any one of the paradigm constructs, and some measurement indicators were replicating. Hence, nine measurement indicators have been removed from the original list. One more
exploratory factor analysis was performed with 41 measurement items, and eight construct factors were experimentally observed with eigenvalues higher than 1.

To test the appropriateness of sample data for the exploratory factor study, the relationship matrix was calculated, exposing enough correlations to advance with the exploratory factor study. The Anti-Image Correlation Matrix (AICM) was computed and indicated that the partial correlations were low by enlightening true constructs in the sample data. The Kaiser–Meyer–Olkin—Measure of Sampling Adequacy (KMO-MSA) was effectively employed for every research construct from the diagonals of PCM, the Partial Correlation Matrix. The PCM was observed to be reasonably high for every research construct. The inclusive MSA has been consistently computed to determine whether the sample size remained adequate for sampling.

Bartlett’s Test of Sphericity (BTS) has been applied effectively to exemplify whether the number of correlations between research constructs is highly significant. The overall KMO-MSA has been calculated (KMO-MSA = 0.857), and the BTS was statistically significant ($\chi^2 = 36,662.770$, $df = 820$, $p$-value = 0.000), signifying the appropriateness of sample research data for exploratory factor study. Therefore, all of these investigations showed that the data was suitable for exploratory factor analysis. The PCA has been applied for mining and extracting underlying constructs. The number of constructs extracted was categorically absolute based upon the “Latent Root Criterion (LRC)” (Table 2). Indeed, all component loadings higher than 0.50 (ignoring positive or negative signs) were subjected to study analysis. The guiding principles for determining significant component loadings based on the study sample size of 350 or more consider the factor loading of 0.30 [27].

### Table 2. Statistics for construct validity of financial inclusion.

| KMO Measure of Sampling Adequacy | Bartlett’s Test of Sphericity (BTS) |
|----------------------------------|-------------------------------------|
|                                  | Approx. $\chi^2$  | $df$  | $p$-Value |
| 0.857                            | 36,662.8           | 820   | 0         |

Eigenvalues for the factors 1 to 8 are 7.153, 5.549, 5.446, 4.397, 3.869, 3.527, 3.269, and 3.160, as shown by the first and foremost column of Table 3. The proportion of the significant Variance described by individual constructs is portrayed in the subsequent column of Table 3. From the analysis, it is obvious that the proportion of the Variance explicated by underlying constructs 1 to 8 is 17.447, 13.533, 13.283, 10.725, 9.437, 8.602, 7.972, and 7.707, respectively. The reliability of the underlying and fundamental constructs was effectively tested by Cronbach’s alpha ($\alpha$). The internal consistency valuation of scale measurements was assessed using Cronbach’s alpha for every construct and wide-ranging constructs. The ICA of the sample data was carried out to test appropriate reliability and to fit the consistent validity of the scale indicators. Cronbach’s alpha was computed to investigate the internal consistency of the factor construct and its appropriate reliability (Table 4).

### Table 3. Total Variance Explained for the Underlying Constructs of Financial Inclusion.

| Factors                  | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Initial Eigenvalues      | Total | 7.153 | 5.549 | 5.446 | 4.397 | 3.869 | 3.527 | 3.269 | 3.160 |
|                          | % of Variance | 17.447 | 13.533 | 13.283 | 10.725 | 9.437 | 8.602 | 7.972 | 7.707 |
|                          | Cumulative % | 17.447 | 30.980 | 44.263 | 54.988 | 64.425 | 73.028 | 81.000 | 88.707 |
| Extraction Sums of Squared Loadings | Total | 7.153 | 5.549 | 5.446 | 4.397 | 3.869 | 3.527 | 3.269 | 3.160 |
|                          | % of Variance | 17.447 | 13.533 | 13.283 | 10.725 | 9.437 | 8.602 | 7.972 | 7.707 |
|                          | Cumulative % | 17.447 | 30.980 | 44.263 | 54.988 | 64.425 | 73.028 | 81.000 | 88.707 |
| Rotation Sums of Squared Loadings | Total | 6.989 | 5.433 | 5.339 | 4.416 | 3.825 | 3.641 | 3.527 | 3.201 |
|                          | % of Variance | 17.046 | 13.252 | 13.022 | 10.770 | 9.328 | 8.880 | 8.601 | 7.807 |
|                          | Cumulative % | 17.046 | 30.298 | 43.320 | 54.090 | 63.418 | 72.298 | 80.900 | 88.707 |

