

# **A Scoping Review of Consumer Financial Capability Measurement with Recommendations for Future Research**

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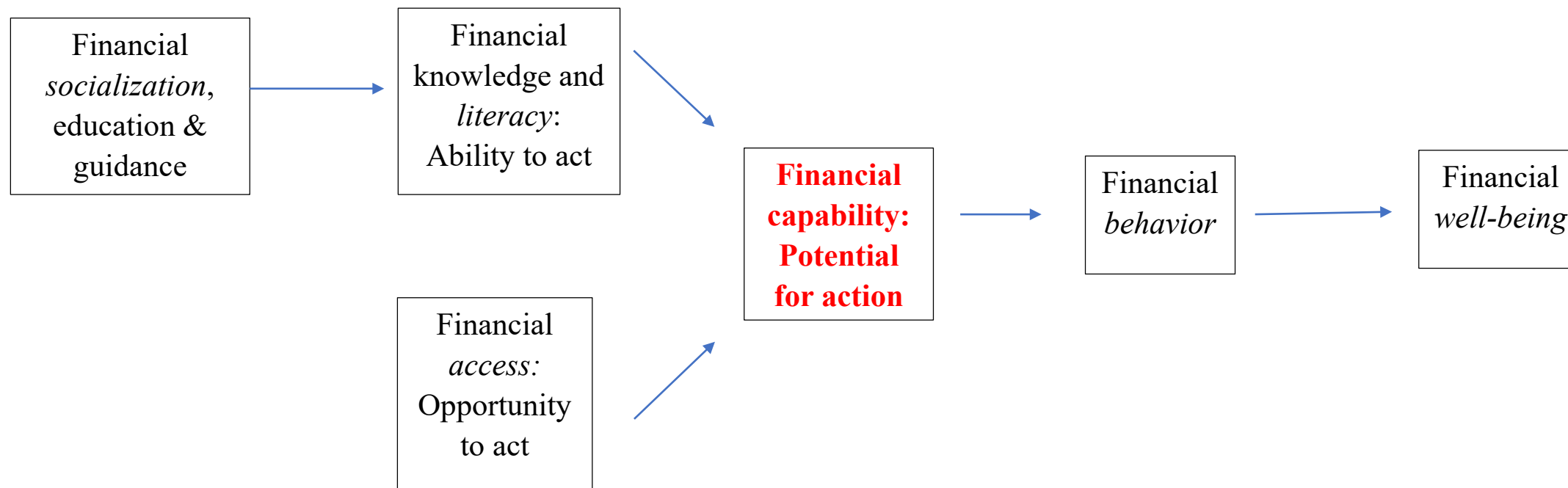
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# Background – Financial Capability

- As a concept, *financial capability* describes various related ideas, including the degree to which consumers **exhibit strong financial management behaviors** (De Meza, 2008; Money & Pensions Service, 2020), and/or the **potential or capacity consumers have for exhibiting effective financial management behaviors** (Friedline & West, 2016; Prosperity Now, 2020a; Sherraden, 2013).
- Related interventions include: credit counseling and building, assisting people to access safe and affordable bank accounts, tax preparation, and others (Callahan et al., 2020; Prosperity Now, 2020b; Sherraden et al., 2016).

**Figure 1 Financial Capability**



From Sherraden, M. (2013). "Building Blocks of Financial Capability", p. 21, in *Financial capability and asset development*, Birkenmaier, Sherraden, Curley (Eds.) New York: Oxford.

# Background – Socialization and Literacy

- Financial **socialization** occurs through parents, employment and formal financial education, such as high school financial education (Shim et al., 2010).
  - **Measurement** - parent-child interaction, communication, and relationships, the degree to which financial socialization was intentional through teaching, modeling, and practice (Gudmunson & Danes, 2011).
- Financial **literacy** is both synonymous with financial knowledge (Huston, 2010b) and with the ability to use financial knowledge and skills to effectively manage financial resources (Huston, 2010b; Servon & Kaestner, 2008)
  - **Measurement** - borrowing, saving/investing, and consumer protection (Huston, 2010b; Lusardi & Mitchell, 2008).

