

Original article

Impact of a personal goals management program on the subjective well-being of young retirees

L'effet d'un programme de gestion des buts personnels sur le bien-être subjectif des jeunes retraités

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Abstract

A personal goal-based intervention was offered to retired people aged 50 to 65 years with the objective of increasing their subjective well-being. The program aimed to help the participants set, plan, and pursue their personal goals through a learning process based on literature on goal intervention. At the end of the program, the experimental group ($N = 117$) had improved significantly more than the control group ($N = 177$) on the majority of the goal and subjective well-being indicators, and this gain was maintained six months later. The enhanced well-being observed in the participants after the intervention stemmed from the mediating effect of the goals and was thus due to the greater focus on goals. Some ideas to make the program more effective are discussed.

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Résumé

Une intervention axée sur les buts personnels est offerte à des retraités de 50 à 65 ans en vue d'augmenter leur bien-être psychologique. Le programme présenté ici a pour objectif de promouvoir l'expression, la planification et la réalisation de projets personnels grâce à une démarche d'apprentissage basée sur une synthèse de la documentation relative à l'intervention sur les buts. Suite à la démarche, les participants du groupe expérimental ($n = 117$) se sont améliorés significativement comparés au groupe témoin ($n = 177$) sur la plupart des indices relatifs aux buts et au bien-être subjectif et cette amélioration s'est maintenue six mois après la fin de l'intervention. Le mieux-être observé chez les participants après l'intervention provient de l'effet médiateur des buts. Les gains en bien-être subjectif découlent donc du rehaussement des buts. Certaines indications permettront une application plus efficace du programme *Gestion des buts personnels*.

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Keywords: Goals; Subjective well-being; Retired people; Intervention

Mots clés : Buts ; Bien-être subjectif ; Retraité ; Intervention

1. Introduction

Early retirement is becoming increasingly common, but little research has been done regarding its impact on individual lives and well-being. Although the majority of retirees consider

themselves happy, others become distressed with all the free time, socially isolated, and sometimes, really depressed. Many retirees think it is difficult to find meaningful activities (Jonsson et al., 2000; Jungmeen and Moen, 2001). This life transition can be facilitated by educational and preventive interventions that provide opportunities, not just to improve quality of life and actualize potential, but also to identify coping strategies to deal with typical problems at this stage of life. It appears that setting new goals and looking to the future can

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benefit those going through the transition to retirement (Lo and Brown, 1999; Nuttin, 1987; Schmuck and Sheldon, 2001).

The goal intervention described in this article was designed as a preventive strategy that promotes well-being through a learning process focusing on the development of attitudes and abilities that help retirees realize personal projects that give meaning to their life. This program was intended for retirees who do not have mental health problems but who feel the need to enhance their quality of life. It is based on a strong theoretical and empirical foundation that links the presence and attainment of personal goals to subjective well-being (SWB). In fact, the benefits of being goal-oriented are one of the most widely accepted tenets in general psychology (Ford, 1992; Schmuck and Sheldon, 2001). Before documenting this relationship between personal goals and subjective well-being, we will define the latter variable and identify its indicators since it constitutes the ultimate objective of this program.

1.1. Subjective well-being (SWB)

The SWB concept used here is multidimensional, not normative, and is based on subjective experience (Bouffard and Lapierre, 1997; Diener, 1994). It corresponds to a positive personal evaluation of one's situation. The markers chosen were positive experience with retirement, happiness (short-term), Ryff's (1989) psychological well-being indicators (personal growth, self-acceptance, positive relationships with others, environmental mastery, purpose in life, autonomy), and distress. Thus SWB is operationalized through both positive and negative, as well as cognitive and affective variables, in accordance with current models of mental health (e.g. Labelle et al., 2001). With this wide range of indicators, it was easier to identify the possible effects of the intervention.

1.2. Personal goals and SWB

The relationship between personal goals and SWB can be examined from various angles. Austin and Vancouver (1996) identified different goal-related dimensions. Here we will only consider the steps in the goal realization process — goal setting, planning, and pursuit — followed by the evaluation of the outcome and of the overall process.

1.2.1. Goal setting and SWB

Personal goals are based on self-conceptions and fundamental psychological needs and are situated in a particular social context as well as a broader cultural context. Thus, in his or her own ecological niche, each person must translate internal and external imperatives into concrete, personalized plans appropriate for each stage of life (Nurmi, 1998) in order to ensure personal survival and well-being. This goal-setting/selection operation is extremely important because it translates motivation into action, focuses energy, supports self-regulation of behaviour, and optimizes personality functioning (Bandura, 1997).