Extraction method: principal component analysis.
Cronbach’s alpha (α) of 0.70 is the minimum recommended reliability coefficient (Nunnally, 1978). It is applied here to assess the consistent validity and appropriate reliability of every construct of financial inclusion. The outcome results are shown in Table 3. Thus, the reliability test was considered highly satisfactory as Cronbach’s alpha (α) is observed to be higher than 0.70 for all research constructs. Thus, alpha (α) values for mined and extracted constructs such as Ease of Access, Usage, Availability, Affordability, Physical Proximity, Awareness and Knowledge, Financial Literacy, and Financial Empowerment are 0.984, 0.968, 0.924, 0.864, 0.843, 0.921, 0.882, and 0.824, respectively.

Table 4. Underlying construct loadings, % of variance explained, and Cronbach’s alpha for extracted construct for financial inclusion.

| Underlying Construct | Indicators                                                                 | Construct Loadings | % of Variance Explained | Cronbach’s alpha (α) |
|----------------------|-----------------------------------------------------------------------------|--------------------|-------------------------|----------------------|
| 1                    | **Ease of Access (EA)**                                                                                              |                    |                         |                      |
|                      | EA1: Availing of bank loans through FI schemes (e.g., PMJDY) is easy.                                                  | 0.948              |                         | 0.984                |
|                      | EA2: Accessing the bank account via FI schemes is easy.                                                                 | 0.926              |                         |                      |
|                      | EA3: It is easy to avail of banking services through FI schemes.                                                        | 0.875              |                         |                      |
|                      | EA4: Opening no-frills (zero-balance) accounts under FI schemes is easy.                                                | 0.911              |                         |                      |
|                      | EA5: I can easily get a credit facility from the Bank via FI schemes.                                                   | 0.953              |                         |                      |
|                      | EA6: Availing micro-credit is easier through FI schemes.                                                                | 0.931              |                         |                      |
|                      | EA7: Bank employees are easily accessible for availing banking services.                                                   | 0.932              |                         |                      |
|                      | EA8: The bank branch is conveniently located for easy access.                                                            | 0.877              |                         |                      |
| 2                    | **Usage (U)**                                                                                                        |                    |                         |                      |
|                      | U1: I often visit the bank branch for money transfers/withdrawals/deposits.                                             | 0.880              |                         | 0.968                |
|                      | U2: I habitually use an ATM/debit card for money withdrawals and deposits.                                              | 0.928              |                         |                      |
|                      | U3: I often visit the bank branch to enquire about financial inclusion schemes.                                          | 0.931              |                         |                      |
|                      | U4: I visit a bank branch to avail bank loans.                                                                         | 0.946              | 13.533                  | 0.968                |
|                      | U5: I visit the bank branch frequently to repay the bank loan.                                                           | 0.923              |                         |                      |
|                      | U6: Bank employees are always cooperative and friendly in doing my transactions.                                         | 0.951              |                         |                      |
| 3                    | **Availability (AV)**                                                                                                 |                    |                         |                      |
|                      | AV1: Bank loans offered via FI schemes are quickly available.                                                            | 0.869              |                         |                      |
|                      | AV2: Bank personnel are available to fill the withdrawal form/deposit form.                                              | 0.872              | 13.283                  | 0.924                |
| Underlying Construct | Indicators                                                                 | Construct Loadings | % of Variance Explained | Cronbach’s alpha (α) |
|----------------------|-----------------------------------------------------------------------------|--------------------|-------------------------|-----------------------|
|                      | AV3: Bank employees are always accessible to obtain guidelines about new FI schemes | 0.895              |                         |                       |
|                      | AV4: The step-step procedure is less demanding for getting a bank loan under FI schemes. | 0.882              |                         |                       |
|                      | AV5: A credit counseling facility is available in my bank branch.            | 0.903              |                         |                       |
| 4 Affordability (AF) | AF1: The interest rates on all bank loans are affordable under FI schemes.  | 0.715              |                         |                       |
|                      | AF2: The charge of opening the bank account under FI schemes is affordable. | 0.713              |                         |                       |
|                      | AF3: The requirement of a minimum balance is affordable to maintain a bank account. | 0.720              | 10.725                  | 0.864                 |
|                      | AF4: Usage cost is affordable for banking services/ATM card/debit card is   | 0.708              |                         |                       |
| 5 Physical Proximity (PP) | PP1: Proximity to a bank branch                                                | 0.629              |                         |                       |
|                      | PP2: Proximity to ATMs                                                        | 0.646              |                         |                       |
|                      | PP3: Proximity to post office                                                  | 0.654              | 9.437                   | 0.843                 |
|                      | PP4: Proximity to cooperative banks                                           | 0.623              |                         |                       |
| 6 Awareness & Knowledge (A&K) | A&K1: I am aware of various FI schemes offered by the Government.           | 0.887              |                         |                       |
|                      | A&K2: I participate in awareness campaigns on FI schemes conducted by banks. | 0.873              |                         |                       |
|                      | A&K3: I know about various benefits of FI schemes provided by the Government. | 0.853              | 8.602                   | 0.921                 |
|                      | A&K4: I am aware of FI schemes via advertisements given by the Government.   | 0.884              |                         |                       |
| 7 Financial Literacy (FL) | FL1: I have basic knowledge of accessing banking services.                  | 0.813              |                         |                       |
|                      | FL2: The adoption of banking technology is easy.                            | 0.749              |                         |                       |
|                      | FL3: I have skills in accessing e-banking services.                         | 0.807              | 7.972                   | 0.882                 |
|                      | FL4: I am technically sound in accessing online banking services.            | 0.746              |                         |                       |
| 8 Financial Empowerment (FM) | FM1: I save money in my savings account at the bank regularly.             | 0.745              | 7.707                   | 0.824                 |
5.3. Nomenclature of Extracted Constructs and Suitable Labeling

