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BRIEF INTERVENTION AS A STRATEGY FOR RETIREMENT PLANNING: TURNING INTENTIONS INTO ACTIONS

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ABSTRACT. The literature has shown that prior planning and participation in interventions are effective strategies for individuals to experience a successful retirement. The aim of this paper was to investigate relevant changes in the participants' behavior of a brief intervention group on retirement planning. The intervention was based on the transtheoretical model of change and in the implementation intentions theory. The study design was pre-experimental with two, four and eleven months of follow-up. Ten women public employees from 47 to 60 years-old (M = 56, SD = 4.06) participated in the brief intervention group. Content analysis was used to deal with research data. The results showed that the brief intervention enhanced cognitive, motivational and behavioral changes and the most frequent reports were related to the action and maintenance stages in health, social network and occupation. Limitations and recommendations for new studies are discussed.

Keywords: Retirement; intervention studies; behavior.

INTERVENÇÃO BREVE COMO ESTRATÉGIA DE PLANEJAMENTO PARA APOSENTADORIA: TRANSFORMANDO INTENÇÕES EM AÇÕES

RESUMO. A literatura tem demonstrado que o planejamento prévio e a participação em intervenções representam estratégias eficazes aos indivíduos para que vivenciem uma aposentadoria bem-sucedida. A proposta deste artigo foi investigar mudanças relevantes nos comportamentos dos participantes de uma intervenção breve sobre planejamento para aposentadoria. A intervenção foi fundamentada no modelo transteórico de mudança e na teoria de implementação de intenções. O delineamento da pesquisa foi pré-experimental com *follow-up* de dois, quatro e 11 onze meses. Dez servidoras públicas entre 47 e 60 anos (M=56, DP=4,06) participaram da intervenção breve em grupo e, para o tratamento dos dados, utilizou-se a análise de conteúdo. Como resultados, destaca-se que a intervenção breve favoreceu mudanças cognitivas, motivacionais e comportamentais, com maior frequência de relatos nos estágios de ação e manutenção da saúde, da rede social e da ocupação.

Palavras-chave: Aposentadoria; estudos de intervenção; comportamento.

INTERVENCIÓN BREVE COMO ESTRATEGIA DE PLANEAMIENTO PARA LA JUBILACIÓN: TRANSFORMANDO INTENCIONES EN ACCIONES

RESUMEN. La literatura ha demostrado que el planeamiento y la participación en intervenciones son estrategias efectivas para que los individuos experimenten una jubilación exitosa. El propósito de este estudio fue investigar los cambios significativos en el comportamiento de los participantes de una intervención breve de planificación para la jubilación. La intervención se basa en el modelo transteórico del cambio y en la teoría de implementación de

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intenciones. El diseño del estudio fue pre-experimental con un seguimiento de dos, cuatro y once meses. Diez funcionarias públicas entre 47 y 60 años (M=56, DP=4,06) participaron en el grupo de intervención y, para el tratamiento de los datos, se realizó el análisis de contenido. Como resultado, la intervención breve facilitó cambios cognitivos, motivacionales y comportamentales, con una mayor frecuencia en las etapas de acción y mantenimiento de la salud, del soporte social y de la ocupación.

Palabras-clave: Jubilación; estudios de intervención; comportamiento.

Introduction

The transition related to retirement involves changes in various spheres of life which are linked to questions about how to spend the free time, how to ensure financial autonomy, how to strengthen old and start new friendships, how to deal with this new identity, among others. Answers to these questions will depend, largely, on a plan that should start long before retirement to better adapt to that stage (Adams & Rau, 2011). This plan may include decisions relating to occupational activities, leisure, financial arrangements, maintenance of networks with friends and family, engagement with groups in the community, type of housing and neighborhood (Van Solinge & Henkens, 2008; Wang, Henkens, & Van Solinge, 2011).

The relevance of such decisions refers to the importance of providing long or brief interventions that motivate people to seek resources for the achievement of their objectives, based on the development of a well-structured action plan (França 2002; Pereira & Guedes, 2012; Seidl, Leandro-França & Murta, 2014; Soares & Costa, 2011; Zanelli, Silva, & Soares, 2010). Therefore, in Brazil, the National Policy for the Elderly (Lei n. 8842, 1994) and the Elderly Statute (Lei n. 10741, 2003) are highlighted as they recommend the implementation and support for Retirement Preparation Programs in public and private organizations, at least two years before the employee's withdrawal.

