

# A NEW PROPOSAL TO DEFINE INSURANCE LITERACY: PAVING THE PATH AHEAD

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## Abstract

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While the importance of insurance is widely recognised, for individuals as well as for society as a whole, the number of individuals actually buying insurance is dramatically low. After stressing this concept in this paper we focus on the critical comparison between three strands of research: financial literacy, insurance literacy, and behavioural insurance literacy and decision-making. Through an in-depth analysis of previous studies and empirical evidence, we set the stage to adapt the various definitions of financial literacy to propose our own definition of insurance literacy as a three-dimensional construct, based on three key pillars: knowledge, skills, and understanding. Finally, we analyse the limits resulting from the lack of insurance literacy and the possible benefits literate consumers can achieve. While our paper is built around our theoretical proposal of a new definition of insurance literacy, it can constitute an incentive for other researchers to analyse more in-depth insurance-related decisions with empirical studies, based on our theoretical foundation. Our final goal is thus to pave the way ahead.

**Keywords:** Financial Literacy, Insurance Literacy, Insurance Knowledge, Insurance Understanding, Insurance Skills

**Authors' individual contribution:** Conceptualization - E.A.; Methodology - G.P.S.; Writing - Original Draft - E.A. and G.P.S.; Writing - Review & Editing - E.A. and G.P.S.; Visualization - E.M.C.; Supervision - E.M.C.

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## 1. INTRODUCTION

Insurance plays a crucial role in individuals' financial wellbeing, as well as for society as a whole.

At the individual level, every person can benefit from possessing an insurance policy since it is an important risk management tool (Lin, Bruhn, & William, 2019) that helps absorb individuals' financial burden caused by adverse events, by transferring their losses to an insurance company (Scriven, 2008). However, it is necessary to identify the risks faced by individuals and assess the probability of their occurrence and the impact they may directly or indirectly have on the consumer. Identifying the risk helps understand the aspects related to the insurance policy, e.g., what needs to be protected and insured and for what value, to avoid problems of underinsurance.

Another benefit is that of security: when a claim arises, the insured party is indemnified by the insurance company.

The study of an individual's insurance literacy level cannot be conducted without having an understanding of the factors that influence its assessment, including age, gender, income, and others.

Moreover, it is important to know the circumstances in which each individual grew up and currently lives. A study conducted by Tennyson (2011) in the US showed that the identified pattern of responses suggests that consumers generally know more about health and life insurance than auto and property insurance. However, the outcome of this study is most likely to have been distorted by the fact that, unlike European countries where the right to health is universally guaranteed by state

law, in the US, this right is essentially based on the principles of private nature. Therefore, it means that while in Europe, healthcare can be provided to all citizens, regardless of census and income, in the US, the situation is somewhat different. In fact, healthcare is guaranteed only for those who can afford it, as they either are wealthy enough to face high healthcare expenses or have health insurance coverage. This is probably why individuals who responded to the questionnaires of this research exhibit good awareness and understanding of life and non-life insurance products.

At the collective level, the greater the number of individuals with adequate insurance coverage, the lower the impact on the welfare state. If individuals can cope with possible problems with the help of insurance policies, the government funds originally allocated to support families and businesses could be reallocated to other important fields such as education and research.

As reported in the Ernst & Young reports (Ernst & Young, 2019a, 2019b, 2019c) there are two macro-trends that impact the present and future insurance market dynamics: economic growth and demography. Economic growth influences both purchasing power and present and future protection needs. In developed countries characterised by mature and stable economies and by state intervention in the area of social protection and social security, insurance demand is stable. Instead, in developing countries with strong economic growth – such as countries in Asia – the insurance demand is growing at a sustained pace due to the rapid spread of wealth among an increasingly large segment of the population. Demographic trends have an impact on the type of insurance solutions mostly demanded. In the case of a strong elderly population, the need to supplement pensions will be stronger than in societies with a “younger” population.

To protect consumers, legislation on transparency in insurance contracts has been imposed on intermediaries. For example, the Insurance Distribution Directive (IDD), which came into force in the European Union in 2018, represents for the insurance market what the MiFID II represented for the asset management industry.