The eight constructs were given apt names based on research indicators embodied in every case. The names of constructs, statement indicator labels, and construct loadings are categorically presented in Table 4. These constructs signifying the importance of financial inclusion in the pursuit of sustainability were methodically discussed below.

5.3.1. Factor 1: Ease of Access

This construct has appeared as the most significant construct clarifying 17.447% out of the total Variance explained. This construct has the eigenvalue of 7.153 and the Cronbach’s alpha of 0.984. Overall, eight statement indicators effectively loaded onto this construct. The highest loading has been found for the statement “I can easily get credit facility from the Bank via FI schemes (0.953)”, followed by, “Availing bank loans through FI schemes (e.g., PMJDY, SHGs) is easy (0.948)”, “Bank employees are easily accessible for availing banking services. (0.932)”, “Access to micro-credit is easier through FI scheme (0.931)”, “Opening a bank account through FI schemes is easy (0.926)”, “Opening no-frills (zero-balance) accounts under FI schemes is easy (0.911)”, “The bank branch is located very conveniently for easy access (0.877)”, and “It is easy to avail banking services through FI schemes (0.875)” (Table 4).

5.3.2. Factor 2: Usage

The second construct explained 13.533% out of the total Variance explained. This construct has the eigenvalue of 5.549 and the Cronbach’s alpha of 0.968. This underlying construct is made up of six correlated indicators. The maximum loading is for the indicator “Bank employees are always cooperative and friendly in doing my transactions (0.830)”. Linked to this, “I visit a bank branch for availing bank loans (0.946)”, “I visit a bank branch regularly for the repayment of bank loan (0.923)”, and “I often visit a bank branch for money transfer/withdrawal/deposit (0.880)” (Table 4).

5.3.3. Factor 3: Availability

The third construct factor explained 13.283% out of the total Variance clarified. This construct has the eigenvalue of 5.446 and the Cronbach’s alpha of 0.924. This underlying construct is made up of five correlated indicators. The maximum loading is for the indicative dimension “Credit counseling facility is available in my bank branch (0.903)”. Followed by, “The field workers/bank employees are available to guide about various new FI schemes (0.895)”, “The procedure is less onerous for getting bank loan under FI schemes
(0.882), and “Bank employees/support staff are available for filling withdrawal/deposit forms (0.872)”, and “Bank loans offered via FI schemes are promptly available (0.869)” (Table 4).

5.3.4. Factor 4: Affordability

Four highly indicative statements loaded onto this construct and explained 10.725% out of the total Variance clarified. This construct has an eigenvalue of 4.397 and a Cronbach’s alpha of 0.864. The maximum loading in this construct is for the indicative dimension “Minimum balance required for maintaining a bank account is affordable (0.720)”, Linked to this, “The interest rates on all bank loans are affordable under FI schemes (0.715)”, “The cost of opening a bank account under FI schemes is affordable (0.713)”, and “Usage charge for banking services/ATMs/debit card is affordable (0.708)” (Table 4).

