Article

Retirement Well-Being: A Systematic Review of the Literature

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Abstract

The objective of this systematic literature review was to investigate the variables that would improve well-being in retirement by analyzing relevant empirical studies. In the literature search, six keywords (retirement, positive psychology, well-being, satisfaction, happiness and quality of life) were used in six international academic portals. This search identified 403 articles, and those meeting the pre-established inclusion criteria were extracted. The 55 articles selected were analyzed based on nine categories: language, year, journal, country, objective, dependent variable, instruments, independent variables and results. The studies had a longitudinal, transversal design or reported on instrument creation and validation. The literature review pointed out a large number of variables, confirming the multidimensionality of the constructs. Aspects highlighted include health, economic situation, gender, marital status, interpersonal relationships, whether retirement was voluntary, retirement duration and leisure activities. A compilation of variables and an agenda for future studies are proposed based on the results of this review.

Keywords: Retirement, well-being, systematic literature review.

Bem-Estar na Aposentadoria: Uma Revisão Sistemática da Literatura

Resumo

O objetivo desta revisão sistemática de literatura foi investigar as variáveis que provocariam bem-estar na aposentadoria, analisando estudos empíricos relacionados ao tema. Na busca, foram utilizadas seis palavras-chave (*retirement*, *positive psychology*, *well-being*, *satisfaction*, *happiness* e *quality of life*) em seis portais acadêmicos internacionais, emergindo 403 artigos, sendo extraídos os que atendiam aos critérios de inclusão pré-estabelecidos. Os 55 artigos selecionados foram analisados com base

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em nove categorias: idioma, ano, revista, país, objetivo, variável dependente, instrumentos, variáveis independentes e resultados. Os estudos tinham caráter longitudinal, transversal ou criação e validação de instrumentos. A revisão de literatura apontou um grande número de variáveis, confirmando a multidimensionalidade dos constructos. Os seguintes aspectos se destacaram: saúde, situação econômica, gênero, status conjugal, relacionamentos interpessoais, voluntariedade da aposentadoria, tempo de aposentadoria e atividades de lazer. Uma compilação de variáveis e uma agenda de estudos futuros foram propostas, baseando-se nos resultados desta revisão.

Palavras-chave: Aposentadoria, bem-estar, revisão sistemática de literatura.

Bienestar en la Jubilación: Una Revisión Sistemática de la Literatura

Resumen

El objetivo de esta revisión sistemática de la literatura fue investigar las variables que causan bienestar en la jubilación, analizando los estudios empíricos relacionados con el tema. En la búsqueda, se utilizaron seis palabras clave (jubilación, psicología positiva, bienestar, satisfacción y calidad de vida) en seis portales académicos internacionales, con 403 artículos emergentes, con los criterios de inclusión preestablecidos. Los 55 artículos seleccionados se analizaron en base a nueve categorías: idioma, año, revista, país, objetivo, variable dependiente, instrumentos, variables independientes y resultados. Los estudios fueron de carácter longitudinal, transversal o de creación y validación de instrumentos. La revisión bibliográfica señaló un gran número de variables, lo que confirma la multidimensionalidad de los constructos. Algunos aspectos fueron destacados: salud, situación económica, género, estado civil, relaciones interpersonales, voluntariado en la jubilación, tiempo de jubilación y actividades de ocio. Se propuso una compilación de variables y una agenda para estudios futuros sobre la base de los resultados de esta revisión.

Palabras clave: Jubilación, bienestar, revisión sistemática de la literatura.

The trend of studying different phenomena by the positive look was inaugurated a little over a decade ago (Seligman & Csikszentmihalyi, 2000). Since then, a number of studies have been developed to deviate from the focus on disease psychology and on harms, and special emphasis has been given to cognitive and emotional processes that allow promotion of each individual potentiality (Reppold, Gurgel, & Schiavon, 2015). During this period, study of positive psychology has contributed to construction of instruments that can be used to measure, identify, and enhance health of individuals and groups in their individual environments and institutions.

Among the main contributions of positive psychology is the development of theories and well-being. Among these is a study on the approach of subjective well-being (Diener, Emmons, Larsen, & Griffn, 1985). According to this

approach, well-being includes global judgments and specific satisfaction with life and emotional experiences; this perspective considers theories on affect (positive or negative) and theories that support cognition and can be operationalized by satisfaction evaluations (Diener et al., 1985).

