

Identifying The Conceptualization, Measurement of Retirement Planning: A Systematic Review

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Abstract

Retirement planning (hereafter, RP) has become a fundamental topic in academic research over the last decade. Despite its development, there is no consensus among scholars on its measurement. This study aimed to tackle the challenge of evaluating RP behaviors across different domains. A comprehensive review journal publications were retrieved the 2000–2023 period from Web of Science. The presentation of methods and results followed the recommendations outlined in the PRISMA guidelines. 32 journal publications were included in this review. Three key trends emerge from the results of our systematic review of the measurement of RP: a majority (53.13%) of RP studies utilizes a unidimensional approach; few measurements of RP were based on any theory; a lack of consistency in the measurement multidimensional approaches. Additionally, we have introduced a thorough framework has also been proposed to define RP in terms of dimensions, antecedents and outcomes. The authors suggest researchers investigating RP's financial aspects consider Stanski et al.'s work for a nuanced measurement framework. For those interested in a comprehensive analysis of various facets of RP, the researchers propose Muratore et al.'s three-dimensional framework for a comprehensive approach to measurement.

Keywords: Retirement Planning, Measurement, Influencing Factors, Systematic Review

INTRODUCTION

Population ageing has increased financial pressures on pay-as-you-go pension systems, leading to significant pension reforms. The multi-pillar approach to public pensions proposed by the World Bank reinforces individuals' responsibility for their financial well-being in old age (Lusardi, & Mitchell, 2011). However, many people approaching retirement are unprepared (Chan et al., 2021; Tomar et al., 2021a; Yeh et al., 2022). People entering retirement with insufficient savings pose a major challenge to the political, economic and social structure and could affect individuals and society detrimentally. It would bring the risk of widespread poverty in old age, increase pressure on public policies (Burnett et al., 2018).

Researchers have expressed concern about an old-age provision in various studies over the past decade (Alessie et al., 2011; Blanco et al., 2017; Hershey et al., 2000; Penn et al., 2021). This demonstrates clearly that RP is of great scientific interest across many academic fields (e.g., business administration, psychology, gerontology and other social sciences). Additionally, researchers have also explored many other objectives in the RP literature. These include the variables that influence RP (Hershey et al., 2010), identifying the impact of RP on well-being in retirement (Adam et al., 2017; Afthanorhan et al., 2020) and the factors that influence on RP (Ansar et al., 2019). These works have collectively enhanced our knowledge of the RP construct.

Given that there are different approaches, there seems to be considerable confusion about how to evaluate the RP construct. Despite the substantial evidence of the benefits of retirement planning, vague and broad measures predominate in the literature. As a result, the generalizability of empirical findings and interpretations are made more difficult by the employment of several measurement methodologies in contemporary RP research. In fact, there have been calls for additional empirical research on the many RP causes and effects (Bongini et al., 2019; Murari et al., 2021). A lack of consensus on how RP is measured can lead to conflicting results and jeopardize the development of reliable evidence.

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Conflicting results and the creation of trustworthy evidence can come from a lack of agreement on how RP is measured. Recent studies have underlined the necessity to explain any confusions and misunderstandings that may already exist in RP research given the multifaceted character of the RP construct and the cross-disciplinary scope of the RP literature (Kerry, 2018; Noone et al., 2010b; Taylor et al., 2008). Although previous studies have reviewed relevant influencing factors of RP using a systematic literature review approach (Gallego-Losada et al., 2022; Tomar et al., 2021b), there is still a research gap on operational measures of RP. Therefore, our study aims to fill the following research gaps in the field of retirement planning:

RQ1 - How has RP been defined and measured?

RQ2 – Which the prominent antecedent and outcome variables have been linked to RP?

The above research questions will be answered in the following sections. The context of the study is described in the first section, and the research questions are formed to specify the scope of the study. The second section highlights three viewpoints on the definition of RP from the extant literature. The procedure for reidentifying, selecting, reviewing and evaluating the available literature on retirement planning is described in detail in the next section. Section four presents the results of this study concerning the measurement of the RP construct. Section five then discusses the findings, and implications for theory, practice and future research are also discussed. As well as consequences for theory, practice, and future study. Lastly, the limitations and conclusion of the study are discussed.

Defining Retirement Planning

Although there hasn't been a definition of RP that is universally acknowledged, the existing literature defines RP from three perspectives (Kerry, 2018).

