

Original Article ISSN (Online): 2582-7472

# DIMENSIONS OF MEASURING FINANCIAL CAPABILITY: A REVIEW

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#### DOI

10.29121/shodhkosh.v5.i1.2024.354

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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# **ABSTRACT**

Financial Capability includes both 'Financial Literacy' and 'Financial Inclusion'. Financial Literacy refers to an individual's capacity to make decisions in their optimal financial interest, while Financial Inclusion refers to the opportunity of individuals to utilize this capacity to act in their best financial interest. Numerous research on financial capabilities has been done from a variety of angles. The present review study is an attempt to identify the dimensions of measuring financial capability adopted in the existing studies. The study found two distinct sets of dimensions: the Normative/ Cognitive Approach and the Positive/ Agnostic Approach. The present study attempts to introduce a new framework for measuring financial capability adopting the dimensions identified from the literature.

**Keywords:** Financial Capability, Dimensions, Approaches, Review

#### 1. INTRODUCTION

Financial capability has been defined differently by different authors. According to Sherraden (2013), Individuals with financial capability possess both the ability and the opportunity to make decisions that enhance their financial wellbeing in their best interests. Financial capacity was defined by Ramana and Muduli (2018) in an RBI working paper as having sufficient financial knowledge to manage and use financial products for present and future requirements. According to Perotti & Zottel (2013), financial capability is the internal ability to make decisions that are in one's best financial interest in light of the socioeconomic context. From the definition provided by different authors, financial capability can be understood as the ability to make financial decisions in order to achieve financial well-being by combining an individual's internal ability with external opportunities and possessing financial capacity gives a person the ability to manage finances in their best interests.

The importance of becoming financially capable is increasing day by day as the frequent introduction of new financial products and services, changing government policy towards retirement saving, and increasing household debt are the major reasons. The rise in digital financial products and services is easing accessibility at the same time also

increasing the cases of financial fraud. From January 2020 to June 2023, over 75% of cybercrimes in India were financial scams, with online banking and UPI accounting for close to 50% of incidents (Hindustan Times, 2023). Another issue of worry in India is the increase of credit card defaults. The Minister of State for Finance Bhagwat Karad mentioned in his statement that the gross non-performing asset (GNPA) in Mar 2022 in credit cards was Rs. 3,122 Crore which increased to Rs. 4,072 Crore in Mar, 2023 and credit card outstanding is also increased from Rs. 1.64 lakh Crore in Mar, 2022 to Rs. 2.10 lakh Crore in Mar, 2023.

The above-mentioned facts highlight the need for the study of financial capability and the present study is an attempt to identify the dimensions of measuring financial capability used in previous studies. It is expected that the findings of the study will contribute to the formulation of the strategy and policies to improve the financial capability of the country.

## 2. STUDIES ON FINANCIAL CAPABILITY

The terms 'Financial Literacy' and 'Financial Capability' are commonly used interchangeably. However, insights from studies by Johnson and Sherraden (2007), Collins (2013), and the World Bank (2013) reveal that "Financial Literacy" refers to the internal capacity for making informed financial decisions, while "Financial Capability" is a broader concept that encompasses both financial literacy (internal capacity) and financial inclusion (external opportunity). In essence, achieving financial capability involves not only possessing the ability to make informed financial decisions but also having access to financial products and services or the opportunity to apply that ability.

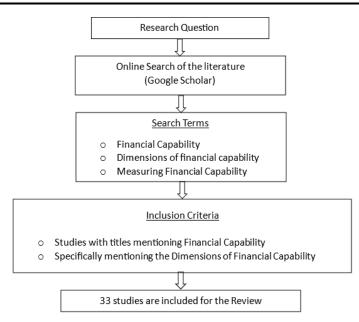
There is no universal definition of financial capability. The diversity in the definition of financial capability leads to the adoption of different dimensions in different studies of measuring financial capability. According to the World Bank Report, 2013, the dimensions of measuring financial capability are 'Financial Knowledge and Awareness'; 'Financial Skill', 'Financial Attitude' and 'Financial Behaviour'. On the other hand, A review study conducted by Zakaria and Sabri, 2013 identified four main dimensions of measuring financial capability: 'Managing Money', 'Staying Informed', 'Choosing Products', and 'planning ahead'.

According to the study conducted by Holzmann et al., 2013, there are two approaches to measuring financial capability, under which the major dimensions of financial capability can be classified. These are the Normative/Cognitive Approach: Dimensions followed in this approach are- "Financial Knowledge", "Financial Skill", "Financial Attitude", 'Financial Behaviour" and "Financial Inclusion". The Positive/Agnostic Approach: Dimensions followed in this approach are- "Managing Money", "Planning Ahead", "Making Choices", and "Getting Help".