Positive concepts have overcome positive experiences in an individual perspective for social, cultural, community, collective and public policies. For example, studies have evaluated work engagement, positive aging, resiliency, and post-traumatic growth (Reppold et al., 2015). The same occurs with views of retirement; and the literature frequently used terminology that led to an optimistic vision of retirement consisting of well-being, satisfaction and resilience (Nalin & França, 2015).

The growth of the older population is a worldwide phenomenon. Although this situation

is a positive one, it requires special attention regarding resources needed to assist this population. In Brazil, 1960 the life expectancy was 54 years; within only 57 years it increased by 22 years (i.e., in 2017 was 76 years; Instituto Brasileiro de Geografia e Estatística [IBGE], 2018). This rapid increase in the age of the elderly Brazilian population also agrees with the higher number of individuals who have retired without a guarantee of the sustainability of resources needed for well-being (França, 2012). There is a scarcity of studies and actions for retirees, and, because of the rapid growth in this age group, further studies on this topic are warranted, especially in Brazil (Boehs, Medina, Bardagi, Luna, & Silva, 2017).

Retirement can be seen as an advantageous or disadvantageous period for those who retire. On the other hand, the importance society places on work causes some to perceive retirement as a time of economic, emotional or psychosocial loss. On the other hand, cessation of work can be viewed as an opportunity to restart life, with additional freedom and more time for relationships and general activities (França, 2012).

Some researchers have demonstrated this more optimistic view of life during retirement – as a restart – but few scholarly studies have been done, especially in Brazilian (França, 2012). Previous reviews emphasized the scarcity of translated measures focusing on antecedents and consequences of this transition (Rafalski, Noone, O'Loughlin, & Andrade, 2017), behavioral measures (Barbosa, Monteiro, & Murta, 2016), and approaches to and diversity of methods of study and intervention (Boehs et al., 2017). In addition, the focus on positivity is still little approached in studies and education practices, orientation, or preparation for retirement (Siguaw, Sheng, & Simpson, 2016).

Despite existing gaps, there is consensus about the number of factors that determine the decision to retire and that can influence well-being (França, Bendassoli, Menezes, & Macedo, 2013). Among the most cited are financial and health conditions (Amorim, França, & Valentini, 2017; Hershey & Henkens, 2013; Van Solinge &

Henkens, 2008), marital status, social and family relationships (Fouquereau, Fernández, & Mullet, 1999) and leisure activities (Earl, Gerrans, & Halim, 2015). In addition, longitudinal studies found positive effects of retirement, especially because of such circumstances such as voluntary retirement, advanced age and opportunity to engage in bridge employment, in which the individual continues to work but at a job with reduced time, with the aim to retire later (Dingemans & Henkens, 2015; França et al., 2013; Gall, Evans, & Howard, 1997; Latif, 2011).

Psychological perspectives related to retirement are generally focused on the adjustment process, on the decision for retirement, and career process evolution (Wang, 2007). Some authors, however, understand well-being in retirement as different from adjustment to retirement. They argue that an individual can adjust to retirement without being satisfied or finding it an advantage (Van Solinge & Henkens, 2008); interest about fluctuation in well-being in this phase of life was recently inaugurated.

Therefore, studying this topic with a focus on well-being is important, although recent studies have concentrated on predictors of adjustment during retirement (Barbosa et al., 2016; Boehs et al., 2017). The current study investigated and systematized information obtained in studies on well-being during retirement by using a systematic literature review of studies that evaluated well-being, happiness, satisfaction, and quality of life, by collection of differences among constructors and adjustment concepts for retirement.

Method

The study search was done electronically by using six online portals: Scielo, PsycInfo, BVS, PubMed, IngentaConnect and Elsevier. Keywords used were retirement (related to retirement) AND positive psychology OR wellbeing OR satisfaction OR happiness OR quality of life (related with positive psychology), without establishing years of publication. Initially, 403 articles were retrieved: 30 from Scielo, 27 from

Table 1 Inclusion and Exclusion Criteria

Inclusion criteria

- 1. Concerned exclusively with retired population.
- 2. Scientific article with any year of publication.
- 3. Empirical quantitative or mixed study.
- 4. Written in English, Portuguese or Spanish.
- 5. Used self-assessment instruments of well-being, satisfaction with life, happiness and quality of life.
- 6. Full abstract available.