First, from the planning formality-based perspective. According to Kroeger (1982), formality, based on a distinction between employer offerings (formal) and employee-directed activities (informal), has delineated retirement planning. Beehr (1986) also refers to formal and informal retirement planning; however, only formal planning is implied as constituting employer-sponsored programs, which is consistent with (Kroeger, 1982). Taylor-Carter et al. (1997) characterization of formal retirement planning followed precedent, viewing it as participation in an employer-sponsored workplace event.

Second, from the planning domain-based perspective. Four retirement planning domains can be roughly categorized as follows: planning for one's finances, health, lifestyle and psychosocial aspects (Conrad Glass, 2000; Dorfman, 1989; Lee, & Law, 2004). From the previous studies, most studies on retirement planning have only measured it using a general item or have focused exclusively on financial planning (Lusardi, & Mitchell, 2011; Tomar et al., 2021a). However, given that older people place a high value on their health (Dorfman, 1995; Reitzes, & Mutran, 2004), it makes sense to assume that it is becoming increasingly crucial to maintain health and well-being in old age (Liu et al., 2022). Lifestyle planning deals with allocating time after retirement (Noone et al., 2010b). Reitzes and Mutran (2004) claimed that anticipatory socialization with future obligations might facilitate the shift from "worker" to "retiree" in terms of psychological planning. Therefore, retirement planning was defined as the goal-directed thoughts and behaviors that promote good health and provide financial security, fulfilling lifestyles and rewarding roles in retirement (Noone et al., 2010b)

Third, from the planning process-based perspective. Planning is a four-stage process according to Friedman and Scholnick (1997). The first step in the planning process is to create an internal representation of the problem space for a potential future scenario. Goals for the future are set once a cognitive understanding of the issue has been achieved. Individuals decide to begin preparing for or engaging in the actions required to achieve their goals in the next stage. The decision to prepare is made considering timing concerns as well as the perceived effectiveness of readiness behaviors. After that, they create a strategy or plan to achieve their objectives. Finally, plans are implemented and updated as appropriate. In a word, the four primary stages of the Friedman and Scholnick (1997) process model include retirement representations, retirement goals, the decision to prepare, and preparedness. The formation of more specific plans as well as their execution and revision—all of which Friedman and Scholnick discussed—were largely included in the concept of the last stage of preparedness.

Over and above these perspectives, the diversity of these terms indicates the variety of RP definitions and could explain the variety of measures that have been used (Muratore et al., 2010; Seidl et al., 2021; Stawski et al., 2007).

METHODOLOGY

To access information relevant to this study, data was retrieved from Clarivate analytics' Web of Science Core Collection platform, the world's leading database of published articles and citations. The search was conducted on 5th January 2024 and data from 2000-2023 were analyzed. It includes publications in high-impact journals (Korom, 2019).

Search Strategy

A set of appropriate search terms (“planning for retirement” OR “retirement planning”) AND (measur* or assess* or scale or instrument or survey or questionnaire) was used to search the articles in the title, abstract or keywords, resulting in 293 initial results. The search results were then refined by using two search criteria: (i) language - English, (ii) document type – article, (iii) research falls under business economics, psychology, geriatrics, gerontology and social sciences. During this phase, we built a preliminary database of 202 articles. hecklist) outlines the process for our review (see Figure 1).