Apart from assuring transparency, some member states have imposed “plain language” requirements aimed at reducing the use of jargon and clearly defining contractual items. Although plain language requirements greatly vary from one state to another, they are dictated on the use of words with common everyday meanings, sentence length, typeface, and document spacing (Stempel, 2006).

Some states use the standard of “readability” for formulating insurance contracts. “Simple language” is defined as writing in the simplest and most direct way, using only the necessary number of words, while “readability” is defined as an objective assessment of literacy needed to read and understand (NAIC, 2010a). To measure the readability of a contract, the Flesch Reading Ease Score is used, which is determined by applying an algebraic formula using the word count of syllables and sentence lengths in the document.

With that being said, some research studies have shown that insurance information materials are not written with low-literacy users in mind (Pati,

Kavanagh, Bhatt, Wong, Noonan, & Cnaan, 2012; Vardell, 2013), and many consumers do not understand insurance information and even admit that they do not often even read it (Cude, 2005). A survey by the National Association of Insurance Commissioners found that only one-third of the respondents thought they had a good understanding of their insurance policies (NAIC, 2010b).

Consumer protection regulation, however, left alone is not sufficient to truly help individuals avoid poor insurance-related choices if they do not understand the basic insurance concepts. Notably, there are two implications arising from a lack of understanding of insurance concepts: consumers insure themselves, but not adequately, thus resulting in underinsured (Rice Warner, 2016), or consumers do not insure at all. With regard to the reasons for non-insurance or underinsurance, previous studies have concluded that most people not only have a low level of insurance literacy but also are not aware of the importance of the function of insurance (Tennyson, 2011; Driver, Brimble, Freudenberg, & Hunt, 2018; Lin et al., 2019).

To answer the questions “How do people understand insurance concepts?” and “What are the factors that impact insurance literacy and decision-making?” it is necessary to analyse the evidence from consumer knowledge studies in the fields of finance and insurance. Moreover, it is appropriate to start studying the concept of consumer financial literacy and the variables that influence it. Furthermore, it is important to study state-of-the-art insurance literacy. Finally, it is necessary to consider the impact of consumers’ cognitive and emotional aspects on their decision-making process. These are the starting points for the development of a conceptual framework that defines the concept of insurance literacy and its implications.

As expected, there is no extensive body of research studies on the general knowledge of insurance literacy, and those available, primarily conducted through surveys and focus groups, suggested a lack of consumer knowledge and decision-making skills (Tennyson, 2011).<sup>1</sup> People have a poor understanding of terms related to disclosures, price, and quality variations across insurers (Cude, 2005; Pourkiani, Chegini, Yousefi, & Madahian, 2014). When a consumer is not able to analyse, understand and discern among several policies, she usually relies on word-of-mouth (Berger, 1988; Schwarcz, 2010; Tennyson, 2011) to take insurance policy decisions.

The paper is organised as follows. In Section 2 we present the literature review. In Section 3 we propose a new definition of insurance literacy. In Section 4 we conclude.

## 2. LITERATURE REVIEW

We divided the literature review into three parts: financial literacy, insurance literacy, and behavioural insurance and decision-making literacy.

Since substantial literature on insurance literacy is still scarce, we decided to focus the review on related concepts.

<sup>1</sup> Low insurance literacy is more pronounced in the case of non-life insurance than life insurance (Tennyson, 2011).

We identified keywords and specific content areas to guide the research on related concepts. As keywords, we identified insurance literacy, insurance education, health insurance literacy, health insurance education, behavioural insurance, consumer behaviour, financial literacy, and insurance knowledge for three content areas: financial literacy, insurance literacy, and behavioural insurance and decision-making literacy. We present the literature review dedicated to these three content areas in the following sections.

**2.1. Literature review on financial literacy**

Recent studies revealed that financial literacy does not necessarily translate into insurance literacy and only a more specialised education can improve insurance literacy (Lin et al., 2019). People make financial decisions, allocating their savings toward short-term (e.g., family budgets), long-term (e.g., retirement plans) horizons, and for future (unexpected) expenses (Dalkilic & Kirkbesoglu, 2015; Brounen, Koedijk, & Pownall, 2016).

In the current financial landscape, there is a growing need for financial knowledge and basic financial skills (Morris, 2001) since when people are financially educated, they make better financial decisions (Albeerdy & Gharleghi, 2015).