The study conducted by Johan, 2018 was an attempt to combine the different sets of dimensions identified in the study of Holzmann et al., 2013. However, one of the major dimensions of financial capability like financial inclusion was not considered in that study. The existence of diverse dimensions of financial capability in the literature raises the need to develop a new framework for measuring financial capability considering all the major dimensions.

## 3. METHODS

To find out the previous studies conducted on financial capability the "Google Scholar" scholarly web search engine was used. The terms "financial capability"; "dimensions of financial capability"; and "measuring financial capability" were used to search the existing studies conducted on financial capability. The studies with titles mentioning financial capability and clearly specifying the dimensions of financial capability were included in the present studies. A total of 35 studies were included in the present study. Chart no.1 shows the selection process of previous studies.



**Chart No. 1** The Procedure of Selecting Articles/ Research Papers

## 4. RESULTS AND DISCUSSION

It can be clearly observed that there are two distinct sets of dimensions for assessing financial capability. Furthermore, it is observed that most studies exclusively use one set of dimensions, following dimensions from one set and excluding dimensions from another set. Out of 35 studies, only 2 studies are observed combining both the 2 sets of dimensions. World Bank report titled "Financial Capability in low- and middle-income Countries: Measurement and Evaluation, 2013", defined these two sets of dimensions:

- a) The Normative/ Cognitive Approach: Dimensions followed in this approach are- "Financial Knowledge", "Financial Skill", "Financial Attitude", 'Financial Behaviour" and "Financial Inclusion"
- b) The Positive/ Agnostic Approach: Dimensions followed in this approach are- "Managing Money", "Planning Ahead", "Making Choices", and "Getting Help".

The World Bank Report, 2013 states that the Positive/ Agnostic approach was initiated by the United Kingdom's Financial Services Authority. It is observed that researchers later on classified the "Managing Money" into two subdomains: "Making Ends Meet", and "Keeping Track of Money".

Table no. 1 shows the names of the authors, titles of the articles/ research papers/ previous studies on financial capability, and dimensions of measuring financial capability adopted in their study.

Table No. 1 Identification of Differisions of Measuring Financial Capability				
Author/s (Year)	Title of the study	Dimensions of measuring financial capability		
Perotti et al., 2013	Making Sense of Financial Capability Surveys	Financial Knowledge		
	around the World: A Review of Existing	Financial Skill		
	Financial Capability and Literacy	Financial Attitude		
	Measurement Instruments	Financial Behaviour		
The World Bank, 2018	Investigating the Financial Capabilities of	Financial Knowledge		
	SMEs: Lessons from a 24-Country Survey	Financial Skill		
		Financial Attitude		
		Financial Behaviour		
Xiao et al., 2022	Financial Capability: A Systematic Conceptual	Financial Knowledge		
	Review, Extension, and Synthesis	Financial Behaviour		
		Financial Outcome		
		Financial Opportunity		