The presence of personal goals is predictive of several SWB indicators (Lecci et al., 1994); it is positively related to life satisfaction and purpose in life and negatively to depression (Cantor, 2003; Emmons, 2003). This presence of goals has proved to be a truly therapeutic instrument (Poehlmann and Brunstein, 2000; Salmela-Aro et al., 2000). In short, it is clear that being goal-oriented is beneficial for one's mental health (Lapierre et al., 2001; Nuttin, 1987; Schmuck and Sheldon, 2001).

If desires are not transformed into *firm intentions*, they will never be achieved (like many New Year's resolutions) and will give rise to regret, negative affects, or various types of pathology. In our intervention, the participants were asked to make a comprehensive list of their aspirations, ambitions, and goals, select their priorities, choose a clear, concrete objective formulated in terms of a target-behaviour, and make a firm resolution to work towards attaining this objective with the group's support.

1.2.2. Goal planning and SWB

Planning is a mental exercise that prepares for action; it includes activities that help to achieve the selected goal: exploring possibilities, looking for ways to achieve it, defining steps, identifying circumstances conducive to initiating action, identifying the required skills, foreseeing obstacles and planning strategies to deal with them, and seeking help if necessary (Watson and Tharp, 1997). Certain strategies that are very useful in goal planning are also beneficial to SWB: anticipating the outcome and *ways to achieve it*, problem-solving, dealing with stress, as well as simulating the action, which is a particularly effective strategy (Taylor and Pham, 1996). On the other hand, resignation, hopelessness, feelings of incompetence in problem solving (D'Zurilla and Sheedy, 1991) are detrimental to SWB at this step. "Defensive pessimism" (imagining the worst) increases the effort needed to improve performance, but is burdensome emotionally and can cause exhaustion (Cantor and Blanton, 1996; Norem, 2001). Gollwitzer (1996) has shown that good planning is accompanied by a state of cognitive, emotional, and behavioral *readiness*. In this state of mind, people take action and persist despite difficulties. Planning has proved to be particularly effective to reduce anxiety associated to exams for university students (Bouffard et al., 2001).

In this step of our intervention, the participants were asked to make a detailed plan for achieving their goal. This complex operation was done with the emotional support of the group, and it's suggestions for concrete actions.

1.2.3. Goal pursuit and SWB

Numerous studies indicate that pursuing a goal or moving towards an objective enhances SWB. In a longitudinal study, Brunstein (1993) showed that it is the progress towards the goal that improves SWB and not the reverse. The results obtained by Lawton et al. (2002) indicate that commitment in a goal-directed activity explains a significant part of the variance in positive affect. The positive impact of pursuing a goal on the quality of the experience is clearly shown in Csikszentmihalyi's

(1997, 2004) work on optimal experience (*flow*). In fact, progress conditions the effect of certain variables that are believed to be directly associated with SWB. For example, personal and environmental resources, social support and life events have a positive effect on SWB only if these variables facilitate progress towards the goal (Diener and Fujita, 1995). However, not all progress towards the goal is necessarily beneficial, according to Sheldon and Kasser (1998). In a longitudinal study done with university students, these authors clearly established that progress towards the goal enhances SWB only if the goals are *in harmony* with fundamental psychological needs (Brunstein et al., 1998; Cantor and Sanderson, 1999; Emmons, 1999; Oishi et al., 1999). In addition, Sheldon (2001) insists that progress in pursuing the goal will be beneficial only if the goal-directed initiative is taken for good reasons, i.e. intrinsic reasons.

Effective pursuit of the goal requires appropriate regulation of the actions taken. Brandtstädter and Rothermund (2002) propose two strategies: tenacity, which is characterized by one's perseverance despite obstacles, and flexibility, which is the ability to adjust to situational constraints. Flexibility is a powerful predictor of various SWB indicators and helps to avoid serious problems when the goals are unattainable (Trépanier et al., 2001), as illustrated by fictional heroines like Anna Karenina and Madame Bovary. Finally, the effective pursuit of goals requires sound management of one's personal resources in order to avoid exhaustion. To prevent this type of problem, Ford (1992) recommends temporarily setting aside some goals in order to pursue those considered a priority.

In our intervention, the participants were invited to discuss with other group members the obstacles encountered, difficulties to overcome, and mistakes they made in order to correct their approach, review their plan, or re-evaluate their goal (if necessary). Once again, the group's support was crucial in regulating the pursuit of the goal.

