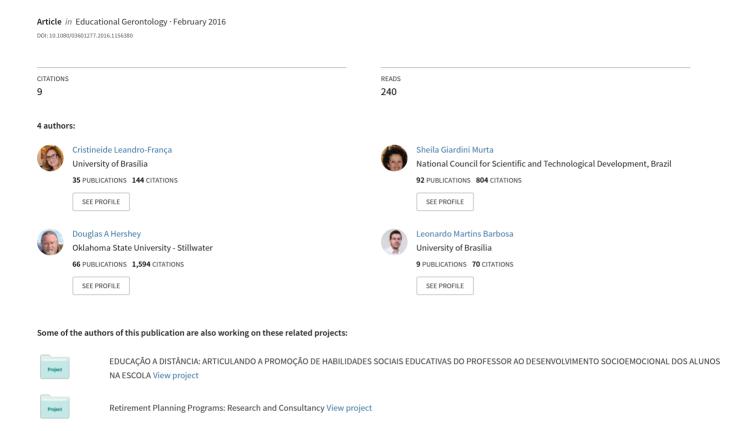
Evaluation of Retirement Planning Programs: A Qualitative Analysis of Methodologies and Efficacy





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Evaluation of retirement planning programs: A qualitative analysis of methodologies and efficacy

Cristineide Leandro-França^a, Sheila Giardini Murta^a, Douglas A. Hershey,^b and Leonardo Barbosa Martins^a

^aPost-Graduation Program in Clinical Psychology, Psychology Institute, University of Brasília, Brasília, Brazil; ^bDepartment of Psychology, Oklahoma State University, Stillwater, OK, USA

ABSTRACT

The objective of this integrative literature review was to evaluate the quality of retirement planning programs described in the extant literature. This was accomplished through a qualitative analysis of methodological and efficacy criteria as described by Flay et al. (2005), Kazdin (2010, 2011 and Murta (2005). Several databases were consulted in searching for retirement program articles including: Academic Search Premier, Medline, PsycInfo, and Web of Science, among others. Retirement planning intervention articles published in English, Portuguese, and Spanish were considered, with a focus on their evaluation methods and results. Eleven studies were identified that described the procedures for both program implementation and intervention evaluation. Results revealed methodological shortcomings in the papers reviewed, with concerns being related to a lack of experimental or quasiexperimental approaches, a failure to use previously validated measurement instruments and longitudinal assessments, and insufficiently robust data analysis procedures. That said, however, there was evidence from multiple investigations that the intervention programs examined led to increases in knowledge, positive changes in attitudes linked to retirement, and an increase in retirement-linked planning and preparation behaviors. Identification of strengths and weaknesses in the methods used and efficacy of these interventions could facilitate the construction of a research agenda aimed at promoting more favorable research designs. Use of more rigorous designs would stand to improve the internal validity of these retirement programs and, consequently, progress in this field.

In many countries around the world, life expectancy continues to increase. According to the World Health Organization (WHO, 2014), by the year 2020, for the first time in history, the number of people 60 years of age or older will exceed the number of children under the age of five. Consequently, there has been an increase in the growth rate of chronic diseases and a concomitant decrease in age-related wellbeing, resulting in a major global public health challenge. One implication of these trends is that people will live longer than ever before after entering retirement, and many will be in jeopardy of experiencing a poor quality of life. That being the case, retirement planning intervention programs that actively promote wellbeing and quality of life can play an important role in helping individuals take proactive steps to avoid negative life outcomes (Comish, 1995; Peila-Shuster, 2011).

The purpose of this article is to conduct an integrative review of published empirical studies on retirement intervention programs. In doing so, we focus on two different facets of such programs: (a) methodological aspects of different interventions (e.g., format, duration, delivery context), and (ib)

program efficacy considerations (e.g., participant satisfaction with the program, increases in knowledge, increases in adaptive preretirement planning behaviors). By adopting these dual foci, our hope is to determine whether some programs are more efficacious than others, with an eye toward understanding possible methodological reasons that distinguish performance outcomes. This study is unique in this regard; we could find no previous comparable reviews that have appeared in the extant retirement literature. We begin with a discussion of methodological dimensions, which is followed by a section that characterizes ways to distinguish intervention efficacy.

Methodological aspects of retirement programs

Employer-based retirement preparation programs began in the United States in the early-to-mid-1950s (Glamser, 1981; Salgado, 1980, as cited in; Zanelli, 2000). However, publications that describe such programs did not begin to appear in the literature until the 1970s. Most articles that describe retirement preparation programs suggest they lead to positive results (Beck, 1984; Heath, 1996; Makino, 1994; Marcellini, Sensoli, Barbini, & Fioravanti, 1997; Wolfe & Wolfe, 1975; Wotherspoon, 1995). This makes the prospect of the widespread dissemination of preparedness programs promising in light of the aging trends described above. However, most employer-based programs are targeted toward individuals in their mid-50 s and older, which—from health and financial planning perspectives—may be too late in life to make meaningful lifestyle changes that would result in increased postemployment life satisfaction (Ekerdt, 1989).