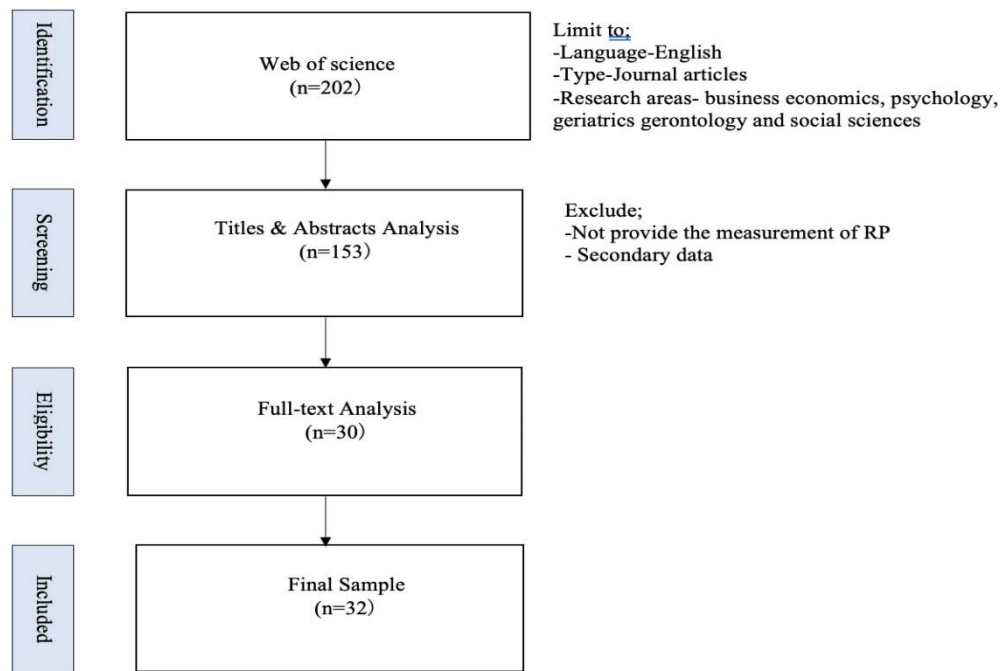


Figure 1: Study Selection PRISMA Flow Diagram Detailing Steps in the Identification and Screening of Sources

Eligibility Criteria

Following that, we looked over each article's title and abstract, including full-length articles when in doubt. To ensure that only relevant articles were included in the study, we shortlisted articles that focused on retirement planning. For further review and analysis, we only considered those studies that meet the following inclusion criteria: (a) retirement planning or planning for retirement appeared in the title, abstract, keywords; (b) measurement of retirement planning; (c) primary data. The inclusion criteria are highlighted in the Table 1. By consensus, we chose 30 papers that matched the requirements for inclusion and were relevant to this review. Additionally, using a snowball search method, we discovered two more relevant journal papers. The final database used for this review included 32 articles.

Table 1: The Inclusion and Exclusion Criteria

The inclusion criteria	The exclusion criteria
Retirement planning or planning for retirement appeared in the title, abstract, keywords	Retirement planning or planning for retirement not appeared in the title, abstract, keywords
Be a journal article	Books, conference, editorial materials, letter, essays
Be in the English language	Not in English
Research falls under business economics, psychology, geriatrics gerontology and social sciences	Not in the business economics, psychology, geriatrics gerontology and social sciences research area
Measurement of retirement planning	Not provided the measurement of retirement planning
Primary data	Secondary data

Data Extraction

The extracted data were recorded in a data collection form in Microsoft Excel. The data were extracted by the lead reviewer included: author name(s), article title, year of publication, journal name, empirical research (i.e., sample, region and industry), key objective, outcomes, theoretical frameworks, RP and measuring scales. The quality of extracted data was independently examined by two reviewers.

RESULTS

The Measurement/Assessment of the RP

Researchers are still determining if RP can be assessed with a single dimension or multiple dimensions. In particular, RP can be measured using a single dimension with several questions or multiple dimensions with various parameters. According to our review, 45.16% of articles conceptualized the RP construct as multidimensional, while the remaining 54.84% of studies either conceptualized RP as a unitary or unidimensional construct. The results show that 14 different measurement scales for RP were used in the 31 quantitative studies identified in our review (see Table 2).

Table 2: Measurement Approaches in RP Research

#	Author/Year	Factor Structure	Dimensions	Scale Characteristics	Reliability (Cronbach a)	Sample	Country profile
1	Hershey et al. (2000)	Single dimension structure	<ul style="list-style-type: none"> Perceived financial preparedness 	Items=4 Scale=6-point scale	a=0.92	Household research panel	USA
2	Hershey et al. (2007)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning activity level (Adapted from Stawski et al, 2007) 	Items= 10 Scale=7-point scale	a=0.76	Working adults	USA
3	Stawski et al. (2007)	Single dimension structure	<ul style="list-style-type: none"> Financial planning activity scale 	Items=9 Scale=7-point scale	a=0.87	Adults	USA
4	Van der Merwe (2009)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning 	Items=7 Scale=7-point scale	Not provided	Intergenerational family businesses	South Africa
5	Van Dalen et al. (2010)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning activity 	Items=3 Scale=5-point Scale	American a=0.88 Dutch a=0.79	Working individuals	Netherlands and USA
6	Van der Merwe (2010)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning 	Items=7 Scale=7-point scale	Not provided	Small and medium sized family businesses	South Africa
7	Hershey et al. (2010)	Single dimension structure	<ul style="list-style-type: none"> Financial planning activity level (Adopted from Hershey et al., 2007; Hershey & Mowen, 2000) 	Items=4 Scale=5-point scale	a=0.84	Adults	Netherlands and USA
8	Anderson et al. (2017)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning (Adopted from Lusardi & Mitchell, 2009) 	Items= 1 Scale= 4-point scale	Not provided	LinkedIn membership	USA