Exclusion criteria

- 1. Not exclusively about retirement population.
- 2. Measured health and/or physical activity.
- 3. Literature review, thesis, books, and book chapters.
- 4. Descriptive studies.

PsycInfo, 130 from BVS, 67 from PubMed, 84 from Ingenta, and 65 from Elsevier. Table 1 shows inclusion and exclusion criteria used in the analysis of articles.

On the basis of inclusion criteria, we excluded 156 of the 403 articles found; this resulted in a sample of 247 articles on retired populations. Subsequently, we excluded articles that included no scientific assessment, those that were not empiric or quantitative, and those with a mixed approach, thereby reducing the sample to 194 articles. Only four articles were written in Portuguese; most were written in English or

Spanish. We also excluded 69 articles that did not evaluate well-being, 26 other articles because they lacked a complete abstract, and 35 articles because they were duplicates.

The text of the remaining 60 articles was read to review the inclusion and exclusion criteria. After this review, five additional studies were excluded because they dealt with an elderly population; evaluated well-being using such variables as health, financial situation, and practice of physical activity; or reported on descriptive studies; after these exclusions, 55 articles remained. Figure 1 shows the analysis and selection process of the identified articles.

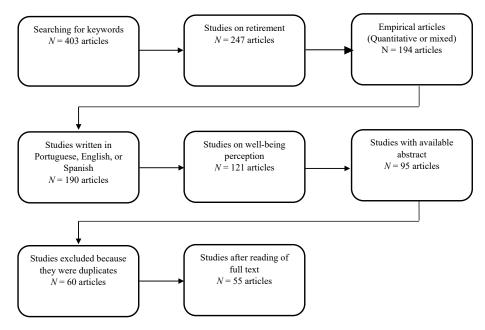


Figure 1. Stages of analysis and results in article search.

Results

The 55 articles selected were analyzed by language, year, journal, country where the study was done, objective of the study, dependent variable studied, instruments used and independent variables included in the model. Results were divided into five sessions: date of publication, objectives, dependent variables, independent variables, and results found.

Data of Publications (language, year of publication, location of the study, and types of journal)

All articles were published in English. Almost half of studies (43.7%) were published in 2010 and after, 29.1% were published between 2000 and 2009 and 14.4% were published in the 1990s. A small portion of the articles was published in 1980s (7.3%) or 1970s (5.5%). Approximately half were published in journals on aging or geriatrics and gerontology (47.3%).

Most articles (45.5%) were developed in the United States and Canada, followed in frequency by European countries (23.6%). Six studies were from Australia (10.9%) and five were from East Asia (9.1%). A small percentage of studies were developed in Southwestern Asia (5.4%), Brazil (3.7%) and Nigeria (1.8%).

Objective of Studies (cross-sectional, longitudinal, or validation and creation of instruments)

Articles were classified into three objectives: i) to verify difference between levels of dependent variables at different times, configured as longitudinal studies (34.5%), ii) to verify the influence of independent variables on dependent variables, with a cross-sectional format (56.4%), or iii) to develop, adapt or verify evidence of the validity of an instrument (9.1%). Such classification is presented in Table 2 and is used throughout our study.

Table 2
Dependent Variables and Measurement Instruments

	Authors/Year of publication	Dependent variable	Instrument
i	Barrett & Kecmanovic (2013)	Subjective well-being	Continuing Person Questionnaire - HILDA (Melbourne Institute, 2001)
	Bell (1978)	Satisfaction with life	Life Satisfaction Index - Reduced version (Neugarten, Havighurst, & Tobin, 1961)
	Burr, Santo, & Pushkar (2009)	Affects	Positive and Negative Affect Scale - PANAS (Watson, Clark, & Tellegen, 1988)
	Calvo, Haverstick, & Sass (2009)	Happiness	5 questions
	Coursolle, Sweeney, Raymo, & Ho (2010)	Emotional WB	Psychological well-being scale (Ryff, 1989)
	Dingemans & Henkens (2015)	Satisfaction with life	3 items of Satisfaction with life scale (Diener et al., 1985)
	Gall & Evans (2000)	Quality of life	Retirement Descriptive Index – RDI (Smith, Kendall, & Hulin, 1969)
	Gall et al. (1997)	Satisfaction with life	1 question
	Hershey & Henkens (2013)	Satisfaction with life	3 items of Satisfaction with life scale (Diener et al., 1985)
	Herzog, House, & Morgan (1991)	WB	4 items of Life Satisfaction Index (Neugarten et al., 1961)