According to Hershey, Mowen, and Jacobs-Lawson (2003), retirement programs can be classified as being either limited or comprehensive depending on the range of topics covered. Limited programs typically focus on only one or two aspects of planning for the postemployment period (e.g., financial planning). Comprehensive programs address a broader range of topics (e.g., health, leisure, finances, social relations). These authors further distinguish programs that have a planning focus (typically seminars with group discussions) from those with a counseling objective (typically one-on-one sessions) in order to promote behavior change leading to enhanced retirement adjustment.

According to Glamser (1981), workplace retirement programs have been marketed under a variety of different names including those that focus on: retirement adjustment, retirement planning, retirement preparation, planning for late life, retirement education, and preretirement counseling (Glamser, 1981). Positive outcomes associated with participation in such programs include improved adaptation to retirement; positive changes in attitudes and habits (Ogunbameru & Sola, 2008); better relations between employees and their employers; and reduced objections to mandatory retirement (Glamser & DeJong, 1975). Others suggest retirement programs can improve life satisfaction following workplace departures (Glamser, 1981); increased postemployment autonomy; lower levels of anxiety; and the ability to develop projects appropriate for this stage of life (Makino, 1994).

Beyond the United States, significant strides have taken place in the delivery of retirement programs in Brazil since the 1980s. During that decade, one national Brazilian oil company (Petrobras) set the stage for the widespread dissemination of employer-sponsored programs, by offering retirement education for its employees. As a result, studies about Brazilian retirement programs began to appear in the literature in the 1990s (França, 1992; Muniz, 1996; Zanelli, 1994 [These three papers were not analyzed as part of the present investigation because they failed to meet the specified inclusionary criteria]). Further interest in retirement programs has been spurred on during the last decade by increases in life expectancy, improvements in the socioeconomic conditions of the population, and passage of the Elderly Statute (Brazilian Law 10/741/2003), which recommends the implementation of retirement planning programs in public and private organizations as a way of promoting quality of life and well-being among future cohorts retirees.

Seidl, Leandro-França, and Murta (2014) advanced a tripartite classification of retirement programs on the basis of their duration. Long-term (or continuing) programs typically involve 8-20 weekly sessions using a group-based meeting format. Intensive programs, in contrast, are shorter in duration and they typically involve immersion meetings that occur on consecutive days of the week. Brief programs—which in terms of duration is the shortest format—typically involve 1-3 sessions using a group-based meeting format. This distinction based on program duration should be useful in future work by helping to classifying qualitatively different approaches to retirement intervention.

In a narrative review chapter that focuses on retirement programs in Brazil, Seidl et al. (2014) suggest that both long and brief interventions can promote cognitive, motivational, and behavioral changes. Cognitive changes can include improvements in retirement decision making (such as deciding when to retire, or where to live after leaving the workforce), as well as the acquisition of new knowledge about factors related to retirement preparation, retirement adjustment, and successful aging (França, Murta, Negreiros, Pedralho, & Carvalhedo, 2013; Murta, Caixeta, Souza, & Ribeiro, 2008; Pereira & Guedes, 2012). Motivational changes are designed to foster the development and clarification of retirementlinked goals, and to heighten interest and involvement in goal-setting and goal-achievement activities (França et al., 2013; Murta et al., 2008; Soares, Costa, Rosa, & Oliveira, 2007). Finally, behavioral changes that may result as a function of involvement in a retirement program include steps that can be taken to strengthen one's social support network, financial autonomy, and health care practices (Murta et al., 2008; Soares & Costa, 2011; Zanelli, 2000).

Despite the fact that studies suggest advantages are associated with participation in retirement preparation programs (Beck, 1984; Heath, 1996; Makino, 1994; Marcellini et al., 1997; Wolfe & Wolfe, 1975; Wotherspoon, 1995), only a handful of studies that have evaluated such programs could be found in the literature. In the following section, we turn attention toward ways to evaluate intervention efficacy.

Program efficacy

Efficacy in the program evaluation context has been defined as the extent to which a specific intervention produces a beneficial effect under ideal implementation conditions (Flay et al., 2005). Writings on best practices in the delivery of intervention programs (Creswell, 2007; Flay et al., 2005; Kazdin, 2010, 2011) suggest a series of criteria that can be applied to evaluate the overall quality of a program. One higher-order dimension in this regard involves aspects linked to the methodological quality of the program. A second dimension involves the quality of specific program outcomes (i.e., whether the program had the intended impact on participants). In terms of the former (methodological considerations), one could look to a strong theoretical foundation for the development of the intervention program, the implementation of a pilot study prior to the intervention, use of a control (or comparison) group, and the administration of postintervention follow-up evaluation(s). These criteria are fairly straightforward and not difficult to identify in published investigations.

In terms of program outcomes, one might seek, for instance, to determine whether the intervention produced more potent effects for those who attended the program relative to members of a control or contrast group (i.e., statistical significance criteria). Or, one could ask whether the program produced a meaningful effect, as opposed to a merely statistically significant outcome (i.e., the *clinical significance* of the intervention). Or, one might seek to determine whether the observed effects carry the promise of broad societal significance, with findings that generalize well beyond the sample investigated. The criteria outlined in this paragraph and the preceding paragraph, among others, will be used in this study as a way of evaluating retirement preparation programs.