5.3.5. Factor 5: Physical Proximity

Four highly indicative statements effectively loaded onto this construct in this factor construct and explained about 9.437% out of the total Variance described. This construct has an eigenvalue of 3.869 and a Cronbach’s alpha of 0.843. The maximum loading on this construct is for the indicative statement “Proximity to post office (0.654)”, Linked to this, “Proximity to ATMs (0.646)”, “Proximity to the bank branch (0.629)”, and “Proximity to cooperative banks (0.623)” (Table 4).

5.3.6. Factor 6: Awareness and Knowledge

This factor construct is composed of four correlated indicative statements and explains about 8.602% out of the total Variance calculated. This construct has an eigenvalue of 3.527 and a Cronbach’s alpha of 0.921. The maximum loading on this construct is for the indicative statement “I am aware of various FI schemes offered by the Government (0.887)”, Linked to this, “I am aware of FI schemes via advertisements given by the Government (0.884)”, “I participate in awareness campaigns on FI schemes conducted by banks (0.873)”, and “I know about various benefits of FI schemes provided by the Government. (0.853)” (Table 4).

5.3.7. Factor 7: Financial Literacy

The seventh factor explained about 7.972% out of the total Variance determined. This construct has an eigenvalue of 3.269 and a Cronbach’s alpha of 0.882. This underlying construct is made up of four highly correlated indicative statements. The maximum loading is for the indicative statement “I have basic knowledge in accessing the banking services (0.813)”. Followed by “I have skills in accessing e-banking services (0.807)”, “The adoption of banking technology is easy (0.749), and “I am technically sound in accessing online banking services (0.746)” (Table 4).

5.3.8. Factor 8: Financial Empowerment

Here, the six indicative statements were highly correlated with each other and loaded onto this construct. This factor explained about 7.707% out of the total Variance determined. This construct has an eigenvalue of 3.160 and a Cronbach’s alpha of 0.824. The maximum loading on this construct is found for the indicative statement “I can manage my financial resources effectively (0.856)”, Linked to this, “I have invested a portion of my earnings regularly in financial assets (0.765)”, “I save money in my savings account of the bank regularly (0.745)”, “I can set my short-term/long-term financial goals periodically (0.698)”, “I can effectively participate in economic activities of my house (0.678)”, and “I am confident of coping with my financial crisis (0.635)” (Table 4).

5.4. Multiple Regression Analysis

A multiple linear regression equation is performed to examine the influence of underlying constructs of financial inclusion on the financial empowerment of the sample
respondents. Here the financial empowerment as a dependent variable and the underlying constructs of financial inclusion as predictor variables and these study variables are expressed in the following designated multiple linear regression equation:

Financial Empowerment (FE) = Constant + β₁ Ease of Access (EA) + β₂ Usage (U) + β₃ Availability (A) + β₄ Affordability (A) + β₅ Awareness and Knowledge (A&K) + β₆ Physical Proximity (PP) + β₇ Financial Literacy (FL) + ε.

For critically examining the influence of underlying constructs on financial empowerment, entering all underlying constructs of the financial inclusion in the unique block model, the researchers identified that the regression model proposed for this study clearly explained a significant part of Variance in Financial Empowerment (FE). Table 5 portrays that 91.2% of observed Variance in Financial Empowerment (FE) is evidently manifested by seven predictive research variables (R² = 0.912, Adjusted R² = 0.908).

In order to examine the null hypothesis of this study that there was no linear statistical relationship in the study population between a dependent variable and predictive variables of this model, the ANOVA Table 6 has been considered and used. The statistical outcomes from Table 6 clearly indicated that the proportional ratio of the two mean squares (F) was 416.534 (F-value = 416.534, p < 0.05). Meanwhile, the observed probability value (p-value) of the model was deemed to be less than 0.001; the seven predictive research variables positively influenced the financial empowerment of the sample respondents.

Table 5. Summary of outcome of multiple regression model.

| Study Model | Multiple R | R² | Adjusted R² | Std. Error of the Estimate |
|-------------|------------|----|-------------|---------------------------|
| 1           | 0.934 *    | 0.912 | 0.908      | 0.312                     |

Note: * Predictors: (Constant), Ease of Access, Usage, Availability, Affordability, Awareness and Knowledge, Physical Proximity and Financial Literacy.