fe scale (Dijkers, 2003)
e (Lawton, 1975)
al well-being scale (Ryff,
with life scale – SWLS 1., 1985)
eale (Hyde, Wiggins, ane, 2003)
ed on CES-D scale 77)
al well-being scale (Ryff,
Happiness Scale ky & Lepper, 1999)
ction Index (Neugarten et
al well-being scale (Ryff,
Person Questionnaire - elbourne Institute, 2001)
Descriptive Index – RDI , 1969)
Descriptive Index – RDI , 1969)
Negative Affect Scale - Tatson et al., 1988)
with life scale – SWLS , 1985)
Satisfactory Inventory - et al., 1992)
Descriptive Index - et al., 1969) and Life Index (Neugarten et al.,
ction Index (Neugarten et
vell-being scale (Cardoso 2009)

	Nimrod (2007)	Satisfaction with life	Life Satisfaction Index (Neugarten et al., 1961)
	Nimrod (2008)	Satisfaction with life	Life Satisfaction Index (Neugarten et al., 1961)
	Noone, O'Loughlin, & Kendig (2013)	Satisfaction with life	5 questions
	O'Brien (1981)	Satisfaction with retirement.	Retirement Descriptive Index - RDI (Smith et al., 1969)
	Peretti & Wilson (1975)	Emotional satisfaction	7 questions
	Price & Balaswamy (2009)	Satisfaction with retirement.	Retirement Satisfactory Inventory - RSI (Floyd et al., 1992)
	Price & Joo (2005)	Satisfaction with retirement.	Retirement Satisfactory Inventory - RSI (Floyd et al., 1992)
	Quick & Moen (1998)	Satisfaction with retirement.	1 question
	Robbins, Lee, & Wan (1994)	Satisfaction with retirement.	Life Satisfaction Index (Neugarten et al., 1961)
	Seccombe & Lee (1986)	Satisfaction with retirement.	2 questions
	Sener, Terzioglu, & Karabulut (2007)	Satisfaction with life	Life Satisfaction Index (Neugarten et al., 1961)
	Siguaw et al. (2016)	Satisfaction with life	Satisfaction with life scale (Diener et al., 1985)
	Smith & Moen (2004)	Satisfaction with retirement.	1 question
	Stephan, Fouquereau, & Fernandez (2008a)	Satisfaction with retirement.	Retirement Satisfactory Inventory - RSI (Floyd et al., 1992)
	Stephan, Fouquereau, & Fernandez (2008b)	Satisfaction with life	Retirement Satisfactory Inventory - RSI (Floyd et al., 1992)
	Wang, Wu, & Wu (2013)	Quality of life	World Health Organization Quality of Life Group scale (WHOQOL, 1998)
	Zhang, Tao, Ueda, Wei, & Fang (2013)	Quality of life	WHOQOL scale (1998)
iii	Bigot (1974)	Satisfaction with life	Life Satisfaction Index (Neugarten et al., 1961)
	Floyd et al. (1992)	Satisfaction with retirement.	RSI (Floyd et al., 1992)
	Fouquereau et al. (1999)	Satisfaction with retirement.	RSI (Floyd et al., 1992)
	Leung & Earl (2012)	Satisfaction with retirement.	10 items for RSI (Floyd et al., 1992)
	Michinov, Fouquerau, & Fernandez (2008)	Satisfaction with retirement.	1 question

 $Note.\ i = longitudinal\ study;\ ii = cross-sectional\ study,\ iii = creation\ study\ or\ instrument\ validation.\ Emotional\ WB-Emotional\ well-being,\ WB-well-being,\ Psychological\ WB-psychological\ well-being,\ Subjective\ WB-subjective\ well-being.$

Dependent Variables (well-being, satisfaction with life, satisfaction in retirement, happiness and its respective instruments)

relation dependent In to variables investigated, we observed that a greater proportion of articles used constructs: satisfaction with life (37.3%), satisfaction in retirement (29.1%) or psychological well-being (10.1%). A small number of authors worked on the construct of quality of life (7.3%), happiness (3.6%), subjective well-being (3.6%), wellbeing (3.6%), emotional well-being (1.8%), affect (1.8%) and emotional satisfaction (1.8%; Table 2).