Previous retirement researchers have argued that methodological weaknesses associated with preparation programs include the lack of a control or contrast group, the lack of follow-up investigations and longitudinal measurement approaches, and sample sizes that are too small to

effectively generalize results to broader populations (França et al., 2013; Hershey et al., 2003; Taylor-Carter, Cook, & Weinberg, 1997). Others have been critical of the use of measurement instruments that lack reasonable psychometric properties (e.g., reliability, validity); studies that report outcomes unsupported by statistical analysis (França et al., 2013); and the failure to assess the robustness of effects through the administration of follow-up measures (Glamser & DeJong, 1975).

Present investigation

In sum, this article is a focused, integrative literature review that is designed to assess the quality of retirement preparation programs using both methodological and efficacy evaluation criteria. Our purposes in developing this study were to explore the range of intervention methodologies used to determine whether those methodologies hold promise when it comes to shaping individuals' retirement-linked attitudes, beliefs, motives and behaviors. In the following section we describe how articles were selected for inclusion in this review, as well as the specific evaluation criteria that were adopted.

Method

Article search and selection procedures

Two inclusionary criteria were adopted in the selection of articles for this review. First, only articles written in Portuguese, Spanish, and English were considered because members of the author team were proficient in these three languages. This included papers published from the earliest electronic records available (in the databases accessed) through the end of December 2014. Second, articles were only considered if they included detailed information on the following: a description of intervention procedures, evaluation of program procedures, and results. Duplicate articles that appeared in more than one database, articles that involved secondary data analysis, dissertations, theses, and benchmark reports were not considered.

Multiple academic databases were consulted in an effort to identify appropriate articles that may have appeared in a variety of different disciplines including psychology, sociology, business, economics, finance, and medicine. Specifically, databases accessed as part of this literature review included: Academic Search Premier, Business Source Premier, Cochrane, EconLit, Lilacs, Medline, PsycInfo, PsycArticles, Scientific Electronic Library Online, Scopus, Sociological Abstracts, Virtual Health Library—BVSPsi, and Web of Science. The Boolean operator AND was used to seek out combinations of keywords that would return the desired results. Keywords examined included: retirement, intervention, preretirement, education, counseling, preparation, and program, as well as their equivalent descriptors in Portuguese and Spanish.

Articles identified through the electronic search process were analyzed by reading their title and abstract to verify that each was consistent with the inclusionary criteria for the study. A secondary search was then performed based on the curriculum vitae of authors initially identified in an effort to find additional relevant publications by those who have published on the topic. Finally, an e-mail was sent to the primary author for each article identified requesting other publications they may have on the topic of retirement programs. Once these steps had been performed, a content analysis of the articles was carried out.

Analytic approach

Studies were analyzed by focusing on two separate dimensions: (a) methodological criteria (see Table 1) and (b) efficacy evaluation criteria (see Table 2). Methodological criteria comprised topics including (but not limited to) the use of strong theory in the development of the program, the nature of the research design, program format, the number of individuals who participated in the study, the

Table 1. Definition of methodological criteria used to evaluate intervention studies.

Criteria	Description
Theory	Theoretical model or approach that underlies the study or program.
design	Describe whether the study is non-experimental (defined as lacking a control group), quasiexperimenal (involving a control group but with nonrandom assignment), or experimental (involving a control group and random assignment).
Context	Context in which the study was carried out (e.g., public or private organization, university, factory).
program format	This criteria analyzes program duration, the total number of meetings, and whether the intervention occurred individually or in groups. Duration is characterized in terms of long programs (meetings occurring weekly over a period of months), intensive programs (immersion meetings that occur on consecutive days of a week), and brief programs (that involve a short time frame of one to three meetings).
Content	Themes and techniques used as part of the intervention (e.g., group discussion and activities designed to increase self-reflection, awareness exercises, sharing of experiences, and development of attitudes and positive emotions).
Participants	Number of individuals that participated in the intervention (initial sample size).
needs assessments	A priori assessment designed to identify target issues for intervention. Criteria involved determining whether a needs assessment was carried out.
Process evaluation	Process evaluation involved evidence of one or more of the following criteria: (a) recruitment approach—strategies used to invite individuals to participate in the program, (b) program context—environmental characteristics that may interfere with implementation and program execution, (c) interim assessment—investigate whether participants made use of resources and engaged in planning activities during the course of a long seminar program, (d) fidelity—examine whether steps or stages of the intervention were carried out as planned, and (e) satisfaction—assessment with participants' satisfaction with the quality of the program.
Instruments	Evaluation of the type(s) of instruments used to collect data on program content and effectiveness, as measured by changes in participants' attitudes, knowledge, behaviors, and beliefs.
Data analysis	Whether qualitative or quantitative procedures were used to analyze data.
results	Clear description of the main results of the intervention, focusing on empirical evidence of program strengths and weaknesses.

Note: Adapted from "Occupational stress management programs: A systematic literature review," by Murta (2005).

Table 2. Definition of efficacy criteria used to evaluate the intervention studies.