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#	Author/ Year	Factor Structure	Dimensions	Scale Characteristics	Reliability (Cronbach a)	Sample	Country profile
9	Liu et al. (2018)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning activity level (Adopted from Hershey et al, 2007) 	Items= 10 Scale=7-point scale	a=0.879—0.913	Nurses	China
10	Schuabb et al. (2019)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning activity level (Adopted from Hershey et al., 2010) 	Items=4 Scale=7-point scale	a=0.90	Private hospital workers	Brazil
11	Farrar et al. (2019)	Single dimension structure	<ul style="list-style-type: none"> Unnamed 	Items= 1 Scale= dichotomous	Not provided	Residents	UK
12	Bongini et al. (2019)	Single dimension structure	<ul style="list-style-type: none"> Intention to behave 	Items=2 Scale= dichotomous	Not provided	University students	Italian
13	Kimiyaahlam et al. (2019)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning (Adopted from Noone et al, 2010a; Petkoska et al., 2009; MacFarland et al., 2004; Van Rooij et al.,2011) 	Items= 15 Scale=6-point scale	Not provided	Residents	Malaysia
14	Baker et al. (2021)	Single dimension structure	<ul style="list-style-type: none"> Financial planning activity level (Adopted from Hershey, Henkens, and Van Dalen, 2010) 	Items=4 Scale=7-point scale	a=0.953	Professional women	Indian
15	Penn et al. (2021)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning goals (Adapted from Stawski et al., 2007) 	Items=9 Scale=7-point scale	a=0.90	Older workers	USA and Canada
16	Hoffmann and Plotkina (2021)	Single dimension structure	<ul style="list-style-type: none"> Retirement planning activity (Adopted from Stawski et al, 2007) 	Items= 10 Scale= 7-point scale	a≥0.7	Adult consumers from Amazon MTurk	USA
17	Ghadwan et al. (2022a)	Single dimension structure	<ul style="list-style-type: none"> Financial planning for retirement 	Items=6 Scale=7-point scale	a=0.86	Public university employees	Saudi Arabia
18	Clark et al. (2019)	Two dimensions structure	<ul style="list-style-type: none"> Subjectively measured Objectively measured 	Items=5 Scale=dichotomous	Not provided	Public sector workers	USA
19	Blakeley et al. (2008)	Three dimensions structure	<ul style="list-style-type: none"> Physical health element Financial health element Psychosocial health element 	Items=25 Scale=5-point scale	a=0.877	Nurses	Canada
20	Muratore et al. (2010)	Three dimensions structure	<ul style="list-style-type: none"> Public protection Self-insurance Self-protection 	Items=28 Scale=5-point scale	a=0.80—0.88	Employees	Australia
21	Donaldson et al. (2010)	Three dimensions structure	<ul style="list-style-type: none"> Public protection Self-insurance Self-protection (Adopted from Muratore &Earl, 2010) 	Items=31 Scale=5-point scale	a=0.91	Semi-retired and retired men and women	Australia
22	Mooney et al. (2017)	Three dimensions structure	<ul style="list-style-type: none"> Public protection Self-insurance Self-protection (Adopted from Muratore & Earl, 2010) 	Items=28 Scale=5-point scale	a=0.80—0.88	Retirees	Australia
23	Lee (2003)	Four dimensions structure	<ul style="list-style-type: none"> Financial planning Health planning Living arrangement planning Psychological planning 	Items=17 Scale=dichotomous	Not provided	Hong Kong Chinese residents	China
24	Lee and Law (2004)	Four dimensions structure	<ul style="list-style-type: none"> Financial planning for retirement Health planning for retirement Living arrangement and activity planning for retirement Psychological planning activities for retirement 	Items= 19 Scale= dichotomous	Not provided	Hong Kong Chinese residents	China
25	(Noone et al., 2010b)	Four dimensions structure	<ul style="list-style-type: none"> Retirement representations Retirement 	Items=52 Scale=5-point scale	a=0.67—0.88	New Zealanders	New Zealand