Table 6. Summary of Outcome of ANOVA b.

| Study Model | Sum of Squares (SOS) | df | Mean Square (MS) | F Ratio | p-Value a |
|-------------|----------------------|----|-----------------|---------|-----------|
| Regression  | 773.365              | 7  | 110.481         | 416.534 | 0.000 a   |
| Residual    | 142.698              | 538| 0.265           |         |           |
| Total       | 916.063              | 545|                 |         |           |

Note: a Predictors: (Constant), Ease of Access, Usage, Availability, Affordability, Awareness and Knowledge, Physical Proximity and Financial Literacy. b Dependent Variable: Financial Empowerment.

For examining the null hypothesis of this study, that the partial regression coefficient of the study population for the research variables is zero, the t-statistic of this model and its pragmatic significance level were effectively applied and used for drawing statistical inference about the study. The resultant outcomes are shown in Table 7. The outcomes from Table 7 indicated that the researchers can safely reject null hypothesis (H₀) that the beta coefficients for underlying constructs of financial inclusion such as availability (β = 0.367, t = 5.624, p < 0.05), ease of access (β = 0.284, t = 3.695, p < 0.05), usage (β = 0.276, t = 3.826, p < 0.05), awareness and knowledge (β = 0.185, t = 2.869, p < 0.05), financial literacy (β = 0.165, t = 2.369, p < 0.05), physical proximity (β = 0.158, t = 2.321, p < 0.05), and affordability (β = 0.129, t = 2.102, p < 0.05) and were deemed to be less than 0.05.

The β weights indicated that the research variable availability (β = 0.367) has a strong positive significant impact on financial empowerment. Similarly, the β weights showed that ease of access (β = 0.284), usage (β = 0.276), awareness and knowledge (β = 0.185), financial literacy (β = 0.165), physical proximity (β = 0.158), and affordability (β = 0.129) have also a strong positive significant impact on financial empowerment.
Table 7. Results of Regression Coefficients

| Study Model | Unstandardized Coefficients | Standardized Coefficients | t Value | p-Value |
|-------------|-----------------------------|---------------------------|---------|---------|
|             | Beta (B)                    | Std. Error (SE)           | Beta (β) |         |
| (Constant)  | -1.128                      | 0.895                     | -11.954 | 0.000   |
| 2. Ease of Access | 0.284                      | 0.086                     | 0.165   | 3.695   | 0.004   |
| 3. Usage    | 0.276                      | 0.056                     | 0.267   | 3.826   | 0.002   |
| 4. Availability | 0.367                      | 0.068                     | 0.265   | 5.624   | 0.000   |
| 5. Affordability | 0.129                      | 0.056                     | 0.087   | 2.102   | 0.043   |
| 6. Awareness & Knowledge | 0.185                      | 0.068                     | 0.132   | 2.869   | 0.024   |
| 7. Physical Proximity | 0.158                      | 0.046                     | 0.098   | 2.321   | 0.036   |
| 8. Financial Literacy | 0.165                      | 0.057                     | 0.896   | 2.369   | 0.029   |

1 Dependent variable: financial empowerment (FE).

Practical Implications

The outcome of this pragmatic study facilitates researchers to use and ratify the research constructs developed and validated by this study in the fertile areas of social sciences. This study also provides the policymakers and providers of financial inclusion services with a wide spectrum of reliable and valid constructs underpinning financial inclusion. This study will help commercial banks, financial institutions, and the government design and provide financial and banking services based upon the underlying constructs of financial inclusion.

The measurement instrument identified and validated in this study will provide the Government of India (GoI) with the practical implications of offering banking and financial services and products easily accessible by blue-collar migrant workers. Moreover, researchers, research scholars, academicians, and practitioners from other geographical areas of India can apply the validated and reliable underlying constructs in future research in the financial inclusion domain. Compared to other measurement scales, this measurement scale is easier to administer, and the response rate would be better and more reliable.