Some theoretical models such as the implementation intentions (Gollwitzer, 1999) and the transtheoretical change model (Prochaska & DiClemente, 1982) have explored the interrelations and transformations among intention, planning and behavior change (Sniehotta, Schwarzer, Scholz & Schuz, 2005). In the scope of retirement, such models can be useful to researches in the area of development and evaluation of preparation programs for retirement.

The theoretical model called *Implementation Intentions* was developed by Gollwitzer (1999) and it has been shown to be a useful reference in intervention studies about health behaviors (Armitage & Arden, 2008). This model presents a detailed action plan, preceded by goals to achieve desired targets, with specification of when, where and how to achieve them. Thus, the implementation intentions are intended to facilitate the beginning of the action, in which a formulated plan of "if-then" proposal links a critical situation to the appropriate behavioral response (Gollwitzer, 1999). A verbalization that exemplifies the implementation intentions would be, *" If I have idle time during retirement, I will start a language course, near my house, twice a week "*.

The transtheoretical model of change formulated by James Prochaska and Carlo DiClemente (1982) provides important information to better understand the changes in health care behaviors and to explain how people can make successful changes in their lives. The transtheoretical model argues that in a behavior modification process people move among five stages of change: pre-contemplation, contemplation, preparation, action and maintenance.

In the pre-contemplation stage, the individual either has not deemed to have a problem or presents resistance to any change. In contemplation, there is awareness about the problem that should be changed, but the motivation to change it is still ambivalent. In preparation, the determination for help seeking, commitment to change and intentions to alter behavior are strengthened. The action relates to engaging in overt behavioral changes for, at least, a period of one month. The maintenance stage is related to the continuity in the achieved change for, at least, six months. It is noteworthy that the said model considers the possibility of occurrence of relapse or backward behaviors among these stages. Thus, people can stay at any of the stages for a long time or even circulate among these several times

until they finally reach the maintenance (Norcross, Krebs, & Prochaska, 2011; Park, Tod & Lavalle, 2012).

In general, psychosocial interventions seek to promote action and maintenance. However, the advancements from pre-contemplation to contemplation or from contemplation to preparation are also relevant. The awareness, motivation and decision increase to adopt self-care behaviors are important precursors of action and maintenance (Norcross et al., 2011). Although the transition among the stages of change is predictable, it is common for people to feel difficulty in overcoming the preparation stage to the following stages. This obstacle is considered a gap in understanding how the preparation turns into action, which can be clarified by the implementation intentions model (Armitage & Arden, 2008) and by the processes of change of Prochaska and DiClemente.

These authors identified 10 processes of change, which are able to move people from one stage to another: awareness, emotional activation, self-reevaluation, environmental reevaluation, liberation or social commitment, stimulus control, counterconditioning, rewards management, self-liberation and aid relationships. For example, when the processes of awareness, emotional arousal and self-reevaluation are activated, they facilitate the transition from pre-contemplation to contemplation, while the activation of the stimulus control, counterconditioning and rewards management processes favor the transition from preparation to action and maintenance.

In an experimental study, based in a month of follow-up, the participants

(N = 554) who were in the preparation stage and exposed to an intervention to promote a healthy diet, were more likely to progress to subsequent stages than those who were in the stage of pre-contemplation and contemplation and who were also exposed to the same intervention. This may indicate that when people are already committed and determined to change, to build action plans can facilitate the transformation of ideas into behaviors, as well as advancing to the action stage (Armitage & Arden, 2008).

The implementation intentions has been recognized as a strong precursor of action, although it depends on the behavioral intention to increase the effect of interventions (Armitage & Arden, 2008). Whereas behavioral intention can guide people who are in transition to retirement, for example, to generally report *"I think in doing volunteer work"*, the implementation intentions would lead people to detail the situation and the means by which effectively would perform volunteer work. Thus, interventions aimed at changing behavior, whether brief or not, can benefit from more promotion of implementation intentions or planning actions (that specify the means and procedures to achieve the change) than simply from promoting behavioral intentions (that do not specify what to do and how to do).