Among the instruments used to measure such variables were questionnaires that consisted of 1 to 7 items and that were developed by the authors (21.8%), the Retirement Satisfactory Inventory (Floyd et al., 1992; 16.6%), and some or all items of the Life Satisfactory Inventory (Neugarten et al., 1961; 16.6%). Only 9% of data used some or all items of the Satisfaction with Life Scale (Diener et al., 1985) and the Retirement Descriptive Index (Smith et al., 1969). The Ryff's Psychological Well-Being Scale (1989) was used in 7.3% of papers.

A small percentage of studies used the WHOQOL (1998) scale (3.6%), Continuing Person Questionnaire – HILDA (Melbourne Institute, 2001; 3.6%), Positive and Negative Affect Scale (Watson et al., 1988; 3.6%), Subjective Happiness Scale (Lyubomirsky & Lepper, 1999; 1.8%), Subjective Well-Being Scale (Cardoso & Ferreira, 2009; 1.8%), CASP-19 Scale (Hyde et al., 2003; 1.8%) and 8 items based on CES-D Scale (Radloff, 1977; 1.8%).

Independent Variables

Among independent variables mentioned in the selected studies, the most cited were health (56.4% of articles), economic situation (50.9%), gender (23.6%), conjugal relationship (13.4%), interpersonal relationships (13.4%), voluntary retirement (12.7%), retirement duration (10.9%) and leisure activities (10.9%).

Few articles mentioned: conjugal relationships (9.1%), continuing to work (7.2%), age (7.2%), engagement in a number of activities (7.2%), places where respondents lived (5.5%), retirement time (5.5%), family relationships (5.5%), physical activities (3.6%), voluntary work (3.6%), feeling of loneliness (3.6%), retirement of a partner (3.6%), bridge employment (3.6%), satisfaction with previous work (3.6%) and type of previous work (3.6%).

Other variables, mentioned in only one article were: previous satisfaction with retirement, values attributed to work, health of partner, loss of partner, job loss before retirement, compulsory retirement, self-transcendence, openness to changes, conservation of values, cognitive resources, motivational resources, management of free time, body satisfaction, motivation to do activities, interference of work in family life, having children living at home, self-employment, self-efficacy, ageism, maintenance of objectives, self-esteem, emotional support, ethnicity, innovative characteristics, prestige in previous work, selfcontrol, having children, sense of humor, living in assisted living residence, age of retirement, demographic density in place where respondent lives, optimism, and free time for activities and hobbies. Each variable corresponded to 1.8% of studies. These results are shown in Table 3.

The data found allowed us to compile independent variables, subdivided into five categories: personal resources, demographic characteristics, activities, previous job, and characteristics of retirement. This compilation is shown in Table 4. The intention was not to limit existing variables. On the contrary, for the number of variables that presented significant effects, it is important to develop studies that continue to explore and test models that include the largest number of possible variables.

Table 3 Dependent Variables per Study

	Authors/Year of publication	Independent variables
i	Barrett & Kecmanovic (2013)	Economic situation, time to retire, health, health of the partner, loss of job voluntary retirement.
	Bell (1978)	Voluntary work, family relationship, compulsory retirement.
	Burr et al. (2009)	Gender, economic situation, feeling lonely, self-transcendence, openness to change, conservation of values.
	Calvo et al. (2009)	Involuntary retirement, health, loss of partner.
	Coursolle et al. (2010)	Interference of work in the family, conjugal relationship, having children living at home, self-employment, sex, health.
	Dingemans & Henkens (2015)	Bridge employment, age, economic situation, health, conjugal status, voluntary retirement
	Gall & Evans (2000)	Activities done, economic status, health, interpersonal relationships.
	Gall et al. (1997)	Activities done, economic status, interpersonal relationships, health.
	Hershey & Henkens (2013)	Job position before retirement, level of formal education, health, volunteer for retirement.
	Herzog et al. (1991)	Volunteer for retirement.
	Ju et al. (2016)	Economic status.
	Kim & Moen (2002)	Time for retirement, sex, retirement of partner, self-control, conjugal relationship, health, and economic status.
	Kubicek et al. (2011)	Exercise, satisfaction with previous job, economic status, interpersonal relationship, sex.
	Latif (2011)	Economic status, health, conjugal status.
	Martin et al. (2013)	Volunteer for retirement.
	Pinquart & Schindler (2007)	Age in retirement, sex, economic status, conjugal status, health, leisure activities, time for retirement.
	Platts et al. (2015)	Mental health, physical health, interpersonal relationship, economic status
	Wang (2007)	Bridge employment, planning for retirement, conjugal status, satisfaction with previous job.
	Yeung (2013)	Planning for retirement.
ii	Amorim et al. (2017)	Interpersonal relationships, health, demographic density in place of residence.
	Austrom et al. (2003)	Health, optimism, economic status, time for leisure activities and hobbies, time for retirement, conjugal relationship.
	Brajkovic et al. (2011)	Having children, health, feeling lonely, sense of humor, live in assisted living residence, economic status.
	Chiang et al. (2012)	Sex, family relationship, health.
	Cho & Lee (2013)	Sex, age, level of formal education, conjugal relationship, type of previous job, continuing to work, place of residence.
	Dorfman & Moffet (1987)	Health, economic status, level of formal education, prestige in the previou job, conjugal status, interpersonal relationship, age, volunteer work.

