Financial Literacy and Financial Capability - What Is What?

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Abstract

This s review plays a vital role in providing a critical summary and the overview of what is and what is not know in the field related to the terminology of financial literacy and capabiltiy. Even though the research and practice of financial literacy has been vastly growing in the past couple of years, it is left underdeveloped in terms of clear theoretical, conceptual and methodological terms. The paper maps 329 journal articles in the field of financial literacy and financial capability. The conceptual and methodological gaps suggest academics and practitioners should be oriented towards theoretical positioning, the division of appropriate measurement tools, the more usage of qualitative and mixed method approaches and multidisciplinary approach to research.

Keywords: financial literacy, financial capability, systematic literetature review, terminology

Introduction

In this paper we review empirical as well as theoretical studies to synthetize financial capability and financial literacy terminology. As the topic is widely researched and applied within different scientific fields, this review only focuses on the selected papers that are closely related to the two terms and fit the procedure explained in the following part.

Conceptually and in terms of measurement instruments, financial capability and financial literacy are two different concepts (De Meza, Irlenbusch and Reyniers, 2008; Kemspon, Perotti and Scott, 2013; Xiao, Chen and Sun, 2015). However, in many papers, they were presented as synonyms (In the literature, financial literacy and financial capability are at times used interchangeably, both referring to the ability to apply certain levels of financial knowledge and perform desirable financial behaviors to achieve financial well-being (Atkinson et al., 2007; Lusardi, 2011; Huhmann, 2017; Lusardi and Mitchell 2014; Xiao, Chen and Chen, 2014). Due to that, by systematically reviewing all available peer-reviewed literature, we demonstrate overlaps as well as clear distinctions.

In order to clarify the noise in the usage of terminology and definitions of financial capability and literacy, we provide an in-depth analysis of the constructs in the published literature, critically examining the selected conceptual frameworks and definitions, similarities and discrepancies across them. The review will help both researchers and practitioners to navigate their future endeavors to in order to build strong grounds for future novelty and advancement in the field and consistency in research.

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Methodology - Review design and criteria

Following the existing methodological guidance (Denyer and Tranfield, 2009; Gough, Oliver and Thomas, 2012a) we started the process by the formulation of research questions, proceeded to the search of related peer-reviewed studies that we overviewed and selected studies that were proceeded to thorough analysis that resulted in the synthesis and the report of the systematic review.

The research question that is being answered is:

RQ1 How can we clarify the terminology and measurement of financial capability and financial literacy by going through key papers, methodologies and variables of interest in existing literature?

We followed the search methods found in the review papers that are classified as theme-based as is this one (Hao et al., 2019; Jamali and Karam, 2018; Kahiya, 2018; Lim, 2016; Paul, Parthasarathy and Gupta, 2017; Rana and Paul, 2017) and covered financial literacy and financial capability as an emerging concept emphasized by Bedi et al. (2019) and Goyal and Kumar (2021). We conducted a broad search for relevant literature for relevant the literature of the 20 years in WOS, Scopus and Google scholar databases as well as reference lists of papers. As we are dealing with a multidisciplinary, fragmented field, the broad search of online databases helped us to include papers from various scientific areas. This search string for locating relevant studies incorporates the main nomenclature of the researched constructs (financial capability, financial literacy). At least one term of the two had to be included in the title, the abstract or keywords of the article. Initially, the two clauses separately generated over 2,500 papers and many institutional reports. We were focused on including. peer-reviewed academic journal articles published in English were included and selected journals were not discriminated based on their field or ranking. However, due to the nature of the field, we also took into consideration institutional reports such as OECD, Financial Service Authorities and National Bureau of Economic Research as they have published sevral reports of very high relevance. The initial database search was performed on February 2, 2020. The search resulted in 182 papers for the string of financial capability and 2,344 for financial literacy. The abstracts of all papers that were downloaded via Endnote were divided between the two authors to select the papers of relevance relative to the formulated research questions and goals.

The decision-making process narrowed down the initial set to 70 for financial capability (Table 1) and 266 for financial literacy (Table 2) appropriate papers and 21 institutional papers and reports (Table 3), making the final list of 357 papers in the sample (the list is available in Appendix 1).