Studies in the financial literacy literature focused on individuals’ wellbeing (Widdowson &

Hailwood, 2007), analysing people ability to discern financial choices, discuss money and financial issues, plan for the future and competently respond to life events that affect every day financial decisions, including events in the general economy (Anthes, 2004).

Several definitions of financial literacy have been produced. In Table 1, we summarise how various definitions of financial literacy were proposed in the last thirty years, focusing on individuals’ ability to understand, know, select, evaluate, compare and judge financial instruments, including those of the insurance market or insurance policies. As stated by Lusardi (2008), financial literacy influences the decision-making processes related to insurance choices, retirement plans, and other choices in the broader financial realm. Financial literacy is an essential tool for making financial decisions (De Beckker, De Witte, & Van Campenhout, 2020), but not all consumers possess it (Kim, Braun, & Williams, 2013). Many US citizens lack the knowledge and skills needed to make informed financial decisions and manage their assets (Fox, Bartholomae, & Lee, 2005; Lusardi, 2008). The relationship between financial literacy and the decision-making process has been deeply investigated for industrialised countries (Duflo & Saez, 2003; Lusardi & Mitchell, 2009; Lusardi & Tufano, 2009; Van Rooij, Kool, & Prast, 2007a; Van Rooij, Lusardi, & Alessie, 2007b).

**Table 1.** Main financial literacy definitions and dimensions

<i>Authors</i>	<i>Definition</i>	<i>Dimensions</i>
Noctor, Stoney, and Stradling (1992)	“...the ability to make informed judgements and to take effective decisions regarding the use and management of money”.	Decision-making
JumpStart Coalition for Personal Financial Literacy (1997)	“The ability to use knowledge and skills to manage one’s financial resources effectively for lifetime financial security”.	Knowledge and skills
Vitt, Anderson, Kent, Lyter, Siegenthaler, and Ward (2000)	“...a person’s ability to understand, analyse, manage, and communicate personal finance matters”.	Understanding; Managing financial resources
Mandell (2008)	“The ability to evaluate the new and complex financial instruments and make informed judgments in both choice of instruments and extent of use that would be in their own best long-run interests”.	Evaluating and decision-making
Servon and Kaestner (2008)	“...a person’s ability to understand and make use of financial concepts”.	Understanding
Social and Enterprise Development Innovations (SEDI) (2008)	“...is a three-dimensional construct that includes: Financial knowledge and understanding: The ability to make sense of and manipulate money in its different forms, uses, and functions, including the ability to deal with everyday financial matters and make the right choices for one’s own needs. Financial skills and competence: The ability to apply knowledge and understanding across a range of contexts including both predictable and unexpected situations and also including the ability to manage and resolve any financial problems or opportunities. Financial responsibility: The ability to appreciate the wider impact of financial decisions on personal circumstances, the family, and the broader community and to understand rights, responsibilities, and sources of advice or guidance”.	Financial knowledge and understanding; Financial skills and competence; Financial responsibility; Decision-making
President’s Advisory Council on Financial Literacy (PACFL) (2008)	“...the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being”.	Knowledge and skills; Managing financial resources
Hung, Parker, and Yoong (2009)	“Knowledge of basic economic and financial concepts, as well as the ability to use that knowledge and other financial skills to manage financial resources effectively for a lifetime of financial well-being”.	Financial knowledge; Managing financial resources
Huston (2010)	“...measuring how well an individual can understand and use personal finance-related information”.	Understanding
Atkinson and Messy (2012)	“[an] amalgam of mindfulness, attitude, behaviors and knowledge and skills essential for making the right financial decisions which eventually lead to the attainment of financial well-being”.	Financial knowledge; Financial behaviour; Financial attitude and skills
Organization for Economic Co-operation and Development (OECD) (2014)	“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”.	Financial knowledge; Understanding; Skills; Decision-making

Source: The author’s elaboration.

The studies summarised in Table 1 revealed the existence of different dimensions influencing financial literacy, including behavioural factors affecting the decision-making process.

Although the definitions of financial literacy have over the years broadened the definition itself by defining its boundaries more and more precisely and in greater detail, identifying over the years the founding dimensions of the concept, we can now briefly state that financial literacy is the ability to use financial knowledge and skills to understand, analyse and judge new and complex financial instruments in an informed way and to make optimal decisions to manage one's financial resources effectively. So the components of financial literacy are knowledge, understanding, and skills.