	Criteria	Description
1. Quality evaluation	1.1 Control condition	Presence or absence of a control or comparison group.
	1.2 Study pilot	Pre-study assessment designed to improve techniques and measures.
	1.3 Multimodal	Involving both quantitative and qualitative measurement approaches as part of
	Measurement	study (e.g., scales, interviews, questionnaires).
	1.4 Multiple informants	Participation of employer, family members, friends, neighbors as part of program evaluation.
	1.5 External evaluation	Evaluation done by someone who is not part of the research team or a study participant.
	1.6 Follow-up	Periodic evaluation(s) over time following the end of the intervention.
	1.7 Inter-rater agreement	Analysis procedures to determine the degree of agreement between coders when conducting qualitative analyses.
	1.8 Validity/Reliability of Instruments	Use of instruments that have demonstrated evidence of validity and/or reliability.
2. Consistent positive effects	2.1 Consistent effects	Significant statistical or clinical results observed in groups exposed to the intervention, and less significant findings in groups not exposed to the intervention.
	2.2 Negative effects	Lack of negative effects reported as part of study findings.
	2.3 Statistical significance	Analysis of impact as measured by statistical significance calculations.
	2.4 Clinical significance	Analysis of impact as measured by clinical significance calculations.
	2.5 Social impact	Analysis of impact as measured by social impact.

Note: Criteria adapted from Flay et al. (2005) and Kazdin (2010, 2011).

process evaluation format, and evidence of a data analysis process. Efficacy evaluation criteria, in contrast, focused on (a) the quality of the evaluation procedures (e.g., use of a control condition; use of multiple measures; use of valid instruments), and (b) evidence of positive outcomes during or following program delivery (e.g., the absence of negative effects; statistical significance testing; conclusions regarding clinical significance). These two sets of intervention evaluation criteria were

based largely on the recommendations of the Society for Prevention Research (SPR), which are fully described by Flay et al. (2005).

Once the evaluative criteria had been established, two independent coders conducted a full-text analysis of each article using a coding protocol that reflected the range of topics identified in Tables 1 and 2. Given the nominal and categorical nature of the data analyzed, interrater reliability levels were established using the percentage agreement approach (Gwet, 2014), which was obtained by taking the number of agreements divided by the sum of both agreements and disagreements, multiplied by 100 (see also Kazdin, 2010). Coding disagreements were resolved with the assistance of a researcher with expertise in the development and delivery of retirement planning programs. Interrater agreement for methodological criteria was 90%, and agreement for efficacy criteria was 81%. According to Kazdin (2011), percentage agreement rates equivalent to or greater than 75% are considered acceptable.

Results

A search of the databases identified in the Method section resulted in 178 hits. Duplicate hits were omitted as well as articles in languages other than English, Portuguese, and Spanish. Also omitted were articles that failed to provide sufficient information about program procedures or evaluative criteria. This resulted in 11 full-text articles, six of which were written in English and five of which were written in Portuguese. (Of the 167 publications that were not included in this review, 90 papers (53.8%) were omitted because they failed to have a primary focus on retirement preparation programs; 38 (22.8%) were duplicate articles that appeared in more than one database; 28 papers (16.8%) failed to adequately describe either program content, procedures, or results; 10 articles (6.0%) involved secondary data analysis, dissertations, theses or benchmark reports; and one paper (0.6%) was written in German, an excluded language.) The source and a description of the contents of the selected articles can be found in Table 3.

Methodological evaluation criteria

The 11 publications that were identified as part of this review appeared in the literature during a 4 decade period between 1975 and 2014. Five program studies were carried out in Brazil (França et al., 2013; Murta et al., 2014; Pereira & Guedes, 2012; Soares et al., 2007; Soares, Luna, & Lima, 2010). The remaining six studies were conducted in the United States (Glamser, 1981; Glamser & DeJong, 1975; Hershey et al., 2003; Hershey, Walsh, Brougham, Carter, & Farrell, 1998; Laughlin & Cotten, 1994; Taylor-Carter et al., 1997).

Four papers mentioned a theoretical foundation for the development of the program or intervention. Specific theories or theoretical frameworks employed included the transtheoretical model of change (Murta et al., 2014); the FRAMES approach to intervention, which is an acronym that stands for feedback, responsibility, advice, menu of options, empathy and self-efficacy (França et al., 2013); image theory (Hershey et al., 2003); and social cognitive theory (Taylor-Carter et al., 1997). The remaining seven studies that did not report a specific theoretical basis appeared to be driven by the empirical goals associated with testing the intervention program. Four of the publications were found to have adopted an experimental design that used some form of control group (Glamser, 1981; Glamser & DeJong, 1975; Hershey et al., 2003; Laughlin & Cotten, 1994). None of the studies examined used a quasiexperimental design.