#	Author/ Year	Factor Structure	Dimensions	Scale Characteristics	Reliability (Cronbach α)	Sample	Country profile
			goals <ul style="list-style-type: none"> The decision to prepare for retirement Preparing for retirement 				
26	Yeung (2013)	Four dimensions structure	<ul style="list-style-type: none"> Financial planning Health planning Social life planning Psychological planning (Adopted from Law et al. 2006)	Items=20 Scale=dichotomous	Not provided	Hong Kong Chinese retiree	China
27	Yeung et al. (2017)	Four dimensions structure	<ul style="list-style-type: none"> Financial planning Health planning Social life planning Psychological planning (Adopted from Law et al., 2006; Yeung, 2013)	Items=20 Scale=dichotomous	Not provided	Hong Kong Chinese working adults and retirees	China
28	Seidl et al. (2021)	Four dimensions structure	<ul style="list-style-type: none"> Financial planning Lifestyle planning Psychosocial planning Health planning (Adapted from Noone et al., 2010b)	Complete Spanish items=37 Short Spanish items=24 Scale=5-point scale	Complete Spanish $\alpha=0.92$ Short Spanish $\alpha=0.90$	Employee	Spain
29	Chan et al. (2021)	Four dimensions structure	<ul style="list-style-type: none"> Financial planning Health planning Social life planning Psychological planning (Adopted from Law et al., 2006; Yeung, 2013)	Items=20 Scale= dichotomous	Not provided	Hong Kong Chinese working adults	China
30	Báčová et al. (2017)	Five dimensions structure	<ul style="list-style-type: none"> FPR (Financial planning for retirement) trust in the 2nd pillar FPR Personal competence FPR Personal engagement FPR task complexity FPR emotional load 	Items=23 Scale=5-point scale	$\alpha=0.67-0.84$	Young employed adults	Slovak
31	Báčová and Kostovičová (2018)	Five dimensions structure	<ul style="list-style-type: none"> Trust in the 2nd pillar Beliefs about personal competence in relation to FPR (Financial planning for retirement) Beliefs about personal engagement in relation to FPR Beliefs about the task complexity of FPR 	Items=23 Scale=5-point scale	$\alpha=0.75-0.81$	Young employed adults	Slovak

#	Author/ Year	Factor Structure	Dimensions	Scale Characteristics	Reliability (Cronbach a)	Sample	Country profile
			<ul style="list-style-type: none"> The emotional load represented by FPR (Adopt from Bačová et al, 2017) 				
32	(Wu, & Chao, 2023)	Five dimension structure	<ul style="list-style-type: none"> Financial planning Health planning Social life planning Residential planning Psychological planning (Adapted from Noone et al, 2010b; Petkoska & Earl, 2009; Muratore & Earl, 2010) 	Items=17 Scale=4-point scale	Not provided	Chinese older adults	China

Information Regarding the Response Scale

The nine articles that introduce new measurement scales employ dichotomous scales (yes/no). In dichotomous items, there is a noteworthy absence of discriminating capacity. For instance, the possession of personal savings explains nothing about their perceived adequacy (Noone et al., 2010a). In accordance with this, all 19 articles introducing new measuring scales employ Likert scales with a range of 1 to 7. The scale with the most articles (10) is 1 to 5. The scales typically run from strongly disagree to strongly agree.

Antecedents and Outcomes

Our analysis of the literature identifies antecedents and outcomes as the two key RP study issues. The RP framework divides antecedents into the following four major categories: demographic, psychological, economic, and social. Many scholars have also shown a link between RP and demographic characteristics (e.g., age, gender, income, education level). Research on the psychological elements influencing RP behavior is still in its infancy, however, compared to work on demographics, with only limited studies by, for example, Hershey et al. (2010) and Hershey et al. (2007). These elements—including retirement attitudes, future orientation, locus of control, financial risk tolerance, and clarity of retirement goals—are based on the existing literature. Economic elements that affect retirement planning include employer pensions, faith in the government, and confidence in banks and insurance companies. Finally, members of a person’s social network, such as spouses, co-workers, and friends, frequently have an impact on their decisions by giving them social norms for the “correct” course of action.