1.2.4. Evaluation of the outcome and of the learning process on SWB

It has long been known that achieving one's objectives generates positive emotions. Sheldon and Hauser-Marko (2001) observed that people who achieve their goals have a positive self-assessment and a high feeling of personal efficacy; they are more involved and get an excellent result, which confirms their self-esteem. This feedback loop also operates in those who fail (Nurmi, 1998). However, success in one's undertakings does not automatically generate happiness. Kruglanski (1996) suggests a few explanations: achieving the goal drained too much energy, the value of the goal declined, the ambition to do better is still present, achieving the objective left a void (as it sometimes happens to gold medalists who do not know what to do with their lives after the Olympics games or to some retirees who feel that there is nothing left to do after work disappears from their life). The relationship between goal attainment and SWB is moderated by different variables like causal attribution. Success is a source of pride insofar as it is attributed to an internal cause (effort or skill, for example) (Weiner, 1986). Not achieving the goal is generally associated with dis-

satisfaction, but this is not always the case (Emmons, 1999) because individuals may learn from their mistakes, work harder next time, or use certain mechanisms to protect their self-esteem (Watson and Tharp, 1997).

In addition to the outcome obtained, the individual also evaluates the overall process. Regardless of the extent to which his or her objective has been attained, an individual may be satisfied and proud of having dealt with certain obstacles, learned something, refined some skills, actualized some of his or her potential, and, because of this, have faith in the future. In interviews conducted by Bouffard et al. (2001), some of the participants said they had learned something significant about themselves and that this increased awareness is sometimes much more important than achieving the particular objective.

In this last step of the intervention, the participants were asked to evaluate the extent to which they had achieved their goals and the satisfaction they felt in regard to this achievement. They also evaluated the different steps in the process in order to clarify what they had learned and be able to use this approach again in the future.

After reviewing the literature, it is clear that each step in the process contributes to SWB. The process may seem linear, but it includes feedback loops so that there is some interplay between the steps and a need for constant adjustment (Nurmi, 1998). For example, planning the action may very well require the goal to be specified or replaced, pursuing the goal may require the plan to be revised, and evaluating the outcome may restart the process by choosing a new target-behaviour. When the impact of affect is added to the process (Schwarz and Bohner, 1996), there is even more interplay. This illustrates the complexity of the mechanisms involved and the power and sophistication of human adaptability in pursuit of a goal.

1.3. Other aspects of the intervention

The intervention program included the steps described above (goal setting, goal planning, goal pursuit, and evaluation of the outcome). Its objective was to help the participants move towards attaining the chosen goal and, at a deeper level, learn the process itself so as to be able to manage their own change and achieve enhanced and lasting well-being (Watson and Tharp, 1997). In accordance with the literature on goal intervention, the desired therapeutic changes were to increase the participants' ability to identify and modify irrational beliefs detrimental to the goal realization process, promote cognitive factors that improve regulation of the action, increase the ability to view alternate means to achieve a goal, and create warm interpersonal relationships and mutual support so that the pursuit of personal goals could bring positive affects (Poehlmann and Brunstein, 2000).

The program was designed for young, community-living retirees. It was based on the idea that personal growth can be achieved at any stage in one's life (Erikson et al., 1986; Vailant, 2002), that it is possible to "optimize" residual potential

— in short, that the retirees could benefit from a psychosocial intervention, especially one given in small groups (Toseland and Rivas, 1998). This intervention has been found to be effective in numerous cases and to have various positive effects (Bouffard et al., 2001).

2. Empirical Study

2.1. Objective and hypotheses

The objective of this study was to verify the impact of the intervention on the participants' goals or projects and SWB. The participants were given the opportunity to join a program called: *Managing your retirement goals*. Their results on goals and SWB indicators were compared to those of a *control group* who was not offered the intervention, but who also filled out the questionnaires three times (pre-test, post-test and follow-up six months later) as part of a study on adaptation to retirement. Based on the theory and the results presented above, the first hypothesis was that the SWB of the participants in the personal goal-oriented intervention would improve significantly more than the SWB of the control group, at both post-test and follow-up. Since it has been shown that having goals and nourishing the hope of achieving them are variables that are strongly associated with SWB, the second hypothesis was that this increase in SWB would stem from the effect of the intervention on goals and hope, in other words, that the goal-related variables would have a mediating effect.

2.2. Participants

Using a non equivalent control group methodological approach, the intervention program was given to 154 retirees aged 50 to 65 years who wanted to take a workshop to help them better adjust to retirement. During the intervention, 19 participants (12.3%) dropped out and 18 (11.7%) did not complete the questionnaires at follow-up. For the control group, 200 people completed the questionnaires at the pre-test, 14 (7%) dropped out at post-test, and 9 (4.5%) at follow-up. The control group participants who completed the questionnaires at all three measurement times were given CDN\$15, which was a good incentive. All participants were French-speaking Canadians. In both groups, there was no significant difference on any of the variables between those who dropped out and those who did not.