Following this, the brief intervention (BI) presents itself as a viable motivational approach to behavior change, whether to promote intentions or stimulate action plans (Soble, Spanierman, & Liao, 2011; Walton et al., 2010). The BI consists of an activity with limited time, can be implemented individually or in groups and it can occur approximately from five to thirty minutes (Marques & Furtado, 2004) up to three sessions (Bien, Miller, & Tonigan, 1993; Miller & Rollnick, 2001). The BI has been frequently used in clinical setting to enhance motivation, promote adherence to the long-term treatment, and reduce waiting time for treatment. As it is a short-term method, it is also suitable to save costs in implementation (Bien et al., 1993).

The active components of BI are summarized in the acronym FRAMES, which includes: *feedback*: preliminary evaluation of the current state of the individual, usually with the use of instruments; *Responsibility:* person autonomy and commitment with the change; *Advice:* guidance and indication of specific targets provided by the professional to the client, clearly and without value judgment; *Menu of Options:* alternative of actions that the professional offers to the client so that he chooses the ones that best fit his problem; Empathy: understanding and respectful behavior by the facilitator and *Self-efficacy:* client self-confidence in the change process through his own resources (Miller & Rollnick, 2001).

In view of the benefits of this type of intervention, to extend it to different areas of psychological practice is recommendable, such as the retirement planning interventions. The literature shows a gap with regard to the application of brief group types related to this kind of public (Seidl et al., 2014). Thus, intervention strategies such as BI can benefit workers who do not have the time to participate in long-term interventions and hence are not covered by these measures.

As BI model is commonly used in the context of health, adaptations should be considered in order to fit it to the preparation for retirement, such as the format, session length and change targets. The brief intervention in health field is generally delivered individually, whereas the brief intervention proposed in this study to prepare for retirement takes a group format to favor the occurrence of therapeutic factors relevant to behavior change (França, Murta, Negreiros, Pedralho, & Carvalhedo, 2013).

In addition, the realization of BI in a group format will require a longer time for promoting the interaction among the members of the group (Yalom & Leszcz, 2006). With regard to changing targets, brief interventions applied to the retirement context should motivate engagement in multiple changing targets for the occupation (Wang, Wu, & Wu, 2013), health, relationships, housing (Adams & Rau, 2011; Van Solinge & Henkens, 2008) and finance (Hershey, Henkens, & Van Dalen, 2010), as opposed to brief interventions applied to health, which often deal with a unique target, as in the treatment of alcohol dependence (Bien et al., 1993; Marques & Furtado , 2004).

The aim of this study was to investigate the transitions among stages of change, experienced by participants during a brief intervention and during its monitoring meetings, considering the significant changes in behaviors related to planning for retirement.

Method

Design and Participants

The design was longitudinal with two, four and eleven months of follow-up. Ten women, public servants, aged between 47 and 60 years (M = 56, SD = 4.06) were involved in the whole study. Among them, four were married or were in a consensual union, four were divorced and two singles. Regarding education, one had completed elementary school, three had finished high school, one had incomplete higher education, two had completed higher education and three had post-graduate course. The average working time in the public agency was 21.7 years (SD = 9.42). Furthermore, participants reported they worked in the organization approximately 40 hours a week.

Instruments and Procedures

For data collection, the head of the Occupational Health Division, organization sector that was responsible for the BI announcement and the registration of the interested participants, was contacted. The announcement of the study was made through an invitation sent by the e-mail organization. Two mental health care professionals and an observer with therapeutic background (e.g. psychology) conducted the activities. Participation in the study was voluntary and the volunteers could sign the Free and Informed Consent Form attesting that they agreed to participate. The research was approved by the Ethics Committee of the Institute of Human Sciences from the University of Brasilia.

The BI was delivered in group to 41 workers of the organization who were divided into four subgroups, each lasting 180 minutes and it was based upon the FRAMES model (Miller & Rollnick, 2001). At the beginning of each group, the facilitator presented the aims of the study, participants' ethical rights and a questionnaire containing sociodemographic information. This was done in, approximately, 30 minutes. In the subsequent step, the participants said their names and their expectations for retirement. It was then explored *Responsibility*, consisting of self-knowledge on factors that involve a successful retirement. To this end, participants were encouraged to report successful or unsuccessful retirement stories and to examine resources used by people who had a promising retirement. This activity lasted 20 minutes.