We also discovered that past research has mostly concentrated on analyzing the varied effects of RP. However, the current academic discussion on the study of RP outcomes demands additional research. In order to better bridge theory and practice, we summarize the RP findings from three perspectives: (1) post-retirement well-being (Yeung, & Zhou, 2017), (2) retirement savings (Van Rooij et al., 2011), and (3) retirement confidence (Liu et al., 2022) .

The Development of the Conceptual Framework

The research on the planning for retirement and the development of concrete conceptual models in this area still lack clarity and precision (Ghadwan et al., 2022b). We have created a thorough synthesis to help people better comprehend the complexity and diversity of RP research based on our comprehensive examination and evaluation of the various methods researchers have used to quantify RP in earlier studies. The suggested framework (Figure 2) takes into account a number of factors, including: (1) operational domain, (2) antecedents, and (3) outcomes. The proposed framework thus provides different measurement options and enables a more detailed understanding of RP (Figure 2).

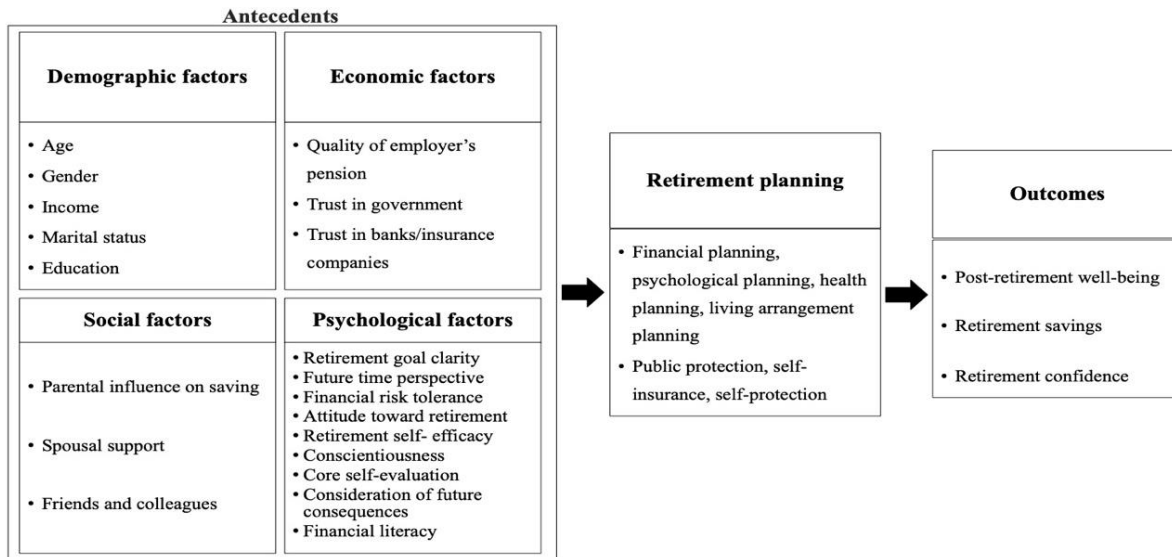


Figure 2: The Conceptual Framework of RP

Theoretical Frameworks

Our review's found that numerous theoretical frameworks have been applied in earlier studies. The following theoretical frameworks were most frequently employed: process theory (Friedman, & Scholnick, 1997), social cognitive theory (Bandura, 2001), the capacity-willingness-opportunity model (Hershey et al., 2013), and the theory of planned behavior (TPB) (Ajzen, 1991). According to the capacity-willingness-opportunity model, it is assumed that the effectiveness of retirement planning and saving depends on three factors: ability, willingness, and opportunity. The three theories—the TPB, process theory, and social cognitive theory—help us comprehend the different psychological, social, and financial elements that are related to RP. This diversity of frameworks, however, underscores the absence of an overarching conceptual framework and makes it challenging to combine and create consistent information.

DISCUSSION

Three key trends emerge from the results of our systematic review of the measurement of RP behaviors.