# Background – Financial Access

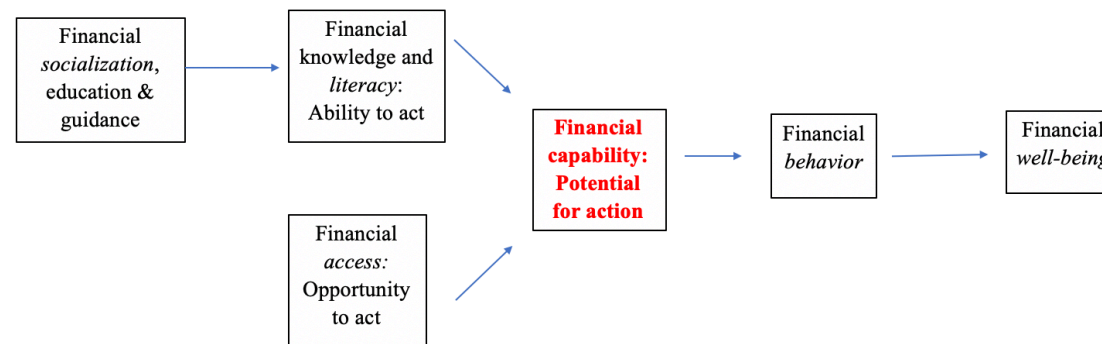
- Consumer financial **access** is defined as the *ability* and *choice* to open, afford, and continuously *use* beneficial financial products and services from banks, credit unions, and insurance companies (Birkenmaier, Despard, Friedline & Huang, 2019).
- **Measurement** – bank accounts, retirement accounts, investments, health insurance, credit scores and checking credit scores, and others (Apaam et al., 2017; Birkenmaier & Fu, 2016; Karp & Nash-Stacey, 2015; Huang, Kim, Sherraden, & Clancy, 2016; The World Bank, 2012; 2019).

# Background – Financial Management Behavior

- Financial **management behavior** consists of behaviors related to consumption (managing shopping and purchases), cash management (i.e., how individuals manage and record their cash purchases), savings and investment (i.e., saving, planning for retirement, investing money), and credit management (how individuals use their credit cards and repay loans) (Dew & Xiao, 2011; Ksendzova, Donnelly & Howell, 2017).
- **Measurement** - specific behaviors (e.g., the act of saving or budgeting), specific outcomes (e.g., having higher retirement savings), and single acts (e.g., using cash for a purchase) and repeated acts (e.g., reviewing monthly bills over time) (Xiao, 2008).

# Background – Financial Well-Being

- Defined as *a state of being in which people have control over their daily finances, are resilient when unexpected changes in finances occur, are making progress toward financial goals, and can make choices to enjoy life* (CFPB, 2015, p.5).
- The concept also includes the **dimension of money management stress** and being able to **manage current finances** to meet obligations and expected future financial security and achieving future financial goals (Netemeyer et al., 2018).



# Study Rationale

- No previous review of financial capability measurement.
- Financial capability is a fairly recent framework and is still under development
- Standardization of measurement domains and indicators would allow for internal consistency of findings and replication among studies,
- Standardization also protects against researcher bias about the best measurement (Epstein & Timmermans, 2018).
- Furthermore, research on financial capability is published in interdisciplinary journals and by researchers outside of social work thus necessitating consensus across disciplines.



# Research Questions

- Using the Sherraden (2013) framework of consumer financial capability, the research questions are:
  - *How is financial capability and its components measured in the quantitative peer-reviewed scholarly literature?*
  - *How do social work scholars measure financial capability and its components in the quantitative peer-reviewed scholarly literature?*

# Methods

- A scoping review of the peer-reviewed scholarly literature about consumer financial capability.
- Data were collected from October 10, 2018 until November 8, 2018, using 13 terms: "financial access", "financial capability", "financial inclusion", "financial exclusion", "financial attachment", "bank access", "bank inclusion", "bank exclusion", "bank attachment", "economic access", "economic inclusion", "economic exclusion", and "economic attachment".