The final sample comprised 117 individuals in the experimental group and 177 in the control group. The retirees in both groups were comparable in regard to age ($M = 57.9$ years, $SD = 3.26$ vs. $M = 57.6$ years, $SD = 3.01$), gender distribution (69.2 vs. 61.6% women), financial situation (84.3 vs. 92.6% satisfied or very satisfied) and schooling ($M = 14.1$ years, $SD = 2.97$ vs. $M = 14.2$ years, $SD = 3.34$), but they differed in regard to the length of retirement. Although all had retired within the previous six years, those in the control group had been retired for longer ($M = 40.4$ months, $SD = 19.98$) than

those in the experimental group ($M = 29.5$ months, $SD = 21.94$) ($t(288) = 4.37$, $P < 0.001$).

2.3. Instruments

The general information questionnaire covered the usual socio-demographic variables. The SWB indicators were evaluated using several instruments. The *Retirement Experience Assessment Scale* [Évaluation du vécu de retraite] (Lapierre and Bouffard, 2001a) measures emotional well-being through 14 statements rated on a seven-point Likert scale (ex.: Since I got retired, I feel disappointed and sad (reversed item). Since my retirement, I can finally do what I want.). It reached a Cronbach alpha of 0.90, indicating good internal consistency. The *Short Happiness and Affect Research Protocol* (SHARP, created by Stones and colleagues, 1996; translated into French by two of the authors, see Bouffard and Lapierre, 1997) contains six items measuring short-term happiness (few months), answered with a yes or no. It has an acceptable internal consistency ($\alpha > 0.82$). Ryff's (1989) six *Psychological Well-being Scales* (translated into French by Bouffard and Lapierre, 1997) contribute to a nuanced analysis of psychological well-being. These scales, each of which contains six statements evaluated on a six-point Likert scale, present good alpha coefficients: self-acceptance (0.91), autonomy (0.83), environmental mastery (0.86), positive relations with others (0.88), personal growth (0.85) and purpose in life (0.88). One of the questionnaires measured a negative aspect of SWB. It was the *Psychological Distress Index* from the *Quebec Health Survey*, which evaluates the frequency of distress symptoms in the preceding week, using 29 items and a four-point scale (Cronbach alpha = 0.90).

Three other instruments were used to verify the impact of the experimental manipulation, i.e. determine if it had an effect on goals and projects. The *Goal Realization Process Questionnaire* (*Questionnaire sur le processus de réalisation des projets de retraite*) (Lapierre and Bouffard, 2001b) evaluates individual ability to set, plan, and pursue personal goals (20 items) using a seven-point Likert scale. For example, "During this stage of my life, I set little objectives that I like" is a goal setting item; "During this stage of my life, I actively seek ways and means to accomplish the things I want to do" is a goal planning item, and "I feel I'm able to face the difficulties that arise in the pursuit of my projects" is a goal pursuit item. The questionnaire has high internal consistency ($\alpha = 0.91$). The *State Hope Scale* (Snyder et al., 1996; translated into French by Lapierre and Bouffard, 2001c) evaluates two dimensions: individual's will or determination to attain his/her goals, and the ability to identify a variety of means to do so. The six items are evaluated on a four-point scale. The instrument's internal consistency is high ($\alpha = 0.91$). The *Goal Instability Scale* (Smith and Robbins, 1988) was translated by the team; it comprises ten items which the participants evaluate on a six-point scale that was reverse in order to give a score of positive orientation toward the future (ex.: After a while, I lose sight of my goals). That is why this variable was named *goal orientation*. The alpha coefficient is

0.86. For all the instruments used, a high score means that the variable measured is at a high level.

2.4. Procedure

The participants of the two experimental conditions were recruited simultaneously but separately through notices in the local media and contacts with associations of retirees. The control group participants were asked to call the Laboratory about participating in a study on adaptation to retirement for people aged 50 to 65 years. The research professional gave them information about the research objective, questionnaires, three measurement times, and the indemnity, verified their eligibility and mailed them an information sheet, the first series of questionnaires (pre-test), and the consent form. For the experimental group, ads invited new retirees from 50 to 65 years to take the *Managing your retirement goals* workshop, designed to help them to get through a life transition, improve the quality of their life during retirement, learn a process to manage their life goals, and help them realize one personal, concrete, and meaningful personal project during the workshop. Eligible individuals were invited to an information session (in groups of 8 to 10), where they were given information about the content of the meetings, the program's objectives and steps, the research process (pre-test, post-test, follow-up), and other relevant information. Their expectations were not assessed, but discussed to make sure that they understood well the research and the intervention programs. Those who were interested were asked to sign the consent form and complete the pre-test questionnaires immediately¹. After the pre-test, the meetings began. Each group was conducted by a retiree and a psychology graduate student who had been trained to perform this function.