Several studies, in addition to the definition of the concept of financial literacy, have identified the variables that influence it.

As reported by Aren and Aydemir (2014), the existing literature includes three major research strands analysing how to measure financial literacy using questionnaires and surveys. The first strand aims to examine the level of knowledge of financial issues through questions on basic financial issues as well as on others requiring more advanced financial knowledge (Chen & Volpe, 1998; Hilgert, Hogarth, & Beverly, 2003; Lusardi & Mitchell, 2007; Howlett, Kees, & Kemp, 2008; Al-Tamimi & Bin Kalli, 2009;

Dvorak & Hanley, 2010; Lusardi, Mitchell, & Curto, 2010; Cole, Sampson, & Zia, 2011; Robb, 2011; Van Rooij, Lusardi & Alessi, 2011; Ansong & Gyensare, 2012; Shahrabani, 2012; Yoong, See, & Baronovich, 2012). The second strand of literature (Van Rooij et al., 2007a; Perry & Morris, 2005) attempts to measure individuals' level of financial knowledge by asking them subjective questions about their perception of their knowledge level through scales such as the Likert scale. The last strand of literature (Van Rooij et al., 2007b; Guiso & Jappelli, 2008; Müller & Weber, 2010; Robb & Woodyard, 2011) is a mix of the previous two strands, as it helps identify the level of financial literacy individuals possess through objective questions on basic and advanced financial issues as well as subjective questions on the perception of individuals about their own knowledge using measurement scales such as the Likert scale.

To date, the main studies that have analysed the heterogeneity of financial literacy levels have identified socio-demographic and socioeconomic characteristics that can influence the level of literacy of individuals.

As shown in Table 2, age, gender, education, professional status, and socio-economic context are the main variables - identified and confirmed in the research of the last ten years - able to influence the level of financial literacy of the consumer.

**Table 2.** Financial literacy explanatory variables

Age	Lusardi, Mitchell, and Curto (2014); Finke, Howe, and Huston (2017); Beckmann (2013); Bucher-Koenen and Lusardi (2011); Lusardi and Mitchell (2011); Gamble, Boyle, Yu, and Bennett (2014).
Gender	Bucher-Koenen, Lusardi, Alessie, and Van Rooij (2017); Cupák, Fessler, Schneebaum, and Silgoner (2018a); Agnew and Harrison (2015).
Education	Lusardi and Mitchell (2014); Lusardi (2012, 2019).
Professional status	Lusardi and Mitchell (2014); Lusardi and Tufano (2015); Atkinson and Messey (2012).
Socio-economic context	Cupák, Fessler, Silgoner, and Ulbrich (2018b); Cucinelli, Trivellato, and Zenga (2019); De Becker et al., (2020); Gudmunson, Ray, and Xiao (2016).

## 2.2. Insurance literacy

One of the problems encountered in conducting research on insurance literacy is the lack of criteria to identify the essential elements of insurance that a "literate" consumer should know and understand (Tennyson, 2011). A possible explanation of this evidence is that insurance literacy is a relatively recent field of study, not yet sufficiently investigated.

Researchers suggested that the lack of reference standards should be addressed by assessing the ability of consumers to orient themselves between policy forms so as to make insurance decisions (Cude, 2005). In addition, most research studies on insurance literacy have been conducted on particular lines of insurance, like life and health insurance, without defining the broader concept of insurance literacy.

Literacy in health insurance is defined as the integration of two types of literacy: health literacy and financial literacy (Fitzgerald, Bias, & Gurley-Calvez, 2017; McCormack, Bann, Uhrig, Berkman, & Rudd, 2009). Moreover, seminal studies (National Center for Health Statistics, 1966; Andersen, Kasper, Frankel, & Associates, 1979) proved several gaps in consumer knowledge.