# Methods

## Data Screening and Inclusion Criteria

- The research team screened each title and abstract of the  $N_3 = 2,712$  for the inclusion criteria.
- A total of  $N=179$  met the inclusion criteria and were subjected to full-text review.
- Afterward, 96 articles that were fully coded.
- $N_4 = 34$  studies met all inclusion criteria for the current study on measurement of financial capability.
- The inclusion criteria for this study was; (1) published in a database searched; (2) published in a peer-reviewed academic journal; (3) use of quantitative data; (4) given the relative similarity of financial systems, for quantitative studies, research subjects were from OECD member countries; (5) related to consumer (rather than larger systems such as organizations and companies); and (6) financial capability was the focus of the article according to the title so as to focus on studies centered on the topic.

# Methods

## Data Analysis

- Articles ( $N_5 = 34$ ) were coded for the presence/absence of the following concepts:
  - financial capability
  - financial knowledge
    - objective and subjective financial knowledge
    - financial decisions
    - financial confidence
    - financial beliefs.
  - financial access
    - *Short-term* access (i.e., bank account), *long-term* access (mortgage loan/homeownership, investments, borrow money from a bank, certificate of deposit, college savings account), and *informal* (AFS use)
  - financial socialization
  - financial behavior
  - perception of financial capability
  - financial well-being
    - Feelings about finances

# Financial Capability Measurement (n=22)

Financial capability element combinations	Articles that measured financial capability (n=22)  Number (%)	Articles first authored by social workers that measured financial capability (n=10)  Number (%)	Articles appearing in social work journals (n=7)  Number (%)
Objective knowledge and financial access	6 (27)	6 (60%)	3 (43)
Objective and subjective knowledge, behavior, perception of financial capability	3 (14)		
Financial capability practitioner skills	2 (9)	1 (10%)	1 (14)
Behavior and access	2 (9)	1 (10%)	1 (14)
Decisions, confidence, and access	1 (4)		

# Financial Capability Measurement (n=22) – cont.

Financial capability element combinations	Articles that measured financial capability (n=22)	Articles first authored by social workers that measured financial capability (n=10)	Articles appearing in social work journals (n=7)
	Number (%)	Number (%)	Number (%)
Behaviors	1 (4)		
Behaviors and financial beliefs	1 (4)		
Behaviors, objective knowledge and financial decisions	2 (9)		
Objective knowledge, behavior, and feelings about finances	1 (4)	1 (10%)	1 (14)
Objective and subjective knowledge, behavior	1 (4)		
Objective knowledge and behavior	1 (4)	1 (10%)	1 (14)
Objective knowledge	1 (4)		

# Financial Access Measurement (n=27)

<b>Formal and Informal measurement</b>	<b>Number (%)</b>	<b>Articles first authored by social workers that measured financial access (n=12)</b>	<b>Articles appearing in social work journals (n=7)</b>
	<b>Number (%)</b>	<b>Number (%)</b>	<b>Number (%)</b>
Formal financial access only	21 (77)	9 (75)	5 (71)
Hybrid formal and informal measurement	6 (22)	3 (25)	2 (29)
<b>Account measurement includes bank account</b>			
Bank account used for measurement	17 (63)	9 (75)	5 (71)
Presumes bank account, but not explicit	10 (37)	3 (25)	2 (29)
<b>Long-term financial access<sup>1</sup></b>			
Measurement includes long-term access	15 (56)	7 (58)	5 (71)

# Financial Knowledge Measurement (n=30)

	Number (%)	Articles first authored by social workers that measured financial knowledge (n=14) Number (%)	Articles appearing in social work journals (n=9) Number (%)
<b>As related to financial capability</b>			
As part of financial capability	11 (37)	4 (29)	4 (44)
Separately from financial capability	19 (63)	10 (71)	5 (56)
<b>Construct combinations</b>			
Objective knowledge only	16 (53)	10 (71)	7 (78)
Objective and subjective knowledge	6 (20)	2 (14)	1 (11)
Objective knowledge and participation in financial education	2 (6)	1 (7)	
Objective and subjective knowledge, and financial management/behavior	2 (6)		
Financial management/behavior	3 (10)		
Financial management/behavior and financial satisfaction	1 (3)	1	1



# Discussion and Implications

## **Research Question 1** (*“How is financial capability measured?”*)

- Little consensus across disciplines. Authors have measured financial capability using nine different components in 12 different combinations.
- However, the majority of them use the **combination of financial knowledge and financial access**.
- Other components include financial-related behavior, perception, skills, decisions, confidence, beliefs, and feelings.