The personal goals management program comprised 10 to 12 two-hour weekly meetings for groups of 7 to 10 people. Table 1 presents the content and objectives of each step in the process: goal setting, planning, and pursuit, as well as the final evaluation. The intervention objective was to help the participants define their goals and pursue them effectively. On a deeper level, it was hoped that the intervention would help the participants to learn the process so they could repeat it to attain other priorities and achieve lasting SWB. The workshop program is described in detail in the document entitled: *It's now retirement: let's choose our projects. Management of personal goals. Group moderator guide* (2001) [*À la retraite: choisissons nos projets. La gestion des buts personnels. Guide de l'animateur*]².

The study included three measurement periods: pre-test, post-test at the end of the intervention program, and follow-up 6 months later. The control group subjects had to complete the questionnaires at the same moments as the experimental group participants. The study lasted two-and-a-half years and

Table 1
Description of the personal goals management program

Steps	Meetings	Content of the meetings
Preliminary meetings	1	Making the acquaintance of the group participants. Information on the program.
	2	Group discussion and exchange about the retirement transition experience.
Goal setting	3	Inventory of personal aspirations, goals, intentions, aspirations, and projects.
	4	Identification of irrational beliefs about goals. Selection of goals that have a high priority and evaluation of each of them according to different characteristics (effort, stress, enjoyment, difficulty, resources, conflict, control, probability of attainment).
	5	Description of the goal in concrete and precise terms as a target-behavior. Selection of one goal and personal commitment to its realization.
Goal planning	6–7	Planning of goal-related action (where, when, how), anticipating obstacles and identifying strategies to face them, identifying personal and social resources. Planning should be re-evaluated regularly. Suggestions from the group are important at this time.
Goal pursuit	8–9–10	Execution of the plan, persistence toward the goal. Facing difficulties with the emotional support of the group. Revision of goal planning could be necessary and even questioning the priority of the goal.
Outcome evaluation	11	Evaluation of the outcome and progress in reaching the goal. Evaluation of the learning process.
Follow-up meetings		According to participants' wishes.

groups of participants were recruited at four different times but simultaneously for the two experimental conditions.

3. Results

In non-equivalent control group designs such as ours, a number of strategies have been suggested to analyze the results (Cook and Campbell, 1979), for instance ancova (with pre-test scores as covariates), gain score (i.e. difference between pre and post-test scores), and standardized gain scores. Analysis of covariance requires that covariate does not vary between experimental conditions. However, this is often a problem in non-equivalent group designs. Gain scores provide an easy way to test whether a group improves or deteriorates between two measures, and standardized gain scores are suggested (e.g. Kenny, 1975) in some particular circumstances (a selection-maturation interaction effect, called the spread-fan pattern). Since this was not the case in our study (for instance, variances do not increase with increasing means), gain scores were computed between the three time periods.

In order to test the first hypothesis, three change scores indicating progress were calculated for each of the variables: one between pre-test and post-test, the second between pre-test and follow-up, and the third between post-test and follow-up (Tables 2 and 3). Then analyses of covariance, controlling for the length of retirement, identified the variables on which the

¹ Participants have answered anonymously by themselves the questionnaire to reduce experimenters' demand effect.

² Available from the lead author.

Table 2

Means and standard deviations of variables for experimental and control groups ($N = 294$)

	Experimental group						Control group					
	Pre-test		Post-test		Follow-up		Pre-test		Post-test		Follow-up	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>Experimental manipulation</i>												
Project realization /7	4.76	1.06	5.51	0.90	5.26	0.98	5.33	0.96	5.40	0.93	5.35	0.96
Hope /4	3.21	0.51	3.40	0.46	3.35	0.51	3.45	0.45	3.45	0.45	3.41	0.49
Goal orientation /6	4.24	1.04	4.77	0.88	4.75	0.96	5.04	0.96	5.08	0.90	4.99	0.97
<i>Positive SWB indicators</i>												
Retirement experience /7	5.45	1.07	5.81	0.98	5.83	0.98	6.08	0.95	6.06	0.90	6.02	0.95
Short-term happiness /1	0.24	0.30	0.35	0.28	0.37	0.24	0.40	0.20	0.42	0.19	0.40	0.21
Personal growth /6	4.70	0.74	4.84	0.74	4.84	0.70	4.71	0.83	4.71	0.78	4.63	0.83
Self-acceptance /6	4.67	0.80	4.79	0.78	4.87	0.75	5.01	0.70	5.10	0.61	5.06	0.65
Positive relations /6	4.63	0.90	4.73	0.86	4.81	0.90	5.00	0.87	5.01	0.85	4.95	0.83
Environ. mastery /6	4.79	0.69	4.92	.76	5.08	0.68	5.25	0.70	5.25	0.66	5.19	0.74
Purpose in life /6	4.46	1.01	4.89	0.84	4.88	0.91	5.06	0.84	5.10	0.77	5.02	0.85
Autonomy /6	4.44	0.81	4.58	0.75	4.65	0.77	4.77	0.77	4.78	0.77	4.75	0.77
<i>Negative SWB indicator</i>												
Distress /4	1.65	0.47	1.52	0.39	1.49	0.38	1.45	0.38	1.43	0.34	1.45	0.35