Table 1: List of papers in the sample relative to the published journal for financial capability

Journals	No.	References
Journal of Family and Economic Issues	21	Ansong et al., 2019; Fan and Chatterjee, 2019; Babiarz and Robb, 2014; Birkenmaier and Fu, 2016; Chowa and Despard, 014; Curran et al., 2018; Friedline and West, 2016; Henager and Cude, 2019; Huang, Nam and Lee, 2015; Jorgensen et al., 2017; Jorgensen et al., 2017; Kim, Anderson and Seay, 2019; LeBaron et al., 2020; Lee, Lee and Kim, 2020; Montalto et al., 2019; Robb et al., 2019; Sherraden et al., 2011; Totenhagen et al. 2019; Wu, Despard and Chowa, 2017; Yao and Xu, 2015; Zhu, 2018
Journal of Consumer Affairs	18	Batty, Collins and Odders-White, 2015; Despard and Chowa, 2014; Harvey, 2019; Huang et al., 2019; Huang, Nam and Sherraden, 2013; Huang et al., 2015; Kim, Lee and Hanna, 2020; Kim and Mountain, 2019; Lachance, 2014; Loke, Choi and Libby, 2015; Luukkanen and Uusitalo, 2019; Roa, Garron and Barboza, 2019; Robb et al., 2015; Rothwell and Wu, 2019; Shim, Serido and Lee, 2019; Shim et al., 2013; Wagner and Walstad, 2019; Warmath and Zimmerman, 2019
International Journal of Consumer Studies	14	Berg, 2015; Bird, Şener and Coşkuner, 2014; Brennan and Coppack, 2008; Choi et al., 2020; Luukkanen and Uusitalo, 2014; Marchant and Harrison, 2020; Potocki and Cierpial-Wolan, 2019; Reyers, 2019; Roszkiewicz, 2014; Son and Park, 2019; Xiao and O'Neill, 2016; Xiao and O'Neill, 2018; Xiao and O'Neill, 2018; Xiao, Chen and Sun, 2015
International Journal of Bank Marketing	6	Aydin and Selcuk, 2019; Bamforth, Jebarajakirthy and Geursen, 2018; Mindra et al., 2017; Pellinen et al., 2011; Williams and Oumlil, 2015; Xiao and Porto, 2017
Business History	1	Jones et al., 2013
Business Strategy and the Environment	1	Yang et al., 2018
European Management Review	1	Chatrakul Na Ayudhya, Prouska and Alexandra Beauregard, 2017
Journal of Marketing	1	Xiong and Bharadwaj, 2011
Journal of the Academy of Marketing Science	1	Angulo-Ruiz et al., 2014
Social indicators research	1	Xiao, Chen and Chen, 2014

Table 2: List of papers in the sample relative to the published journal for financial literacy