To measure *Feedback*, the Scale for Behavioral Change in Retirement Planning –EMCPA (Leandro-França, Murta, & Iglesias, 2014) was adopted to evaluates behaviors change in planning for retirement according to the transtheoretical model of change. Participants completed the scale and the results were discussed. The self-care behaviors related to planning for retirement that each of them already performed and those who intended to carry out were emphasized, according to the stages of

change. This procedure was performed in 30 minutes. After this stage, there was an interval of 15 min and then the other phases of FRAMES were conducted.

Self-efficacy was approached by a resource diagram (França et al., 2013) which consisted in reporting the resources that the participants had in their personal, emotional-social and community scope towards a promising retirement. This technique, executed in 30 minutes, was designed to promote confidence in their own resources and subjects potentialities. A preparation guide for retirement integrated the *Menu of Options* (Murta et al., 2010), which contained information on: criteria and types of retirement in the public service, procedures for requesting retirement, elderly rights, coping with life transitions, life quality predictors in retirement, health, finance, social support, employment and leisure. The facilitator presented the guide to participants and recommended them to read and to do the exercises contained in the guide. This activity lasted around 15 minutes.

In *Advice* step, relevant self-care practices in planning for retirement were suggested. To this end, an action plan was built, in which participants were asked to report, freely, what they should stop doing, keep doing and start doing for a successful retirement. The group reports were recorded on a whiteboard so that everyone could see the group's action plan. Considering the short period of implementation of the assistance, a collective action plan was carried out instead of an individual, which lasted 20 minutes.

During the intervention, the facilitators have adopted an empathic attitude (empathy), with reflexive listening in order to promote motivation and confidence atmosphere. Finally, the participants were asked, in the final 20 minutes, to evaluate the intervention through the sentence completion technique which consisted of the following sentences: "*I felt .... I thought ... I found that... "* (Murta et al., 2012). Next, the steps of monitoring meetings will be described, that is, the steps carried out months after brief intervention.

1st monitoring (M1) meeting - It was conducted in group meeting, two months after the brief intervention, and lasted about two hours. Nineteen people who attended the brief intervention participated in this stage. As a procedure, participants reported what has changed in their lives, considering their planning for retirement, since their participation in the BI. Then they met and discussed the results of EMCPA scale and developed, collectively, a similar action plan carried out in BI. Finally, they evaluated the monitoring meeting by means of a word that represents the individual feeling about it.

2nd monitoring (M2) meeting – performed in group, four months after the BI, it lasted two hours and included guidelines for relapse prevention. Fourteen people from the 19 who attended the 1st monitoring meeting joined this action. For this purpose a short text about the concept of relapse was used, just as well guidelines to prevent it and a framework to be completed by participants. The framework contemplated the following items: (a) to meet acquired or already conquered habits, related to adaptation to retirement; (b) to identify internal and external triggers that increase the risk of relapse of these habits; (c) to build coping planning with alternatives for dealing with the threats and obstacles, as suggested by implementation intentions theory. Finally, a closing technique was carried out that consisted of making an object from scraps, which symbolize the significance of the meeting with a further discussion.

3rd Monitoring (M3) meeting - Eleven months after the BI, there were individual phone interviews with the participation of 10 people among the 14 who attended the 2nd monitoring meeting. The interviews were conducted on the organization where participants worked and lasted about 40 minutes. During the interview the permanence of experiences or transition among stages of change were investigated.

The reasons for non-attendance of some participants in the monitoring meetings were explained by the occurrence of retirement, workload, city change, leave due to health problems, vacations and incompatibility with the time of the intervention. To collect this information, the Client Satisfaction Scale (França et al., 2013) was sent to the participants via e-mail at the same time the 3rd monitoring meetings was taking place.

Data analysis

The thematic content analysis by Bardin (2011) was used to investigate data on transitions among stages of change, which include the development or the stay of participants in stages. These data were obtained from spontaneous reports issued during the BI session and the three monitoring meetings (At two months, M1; at four, M2 and at 11, M3), which were recorded in audio, transcribed, analyzed and categorized, independently, by two evaluators.

Doubts and disagreements between the two evaluators were discussed and decided by an expert in retirement preparation programs. The intercoder reliability was evaluated calculating as follows: agreements divided by the sum of agreement and disagreement, multiplied by 100. It was considered a reliable answer when the intercoder realiability was equivalent to 75% or more, as proposed by Kazdin (2010).

Results

The results will be presented according two main themes: findings regarding transitions among stages of chance and findings on continuity in the stages of change.