Table 3

Change scores for experimental and control groups between time measures adjusted for length of retirement ($N = 294$)

	Mean differences								
	Pre-test and post-test			Post-test and follow-up			Pre-test and follow-up		
	Exp.	Control	F	Exp.	Control	F	Exp.	Control	F
<i>Experimental manipulation</i>									
Project realization	0.76	0.07	48.81***	-0.26	-0.05	5.05*	0.50	0.02	22.57***
Hope	0.19	0.00	15.49***	-0.04	-0.04	0.01	0.15	-0.04	11.68***
Goal orientation	0.53	0.04	34.29***	-0.02	-0.09	0.57	0.51	-0.05	33.57***
<i>Positive SWB indicators</i>									
Retirement exp.	0.36	-0.02	14.92***	0.01	-0.04	0.78	0.37	-0.06	16.36***
Short-term happiness	0.11	0.02	9.80**	0.03	-0.02	3.34	0.13	-0.00	20.57***
Personal growth	0.14	-0.01	3.33	0.01	-0.08	0.83	0.14	-0.08	6.11**
Self-acceptance	0.12	0.08	0.20	0.08	-0.03	3.44	0.20	0.05	3.77*
Positive relations	0.11	0.00	1.41	0.08	-0.06	3.34	0.19	-0.06	6.78**
Environ. mastery	0.14	0.00	2.65	0.16	-0.06	15.55***	0.30	-0.06	24.44***
Purpose in life	0.44	0.04	20.69***	-0.02	-0.08	1.70	0.42	-0.04	24.70***
Autonomy	0.14	0.01	2.32	0.07	-0.03	1.03	0.21	-0.01	5.68*
<i>Negative SWB indicators</i>									
Distress	-0.12	-0.03	6.58**	-0.03	0.03	3.20	-0.16	-0.00	13.09***

* $P < 0.05$. ** $P < 0.01$. *** $P < 0.001$.

experimental group improved significantly more than the control group following the intervention³. Because of the number of variables examined, the significance level was set at $P < 0.01$ for all the analyses. Table 3 shows that the participants in the experimental group (*Management of personal goals*) made significantly more progress than those in the control group between pre-test and follow-up on almost all the indicators. The only exceptions were self-acceptance and autonomy, which were only significant at $P < 0.05$. Between pre-test and post-test, the gains were greater in the experimental group for the three goal-related variables, and for positive experience with retirement, happiness, purpose in life, and distress (which declined). The comparison between post-test and follow-up showed that the gains were maintained (except for goal realization). We should point out that at pre-test the experimental group participants reported significantly lower

scores related to goals and SWB than those in the control group. The intervention program brought them up to a comparable level (see Table 2), except for goal-orientation [$t(290) = 2.03$, $P < 0.05$], and self-acceptance [$t(292) = 2.34$, $P < 0.05$], which remained lower.

The second hypothesis was that the increase in SWB stemmed from the effect of the intervention on the goal-related variables. In this case, the analyses were restricted to the 117 experimental group participants. To test for the mediating effect of the goals, a path analysis (Fig. 1) was applied through multiple regression analyses. Based on the second hypothesis, we expected to find a weak direct effect of the goals at pre-test on SWB at post-test (ρ_{x1y2}) and a strong indirect effect of the goals at pre-test on SWB at post-test via the goals at post-test ($\rho_{x1x2} * \rho_{x2y2}$). The results confirm the mediating effect of the goals at post-test (Table 4). Apart from a two exceptions, the indirect effect has a higher coefficient than the direct effect. The effect of goal-orientation appears to be the most important, followed by hope, and then the goal realization process.

³ These results were corroborated by ANCOVAs where the results at pre-test were entered as covariables.

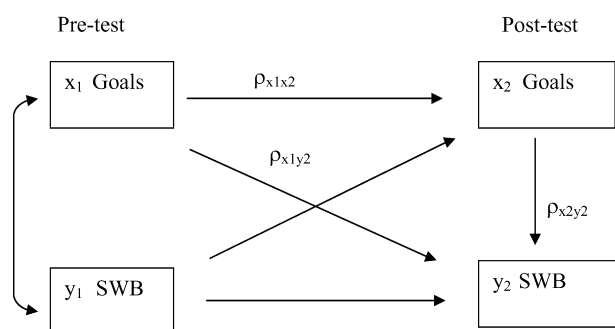


Fig. 1. Direct ($p_{x_1y_2}$) and indirect effects ($p_{x_1x_2} * p_{x_2y_2}$) of goal variables on SWB.