Journals	No.	References
Journal of Consumer Affairs	44	Al-Bahrani et al., 2019; Angulo-Ruiz and Pergelova, 2015; Barcellos et al., 2016; Batty et al., 2015; Bavafa et al., 2019; Bucher-Koenen et al., 2017; Chung and Park, 2019; Collins and O'Rourke, 2010; Cucinelli, Trivellato and Zenga, 2019; Cumurovic and Hyll, 2019; Despard and Chowa, 2014; Drever et al., 2015; Eccles et al., 2013; Fonseca et al., 2012; Foster, F. D., Ng and Wee, 2015; Fox, Bartholomae and Lee, 2005; Gill and Bhattacharya, 2015; Grinstein-Weiss et al., 2015; Harvey, 2019; Herd, Holden and Su, 2012; Hira and Loibl, 2005; Hoffmann and McNair, 2019; Huston, 2010; Kalwij et al., 2019; Kim and Mountain, 2019; Knoll and Houts, 2012; Lanchace, 2014; Letkiewicz and Fox, 2014; Loke et al., 2015; Lukkanen and Uusitalo, 2019; Lusardi, 2015; Lusardi et al., 2010; Mahdavi and Horton, 2014; Monticone, 2010; O'Connor, 2019; O'Connor and Kabadayi, 2020; Remund, 2010; Sansone, Rossi and Fornero, 2019; Schmeiser and Seligman, 2013; Servon and Kaestner, 2008; Tang, Baker and Peter, 2015; Tennyson and Nguyen, 2001; Wagner and Walstad, 2019; Warmath and Zimmerman, 2019
International Journal of Consumer Studies	29	Agnew and Cameron-Agnew, 2015; Agnew et al., 2018; Alsemgeest, 2015; Barbic et al., 2019; Baumann and Hall, 2012; Bird et al., 2014; Cude, Chatterjee and Tavosi, 2019; Cui et al., 2019; De Beckker, De Witte and Van Campenhout, 2019; Ergun, 2018; Hoffmann and Otteby, 2017; Liu et al., 2019; Lukkanen and Uusitalo, 2014; Mancebon et al., 2019; Marchant and Harrison, 2020; Murendo and Mutsonziwa, 2017; Nicolini, Cude and Chatterjee, 2013; Pak, 2018; Riitsalu and Põder, 2016; Sevim et al., 2012; Son and Park, 2019; Taylor, Tisdell and Forté, 2012; Utkarsh et al., 2020; West, 2012; Xiao and O'Neill, 2016; Xiao and O'Neill, 2018; Xiao et al., 2014; Xiao, Chatterjee and Kim, 2014; Xiao, Chen and Sun, 2015
Journal of Family and Economic Issues	21	Al-Bahrani et al., 2020; Ansong et al., 2019; Babiarz and Robb, 2014; Friedline and West, 2016; Henager and Cude, 2019; Jorgensen et al., 2017; Jorgensen et al., 2019; Kim et al., 2019; Kunovskaya et al., 2014; Le Baron et al., 2018; Levinger et al., 2011; Lucey, 2005; Luhr, 2018; Maurer and Lee, 2011; Montalto et al., 2019; Peng et al., 2007; Sharif, Ahadzadeh and Turner, 2020; Sherraden et al., 2011; Thomas and Spataro, 2018; Totenhagen et al., 2019; Zhu, 2018
International Journal of Bank Marketing	13	Akhtar and Das, 2019; Bamforth et al., 2018; Bayuk and Altobello, 2019; Bongomin et al., 2018; Huhmann, 2017; Kuntze et al., 2019; Losada - Otalora and Alkire, 2019; Nejad and Javid, 2018; Riitsalu and Murakas, 2019; Santini et al., 2019; Sivaramakrishnan et al., 2017; Williams and Oumlil, 2015; Xiao and Porto, 2017
Journal of Financial Counseling and Planning	13	Ammerman and Stueve, 2019; Atlas et al., 2019; Bapat, 2019; Bucciol and Zarri, 2019; Chambers et al., 2019; Deenanath, Danes and Jangc, 2019; Le Baron et al., 2018; Mielitz et al., 2018; Moreland, 2018; Nguyen, 2019; Shi et al., 2019; Szendrey and Fiala, 2018; Wagner, 2019
Journal of Economic Psychology	11	Bannier and Schwarz, 2018; Bucciol and Veronesi, 2014; Croy, Gerrans and Speelman, 2010; Darriet et al., 2020; Farrell, Fry and Risse, 2016; Gathergood, 2012; Grohmann, Kouwenberg and Menkhoff, 2015; Seuntjens et al., 2016; Tang and Baker, 2016; Van Rooij, Lusardi and Alessie, 2011; Xu et al., 2015
Journal of Financial Services Marketing	11	Brimble and Blue, 2013; Drew, 2013; Drew and Cross, 2013; Estelami, 2009; Hari, Pirsch and Rawitzer, 2018; Jariwala and Sharma, 2013; Lewis, 2018; Nejad and O'Connor, 2016; Ricaldi, Finke and Huston, 2013;Worthington, 2013; Zhao et al., 2018
Journal of Banking and Finance	10	Bellofatto et al., 2018; Biljanovska and Palligkinis, 2018; Boente and Filipiak, 2012; Calcagno and Monticone, 2015; Cobb-Clark, Kassenboehmer and Sinning, 2016; Disney and Gathergood, 2013; Gathergood and Weber, 2017; Jappelli and Padula, 2013; Luehrmann et al., 2015; Stolper, 2018
Journal of Economic Education	10	Bosshardt and Walstad, 2014; Bosshardt and Walstad, 2018; Carlin and Robinson, 2012; Collins and Odders-White, 2015; Erner, Goedde-Menke and Oberste, 2016; Foerster, Happ, and Molerov, 2017; Gill and Bhattacharya, 2019; Skimmyhorn et al., 2016; Walstad and Rebeck, 2017; Walstad et al., 2017
International Review of Economics Education	8	Arceo-Gomez and Alejandro Villagomezb, 2017; Blue et al., 2014; Cameron et al., 2014; Happ and Foerster, 2019; Jang et al., 2014; Kiliyanni and Sivaraman, 2016; Lopus et al., 2019; Schuhen and Schuerkmann, 2014
Journal of Behavioral and Experimental Finance	8	Budiner Mette et al., 2019; Fan and Chatterjee, 2018; Grigion Potrich et al., 2015; Grigion Potrich, Mendes Vieira and Kirch, 2018; Hanson and Olson, 2018; Lim et al., 2018; Rodrigues et al., 2019; Stromback et al., 2017
Family and Consumer Sciences Research Journal	7	Henager and Mauldin, 2015; Kabaci and Cude, 2015; Kim and Yuh, 2018; Matzek and Stum, 2010; Sabri et al., 2010; Solheim and Yang, 2010; Varcoe et al., 2010
Journal of Economic Behavior and Organization	6	Brown et al., 2018; Collins, 2013; Gathergood and Weber, 2014; Van Rooij and Teppa, 2014; Meier and Sprenger, 2013; Kramer, 2016