Dorfman (1995) Health, sex.

Earl et al. (2015) Activities, interpersonal relationship.

Ejechi (2012) Exercise, continue to work.

Fouquereau et al. (2005) Place of residence, health, economic status, previous satisfaction with

retirement.

Hooker & Ventis (1984) Values attributed to work, activities.

Iwatsubo et al. (1996) Conjugal status, health, leisure activities, family relationship.

Nalin & França (2015) Resilience, economic situation.

Nguyen et al. (2014) Conjugal relationship, health, economic status.

Nimrod (2007) Leisure activities.

Nimrod (2008) Health, place of residence, innovative characteristics.

Noone et al. (2013) Sex, planning for retirement, economic situation, time for retirement.

O'Brien (1981) Leisure activities, health, economic situation.

Peretti & Wilson (1975) Voluntary retirement.

Price & Balaswamy (2009) Self-esteem, emotional support, race/ethnicity, economic status.

Price & Joo (2005) Conjugal status

Quick & Moen (1998) Sex, health, continue to work, economic status, planning for retirement.

Robbins et al. (1994) Leisure activities, maintenance of objectives.

Seccombe & Lee (1986) Economic status.

Sener et al. (2007) Leisure activities, health, financial status.

Siguaw et al. (2016) Health, ageism, self-efficacy.

Smith & Moen (2004) Retirement of partner, financial situation, health.

Stephan et al. (2008a) Satisfaction with body, health.

Stephan et al. (2008b) Motivation to keep active, time for retirement, health.

Wang et al. (2013) Management of free time.

Zhang et al. (2013) Financial status, sex.

iii Bigot (1974) Age, economic status.

Floyd et al. (1992) Level of formal education, sex, economic situation.

Fouquereau et al. (1999) Interpersonal relationship, health, conjugal status.

Leung & Earl (2012) Continue to work, sex, age, cognitive resources, motivational resources,

economic status, interpersonal relationship, health, conjugal status.

Michinov et al. (2008) Affective identity

Note. I = longitudinal study; ii = Cross-sectional study; iii = Creation study or instruments validation.

Table 4
Compilation of Variables Related with Satisfaction with Retirement

Personal resources	Demographic variables	Previous job	Activities done	Characteristics of retirement
Health conditions	Gender	Continue to work	Number of activities	Time of
Financial conditions	Age	Bridge employment	done	retirement
Satisfaction with body	Marital status	Values given to work	Physical activities	Volunteer
Family and conjugal	Level of formal	Loss of job before	Voluntary work	Compulsory
relationship	education	Before retirement	Leisure activities	retirement
Health/Loss of a partner	Race/Ethnicity	Relationship work-	Time for hobbies	Planning
Interpersonal relationship	Place of residence	family	Maintenance of	Age in
Presence of child	Features of place of	Self-employment	objectives	retirement
Emotional support	residence	Type of work		Retirement
Optimism, sense of humor		Satisfaction with		of a partner
feeling lonely		work		Early
Self-transcendence				satisfaction
Self-efficacy				with retirement
Openness to change and				Ageism
innovation				
Motivation				
Self-control				
Values of conservation				
Identify				
Self-esteem				

Results Found (Cross-sectional studies, longitudinal studies and creation and/or validation of instruments)

Cross-Sectional Studies. With regard to cross-sectional studies, in addition to independent variables investigated and mentioned in the previous section, we highlight results found in six studies that analyzed the relationship between variables. One of them showed that the relationship of satisfaction with one's body and satisfaction in retirement was partially measured by subjective health.