The interventions programs were implemented in five different settings including universities (four studies, Hershey et al., 1998; Murta et al., 2014; Soares et al., 2007; Taylor-Carter et al., 1997); public organizations (three studies, França et al., 2013; Pereira & Guedes, 2012; Soares et al., 2010); factories (two studies, Glamser, 1981; Glamser & DeJong, 1975); a community center (one study, Hershey et al., 2003); and a community mental health center (one study, Laughlin & Cotten, 1994). The minimum number of participants reported in a study was 13 (Murta et al., 2014), and the

Author, Year (A) Language (L)	Theory (T) Design (D) Context (CX) Participants (n)	Format (F)	Content (C) Techniques (TC)	Need Assessment (NA) Process Evaluation (PE) Instruments (I)	Data Analysis (DA) Results (R)
(A) França et al., 2013. (L.) Portuguese	(T) FRAMES and Transtheoretical Model (D) Non-experimental, follow-up at 11 months (CX) Public organization (n) 41	(F) Brief: One meeting during 4 hours and three follow up meetings	(C) Rapport between participants, resource assessment and encouragement of responsibility; self-assessment of preparation for retirement behaviors; self-efficacy; relevant factors in the transition to plans. (TC) Educational and experiential: Activities with discussion group, illustrative pictures of retirement resources, retirement planning guidebook	(NA) Not specified (PE) Assessment of process fidelity and group climate, suitability of context in which program takes place, performance of coordinators and evaluation of satisfaction. (I) Interview, protocol analysis, completion of sentences, and scale to assess retirement resources	(DA) Qualitative content analysis and descriptive statistics. (R) Majority of participants judged that their participation in the intervention motivated planning for retirement, promoted experiences of positive emotions in relation to retirement, change of behavior in health care and increased knowledge about actions that promote adjustment to retirement
(A) Glamser & DeJong, 1975. (L) English	(T) None specified (D) Experimental, follow-up at 1 month (CX) Factory (n) 132	(F) Long: eight meetings, duration 90 min each. Brief: visit the plant personnel office for an explanation of the company retirement benefits—duration 30 minutes	(C) Meaning of work and retirement, financial planning, health, leisure, family and friends, life projects, social security, housing conditions, health insurance. (TC) Educational and experiential: Long: group discussions and reading a book on preparation for retirement. Brief: use of four booklets on retirement adjustment and resources	(NA) None specified (PE) None specified (I) Questionnaire measuring knowledge of retirement issues	(DA) Statistical analyses: t-tests and analysis of variance. (R) Long program was effective when compared to the control group and brief intervention. Significant increase in the number of retirement activities and plans (e.g., saving activities, talking about plans with a partner, healthy eating). Efficacy of brief program compared to long program was relatively minimal
(A) Glamser, 1981. (L) English	(T) None specified (D) Experimental and longitudinal (Evaluated six years after interventions ended) (CX) Factory (n) 82	(F) Long: eight meetings, duration 90 min each. Brief: visit the plant personnel office for an explanation of the company retirement benefits, duration 30 minutes	(C) Meaning of work and retirement, financial planning, health, leisure, family and friends, life projects, social security, housing conditions and health insurance. (TC) Educational and experiential: Long: group discussions and reading a book on preparation for retirement Brief: use of four booklets on	(NA) None specified (PE) None specified (I) Questionnaire	(DA) Statistical analyses: chi-square tests (R) No significant differences between retirement program groups and a control group regarding the expected, level of preparation, life satisfaction and attitudes toward retirement

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sults (R)	ed ining cide upon their post-	noted ne dships, and tirement	that the reflect on bectives and e decision	Pearson ression, increased tisfaction satisfaction. int nformal ocial
Data Analysis (DA) Results (R)	(DA) None specified (R) The intervention helped participants increase planning conscientiousness and decide upon and develop a project for their postcareer life	(DA) None specified (R) The intervention promoted sharing of experiences, the development of new friendships, and dispelling myths about retirement	(DA) None specified (R) Participants reported that the program helped them to reflect on the past and future perspectives and provide security about the decision to retire	(DA) Statistical analyses: Pearson correlations, multiple regression, t-tests. (R) Effect of the seminar increased anticipated retirement satisfaction and anticipated financial satisfaction. Pre-intervention assessment demonstrated effects of informal leisure planning and financial planning on retirement expectations.
Need Assessment (NA) Process Evaluation (PE) Instruments (I)	(NA) Interview and questionnaire. (PE) None specified (I) Interview and questionaire	(NA) Interview (PE) None specified (I) Interview	(NA) None specified (PE) None specified (I) Tool of self-evaluation	(NA) None specified (PE) None specified (I) Financial planning and leisure scales, retirement self-efficacy scale
Content (C) Techniques (TC)	(C) Self-awareness, relationships, financial management and life project. (TC) Educational and experiential: dynamics, texts, interactive exhibits, teamwork, lectures and film	(C) Past, present and future choices and changes, professional career, labor and social security, family, social support, business, finance, health, sport, search for self, leisure and future projects. (TC) Educational and experiential: Activities, discussion group, and lectures	(C) Self-knowledge; changes and choices; family and social dynamics; health, management of financial and free time, life projects. (T) Educational and experiential: lectures, activities, and group discussions	(C) Social security, financial planning, leisure, pension law. (T) Educational: seminar/lecture
Format (F)	(T) None specified (F) Long: 45 hours, meetings (D) Non-weekly, duration 3 hours each experimental (CX) Public organization	(T) None specified (F) Long: nine weekly meetings, (D) Non-duration 2 hours each experimental (CX) University (n) 16	(T) None specified (F) Intensive: three meetings, one (D) Non-every other week, duration experimental 8 hours each (CX) Public organization (TX) Public (CX) 15	(F) Brief: lecture with two meetings, hours each
Theory (T) Design (D) Context (CX) Participants (n)	(T) None specified (D) Non-experimental (CX) Public organization (n) 3			(T) Social Cognitive Theory (D) Non- experimental (CX) University (n) 34
Author, Year (A) Language (L)	(A) Pereira & Guedes, 2012. (L) Portuguese	(A) Soares et al., 2007. (L) Portuguese	(A) Soares et al., 2010. (L) Portuguese	(A) Taylor- Carter et al., 1997. (L) English

maximum number of individuals who participated in an intervention was 132 (Glamser & DeJong,