Case Study: Mrs. M.

To properly illustrate the intervention process and to better understand the psychological significance of the results, we believed that it would be pertinent to present them in the form of a case study.

Mrs. M. is a widow of 63 with four children and eight grandchildren. She describes herself as being happy, good-natured and a person who moves ahead with confidence. She adored her work at a hospital, where she enjoyed the trust and esteem of her colleagues. The shift towards ambulatory health care, with its budget cuts and mergers, led to many frustrations for Mrs. M. These were further aggravated, as she felt excluded

by the members of her new work team. It is in this context that she retired five years ago.

This woman could be described as "reactive" in the sense that she reacted constantly to the provocation and indifference of her husband. "Her husband only had to suggest that she do one thing, for her to do the opposite", wrote the program animator in her observations. Widowed for five months, she presented herself at the workshop "Managing your retirement goals" feeling helpless and discouraged, as the death of her husband had left her without direction. For example, prior to the workshop, she did not tell anyone that she was widowed and she had yet to make any changes in her home, especially to her husband's bedroom. She quickly realized that she needed to grieve the death of her husband and the loss of her work, to take things in hand, pick herself up, and turn the page. The two program animators truly helped her see things more clearly as Mrs. M. spent many hours with them in discussion at the end of the workshops. Let's quickly run through the different steps she undertook during the intervention process.

The *choice of a clear and tangible goal* was preceded by the inventory of goals and projects and the choice of priorities. Mrs. M.'s priorities were:

- put my talent to good use;
- recover my self-confidence and autonomy;

Table 4
Direct et indirect effects (r and $B\acute{e}ta$) of SWB variables on goal variables at post-test ($N = 117$)

	Direct effects						Indirect effects
	$r_{x_1y_1}$	$p_{x_1 \times 2}$	$p_{y_1 \times 2}$	$p_{y_1y_2}$	$p_{x_2y_2}$	$p_{x_1y_2}$	$p_{x_1 \times 2} * p_{x_2y_2}$
<i>Realization process</i>							
Retirement experience	0.54***	0.53***	-0.00	0.60***	0.55***	-0.19*	0.29
Short-term happiness	0.44***	0.47***	0.11	0.40***	0.43***	-0.08	0.20
Personal growth	0.44***	0.51***	0.04	0.47***	0.53***	-0.18*	0.27
Self-acceptance	0.49***	0.40***	0.26**	0.69***	0.30***	-0.14*	0.12
Positive relations	0.31***	0.51***	0.05	0.67***	0.36***	-0.15*	0.18
Environ. mastery	0.52***	0.45***	0.13	0.54***	0.48***	-0.19*	0.22
Purpose in life	0.75***	0.41***	0.15	0.54***	0.61***	-0.22**	0.25
Autonomy	0.28**	0.49***	0.11	0.68***	0.33***	-0.13	0.16
Distress	-0.34***	0.49***	-0.09	0.52***	-0.50***	0.19*	-0.25
<i>Hope</i>							
Retirement experience	0.61***	0.51***	-0.03	0.53***	0.36***	0.04	0.18
Short-term happiness	0.51***	0.47***	0.05	0.39***	0.42***	-0.09	0.24
Personal growth	0.51***	0.44***	0.11	0.43***	0.44***	-0.10	0.19
Self-acceptance	0.62***	0.34**	0.26**	0.58***	0.38***	-0.02	0.13
Positive relations	0.38***	0.48***	0.04	0.69***	0.35***	-0.18*	0.16
Environ. mastery	0.52***	0.37***	0.24**	0.44***	0.48***	-0.07	0.18
Purpose in life	0.65***	0.41***	0.13	0.51***	0.51***	-0.09	0.21
Autonomy	0.29**	0.47***	0.09	0.67***	0.23**	0.03	0.11
Distress	-0.50***	0.46***	-0.09	0.46***	-0.49***	0.06	-0.23
<i>Goal orientation</i>							
Retirement experience	0.46***	0.55***	0.05	0.57***	0.55***	-0.19*	0.30
Short-term happiness	0.44***	0.51***	0.13	0.30***	0.48***	0.07	0.24
Personal growth	0.41***	0.55***	0.05	0.47***	0.57***	-0.24**	0.31
Self-acceptance	0.60***	0.41***	0.27**	0.55***	0.45***	-0.05	0.18
Positive relations	0.29***	0.53***	0.12	0.62***	0.44***	-0.17*	0.23
Environ. mastery	0.56***	0.48***	0.16	0.42***	0.55***	-0.08	0.26
Purpose in life	0.68***	0.48***	0.14	0.47***	0.57***	-0.12	0.27
Autonomy	0.36***	0.54***	0.09	0.67***	0.35***	-0.12	0.19
Distress	-0.54***	0.49***	-0.14	0.38***	-0.58***	0.05	-0.28

* $P < 0.05$. ** $P < 0.01$. *** $P < 0.001$.