Transitions among stages of change

The transition among stages of change were evaluated from pre-contemplation to contemplation, from contemplation to preparation and from preparation to action through the following categories: (a) occupation, with respect to engaging in leisure activities, hobbies, religion, volunteering and new professional focus; (b) health, which consists of health care actions such as medical consultation, physical activity and healthy eating; (c) social network, which covers dedication in relationships with friends, family and experiences among groups; and (d) finance, which is related to the investment, saving, and control of spending.

Results of the evolution of the participants among the stages of change, categories and frequency of reports occurred during the BI and monitoring meetings are shown in Table 1.

According to Table 1, no report of change on the part of the participants from pre-contemplation to contemplation stages was identified, during the BI or during the monitoring meetings. There were small changes in the transition from contemplation to preparation stages, with approximately one report per category in the thematic occupation (*e.g. "I'm looking for a place near where I live, because I intend to have a stationery shop when I retire, so that I will not be idle"*), health (*e.g. "I contacted a friend of mine who participates in a group of promotion of healthy food because I also want to join this group and take care of my health"*) and finance (*e.g. "I have tried and done some studies on private pension and bond investments"*).

The most frequent changes occurred in the transition from preparation to action stage with continuous change of behavior from the BI to the last monitoring meeting in occupation (M3 = 3) (*e.g. "Nowadays, my hobby is to invest in my farm"*), social network (M3 = 3) (*e.g. "I got a mate. We are getting married and we are making plans for retirement"*), finance (M3 = 2) (*e.g. "I'm investing on a new business and financial project. I have already created a brand name and I am making the products at home"*) and a higher proportion in the health category (M3 = 7) (*e.g. "I had said in our last meeting that I was going to start taking care of my health and I got it, I did those all those clinical examinations, I went to the gynecologist and I'm doing physical activity"*). The intercoder realiability for the evolution of stages of change ranged from 85.7% to 100%.

Table 1

Frequency (F) of reports on participants progress (N = 10) in the stages of change according to categories, collected in the BI and the three monitoring meetings (M1, M2, M3).

Stages of change	Category	(F) BI	(F) M1	(F) M2	(F) M3	IR*
From Pre-Contemplation to Contemplation	Occupation	-	-	-	-	100.0 %
	Health	-	-	-	-	
	Social network	-	-	-	-	
	Finance	-	-	-	-	
From Contemplation to Preparation	Occupation	-	0	0	1	85.7%
	Health	-	2	1	0	
	Social network	-	0	0	0	
	Finance	-	0	1	1	
From Preparation to Action	Occupation	-	1	1	3	92.8%
	Health	-	2	2	7	
	Social network	-	0	3	3	
	Finance	-	1	2	2	

IR* = intercoder realiability

Continuity in the stages of change

In addition to transitions among stages of change, the reports of the participants indicated that they stay on the same stage, considering the reports obtained from the BI session and the three monitoring meetings. The evaluation of the permanence among the stages of change, which are the pre-contemplation, contemplation, maintenance without expanding of activities, maintenance with expanding of activities and relapse was carried out in the same categories of the previous analysis: occupation, health, social network and finance. Table 2 shows the stay of participants among the stages of change according to the categories and the frequency of reports of BI and monitoring meetings.

In terms of permanence in stages, in the pre-contemplation stage the results demonstrated the occurrence of four reports about occupation, being M1 = 2 (*e.g. "Different from C. I can not see myself retired"*) and M2 = 2 (*e.g. "For me, this event has not changed my thoughts so much, I am not even thinking about it*). In the contemplation stage there were fluctuations in the occupation category with a marked increase in frequency in the 3rd monitoring meeting (M3 = 7) (*e.g. "I intend to do volunteering work, participate in groups in the community and attend to an arts and crafts course"*)

Table 2

Frequency (F) of reports on participants stay in the stages of change according to the categories, collected in the BI and the three monitoring meetings (M1, M2, M3).