In terms of program duration, the format used to deliver the interventions varied from one investigation to the next. Three programs adopted a "long duration" approach (Murta et al., 2014; Pereira & Guedes, 2012; Soares et al., 2007), and four other programs employed a brief format (França et al., 2013; Hershey et al., 2003, 1998; Taylor-Carter et al., 1997). Two of the programs evaluated used an intensive format (Laughlin & Cotten, 1994; Soares et al., 2010), whereas two other investigations (Glamser & DeJong; 1975; Glamser; 1981) were found to have used a combined (long and brief) format in the development of their intervention approach.

With respect to the intervention procedures, nine studies were found to have used educational activities (e.g., lectures, seminars, brochures, books) in combination with experiential exercises (e.g., group discussions). This hybrid model was clearly the preferred format approach. Only two investigations were found to have exclusively used either educational activities or experiential exercises (Laughlin & Cotten, 1994; Taylor-Carter et al., 1997).

The content discussed during the intervention programs involved a combination of themes about antecedents of retirement adjustment, such as support from family members and members of one's broader social network, physical and mental health, financial planning activities, beliefs about the meaning of work, longevity and aging, the management of free time, postcareer life projects, leisure activities, social security laws, and retirement-related self- knowledge. Financial planning was the most commonly explored theme; in fact, as a topic, finances were discussed in 10 of the 11 investigations (França et al., 2013; Glamser, 1981; Glamser & DeJong, 1975; Hershey et al., 2003, 1998; Murta et al., 2014; Pereira & Guedes, 2012; Soares et al., 2007, 2010; Taylor-Carter et al., 1997).

With regard to process evaluations of the intervention programs, some form of participant satisfaction was the most commonly used criterion, although fewer than half collected data on this dimension. Perceptions of program satisfaction was a target in five studies (Glamser & DeJong, 1975; Pereira & Guedes, 2012; Soares et al., 2007, 2010; Zanelli, 2000). Two other studies (França et al., 2013; Murta et al., 2014) referred to the use of comprehensive process evaluations that tapped multiple aspects of the intervention program including participant satisfaction.

Three studies (Murta et al., 2014; Pereira & Guedes, 2012; Soares et al., 2007) reported using some type of (preintervention) participant needs assessment. These assessments took the form of an interview, a focus group discussion, or a questionnaire. The instruments most widely used for data collection purposes included scales (four studies, Hershey et al., 2003, 1998; Laughlin & Cotten, 1994; Taylor-Carter et al., 1997), a combination of a questionnaire and interview (two studies, Murta et al., 2014; Pereira & Guedes, 2012); a questionnaire (three studies, Glamser, 1981; Glamser & DeJong, 1975; Soares et al., 2010); an interview supplemented by the use of a scale (one study, França et al., 2013); and an interview only (one study, Soares et al., 2007).

Three studies (Pereira & Guedes, 2012; Soares et al., 2007, 2010) failed to report the type of data analyses used to evaluate the interventions. Of the eight remaining studies, one went in a qualitative direction (Murta et al., 2014) describing the use of thematic content analysis, one employed a combination of qualitative and quantitative approaches (França et al., 2013), and six others (Glamser, 1981; Glamser & DeJong, 1975; Hershey et al., 2003, 1998; Laughlin & Cotten, 1994; Taylor-Carter et al., 1997) used some form of quantitative approach to analyze the data. These latter investigations typically not only presented descriptive data (e.g., means, standard deviations, counts), but they also reported the results of inferential tests to assess the programs including t tests, chisquare tests, correlations, multiple regression analysis, analysis of variance, and analysis of covariance.

Efficacy evaluation criteria

As described in Table 2, efficacy evaluation criteria focused on two overarching themes: (a) the quality of the evaluation criteria (e.g., external evaluation, use of follow-ups, establishing inter-rater agreement) and (b) evidence of positive effects of the program. In terms of the former dimension, four studies (Glamser, 1981; Glamser & DeJong, 1975; Hershey et al., 2003; Laughlin & Cotten, 1994) used a control or comparison group. Three studies (França et al., 2013; Murta et al., 2014; Pereira & Guedes, 2012) used a multimodal measurement approach. One made use of multiple informants (Murta et al., 2014), and two cited the use of a pilot study to assist in the development of intervention content (França et al., 2013; Murta et al., 2014). None of studies mentioned made use of blind evaluation procedures. It is also noteworthy that five studies described the presence of one or more follow-up evaluations (França et al., 2013; Glamser, 1981; Glamser & DeJong, 1975; Hershey et al., 2003; Murta el at., 2014). One investigation (Glamser, 1981), in fact, reported data collected from individuals who participated in the Glamser and DeJong (1975) study six years earlier. This was done in order to assess the long-term impact of the 1975 intervention program.