6. Conclusions and Managerial Implications

The current study has proposed a research model with the antecedents associated with financial inclusion. Financial inclusion is a strategic tool used for mobilizing savings and facilitating productive investments, which will promote the nation’s economic growth and pave the road map for sustainable development. This study is designed to explore and validate reliable constructs of financial inclusion. Consequently, it examines the significant influence of underlying constructs of financial inclusion on the financial empowerment of blue-collar workers. The outcomes of this study have pragmatic implications for the policymakers, governments, financial institutions, commercial banks, and other financial service providers in terms of providing financial inclusion schemes and the researchers in the financial inclusion domain.

This study taps into the minds of blue-collar workers to assess their accessibility to various financial inclusion schemes offered by the Government of India. It was apparent from this research study that underlying constructs identified and validated with the help of exploratory factor analysis were observed to be more significant as factor loadings for all indicative dimensions concerning financial inclusions were deemed to be higher than 0.50. This research study identified eight reliable and valid constructs of financial inclusions such as ease of access, usage, availability, affordability, as well as awareness and knowledge. Physical proximity, financial literacy, and financial empowerment. These underlying constructs were empirically associated with financial inclusions. Further, the study’s outcome clearly revealed that the underlying constructs empirically validated with the help of exploratory factor analysis significantly positively influence the financial empowerment of blue-collar workers. This study has also suggested that financial inclusion is a strategic tool to be adopted by the Government of India to reach out to marginalized people in terms of accessing financial services to achieve inclusive financial growth.
7. Limitations of the Study

Viewing this empirical study in the context of its limitations is imperative. Initially, the research schema designed in this study is an original attempt to develop and validate measurement constructs for the financial inclusion of blue-collar workers in the context of sustainable growth of the nation. In this empirical study, the inter-associations between the indicative dimensions and the underlying constructs of financial inclusion were not investigated. The crux of this empirical study aimed at assessing underlying dimensions of financial inclusion precisely from the perspectives of blue-collar workers, and hence, might not take into account the perspective views of other stakeholders such as non-government organizations, bank officials, and business correspondence.

8. Scope for Further Research

The empirical study reported here was conducted in a few rural districts of Karnataka in South India to explore the underlying antecedents of financial inclusion from the perspectives of blue-collar workers. Hence, the present research schema can also be used to measure the underlying constructs of financial inclusion in other marginalized sections of India. Moreover, the state-wise evaluation of the degree of financial inclusion in terms of the underlying factors identified in this study could strengthen this current study. Further, it is also strongly recommended by the researchers that future studies must be done on this research area in other countries to provide support for these findings. Finally, the present study was conducted from the viewpoints of blue-collar workers only; nevertheless, further studies may be carried out to throw light on the standpoints of Primitive Tribal Groups (PTGs) in India and other marginalized groups of the society.

Author Contributions: Conceptualization, J.M.K.P.; data curation, T.K.M., J.V.C. and F.J.G.; formal analysis, E.R.A. and F.J.G.; funding acquisition, E.R.A.; investigation, J.M.K.P.; project administration, T.K.M., E.R.A., J.M.K.P. and J.V.C.; resources, J.V.C. and G.P.D.; software, E.R.A. and G.P.D.; supervision, J.C.P.; validation, J.C.P.; visualization, T.K.M. and F.J.G.; writing—original draft, T.K.M.; writing—review & editing, J.M.K.P. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Universidad Senor de Sipan(IRB ID: MOD003334, Date of Approval: 21 September 2022).

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare that they have no known competing financial interest or personal relationships that could influence the work reported herein.

References
1. Subbarao, D. Financial Inclusion: Challenges and Opportunities; Address delivered at the Bankers Club in Kolkata on December; 2009, Volume 9, pp. 1–16. Available online: https://www.bis.org/review/r091215b.pdf (accessed on 22 May 2022).
2. Arora, R.U. Measuring Financial Access; Discussion Paper in Economics; Griffith University: Brisbane, Australia, 2010; pp. 1–21.
3. Ghosh, S. Determinants of banking outreach: An empirical assessment of Indian states. J. Dev. Areas 2012, 4, 269–295. [CrossRef]
4. Gupte, R.; Venkataramani, B.; Gupata, D. Computation of financial inclusion index for India. Int. J. Procedia Soc. Behav. Sci. 2012, 37, 133–149. [CrossRef]
5. Kuri, P.K.; Laha, A. Determinants of financial inclusion: A study of some selected districts of West Bengal, India. Indian J. Financ. 2011, 5, 29–36.
6. Chattopadhyay, S.K. Financial Inclusion in India: A Case Study of West Bengal; Working Paper Series No. 8/2011; Department of Economic and Policy Research, Reserve Bank of India: Kolkata, India, 2011.
7. Morgan, P.J.; Long, T.Q. Financial literacy, financial inclusion, and savings behavior. Laos J. Asian Econ. 2020, 68, 101197. [CrossRef]
8. Sarma, M. Index of Financial Inclusion—A Measure of Financial Sector Inclusiveness (No. 1207); Berlin Working Papers; Money, Finance, Trade and Development: Berlin, Germany, 2012.
9. Chauvet, L.; Jacolin, L. Financial inclusion, bank concentration, and firm performance. World Dev. 2017, 97, 1–13. [CrossRef]
10. Mehrotra, N.; Puhazhendhi, V.; Nair, G.G.; Sahoo, B.B. Financial Inclusion—An Overview; Occasional Paper No. 48; Department of Economic Analysis and Research, National Bank for Agriculture and Rural Development (NABARD): Mumbai, India, 2009.