The European Journal of Finance	6	Alemanni and Lucarelli, 2017; Artavani and Karra, 2020; Collins and Urban, 2020; Cupák, Kolev and Brokešová, 2019; Engels, Kumar and Philip, 2020; Philippas and Avdoulas, 2020
Australasian Accounting, Business and Finance Journal	5	Bourova, 2018; Samkin, Low and Taylor, 2012; Shusha, 2017; Vyvyan, Blue and Brimble, 2014; Taylor and Wagland, 2013
Management Science	5	Carlin et al., 2018; Carpena et al., 2019; Fernandes, Lynch and Netemeyer, 2014; Finke, Howe and Huston, 2017; Gamble et al., 2015
Applied Economics Letters	4	Almenberg and Gerdes, 2012; Arrondel et al., 2015; Crawford, Lajbcygier and Maitra, 2018; Niu and Zhou, 2018
Sustainability	4	Chen et al. 2020; Cwynar, Baryła-Matejczuk and Betancort, 2019; Swiecka et al., 2020; Ye and Kulathunga, 2019
Young Consumers	4	Bamforth et al., 2017; Nga, Yong and Sellappan, 2010; Sachitra et al., 2019; Te'eni-Harari, 2016
Children and Youth Services Review	3	Moreno-Herrero et al., 2018; Shephard et al., 2017; Sinha et al., 2018
International Journal of Social Economics	3	Engelbrecht and Ornellas, 2019; A. M. H. A. P, 2015; Natoli, 2018
Journal of Behavioral and Experimental Economics	3	Angel, 2018; Muñoz-Murillo, Álvarez-Franco and Restrepo-Tobón, 2020; Skagerlund et al., 2018
Journal of Business Research	3	Farias, 2019; Maria Garcia and Vila, 2020; Shefrin and Nicols, 2014
Journal of Consumer Policy	3	Cloutier and Roy, 2020; Dharshing and Hille, 2017; Oehler and Werner, 2008
Journal of Social Service Research	3	Kiliyanni and Sivaraman, 2018; Kindle, 2010; Reich and Berman, 2015
Accounting and Finance	2	Gerrans and Heaney, 2019; Liao et al., 2017
African Journal of Business Management	2	Altintas, 2011; Kefela, 2011
Economics and Sociology	2	Belas et al., 2016; Gavurova et al., 2017
International Journal of Financial Studies	2	Lee et al., 2019; Nicolini and Haupt, 2019
Journal of Financial Economics	2	Anderson et al., 2017; Van Rooij, Lusardi and Alessie, 2011
Journal of International Development	2	Adetunji and David-West, 2019; Baidoo et al., 2018
Managerial Finance	2	Baker et al., 2019; Bongomin et al., 2017
World Development	2	Berry et al., 2018; Grohmann, Klühs and Menkhoff, 2018
African Journal of Economic and Management Studies	1	Oseifuah, 2010
American Economic Journal	1	Bruhn et al., 2016
American Economic Review	1	Lusardi and Mitchell, 2008
Economist-Netherlands	1	Migheli and Moscarola, 2017
Finance Research Letters	1	Peng et al., 2018
Financial and Credit Activity-Problems of Theory and Practice	1	Sorkin, 2013
Journal of Behavioral Finance	1	Lee et al., 2017
Journal of Community Practice	1	Chen and Lemieux, 2016
Journal of Human Behavior in the Social Environment	1	Smith et al., 2016
Review of Finance	1	Guiso and Viviano, 2015
Review of Financial Studies	1	Brown et al., 2016