The relationships between social support and satisfaction with life of retirees and between social support and quality of leisure time were measured by continuity of goals. For retirees who had limited leisure activities before retirement, the experience of new activities was far more important than continuing the process of adapting to retirement.

Regarding retirement planning, regardless of whether the event was involuntary or voluntary,

the preparation for retirement was associated with satisfaction with life. A study whose results should be highlighted was a transcultural study that included workers from South Korea, Germany, and Switzerland. In South Korea, only workers who definitely retired had higher levels of satisfaction with life compared with those who continued working, whereas in Germany and Switzerland those who continued to work had higher levels of satisfaction with life.

Longitudinal Studies. Three longitudinal studies reported positive impact of retirement, and one study found a negative impact. One finding that should be highlighted is that retirement can be more a relief than a stressor for individuals who had a very demanding job that interfered with family life. In the case of stressed families, that did not change with retirement.

In relation to personal resources, receipt of government pension influenced quality of life. For health, persistence in seeking for objectives and flexibility in adjusting to goals in adulthood was beneficial for well-being in retirement. Differences in age, gender, marital and socioeconomic status and resources before retirement influenced levels of well-being after that transition.

Regarding variables related to work, greater planning was associated with an increase in psychological well-being. The degree of occupancy in adult life and standard of participation in the work market influenced well-being in retirement, as did bridge employment, which seemed to be strategy for dealing with involuntary retirement because it can prevent negative changes during retirement. Voluntary retirement was shown as a positive influence on the level of satisfaction after retirement.

Creation **Studies** Validation or Instruments. In relation to the creation and validation of the instruments we highlighted five studies measured the satisfaction in retirement (Floyd et al., 1992), the retirement resources (Leung & Earl, 2012), satisfaction with life (Bigot, 1974) and the retiree's social identification (Michinov et al., 2008). It has also applied the satisfaction in retirement in a different sample than the original study (Fouquereau et al., 1999). In these studies, reasons to retire, sources of leisure time, and satisfaction with life during retirement were explained by predictors of satisfaction with health and resources, anticipated satisfaction, satisfaction with family and marriage, recovery of liberty and control. The same dimensions had differential functioning for differences in gender, socioeconomic status, time of retirement and bridge employment.

Physical, financial, social, emotional, cognitive and motivational resources added to satisfaction during retirement, in addition to what was explained by demographic variables. Acceptance and retirement had differential functioning to age and socioeconomic status. Social identity of retirees was composed of cognitive, evaluative, and affective components; only the affective component predicted satisfaction with retirement.

Discussion

To investigate and systematize information obtained so far about well-being during retirement, we analyzed 403 papers related to well-being. According to inclusion and exclusion criteria, we included 55 papers, national and international, quantitative or mixed.

Such publications were published in English and most of them were done in North America and Europe, thereby showing the need for studies in South America, Asia, and Africa. Although a substantial number of papers were published between 1970 and 1990, most were published after 2000, based on an increase in concern about the aging population that agreed with beginning of studies in positive psychology (Reppold et al., 2015; Seligman & Csikszentmihalyi, 2000).

More than half of selected articles were cross-sectional, one third were longitudinal and only 10% created or validated instruments. We highlight that both longitudinal studies – which facilitate understanding of dynamics of changes in retirement (Dingemans & Henkens, 2015) – and validation instruments studies – which involve beliefs, behaviors, and specific needs (Diener et al., 1985) – were observed only in developed countries.

Still, instrument development seems to be in the validation phase to differentiate populations, most papers used instruments developed for the general population and only three instruments were specific for retirees (Floyd et al., 1992; Neugarten et al., 1961; Smith et al., 1969). In this review, we included only papers that used self-report instruments, according to recommendations for studies of positive psychology (Calvo et al., 2009; Diener et al. 1985).