Stages of Change	Category	BI	(F) M1	(F) M2	(F) M3	IR*
Pre-Contemplation	Occupation	-	2	2	-	100.0%
	Health	-	0	0	-	
	Social network	-	0	0	-	
	Finance	-	0	0	-	
Contemplation	Occupation	4	2	4	7	81.5%
	Health	2	0	1	1	
	Social network	2	0	0	3	
	Finance	0	3	3	3	
Maintenance without expanding of activity	Occupation	3	2	2	8	87.7%
	Health	3	4	1	8	
	Social network	1	1	1	9	
	Finance	1	1	0	5	
Maintenance with expanding of activity	Occupation	-	-	1	1	75.0%
	Health	-	-	0	0	
	Social network	-	-	0	1	
	Finance	-	-	0	0	
Relapse	Occupation	-	1	0	1	80.0%
	Health	-	2	2	0	
	Social network	-	0	0	1	
	Finance	-	0	0	0	

IR* = intercoder realiability

The maintenance stage was classified as: (a) maintenance without expansion of activities: verbalizations, during the study, which refers to the continuity in carrying out activities acquired before or during the intervention and monitoring, at least six months and (b) maintenance with expansion of activities: increased verbalizations in carrying out activity already developed before starting the intervention and monitoring.

As a result, the maintenance without expanding of activities in the 3rd monitoring meeting, the continuity in performing practices related to social network is highlighted (M3 = 9) (*e.g. "I continue investing in family life and cultivating friendships"*), occupation (M3 = 8) (*e.g. "I am still involved with voluntary and religious practices"*), health (M3 = 8) (*e.g. "I keep doing physical activity, medical check-up and having healthy eating"*) and finance (M3 = 5) (*e.g. "I continue doing financial investment"*). There were also reports of maintenance with expanding of activities in the occupation category in the 2nd and 3rd monitoring meetings (M2 = 1 M3 = 1) *(e.g. "In addition to the sewing machine, which I have already bought to assist in the voluntary work, I added more, I joined in a group that offers soup to needy persons"*) and a report on social network (M3 = 1) (*e.g. "I realized after participate in the meetings that the relationship with my partner is stronger"*).

The experience of relapse was analyzed considering relapses before and during the intervention in health categories (M1 = 2, M2 = 2) (*e.g. "Physical activity is something that I need to do, but generally, I start, I stop and I start again and I stop again…"*), occupation (M1 = 1 M3 = 1) (*e.g. "What I started to do, but I stopped, was attending groups in the community and practice a hobby"*) and social networking

(M3 = 1) (*e.g. "I moved away from my friends because I do not have much time at the moment"*). There were no reports of relapses in finance in any of the monitoring meetings. The intercoder realiability in relation to the permanence in the stages of change ranged from 80.0% to 100%.

Discussion

This study had the purpose of investigating the transitions among stages of change in participants from a brief intervention for retirement planning. With regard to the description of transitions among stages of change experienced during the study, data from 3rd monitoring meeting showed significant changes in the behavior of the participants, highlighting reports of action and maintenance in health, social network and occupation. This indicates that in the course of 11 months of study, the changes acquired in these categories have become consolidated. These results are positive in view of the difficulty people have in reaching the action stage, as noted in the literature (Armitage & Arden, 2008; Gollwitzer, 1999).

At the end of the 3rd monitoring meeting, participants were more engaged in actions related to health care, such as physical exercise, nutritional care and medical examinations. It is likely that adherence to health behaviors have occurred due to the participants perceived this category as easier to perform compared to others. These activities are relatively less expensive and time-consuming. This result is promising, since the literature highlights the health practices and changes in lifestyle as important for a successful retirement (Van Solinge & Henkens, 2008; Wang et al, 2011) because the reduction of risks of chronic diseases that impair the quality of life in aging.

The results of the social network category revealed that participants remained in contemplation during the eleven months, showing interest in cultivating friendships and strengthening family ties. Some of the participants showed engaging in such actions since the 2nd monitoring meeting, with report of relapse, explained in the interview (3rd monitoring meeting) as a result of work overload and lack of time to devote to friends. However, most of the participants reported in the 3rd monitoring meeting that they continue to keep the behavior of cultivating relationships, for at least six months. The good results in maintaining this category indicates that the participants were engaged in this practice and that this may have been a result of the intervention, as the design of this study lasted 11 months. Nevertheless, the use of a design without a control group impedes a clear conclusion on this point.

In the 3rd monitoring meeting, it was also found that seven participants were at the contemplation stage related to start occupational activities. That is a greater quantity compared to the initial number which has four individuals. This means that, even motivated, the majority did not reach the action stage in that category. The changes regarding occupation, such as set up a business or invest in a second career, require more time for implementation and execution and a higher financial cost. Taking this into account, it is likely that the time of follow-up was insufficient to happen significant changes in this respect. Another possible explanation for the observed little progress in occupation was the lack of elaboration of a plan of action and coping individual, detailed, with pre-established goals in the intervention stage, as proposed by the theory of implementation intentions (Gollwitzer, 1999). It is assumed that this could have been helpful for participants to transform, faster, intentions to actions.