11. Chakravarty, S.R.; Pal, R. Measuring Financial Inclusion: An Axiomatic Approach; Indira Gandhi Institute of Development Research: Mumbai, India, 2010.

12. Mader, P. Contesting financial inclusion. Dev. Change 2017, 49, 461–483. [CrossRef]

13. Sarma, M.; Pais, J. Financial inclusion and development. J. Int. Dev. 2011, 33, 279–285. [CrossRef]

14. Kumar, S.S. Impact of microcredit dispensation on economic empowerment of women in Kerala. J. Rural Dev. 2016, 3, 39–49.

15. Mehrotra, A.; Nadhnaela, G.V. Financial Inclusion and Monetary Policy in Emerging Asia; Financial Inclusion in Asia; Palgrave Macmillan: London, UK, 2016; pp. 93–127.

16. Thorat, U. Financial Inclusion—The Indian Experience; Reserve Bank of India Monthly Bulletin, July; Reserve Bank of India: Kolkata, India, 2007; pp. 1165–1171.

17. Sakyi-Nyarko, C.; Ahmad, A.H.; Green, C.J. The gender-differential effect of financial inclusion on household financial resilience. J. Dev. Stud. 2022, 58, 692–712. [CrossRef]

18. Srinivasan, N. Policy issues and Role of the banking system in financial inclusion. Econ. Political Wkly. 2007, 42, 3091–3095.

19. Allen, F.; Demirguc-Kunt, A.; Klapper, L.; Peria Martinez, S.M. The Foundations of Financial Inclusion Understanding Ownership and Use of Formal Accounts; Policy Research Working Paper 6290; World Bank: Washington, DC, USA, 2012.

20. Amidzic, G.; Massara, A.; Mialou, A. Assessing Countries’ Financial Inclusion Standing—A New Composite Index; IMF Working Paper WP/14/36; International Monetary Fund: Washington, DC, USA, 2014; pp. 1–31.

21. Cnaan, R.A.; Moodithaya, M.S.; Handy, F. Financial inclusion: Lessons from rural South India. J. Soc. Policy 2012, 41, 183–205. [CrossRef]

22. Demirguc-Kunt, A.; Klapper, L. Measuring financial inclusion: Explaining variation in use of financial services across and within countries. In Brookings Papers on Economic Activity; The Johns Hopkins University Press: Baltimore, MD, USA, 2013; pp. 279–340.

23. Nandru, P.; Rentala, S. Demand-side analysis of measuring financial inclusion: Impact on the socio-economic status of primitive tribal groups (PTGs) in India. Int. J. Dev. Issues 2019, 19, 1–24. [CrossRef]

24. Ramana, D.V.; Muduli, S. Measuring Financial Capability of the Street Vendors; RBI Working Paper Series, No. 06/2018; Reserve Bank of India, Department of Economic and Policy Research: Mumbai, India, 2018; pp. 1–19.

25. Salathia, P. Impact of Financial Inclusion on Economic Development. Ph.D. Thesis, University of Jammu, Jammu, India, 2014. Available online: http://hdl.handle.net/10603/80438 (accessed on 22 May 2022).

26. Swamy, V. Financial inclusion, gender dimension, and economic impact on poor households. World Dev. 2014, 56, 1–15. [CrossRef]

27. Hair, J.; Ralph, A.; Ronald, T. Multivariate Data Analysis, 5th ed.; Prentice-Hall: London, UK, 1998.