Newhouse, Ware, and Donald (1981) showed that although most consumers have certain basic

knowledge of the medical care delivery system, they do not really know how to apply it. To date, many researchers evaluated health insurance literacy (Hibbard, Jewett, Engelmann, & Tusler, 1998; Cho, Lee, Arozullah, & Crittenden, 2008; McCormack et al., 2009; Yin, Johnson, Mendelsohn, Abrams, Sanders, & Dreyer, 2009; Politi, Kaphingst, Kreuter, Shacham, Lovell, & McBride, 2014; Wong et al., 2015) with particular consideration of demographic variables (Hira & Loibl, 2005; Sentell, 2012; Norton, Hamel, & Brodie, 2014). With reference to gender, Kutner, Greenburg, Jin, and Paulsen (2006) and Politi et al. (2014) showed that males are less literate than females, McCormack et al. (2009) found the exact opposite results.

Recent studies showed that consumers do not understand the terms and characteristics of health insurance plans and are unable to make comparisons in order to choose the most appropriate one (Consumer Union, 2012; American Public Health Association, 2012; Kim et al., 2013; Loewenstein et al., 2013; Paez et al., 2014; American Institutes of CPAs, 2013). This confusion frightens consumers and hinders their purchasing decisions (Quincy, 2012; Kaiser Family Foundation, 2013).

The evidence found with reference to health policies, according to our theory, can certainly be found, albeit with sometimes different outcomes, with reference to the broader concept of

insurance literacy, without reference to a specific type of policy.

The variables identified by the literature as determinants of financial literacy can play an important role in defining the level of insurance literacy of individuals.

### 2.3. Behavioural insurance and decision-making literacy

Consumers' psychology should not be overlooked because, for example, knowing of being protected from a risk and being able to avail the benefits of adequate financial resources from a claim allows the individual to lead a life with a less anxiogenic component related to future uncertainties.

While there are many studies on individuals' choices on financial investments (Yoong, 2010; Van Rooij et al., 2011) and retirement decisions (Benartzi & Thaler, 1999, 2007; Lusardi & Mitchell, 2011; Bateman, Stevens, & Lai, 2015), still few studies analyse the cognitive and emotional aspects related to the decision-making process in the insurance field. A possible explanation is that insurance-related decisions are among the most complex ones that many consumers have to take during their lifetime (Sanjeeva & Hongbing, 2019).

The traditional finance approach assumes that decision-makers are fully rational and able to maximise their expected utility (Von Neumann & Morgenstern, 1947). Similarly, the same approach, when applied to insurance-related decisions, implies maximisation of the expected utility (Lindley, 1985; Mitchel & Holzworth, 2005).

However, in reality, consumers are not completely rational and might not always take reasonable decisions (Simon, 1955; Tversky & Kahnemann, 1986; Kahneman, 2003).

For example, while the traditional approach claims that it is necessary to provide the consumer with as much information as possible, in reality, it seems that consumers prefer fewer options and information presented in a single or simplified format, to simplify complex choices and avoiding making suboptimal decisions, (Hibbard, Slovic, Peters, & Finucane, 2002; Loewenstein et al., 2013).

Insurance-related decisions, thus, are not adequately explained by neoclassical economic theories, as these theories lack the cognitive and emotional components that allow a better understanding of these decisions (Tversky & Kahneman, 1991; Shanteau, 1992; Laury & McInnes, 2003; Kusev et al., 2017; Sum & Nordin, 2018).

As a matter of fact, it is important to consider variables such as individuals' risk perceptions (Buzatu, 2013) and emotions (Hsee & Kunreuther, 2000), but also behavioural biases, heuristics, and framing effects (Shanteau, 1992; Johnson, Hershey, Meszaros, & Kunreuther, 1993; Kusev et al., 2017; Sum & Nordin, 2018).

Through empirical studies, several researchers have highlighted some consumer trends in purchasing insurance products. These choices are affected by the complex decision-making process characteristic, and they are specific to each individual. This, in turn, refers to the concept of knowledge being a guide in human behaviour.

One of the various trends relates to the predisposition of some consumers to take out

an insurance policy to tackle small financial risks rather than to cover themselves against catastrophic risks, despite the fact that the impact of the latter is much higher (Slovic, Fischhoff, Lichtenstein, Corrigan, & Combs, 1977; Kunreuther, Novemsky, & Kahneman, 2001; Laury, McInnes & Swarthout, 2009). This irrational behaviour is driven by cognitive bias: consumers perceive that the probability of a catastrophic event occurring, which could cause them huge damage, as zero. Thus, they decide against taking out a policy for this risk. Another trend is the preference for insurance with lower deductibles (Sydnor, 2010), ignoring the price and risk compromises associated with different deductibles.