Regarding the finance category, the results showed that the participants were in the contemplation stage at the beginning of the intervention, that is, they intended to do financial investment, saving account and spending control. During the study, they moved to preparation stage, and they finished the study maintaining behaviors targeted on finances, although to a lesser extent compared to occupation, health and social network categories.

A finding that deserves attention concerns the strengthening and expansion of behaviors acquired before the BI, evaluated during the maintenance stage. It can be said that the variability in health behaviors and social network has occurred because of the contingencies of reinforcement promoted by the facilitator and group members. These data suggest that the BI and the subsequent follow-up meetings have expanded and diversified the behavioral repertoire in health behaviors and relationships cultivation, with even broader gains in these categories.

Final considerations

Throughout the study, we observed changes in the participants' behaviors related to health care, social network (friends and family) and finance, with progressive engagement in actions in these spheres. These findings are auspicious because they derive from an intervention which is user-friendly and economically viable (Marques & Furtado, 2004), considering the short term and participation of few professionals for carrying it out.

The feasibiliy of implementing BI facilitates the dissemination of intervention to a greater number of people in services aimed at health promotion at work and organizations, being in line with the principles of the National Policy for the Elderly (Lei n. 8842, 1994) and the Elderly Statute (Lei n. 10741, 2003). The BI can also benefit people in preparation for retirement to whom the access to a continuum and intensive programs is often limited or impossible due to their long-term duration. Moreover, taking into consideration the motivational effect (Miller & Rollnick, 2001), the BI is a useful strategy to promote adhesion of workers to more extensive retirement preparation programs. Thereby, further studies about this type of intervention focused on planning for retirement are justified.

This study presents two main limitations: the first is the lack of control group and the second is the purely female sample. The first limitation, concerning the internal validity, prevents that clear conclusions can be obtained regarding the causal relationship among the intervention and the observed effects. Alternative explanations, such as the maturation of the participants (changes resulting from different influences naturally present in everyday life and not specifically associated with the intervention) may have affected the results. The second limitation, related to external validity, impedes that the observed results can be generalized to groups of men and women and male groups (Kazdin, 2010).

To cover the shortcomings of this study, it is suggested its replication in larger samples with participants of both sexes, with experimental or quasi-experimental designs and quantitative and qualitative outcome measures. Furthermore, in future research, it is recommended case studies with individual analysis of transition or permanence among the stages of change, investigation of variables such as gender, age, education and time to retirement, and longitudinal evaluation of longer duration in order to examine the impact of the intervention after retirement.

References

Adams, G. A. & Rau, B. L. (2011). Putting off tomorrow to do what you want today: Planning for retirement. *American Psychologist*, 21, 1-13.

Armitage, J. C. & Arden, M. (2008). How useful are the stages of change for targeting interventions? Randomized test of a brief intervention to reduce smoking. *Health Psychology, 6,* 789-798.

Bardin, L. (2011). *Análise de conteúdo*. São Paulo: Edições 70.

Bien, T. H., Miller W. R., & Tonigan, J. S. (1993). Brief interventions for alcohol problems: A review. *Addiction, 3*, 15-36.

França, C., Murta, S., Negreiros, J., Pedralho, M., & Carvalhedo, R. (2013). Intervenção breve na prepração para aposentadoria. *Revista Brasileira de Orientação Profissional, 14*, 99-110.

França, L. H. F. P. (2002). *Repensando a aposentadoria com qualidade: um manual para facilitadores de programas de educação para aposentadoria em comunidades*. CRDE UnATI UERJ.

Gollwitzer, P. (1999). Implementation Intentions: Strong effects of simple plans. *American Psychologist*, 54, 493-503.

Hershey, D. A., Henkens, K., & Van Dalen, H. (2010). Aging and financial planning for retirement: Interdisciplinary influences viewed through a cross-cultural lens. *International Journal of Aging and Human Development, 70,* 1-38.

Kazdin, A. (2010). *Research design in clinical psychology*. Boston: Person Education Company.