Independent analysis of variables allowed to conclude that some variables were consolidated in the literature regarding effect on well-being (Amorim et al., 2017; Dingemans & Henkens, 2015; Hershey & Henkens, 2013; Latif, 2011). These variables are health, economic situations, gender, conjugal status, interpersonal

relationships, voluntary retirement, time for retirement, and to do leisure activities. A large number of other variables, although investigated with less frequency, presented significant effects on well-being in retirement, which confirms the multidimensional of this construct as mentioned by a number of authors (Barbosa et al., 2016; Boehs et al., 2017; França, 2012; Nalin & França, 2015).

These compiled variables presented five dimensions: demographic variables, personal resources, previous work characteristics, ability to do activities, and characteristics of retirement. Previous work characteristics were included in fewer studies, whereas dimensions related to demographic variables and personal resources were mentioned more often. Regarding the latter, we observed a focus on health and financial conditions in compensation to personal, emotional, and motivational characteristics. The literature seems to progress, therefore, for consensus that health, finances, and social conditions influence how retirement can be assessed in terms of well-being. Continuing results in this sense using different delineations corroborate with the beliefs of many subgroups for retirement (Hershey & Henkens, 2013; Wang, 2007).

We understand that including all independent variables in a single model would be almost impossible because of the number of variables. However, it is fundamental to studies using little consolidation of variables in order to fulfill gaps pointed out in other studies, reinforcing the multi-dimension of well-being in retirement (França, 2012; França et al., 2013).

Analysis of work characteristics and retirement shows not only the impact of involuntary and voluntary retirement (negative and positive, respectively) but also the importance of preparation for retirement in any situation (Calvo et al., 2009; Dingemans & Henkens, 2015). Therefore, planning is confirmed as an important practice that must be stimulated as young people enter the job market (França, 2012; França et al., 2013).

Job standards developed throughout life must be considered to achieve well-being in retirement. Strategies for planning can include the increase of leisure activities (Earl et al., 2015), bridge employment, beginning a new career, or even remaining in the same job (Dingemans & Henkens, 2015; França et al., 2013). Because this job standard can be influenced by culture, it is relevant to perform transcultural studies that evaluate perception of retirement in different contexts (Cho & Lee, 2013; Kim & Moen, 2002).

França (2012) highlighted that retirement can be seen as a time of losses and gains in a positive and negative manner. This assessment, along with individual, demographic and cultural differences, seems to explain both positive and negative results concerning impact of well-being in retirement found in some of the studies selected in this review.

Conclusion

This study achieved its goal of exploring the literature on well-being during retirement and its influences. Gaps remain related to development in this area of study. Some variables related to demographic characteristics (gender, conjugal status), personal resources (health, economic situation, and interpersonal relationships), the characteristics of retirement (voluntary retirement, retirement time) and leisure activities are already consolidated as positively affecting well-being. However, further studies are warranted to approach the complexity of well-being in retirement of studies with longitudinal and transcultural design.

There are number of concepts used in retirement, some of them deal with the same construct. In Brazil, a number of studies are focused on decision process. Internationally, the adjustment process, regardless of satisfaction, seems to have gained more attention (Van Solinge & Henkens, 2008). Although we did not include all possibilities of transition in this review, it is necessary to consider the massive construction of these studies to amplify the knowledge about retirement and direct positive characteristics for this phase of life.

Of note, some limitations of this study do not allow generalizability of its results, such as the fact that the included studies were published in only three languages. In addition, we considered only empirical studies published as scientific articles. Book chapters on the subject were excluded. Such decisions were made with the aim of justifying the search, once free-access platforms were considered only for this type of publication.

Based on scarcity of national studies, we highlight the need of including well-being during retirement as a topic on the agenda of Brazilian researchers. The current lack can be corrected by studies that include the following points: analysis of well-being concepts, adjustment to retirement and decision to retire; development and adaptation of instruments directed for retirees; elaboration and testing of most robust models of investigations that cover different phases of retirement; development of longitudinal studies that may enhance the knowledge on the impact of well-being during retirement; construction of interventional models for pre-retirees and retirees to assess the impact on well-being of their life.

We believe that studies as mentioned above can improve integration sought by positive psychology, constructing knowledge in the urgent domain for society as well as well-being. For studies of retirement, to enhance the view that already exists, few studies have cited as a theory that possibly will contribute to harmonious departure from the job market and a positive perception of the possibilities and accomplishments during retirement.

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