Additionally, an observed trend is the predisposition of consumers to reason and reflect on whether or not to buy insurance on the basis of certain information available to them, which may support the idea that the ideal policy is already formed in the consumer's mind, without even considering the financial implications of the policy (Johnson et al., 1993). In this case, the consumer is thus prone to both availability bias and confirmation bias, i.e., she tends to give too much weightage to the information that supports her point of view and ideas, while she tends to not consider the information that obstructs and contradicts her idea. Linked to the above-mentioned evidence, Tennyson (2011) showed how consumers know more about what is most familiar to them.

All these biases strengthen overconfidence through the reinforcement of the idea that they are better at reasoning and possess more knowledge than others.

Another behavioural trap that consumers fall into is the so-called "narrow framing", a type of framing introduced by Kahneman and Lovallo (1993), which describes the tendency of individuals to consider decision-making problems one at a time. Narrow framing has a considerable impact on the insurance industry, as purchasing an insurance product might seem undesirable if the potential benefits of avoiding a loss through it are not properly considered (Richter, Ruß, & Schelling, 2019).

Interestingly, behavioural finance has emphasised the idea that a major problem in making insurance-related decisions is the lack of consumers' understanding of the general concepts of probability and risk. Along with the lack of understanding of the content of insurance policies, it leads to consumers making decisions that are not ideally suited to their needs.

### 3. A NEW DEFINITION OF INSURANCE LITERACY

Drawing from the definition of health insurance proposed by Paez et al. (2014), which, in turn, goes back to the definition of financial literacy forwarded by Fear (2008), Lin et al. (2019) proposed a definition of insurance literacy, which included the following three dimensions:

- 1) understanding the concept of insurance and being aware and informed about the insurance products under consideration;
- 2) having a reasonable understanding of the risks covered by the insurance policy under consideration;

3) being able to apply the relevant knowledge and understanding to assess insurance options and make insurance decisions consistent with the perceived risks.

In Table 3, we adapt the main definitions of financial literacy to the insurance context to build our own definitions of insurance literacy. In doing so, we identify the dimensions of insurance literacy.

**Table 3.** From definitions of financial literacy to definitions of insurance literacy

<i>Authors</i>	<i>Original definitions of financial literacy</i>	<i>Our adapted definitions of insurance literacy</i>	<i>Dimensions</i>
Noctor et al. (1992)	"...the ability to make informed judgements and to take effective decisions regarding the use and management of money".	... the ability to identify potential risks with full knowledge of the facts and take effective insurance decisions regarding their management.	Decision-making
JumpStart Coalition for Personal Financial Literacy (1997)	"The ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security".	The ability to use knowledge and skills in insurance to preserve one's financial resources effectively for financial security for life.	Knowledge and skills
Vitt et al. (2000)	"...a person's ability to understand, analyse, manage, and communicate personal finance matters".	... a person's ability to understand, analyse, manage, and communicate insurance matters.	Understanding; Managing insurance resources
Mandell (2008)	"The ability to evaluate the new and complex financial instruments and make informed judgments in both choice of instruments and extent of use that would be in their own best long-run interests".	The ability to evaluate the new and complex insurance instruments and make informed judgments in both choice of instruments and extent of use that would be in their own best long-run interests.	Evaluating and decision-making
Servon and Kaestner (2008)	"a person's ability to understand and make use of financial concepts".	... a person's ability to understand and make use of insurance concepts.	Understanding
SEDI (2008)	"... is a three-dimensional construct that includes: Financial knowledge and understanding: The ability to make sense of and manipulate money in its different forms, uses, and functions, including the ability to deal with everyday financial matters and make the right choices for one's own needs. Financial skills and competence: The ability to apply knowledge and understanding across a range of contexts including both predictable and unexpected situations and also including the ability to manage and resolve any financial problems or opportunities. Financial responsibility: The ability to appreciate the wider impact of financial decisions on personal circumstances, the family, and the broader community and to understand rights, responsibilities, and sources of advice or guidance".	... is a two-dimensional construct that includes: Insurance knowledge and understanding: The ability to make sense of insurance products in their different forms, uses, and functions, including the ability to deal with everyday matters and choose the right product for one's own needs. Financial and insurance skills and competence: The ability to apply knowledge and understanding across a range of contexts including both predictable and unexpected situations and also including the ability to manage and resolve financial problems or opportunities.	Financial knowledge and understanding; Financial skills and competence; Financial responsibility; Decision-making
PACFL (2008)	"... the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being".	... the ability to use insurance knowledge and skills to allocate financial resources effectively for a lifetime of financial well-being in terms of protection from risks.	Knowledge and skills; Managing financial resources
Hung et al. (2009)	"Knowledge of basic economic and financial concepts, as well as the ability to use that knowledge and other financial skills to manage financial resources effectively for a lifetime of financial well-being".	Knowledge of basic insurance and financial concepts, as well as the ability to use that knowledge and other insurance skills to allocate financial resources effectively for a lifetime of financial well-being in terms of protection from risks.	Insurance knowledge; Managing insurance resources
Huston (2010)	"... measuring how well an individual can understand and use personal finance-related information".	... measuring how well an individual can understand and use insurance-related information.	Understanding
Atkinson and Messy (2012)	"amalgam of mindfulness, attitude, behaviors, and knowledge and skills essential for making the right financial decisions which eventually lead to the attainment of financial well-being".	... amalgam of mindfulness, attitude, behaviors, and knowledge and skills essential for making the right insurance decisions which eventually lead to the protection from risks.	Insurance knowledge; Insurance behaviour; Insurance attitude; Skills
OECD (2014)	"... 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".	... knowledge and understanding of insurance concepts and financial 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 protection from risks and financial well-being of individuals and society, and to enable participation in economic life.	Insurance knowledge; Understanding; Skills; Decision-making