The Review Results

Financial literacy and capability terminology

Although today financial literacy and financial capability are well-known concepts and many countries have developed specialized programs of promoting and increasing the level of financial literacy or financial capability, still, researchers have not yet reached a consensus on the exact definition of either of the concepts, their dimensions and measurement. They have been discussing different meanings in various contexts. Also, within the relevant literature, financial literacy and financial capability are at times used interchangeably, both referring to the ability to apply certain levels of financial knowledge and perform desirable financial behaviors to achieve long-term financial well-being (Atkinson et al., 2007; Xiao, Chen and Chen, 2014; Xiao and O'Neill, 2016). Unfortunately, until academics agree on a common definition of the concepts, the value of empirical studies and education programs will remain compromised (Remund, 2010).

Following the definition of most authors, financial literacy is often described as individuals' capability of managing money. However, the concept has not always been labelled as financial literacy, rather the idea dates back to early 1900s and the beginning of consumer education research and initiatives in the United States (Jelley, 1958, as cited in Remund, 2010). Throughout the literature financial literacy is conceptualized within two dimensions, as financial knowledge and the application of financial knowledge, and hence the skills in the efficient management of personal financial resources (Mason and Wilson, 2000; Lusardi, 2008; Huston, 2010; Redmund 2010; Hastings, Madrian and Skimmyhorn, 2012). Lusardi and Mitchell (2014) consider financial literacy as the ability to make financial planning, build and maintain wealth, make informed decisions on debt and retirement, and use economic knowledge.

Financial literacy is "an individual's ability to obtain, understand and evaluate the relevant information necessary to make decisions with an awareness of the likely financial consequences" (Mason and Wilson, 2000, p. 17). Huston (2010) suggests that financial literacy has two dimensions, personal financial knowledge (cognitive component) and personal finance application, where application implies ability and self-efficacy (affective component). From that standpoint, financial literacy refers to one's capacity to make effective financial decisions and consists of knowledge, skills and self-efficacy (Warmath and Zimmerman, 2019).

Following the notion that knowledge and skills representing financial literacy do not guarantee sound financial behavior (Lusardi, 2008) it brings us to the confusing conception of whether financial literacy comprises behavioral aspects or not. Such situation builds the case for both broader and narrower conceptualization of financial literacy (Rothwell and Wu, 2019). Broader definitions include a wide-ranging set of elements and still refer to it as financial literacy including cognitive, attitudinal and behavioral elements (Danes and Haberman 2007; Jorgensen and Savla, 2010; OECD, 2011; Atkinson and Messy, 2012; Fonseca et al., 2012). Financial literacy can be considered ''a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being'' (OECD, 2011; p3; Atkinson and Messy, 2012: p2). It generally refers to "the ability to interpret, communicate, compute, develop independent judgments, and take actions resulting from those processes in order to thrive in our complex financial world" (Danes and Haberman 2007, p.49).