# Discussion and Implications

- The measurement of financial access within articles about financial capability most often includes only formal access (e.g., ownership of a bank account rather than also include use of AFS).
  - Does not reveal the extent to which the account provides access to the financial mainstream.
- Most of the articles that measure financial knowledge, measure the concept as a separate concept from financial capability.
- For the majority of articles, objective, rather than subjective, knowledge is measured.

# Discussion and Implications

- Very few of the studies measure financial socialization or financial well-being.
- The challenge to a broader consensus about measurement of financial capability has not been significantly limited by data source. Most researchers created their own datasets for which they had control over the measurement variables or used FINRA's (US) National Financial Capability Study, which includes a wide variety of variables for both financial access and financial literacy that would allow for a broad measurement of both concepts (Mottola & Kieffer, 2017).

# Discussion and Implications

Research Question #2 (“*How do social work scholars measure financial capability?*”):

- The majority of those authored by social work authors and those published in social work journals use the **combination of financial knowledge and financial access**, which reflects Sherraden’s (2013) theoretical work on financial capability.
- Most of the articles that measure financial knowledge, including those authored by social work authors and published in social work journals, measure the concept as a separate concept from financial capability.
- While the majority of social work-authored articles include more expansive measures of both constructs, there is still room for improvement.

# Discussion and Implications

- These findings present a mixed picture – within social work, social work authors and journals are publishing articles about financial capability using measurement of a combination of financial knowledge and financial access.
- However, this is not necessarily true outside of social work, which limits the ability to engage in interdisciplinary research, and thus build a robust body of evidence.
- The majority of studies that did not include any measure of financial access were authored by non-social workers and published in non-social work journals (Jang, 2015; Miller et al., 2014; Mottola & Kieffier, 2017; Ranta & Salmela-Aro, 2018).

# Future Research Recommendations – Financial Capability

- To evaluate/validate the utility of Sherraden's (2013) model, a body of empirical research that **assists toward standardization of the constructs** in the model is needed.
- A commonly accepted, standard construct measured using stable domains would provide the consistency needed for comparison studies and/or meta-analyses.
- Using Sherraden's (2013) model, future financial capability studies should also *include measures of parental and non-parental financial socialization*, as well as *financial well-being* as the outcome of financial capability.
- Social workers could develop interdisciplinary teams to empirically test the relationships among the constructs, and refine the model as needed.
- Publish within and outside of social work journals to disseminate measurement consensus

# Future Research Recommendations – Financial Access

- Likewise, research that moves toward **standardization of measurement of consumer financial access** is needed.
- Currently, financial access is conceptually murky – it can be defined as the ability, choice and use, while measurement is focused on actual use. Future research should test separate measures for these three aspects of financial access.
- Further, financial access measurement should include *both short-term liquidity and long-term access measurements* for a holistic measurement of financial access.

# Future Research Recommendations – Financial Knowledge

- *Consensus on the measurement of financial knowledge*, whether objective and/or subjective knowledge, “knowledge in action” through financial behavior, participation in financial education and/or or one’s financial satisfaction, would also assist toward the effort to build more evidence about its relationship to financial capability.



# Limitations

- This study is a descriptive study only that provides an overview of research that used quantitative data. It may be that inclusion of eligible studies published prior to 2015 or after 2018 would significantly affect the findings.
- We are unable to make any conclusions about the validity or reliability of measurement domains or their indicators.
- It's possible our search strategy missed studies from other disciplines who may be studying these topics but use different terminology.

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