Inasmuch as few investigations relied upon content analysis to evaluate the effect of the intervention, not surprisingly, none reported interrater agreement levels. However, four studies reported having used instruments that had previously been demonstrated to have evidence of validity and/or reliability (França et al., 2013; Hershey et al., 2003; Laughlin & Cotten, 1994; Taylor-Carter et al., 1997).

Continuing with the analysis of efficacy criteria, we now turn our attention to the second overarching theme—that is, whether evidence was provided regarding positive intervention effects (i.e., items 2.1 to 2.5 in Tables 2 and 4).

Results regarding the effects of the interventions revealed that long intervention programs (i.e., based on 8-20 weekly meetings, mostly using a group format) led to increases in knowledge of retirement planning (Glamser & DeJong, 1975); control of financial spending; awareness of the need for retirement planning; health care; the development of leisure activities; the initiation and maintenance of physical activities; spiritual engagement, healthy eating practices; and prospects for a new career (Glamser & DeJong, 1975; Murta et al., 2014; Soares et al., 2007). One study successfully helped individuals decide when to retire, as well as how to develop ideas for a meaningful project that could be carried out during their postemployment life (Pereira & Guedes, 2012).

Interventions that used an intensive format (i.e., an immersion approach with multiple meetings that occur on consecutive days) promoted reflection of the past and future; feelings of security about the decision to retire (Soares et al., 2010); and knowledge about resources that would help to ensure a successful retirement (Laughlin & Cotten, 1994). Brief or limited intervention programs (i.e., a short duration approach of one-four group meetings), in contrast, were found to motivate planning for retirement. They promoted the experience of positive emotions in relation to retirement, improved health care practices, and increased knowledge of strategies that could be used to promote retirement adjustment (França et al., 2013). Brief programs were also found to promote increased financial knowledge; increases in retirement goal clarity (Hershey et al., 2003; 1998); anticipated retirement and financial satisfaction, leisure planning; and realistic future financial planning expectations (Taylor-Carter et al., 1997).

One experimental study that compared the differential impact of long and brief intervention programs (Glamser & DeJong, 1975) showed strong results in favor of the long intervention format. Specifically, compared to individuals who were exposed to a brief program or who were in a control group, those who participated in a long intervention program were more likely to be engaged in retirement planning activities. In addition, studies that compared different types of brief interventions found that combined intervention formats (i.e., that used educational seminars in combination with group discussions) had a greater impact on participants than interventions that relied exclusively on an educational program (Hershey et al., 2003, 1998). However, a longitudinal study carried out by Glamser (1981) failed to find differences in retirement expectations, retirement preparedness, life satisfaction, and attitudes toward retirement when participants from long and brief intervention programs were compared to members of a control group.

Six of the 11 studies relied upon inferential statistics (i.e., p-level evidence) to evaluate the effectiveness of the intervention (Glamser, 1981; Glamser & DeJong, 1975; Hershey et al., 2003,

Study						J	Criteria						
	1.1 Presence of control or comparison group	1.2 Implemantetion pilot study	1.3 Multimodal measurement approach	1.4 Use of multiple informants	1.5 External program evaluation	1.6 Presence of follow- up evaluation	1.7 Evidence of agreement between raters	1.8 Use of instruments with evidence of validity	2.1 Significant effect of intervention	2.2 Absence of negative effects		2.5 of 2.4 Analysis Analysis Analysis statistical of clinical of social significance significance impact	2.5 Analysis of social impact
França et al. (2013)		×	×			×		×	×	×			
Glamser and	×					×			×	×	×		
(1975)													
Glamser (1981)	×					×		×		×	×		
Hershey et al. (1998)			×					×		×	×		
Hershey et al. (2003)	×		×			×		×	×	×	×		
Laughlin and Cotten	×							×	×	×	×		
(1994)													
Murta et al. (2014)		×	×	×		×			×	×			
Pereira and			×							×			
(2012)													
Soares et al.										×			
(2007) Soares et al										>			
(2010)										<			
Taylor-Carter								×	×	×	×		
et al. (1997)													

1998; Laughlin & Cotten, 1994; Taylor-Carter et al., 1997). Of the five remaining investigations, either descriptive statistics were reported, or no information was provided as to how the intervention was evaluated. What was surprising, however, was the fact that none of the 11 studies specifically commented on the clinical significance or (potential) social impact of the program under scrutiny. From an intervention perspective, this would seem to be a serious omission.

Discussion

In describing best practices for intervention research, theorists (Flay et al., 2005; Kazdin, 2010, 2011; Murta, 2005) have identified two broad sets of criteria against which real-world intervention programs can be evaluated. Methodological criteria focus on the development and design of intervention programs; efficacy criteria, in contrast, focus primarily on the effectiveness of the intervention. The evaluative criteria across these two dimensions are not mutually exclusive, as elements of methodologies (e.g., use of a control group; measurement approach) have been specified as key criteria in the evaluation of efficacy.