There are two schools of thought when it comes to defining whether behavior is a component of financial literacy or not. One school of thought sees behavior as a crucial part of financial literacy, while the other perceives behavior as the result of financial literacy. Riitsalu and Põder (2016) argue on it and conclude that behavior is part of financial literacy since it is very hard to separate knowledge, skills and attitudes from actual behavior and decision making. Also, one may lead to the other and vice versa. The definition used in the Programme for International Student Assessment (PISA) suggests that financial literacy also includes motivation and confidence for responsible financial behavior: "Financial literacy is knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life" (OECD, 2014). This is in line with definitions of Oseifuah (2010) and Xiao and Porto (2017).

Such broader consideration of financial literacy refers to it also as financial capability that is composed out of a skillful combination of financial knowledge, attitudes and behavior (Kempson, Collard and Moore, 2005; Xiao, Chen and Chen, 2014; Sherraden et al., 2015; Xiao and O'Neill, 2016), basing it on the concept of behavioral measures (Atkinson et al., 2007). Namely, it involves three dimensions: perceived financial capability, financial literacy and financial behavior (Xiao, Chen and Chen, 2014). Financial capability denotes one's ability to take actions to manage their finances (Atkinson et al., 2007) and to achieve financial well-being (Lučić, Barbić and Uzelac, 2022; Xiao, Chen and Chen, 2014; Xiao and O'Neill, 2016). It is the foundation "for desired financial behaviours, such as saving, budgeting, and using credit wisely and planning … includes reading and understanding financial information, making decisions and managing finances according to values and goals" (Bird, Şener and Coşkuner, 2014).

There are some authors that define financial capability extremely broadly, conceptualizing it through the combination of financial education and opportunities (Friedline and West, 2016) or intrinsic motivation and self-sufficiency (Danes and Yang, 2014). However, the greatest difference financial capability has over literacy is that it refers to one's knowledge and skills but also opportunities (Johnson and Sehrraden, 2007; Sherraden, 2013), taking into account the individual's external environment as a relevant dimension to act on the knowledge one has including access to financial resources (Birkenmaier, Sherraden and Curley, 2013; Sherraden and Grinstein-Weiss, 2015). Such an approach takes into consideration processes of financial socialization and the interaction with relevant agents that develop financial capability. Therefore, it defines financial capability through internal aptitudes (e.g. knowledge, skills and attitudes) but also through the influence of peripheral environment (financial inclusion and access) (Sherraden, 2013; Xiao and O'Neil, 2016). In order to be considered financially capable, the individual must be financially literate, acquire the necessary financial knowledge and skills, but also have access to financial products, services and institutions that allow them to improve their financial well-being (Despard and Chowa, 2014).

Measuring financial literacy and capability

When analyzing definitions of various scholars, it is obvious that knowledge is the most included dimension in the majority definitions of financial literacy (Huston, 2010; Van Rooij, Lusardi and Alessie, 2011; Fonseca et al., 2012; Gathergood, 2012; Jappelli and Padula, 2013; Xiao and Porto, 2017). According to Remund (2010) this is caused by the fact that in order to manage money and make financial decisions one must first learn something about money. Lusardi and Mitchell (2008) consider knowledge to be the best way to define and measure the individual's financial literacy. Consequently, financial literacy is mainly measured in terms of knowledge about: financial products (stocks, bonds, life insurance, investments, etc.), financial concepts (inflation, diversification, interest rates, credit scoring, etc.), mathematical and numerical skills necessary for making financial decisions, as a measure of knowledge needed to become involved in certain activities such as financial planning. It can be measured in three ways: objectively, subjectively (confidence) and via subjective financial management ability (Huston, 2010). Financial skills are the second most included dimension of financial literacy and represent the practical dimension of the concept, a form of testing the acquired financial knowledge (Oseifuah, 2010; Fonseca et al., 2012; Gathergood, 2012; Jappelli and Padula, 2013).