Leandro-França, C., Murta, S., & Iglesias, F. (2014). Planejamento da aposentadoria: uma Escala de Mudança de Comportamento. *Revista Brasileira de Orientação Profissional, 15,* 75-84.

Lei nº 8.842, de 4 de Janeiro de 1994. (1994, 4 de janeiro). Dispõe sobre a Política Nacional do Idoso, cria o Conselho Nacional do Idoso e dá outras providências. Brasília, DF: Presidência da República. Recuperado de http://www.planalto.gov.br.

Lei nº 10.741, de 1º de Outubro de 2003. (2003, 1º de outubro). Dispõe sobre o Estatuto do Idoso e dá outras providências.

Brasil: Presidência da República: Casa Civil: Subchefia para Assuntos Jurídicos. Recuperado de http://www.planalto.gov.br.

Marques, A. C., & Furtado, F. E. (2004). Intervenções breves para problemas relacionados ao álcool*. Revista Brasileira de Psiquiatra, 26,* 28-32.

Miller, W., & Rollnick, S. (2001). *Entrevista motivacional: preparando as pessoas para a mudança de comportamentos adictivos.* São Paulo: Artmed.

Murta, S., Oliveira, S., Siqueira, A. L., Carvalhedo, R., Gunther, I., Lira, N., & Naves, M. (2010). *Viva Mais! Programa de preparação para aposentadoria: guia para participantes.* Universidade de Brasília, Brasil.

Murta, S. G., Rosa, I. O., Menezes, J. C. L., Rieiro, M. R. S., Borges, O. S., Paulo, S. G.... Del Prette, Z. (2012). Direitos sexuais e reprodutivos na escola: avaliação qualitativa de um estudo piloto. *Psicologia: Teoria e Pesquisa, 28*, 335-344.

Norcross, J., Krebs, P., & Prochaska, J. (2011). Stages of changes. *Journal of Clinical Psychology, 67(2),* 143-154.

Pereira, T., & Guedes, S. (2012). Novo Tempo: A experiência de implantação do programa de preparação para o pós-carreira no IFRN. *Hollos, 4,* 158-177.

Park, S., Tod, D., & Lavalle, D. (2012). Exploring the retirement from sport decision-making process based on the transtheoretical model. *Psychology of Sport and Exercise,13*, 444-453.

Prochaska, J. O. & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychoterapy: Theory, Research, and Practice, 19*, 276-288.

Seidl, J., Leandro-França, C., & Murta, S. (2014). Formatos de programas de educação para aposentadoria. In S. Murta, C. Leandro-França & J. Seidl (Orgs.), *Programas de Educação para Aposentadoria: como planejar, implementar e avaliar* (pp. 84-113). Novo Hamburgo: Sinopsys.

Soble, J., Spanierman, L., & Liao , H. (2011). Effects of a brief video intervention on white university students' racial attitudes. *Journal of Counseling Psychology, 1*, 151-157.

Soares, D. H. & Costa, A. (2011). *Aposent-ação: aposentadoria para a ação.* São Paulo: Vetor.

Sniehotta, F., Schwarzer, R., Scholz, U., & Schuz, B. (2005). Action planning and coping planning for long-term lifestyle change: Theory and assessment. *European Journal of Social Psychology, 35*, 565-576.

Van Solinge, H. & Henkens, K. (2008). Adjustment to and satisfaction with retirement: Two of a kind? *Psychology and Aging, 23,* 422−434.

Walton, M., Chermack, S., Shope, J., Bingham, R., Zimmerman, M., Blow, F., & Cunningham, R. (2010). Effects of a brief intervention for reducing violence and alcohol misuse among adolescents. *American Medical Association, 5,* 527-535.

Wang, M., Henkens, K., & Van Solinge, H. (2011). Retirement adjustment: A review of theoretical and empirical advancements. *American Psychologist, 66(3),* 204-213.

Wang, W. C. Wu, C. Y., & Wu, C.C. (2013). Free time management makes better retirement: A case study of retirees´s quality of life in Taiwan. *Applied Research Quality* Life, 1-14.

Yalom, I., & Leszcz, M. (2006). *Psicoterapia de grupo: teoria e prática.* Porto Alegre: Artmed.

Zanelli, J. C., Silva, N., & Soares, D. H. (2010). *Orientação para aposentadoria nas organizações de trabalho: construção de projetos para o pós-carreira.* Porto Alegre: Artmed.

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