In this integrative literature review, 11 retirement intervention programs that had been identified in the primary scientific literature were evaluated to determine their overall quality. While it was found that many of the published studies met recommended standards in terms of their methods and efficacy, the data suggest that there exists considerable room for improvement. In fact, no one intervention program could be viewed favorably in terms of all evaluative criteria. The implication of this outcome is important. The identification of gaps in best practices can provide guidance for program specialists in many economically-more-developed nations who seek to cultivate retirement interventions in the future.

In terms of methodological criteria, a number of studies were designed and delivered in such a way as to maximize the likelihood of positive effects. Ideally, programs would not only be grounded in strong theory, but also developed in such a way as to meet the unique needs of program participants. That said, however, only four of the 11 articles indicated the use of a specific theoretical framework in the development of the program, and only four articles indicated that a preprogram needs assessment had been carried out. Future intervention efforts, it would seem, could benefit from more solid (theoretical and empirical) foundations.

Program format (design; duration) is another important dimension that revealed variability across studies. The stated use of a control group (or appropriate contrast group) was found to be lacking in a majority of investigations, which would seem to be a critical shortcoming. From a design perspective, the gold standard in intervention research is to use a matched control group, so that the magnitude of treatment effects can be unequivocally assessed. Investigators also face choices in terms of selecting an appropriate program format and duration. Certainly, in choosing a program duration, the data from this study suggest there is a trade-off in terms of the time invested and the costs incurred (both financial and personnel costs). Although all three types of program formats/durations (i.e., long, intensive, brief; Seidl et al., 2014) were found to lead to positive effects, at least one investigation found evidence for the superiority of the long format approach (i.e., Glamser & DeJong, 1975). This approach would seem to more readily lend itself to comprehensive topical programming; single topic interventions (e.g., financial only)—which are, indeed, more common than comprehensive interventions—are more easily adapted to the brief program format.

We now turn attention to the efficacy of retirement intervention programs. In this regard, the data from the present investigation are unequivocal. The general conclusion reached is that retirement programs foment change. This is evidenced not only by the observation of significant positive effects (found in more than half of the studies surveyed), but also the absence of negative effects (found in all 11 investigations). Broad support for the efficacy of retirement interventions could be overestimated, however, by a publication bias in favor of investigations that demonstrate significant outcomes. That is, it is unknown how many intervention studies failed to produce change that have gone unpublished—what researchers refer to as the "file drawer effect" (Scargle, 2000). Despite this fact, there would appear to be sufficient evidence to suggest that a carefully designed and implemented program will lead to desired outcomes; depending on intervention objectives, such programs are likely to result in improvements in retirement-linked knowledge, expectations, attitudes, and planning behaviors.

From a public policy perspective, the findings from this study suggest it would be well worth investing in the further development and dissemination of retirement intervention programs. This endorsement is conditioned upon the premise that future program specialists would consider best practices criteria when designing their research and when developing program content. There is every reason to believe that interventions are potentially effective when offered in any one of a number of settings—in community centers, schools, and in the workplace. To that extent, it could be advantageous for proponents of interventions to partner with universities, large corporations, and government agencies when seeking funding and tangible support for their efforts.

This investigation is not without its limitations. One limitation involved the pragmatic decision to focus on program reports published only in English, Portuguese, and Spanish. There may be evaluation studies published in other languages that were not included in this review. On that point, it is interesting to note that the investigations identified were only published in English and Portuguese. Notably, a number of the English reports were older, reflecting the long-standing interest in retirement programs in the UnitedStates (Ekerdt, 1989). And the Portuguese language reports all appeared in the literature since 2006, following passage of the 2003 Brazilian Statute of the Elderly law mentioned earlier in this paper.

Perhaps future investigations could focus on articles published in major world languages not examined as part of this study such as Chinese, Hindi, Arabic, Bengali, Russian, and Japanese. Doing so would result in a richer understanding of how retirement preparation programs differ across countries and cultures. Of particular interest— in light of differences across countries in sources of financial, family, and instrumental support (Asher, 2002; McCallum, 1992)—would be the way in which programs in Asian and Southeast Asian cultures prepare workers for retirement. Beyond understanding differential patterns of support, future retirement program development could benefit from an enhanced understanding of the way in which retirement goals, lifestyles, and leisure pursuits in Eastern nations diverge from that which is typically found in the West.

Another limitation of this study involved the fact that the analytic strategy adopted was restricted to the use of descriptive statistics. A stronger approach would have involved using inferential statistics to examine program outcomes—such as in the form of a meta-analysis. However, the small number of investigations identified made it impossible to adopt a superior quantitative methodology. Perhaps in the coming years as more studies on this topic appear in the literature, with more consistent focal criteria and analysis procedures, it will be possible to revisit the issue of program efficacy using more robust inferential methods.

In closing, we are optimistic that the aging of members of the baby boom generation will spur on further research on the topic of retirement intervention programs. Findings from this review suggest that the widespread dissemination of such programs, whether in the workplace or in other venues, stand to enhance the future wellbeing of program participants in one or more realms of functioning. Balanced against the alternative—that is, a cohort of poorly prepared retirees who can be expected to experience a diminished quality of life—it would seem well worth the cost to develop evidence-based programs that have clearly focused objectives and demonstrable effects.

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