Source: The authors' elaboration.

To create our definition of insurance literacy, we summarised the definitions presented in Table 2. Following Lin et al. (2019), we thus propose our own definition implemented of insurance literacy as a three-dimensional construct including the following:

- insurance knowledge: understand and make use of insurance concepts and be aware and informed about the insurance products under consideration;
- insurance understanding: having a reasonable understanding of the risks covered by the insurance policy under consideration and to make sense of insurance products in their different forms, uses, and functions;
- insurance skills and attitude: apply knowledge and understanding to assess insurance options and make decisions consistent with the perceived risks and for fulfilling one's own needs.

Our definition is an implementation of the previous definition of Lin et al. (2019) as it identifies and makes clear what are the three constituent components of financial literacy: knowledge, understanding, skills and attitude.

#### 4. CONCLUSION

While the importance of insurance is widely recognised, the number of individuals actually buying insurance is dramatically low. Through an in-depth analysis of previous studies and empirical evidence, we set the stage to adapt the various definitions of financial literacy to propose a new definition of insurance literacy.

We intentionally divided previous studies into three branches of literature related to financial literacy, insurance literacy, and behavioral and decision-making literacy.

Our choice has been driven by the evidence that the literature on insurance literacy is still scarce, thus we had to initially start from the financial literacy literature to eventually depart from it. We claim that considering the behavioral and decision-making literature is vital since traditional neoclassical economic and financial theories are not able to fully explain real life insurance-related decisions because they do not account for both cognitive and emotional biases that influence individuals' choices.

Analysis of previous studies allowed us to understand the state of the art of the literature, driving us to propose our own definition of insurance literacy as a three-dimensional construct including insurance knowledge, understanding, and skills.

A higher level of insurance literacy would probably reduce the widespread and dramatic problem of underinsurance, with benefits both for individuals and societies as a whole. Increased demand for insurance products would furthermore prompt insurance companies, and the insurance industry as a whole, to become more competitive, as consumers with proper insurance literacy would be able to compare different offers of similar products.

We acknowledge that a limitation of this paper is the lack of empirical evidence supporting our claim, and this leads us to claim that has still to be done in this direction.

While our paper is built around our theoretical proposal of a new definition of insurance literacy, that has to be supported by empirical evidence, we claim that it can constitute an incentive for other researchers to analyse more in-depth insurance-related decisions, with a theoretical foundation on which to base future studies.

Our final goal, with our proposal, is thus to pave the way ahead.

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