Table No. 1 Identification of Dimensions of Measuring Financial Canability

Vyvyan et al., 2014	Factors that Influence Financial Capability and Effectiveness: Exploring Financial	Attitude Perceived Behaviour
	Councellors' Perspectives	Skill and Knowledge
Sherraden, 2010	Financial Capability: What is It, and How Can	Financial Knowledge and Skill
Sherraden, 2010	It Be Created?	Financial Inclusion
Goff, 2019	Literacy and Financial Capability: An Evidence	Skill
doii, 2015	Review	Behaviour
	The view	Mindset
Kempson et al., 2006	Measuring Financial Capability: An	Managing Money
	Exploratory Study	Planning Ahead
		Making Choices
		Getting Help
Atkinson et al., 2007	Levels of Financial Capability in the UK	Managing Money
, , , , , , , , , , , , , , , , , , , ,	The state of the s	Planning Ahead
		Choosing Products
		Staying Informed
Atkinson, 2011	Measuring financial capability using a short	Making ends meet
	survey instrument: Instruction Manual	Keeping Track
		Planning Ahead
		Choosing Products
		Staying Informed
McQuaid and Egdell, 2010	Financial Capability – Evidence Review	Making ends meet
<b>5</b> ,		Keeping track of money
		Planning ahead
		Staying Informed
		Choosing financial products
O'Donnell and Keeney	Financial Capability in Ireland and a	Managing Money
•	Comparison with the UK	Planning Ahead
		Choosing Products
		Staying Informed
McKay, 2011	Understanding Financial Capability in Canada:	Making Ends meet
•	Analysis of the Canadian Financial Capability	Keeping Track
	Survey	Planning Ahead
		Choosing Products
		Staying Informed
Robson and Splinter, 2015	A new (and better) way to measure individual	Making Ends meet
	financial capability	Keeping Track of Money
		Planning Ahead
		Choosing Products
		Staying Informed
Mokhtar et al., 2020	Financial Capability and Difference in Age and	Making Ends meet
	Ethnicity	Planning Ahead
		Choosing Products
		Staying Informed
Cera et al., 2021	Improving financial capability: the mediating	Financial Attitude
	role of financial behaviour	Financial Knowledge
		Financial Behaviour
		Financial Inclusion
Sabri et al., 2020	Effects of Gender and Income on Malaysian	Managing money
	Financial Capability	Planning ahead
		Making Choices
		Staying Informed
Zakaria and Sabri, 2013	Review of Financial Capability Studies	Managing Money
Zakaria and Sabri, 2013	Review of Financial Capability Studies	Managing Money Planning Ahead
Zakaria and Sabri, 2013	Review of Financial Capability Studies	Managing Money Planning Ahead Choosing Products
		Managing Money Planning Ahead Choosing Products Staying Informed
Zakaria and Sabri, 2013 O'Donnell and Keeney, 2009	Review of Financial Capability Studies  Financial Capability: New Evidence for Ireland	Managing Money Planning Ahead Choosing Products Staying Informed Managing Money
		Managing Money Planning Ahead Choosing Products Staying Informed Managing Money Planning Ahead
		Managing Money Planning Ahead Choosing Products Staying Informed Managing Money Planning Ahead Choosing Products
O'Donnell and Keeney, 2009	Financial Capability: New Evidence for Ireland	Managing Money Planning Ahead Choosing Products Staying Informed Managing Money Planning Ahead Choosing Products Staying Informed
	Financial Capability: New Evidence for Ireland  Consumer Financial Capability: A Comparison	Managing Money Planning Ahead Choosing Products Staying Informed Managing Money Planning Ahead Choosing Products Staying Informed Managing Money
O'Donnell and Keeney, 2009	Financial Capability: New Evidence for Ireland	Managing Money Planning Ahead Choosing Products Staying Informed Managing Money Planning Ahead Choosing Products Staying Informed

		Charity I I form a d
Lemu, 2020	Financial Capability in Ethiopia: A Case Study	Staying Informed Financial Knowledge
	of Addis Ababa City	Financial Attitude Financial Behaviour
Reddy et al., 2013	Financial Capability in Mexico: Result from a	Financial Knowledge Financial Attitude
	national survey on financial behaviours, attitudes and knowledge	Financial Attitude Financial Behaviour
		Financial Inclusion
Storchi and Johnson, 2016	Financial Capability for Wellbeing: An alternative perspective from the capability	Financial Knowledge Financial Skill
	approach	Financial Attitude
		Financial Behaviour
Brown, 2020	Economic Dignity and Financial Capabilities	Financial Inclusion Internal Context (Financial Knowledge, Skill,
510W11, 2020	Economic Dignity and Financial Capabilities	and Behaviour)
		External Context (System and Structure)
Cera et al., 2019	Determinants of Financial Capability: Evidence from a Transition Country	Financial Attitude Financial Knowledge
	Evidence from a Transition Country	Financial Behaviour
Zottek et al., 2016	Enhancing Financial Capability and Inclusion	Financial Knowledge
	in Senegal	Financial Attitude Financial Skill
		Financial Behaviour
		Financial Inclusion
Reddy et al., 2013	Financial Capability in Colombia: result from a	Money Management
	national survey on financial behaviours, attitudes, and knowledge	Planning Ahead Choosing Financial Products
Zaimah et al., 2022	The Financial Capability of the Millennial	Financial Knowledge
	Generation During the Pandemic of Covid-19	Financial Behaviour
		Motivation Opportunity
Atkinson, 2007	Financial Capability amongst Adults with	Making Ends Meet
	literacy and Numeracy needs	Keeping Track
		Planning Ahead Choosing Products
		Staying Informed
Bharghava et al., 2022	Moderating Role of Personality in Relationship to Financial Attitude, Financial	Financial Behaviour
	Behaviour, Financial Knowledge, and	Financial Knowledge & Skill Financial Attitude
	Financial Capability	
Johan, 2018	Financial Capability Among University	Financial Knowledge
	Students in Indonesia	Financial Skill Financial Attitude
		Financial Behaviour (Managing Money,
		Planning Ahead, Choosing Products, and
Hebert and Gyarmati, 2014	Financial Capability and Essential Skills: An	Staying Informed)  Making End Meet
	Exploratory Analysis	Keeping Track
Manufala and Charata 2000	Einen siel Completite of A	Planning Ahead
Nomlala and Sibanda, 2020	Financial Capability of Accounting Students in South African Universities	Financial Knowledge Numeracy Skill
		Financial Attitude
Helemann et al. 2012	Einensial Canability in Law and MC10	Financial Behaviour
Holzmann et al., 2013	Financial Capability in Low- and Middle- Income Countries: Measurement and	Normative/ cognitive approach: Knowledge skill, attitude, behaviour
	Evaluation Evaluation	
		Positive/ Agnostic approach: Managing
		money, planning ahead, making choices, getting help
Ramana & Muduli, 2019	Measuring Financial Capability of Street	Making Ends Meet
	Vendors	Planning Ahead
		Managing Financial Products