First, a significant proportion (53.13%) of the reviewed literature utilizes a unidimensional approach in measuring RP. These studies on RP have only measured it using a general item or have focused exclusively on financial planning. The most widely tested and validated in the previous literature was developed by Stawski et al. (2007). The limitation of this approach is that it neglects the importance of other domains for post-retirement well-being (Yeung, & Zhou, 2017).

Second, relatively few of the measurements of RP were based on any theory. Notably, Noone et al. (2010b) measures had a strong theoretical basis. However, it was less reliable on some subscales (Retirement Decisions subscale items: $\alpha = 0.52$ – 0.66 ; Lifestyle Preparedness: $\alpha = 0.67$; Health Preparedness: $\alpha = 0.65$). Moreover, Noone and colleagues' measure fails to consider the impact of pension policy on individual RP.

Third, despite growing utilization of multidimensional perspectives (Lee, & Law, 2004; Muratore et al., 2010; Petkoska et al., 2009), we identified a lack of consistency in the measurement multidimensional approaches. Specifically, the multidimensional measurement ranges from 2 to 5 dimensions. For instance, Law (2006) developed a widely cited four-dimensional measurement encompassing finances, health, life circumstances, and psychology. Notably, this measurement utilized a dichotomous scale, which has been acknowledged for its limited ability to discriminate. Additionally, Muratore et al. (2010) proposed another frequently cited three-dimensional measurement focusing on public protection, self-insurance, and self-protection, which assesses both financial and non-financial preparedness for retirement, as well as the government's role in retirement planning.

Theoretical Implications

This paper has several important theoretical implications. First, it describes the methods used to measure the RP construct in earlier investigations. This is crucial for academics, because there has little research conducted on measurement of the RP construct. Second, this paper creates a conceptual framework that defines the traits, objectives, and dimensions of RP. We provided evidence for numerous RP drivers, effects, and transmuting components. As a result, it may be used as a launching pad for further development of knowledge in this area of research. Third, we critically analyzed the contents and contributions of the current RP literature in order to identify research gaps and develop key research questions to shift the RP debate from what is currently known to what is still unknown. The literature review also identified some of the difficulties in measuring the RP construct and offered significant new insights into the RP literature. Finally, our analysis offers directions for further investigation that researchers may take into account in their own work in the future.

Practical Implications

The importance of RP for retirement well-being has been highlighted in earlier work. Due to the complexity of investment, planning, and retirement savings decisions, the body of research suggests that studying sophisticated planning for retirement calls for professionals. This paper suggests a strategy that counsellors and retirement advisors could use to assist their clients to handle their own RP effectively. Counsellors and retirement advisors should be aware of in order to better serve their clients' needs. Thus, RP may result in considerable advantages in the following life stage (Lamarche, & Rolison, 2021).

Limitations, and Future Research Trajectory

This study offers a thorough review of the RP metrics employed in earlier research ($n = 31$); thus, the development of a composite RP framework comes next. Additionally, this work could be a vital precursor for upcoming RP studies. By removing academic ambiguity and addressing significant knowledge gaps in the literature. This review opens the way for future researchers, who might use the review's conclusions as a guide for choosing the right theoretical lens and level of investigation. Our in-depth examination of the RP literature identified significant flaws and restrictions.

Readers should also take into account the following constraints while evaluating the theoretical and practical insights from this essay. Despite using a normal systematic review methodology in this paper, we limited our search to the WOS database using the terms "planning for retirement" or "retirement planning". Therefore, we may have overlooked research that was published in other databases or that contain other pertinent terms. Second, when developing the study, we used certain exclusion and inclusion criteria. In this regard, certain articles may not—Our sample did not include publications with measurement, those published after the day the search was conducted, or those written in languages other than English. In order to provide a thorough understanding of the RP construct, future research may incorporate those studies in their search attempt.

CONCLUSION

By analyzing current operationalizations' rigorously, this work was intended to shed some light on the conceptualization, measurement, antecedents and consequences of RP. The results of this study brought to light the absence of a common method for measuring RP, which may have led to inconsistent and unreliable findings in earlier studies. In order to address this fundamental problem, we used the systematic literature review technique. As a result, we were able to critically assess the strategically chosen RP publications.

In view of the well-documented limitations associated with dichotomies (Lee, & Law, 2004; Petkoska et al., 2009; Yeung, 2013), we call on researchers to consider using Stawski et al. (2007) who aim to investigate the finance aspect of RP. This method offers a more sensitive and nuanced measurement methodology that can significantly advance our understanding of the intricate processes underlying retirement planning.