Furthermore, many definitions of financial literacy include some reference to the ability to successfully plan and manage personal finances (Lusardi and Mitchell, 2008; Lusardi, 2010; Remund 2010; Disney and Gathergood, 2013; Huang, Nam and Sherraden, 2013; Xiao, Chen and Chen, 2014). Their research points to the fact that financial literacy is more than just a measure of knowledge or skills, and it reflects one's ability to apply the acquired knowledge and skills and perform certain tasks related to money, such as financial planning and financial decision making. Concerning financial literacy measurement, many surveys of financial literacy were based on consumers' own assessments of their financial knowledge, confidence and decisions about financial products (Nicolini, 2006; Taylor, 2011; Xiao, Chen and Chen, 2014; Xiao, Chen and Sun, 2015). Such, subjective approach allows overconfident people to seem competent. Other studies, such as PISA (OECD, 2010), have tended to regard financial literacy as analogous to an objective mathematics test, with right and wrong answers about interest and discounts, for instance. The most common measure of financial literacy used nowadays was designed by Lusardi and Mitchell (2011). The questions include testing of financial knowledge and skills about inflation, compound interest, diversification, and stocks and bonds. Nicolini and Haupt (2019) concluded that "sometimes the limited number of items and the broad areas of contents investigated by the Lusardi–Mitchell questions could fail in capturing the connection between financial literacy and financial behaviors that exist and that are detected by alternative measures".

Also, it is important to mention that all the examined definitions of financial capability emphasize the importance of financial behavior and transforming financial knowledge and skills into actions. According to Sherraden's (2013) definition of financial capability, what distinguishes financial capability from financial literacy the most is the opportunity which is highly dependent on the environment. Therefore, "financial capability is developed through interaction with and feedback from the environment" (Sherraden, 2013) and includes access to financial policies and instruments and the opportunity to act according to one's best financial interest (Luukkanen and Uusitalo, 2019). In terms of measurement, financial capability includes measures of financial behavior, confidence and satisfaction (Taylor, 2011; Xiao, Chen and Chen, 2014) or even financial inclusion (Johnson and Sherraden, 2007). Conceptualizing financial capability within the behavioral context solves the problems of the narrow focus on knowledge and skills exclusively, financial capability encompasses behaviors and decisions about spending and savings (Collins and Odders-White; 2015), therefore offering insights into how knowledge influences actual behavior. Regarding measurement of the concept of financial capability, most studies include questions evaluating: objective financial literacy, subjective financial literacy, financial behavior, financial capability, and self-efficacy (Huang, Nam and Sherraden, 2013; Xiao, Chen and Chen, 2014; Despard and Chowa, 2014; Xiao and O'Neill, 2016; Xiao and Porto, 2017; Luukkanen and Uusitalo, 2019). Some studies also examined the psychometric properties of measures (Knoll and Houts, 2012).

Conclusion and limitations

Even though the research and practice of financial literacy have been vastly growing in the past few of years, it is left conceptually underdeveloped in terms of clear theoretical and conceptual terms. The field lacks clarity in definition, accompanying metrics and rigor in theoretical positioning providing much needed grounds for relevant conclusions and practical implications. This systematic review plays a vital role in providing a critical summary and overview of what is and what is not known in the field of financial literacy and capability. Moreover, as there is growing pressure for the advancement of evidence-based strategies and programs this review is of great value for practitioners, government officials and other individuals operating in the field.

This review pursued to investigate the theoretical constructs and used definitions. To encourage further development of the field, these findings have essential value for both academic researchers but also policy makers, managers in the financial industry, teachers and students. The paper outlined numerous avenues to extend the existing body of knowledge in order for the field to become coherent and to generate effective solutions in the creation of individual financial well-being.

Certainly, there are limitations to this review. In spite of the fact that we have chosen rigorous methodological guidance (Denyer and Tranfield, 2009; Gough, Oliver and Thomas, 2012a; 2012b) there are limitations in terms of the fact that we did not consider conference papers, working papers and published books, as well as unpublished papers; the use of English-only papers; the inclusion criteria chosen by authors. Therefore, it is possible that some valuable research studies have gone unnoticed.

Nonetheless, the paper summarizes, acclaims and reviews the contributions of key papers in the field of financial literacy and capability that is becoming more and more relevant within a wide variety of involved groups. The conceptual and methodological gaps suggest academics and practitioners should be oriented towards theory-setting and multidisciplinary approach to research.

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