Parvathy, 2022	Financial capability and financial well-being   Financial Knowledge	Financial Knowledge	
	of women in community-based organizations:   Financial Skill		
	mediating role of decision-making ability Financial Attitude		
	Financial Behaviour		

**Source** Existing studies on financial capability retrieved from the Google Scholar search engine

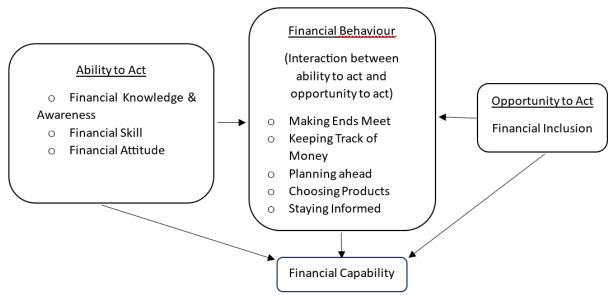
Table no. 1 shows the names of the authors, titles of the articles/ research papers/ previous studies on financial capability, and dimensions of measuring financial capability adopted in their study.

**Table No. 2** Frequency of the Dimensions of Financial Capability

Approaches	Dimensions	Frequency
The Normative/ Cognitive Approach (17)	Financial Knowledge and Awareness	18
	Financial Skill	13
	Financial Attitude	16
	Financial Behaviour	17
	Financial Inclusion	8
The Positive/ Agnostic Approach (16)	Managing Money	10
	Making Ends Meet	8
	Keeping Track of Finances	6
	Planning Ahead	18
	Choosing Financial Products/ Making Choices	17
	Staying Informed	13
	Getting Help	2
Note: 2 studies were observed adopting dimen	sions from both approaches	

Source: Created by the authors from existing literature retrieved from Google Scholar

Table no.2 indicates the frequency of the dimensions of financial capability considered in the studies. It is found that out of 35 studies, 17 studies adopted dimensions from the Normative/ Cognitive Approach; 16 studies adopted dimensions from the Positive/Agnostic Approach and in the remaining 2 studies dimensions from both approaches were adopted. The "Financial Inclusion", and "Getting Help" dimensions were not included in the classification provided by World Bank Report, 2013. However, it is observed that "financial inclusion" was used in the studies while following the Cognitive Approach; and "Staying Informed" was used while following the Positive Approach.



Source: Developed from the literature

Chart no.2 presents the dimensions of financial capability developed from the literature. In the thesis titled "Financial Capability among University Students in Indonesia" by Johan, 2017, all the dimensions from the Positive/Agnostic Approach were considered as a sub domain of "Financial Behaviour" which is one of the dimensions of the Normative/ Cognitive Approach. However, the "Financial Inclusion" dimension was not included in the study conducted by Johan, 2013.

## 5. CONCLUSION

In the present study, it is observed that the dimension used in a study is highly influenced by the definition framed or developed in the study. The existence of diverse definitions is the reason for adopting diverse dimensions in the existing financial capability studies. The study concludes that the major dimensions of financial capability can be classified into two sets as recognized in the study conducted by Holzmann et al., 2013. Further, the study also attempted to introduce a new framework for measuring financial capability considering all the major dimensions existing in the literature. However, the model of the framework is to be tested by conducting further study with primary data. It is believed that the findings of the present study will play a pivotal role in the conducting of future studies on measuring financial capability which will further contribute significantly to the formulation of strategies and policies aimed at enhancing the overall level of financial capability.

# **CONFLICT OF INTERESTS**

None.

## **ACKNOWLEDGMENTS**

None.

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