Furthermore, we advocate that researchers interested in studying a broad aspects of retirement planning (RP) consider employing the three dimensions measurement developed by Muratore et al. (2010). These important life domains of public protection, self- insurance, and self-protection offer a comprehensive approach to

ensuring financial security, health, and well-being during retirement. It is worth noting that these measures have demonstrated the high reliability (public protection: $\alpha = 0.85$, self-insurance: $\alpha = 0.88$, self-protection: $\alpha = 0.80$) and validity in previous research. In Appendix we highlight the key measures used in previous research.

Importantly, this work has contributed to a discussion over how best to use its measurements and methodology. A thorough framework has also been proposed to define RP in terms of (1) dimensions, (2) antecedents, and (3) outcomes. Additionally, this study identifies limits and information gaps in already conducted RP research and proposes a research agenda for future studies.

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Appendix

Key measurement of retirement planning

Author/Year	Number of items	Sub dimensions	Scale Items
Stawski et al. (2007)	10	/	<ol style="list-style-type: none"> 1. Frequently read articles/brochures on investing or financial planning; 2. Read one or more books on investing or financial planning; 3. Frequently visited financial planning sites on the World Wide Web; 4. Gathered or organized your financial records; 5. Regularly tuned into television/radio shows on investing or financial planning; 6. Conducted a thorough assessment of your net worth; 7. Identified specific spending plans for the future; 8. Discussed financial planning goals with a professional(s) in the field; 9. Discussed financial retirement plans with an employer's benefits specialist; 10. Discussed retirement plans with a knowledgeable friend or acquaintance.
Hershey et al. (2010)	4	/	<ol style="list-style-type: none"> 1. Calculations have been done to determine how much will need to be saved. 2. I have read books and brochures on retirement planning. 3. I have informed myself about future retirement benefits. 4. I have informed myself about retirement preparation.
Muratore et al. (2010)	28	<ul style="list-style-type: none"> • Public protection • Self-insurance • Self-protection 	<p>Public protection: 1. Pensions; 2. Seniors concession allowance; 3. Health concessions; 4. Seniors health care card; 5. Government-run seminars; 6. Public health programs;</p> <p>Self-insurance: 7. Nominating superannuation fund; 8. Superannuation fund performance; 9. Living cost; 10. Savings contributions; 11. Estate planning; 12. Investment; 13. Insurance; 14. Post-retirement job (financial); 15. Making superannuation fund contributions; 16. Checking superannuation fund; 17. Net worth; 18. Financial planning seminars; 19. Housing;</p> <p>Self-protection: 20. Health screening programs; 21. Outings with friends/family; 22. Calling or visiting friends/family; 23. post-retirement job (non-financial); 24. Healthy lifestyle; 25. Leisure activities; 26. Healthy mind; 27. New interests or skills; 28. Leisure planning seminars.</p>

Lee and Law (2004)	19	<ul style="list-style-type: none"> • Financial planning for retirement • Health planning for retirement • Living arrangement and activity planning for Retirement • Psychological planning activities for retirement 	<p>Financial Planning for Retirement: 1. Saving for retirement. 2.Bought flat or apartment for retirement. 3. Bought stocks, funds, or bonds for long-term investment for retirement. 4.Bought life or saving insurance policy. 5.Bought accident insurance policy.</p> <p>Health Planning for Retirement:</p> <p>6.Bought medical insurance policy. 7.Exercise regularly (at least twice a week). 8.Arrange medical checkup periodically (at least once every 2 years). 9. Quit or start to quit health hazard habits.</p> <p>Living Arrangement Planning for Retirement:</p> <p>10. Cultivate hobbies to keep busy during retirement. 11. Plan for retirement living arrangement. 12.Plan for retirement daily life activities.</p> <p>Psychological Planning for Retirement:</p> <p>13.Participate in workshops, seminars, or courses on retirement.14. Read books or articles about retirement. 15.Watch television or listen to radio programs concerning retirement. 16. Discuss with immediate family members about your retirement. 17. Discuss with relatives, friends, and colleagues about your retirement. 18. Discuss retirement with retired people. 19.Discuss retirement with social services workers.</p>
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