- reestablish myself either through work or a charitable cause;
- join a new circle of friends.

It was this last priority that she chose as the "target behavior" to achieve during the course of the workshop. As with all her goals and aspirations, Mrs. M. takes things to heart, wants things to change, as she would say "as quickly as possible as I am at wits end"! It is important for her to make friends and meet new people and, once again, become the high-energy, decisive woman she was previously. She did not want to wait passively but to "go on ahead" and in this, she was supported by those closest to her and the members of the group workshop. As the meetings progressed, this support became tangible.

Planning was done with attention and in detail. She put her objective into concrete form by committing to attend breakfasts for retirees, to find new activities to participate in (charitable work) with others, and to take the initiative to call people instead of waiting for them to call her. The technique of internal language suggested in the *Participant's Guide* was helping her greatly as she convinced herself not to give up. The meetings with the animators also provided support. It was during these exchanges that she decided to undertake psychotherapy to "put things back into perspective" and to "pursue her grief work".

During the *goal pursuit* phase, Mrs. M. demonstrated "exemplary courage" as noted by the animator. She made considerable progress towards realizing her goal to meet friends, but also towards the broader objective of rediscovering the woman she was. Other participants, experiencing similar problems of isolation, exchanged with her; in doing so, they created mutual support. In fact, during the weeks that followed, a genuine intimacy and support (very moving on occasion) developed within the group.

At the end of the process, during the *evaluation phase*, Mrs. M. considered that she had achieved 75% of her objective and was totally satisfied. She set herself to continue, as she realized that she could not "go faster than time". She noted that "the process truly helped me to put my finger on the real reasons for my disarray. It gave me the opportunity to understand and work through the two losses that I was living". She felt that she was moving towards "finding the woman from before" and for this, she was very happy, even if there was lots of work still to do.

It was apparent that Mrs. M. fully involved herself in this process, that she obtained the anticipated benefits, and that she decided to undertake deeper work through psychotherapy. In her case, she not only learned and used the strategies to help her achieve her objective but also improved her own sense of well-being.

4. Discussion

The results showed that the personal goal management program was effective in improving the participants' ability to rea-

lize their goals by learning how to set, plan, and pursue their retirement projects. It also increased their orientation toward the future and, to a lesser extent, developed hope (willingness and ability to identify various ways to achieve their goals). During the study, the experimental group participants progressed more than the retirees in the control group on these different aspects. These results indicate that it is possible to teach individuals how to integrate and use the components and strategies involved in the different steps to achieve goal realization, and to apply these strategies afterwards to adjust better to retirement. The intervention also produced benefits in terms of SWB. Despite the difficulties encountered prior to the program, the participants increased their SWB to a level comparable with that of the retirees in the control group, and maintained it six months after the intervention.

The improvement in the participants' well-being stems from the mediating effect of the goals. In other words, the gains in SWB were due to the augmentation of the goal-related variables. These participants became more skilled at going through the steps in the goal realization process, more oriented towards the future, and more confident of their abilities to reach their goals (hope) and, because of this, their SWB improved. These results corroborate those obtained by Cantor and Sanderson (1999) and Emmons (2003), according to whom the mere fact of having goals enhances well-being. They also support the conclusions of Brunstein (1993), who, with a longitudinal design, showed that it is the progress towards the goals that increases SWB and not the reverse. In short, commitment in goal-directed activities explains a significant part of the variance in positive affects (Lawton et al., 2002) and produces an optimal experience (Csikszentmihalyi, 2004).

Because we used numerous SWB indicators, we were able to observe various types of improvement: happiness (short-term), positive experience with retirement, environmental mastery, personal growth, purpose in life, and relations with others, plus a substantial decrease in distress, even six months after the intervention.

The goal realization variable is puzzling: it decreased significantly between post-test and follow-up in the experimental group compared to the control group (-0.26 vs. 0.05), even if this variable increased significantly between the start of the intervention and follow-up in the experimental group compared to control group (0.50 vs. 0.02). Is there a need to review the intervention strategies, do more follow-up? These are some of the questions that could be explored.

5. Limitations

The individuals willing to participate in the study were not randomly assigned to the two groups. Although this rigorous experimental design is theoretically more powerful (in detecting effects), it was not appropriate in this instance. In a previous study, the people not assigned to the experimental group said they were "frustrated", which contaminated the results. The quasi-experimental design we used is closer to reality and had the advantage that the control group subjects did

not know about the intervention or that they were part of a comparison process. The disadvantage of starting with unequal groups was inherent to the program since the individuals who registered for the workshop thought they experienced enough difficulties and distress to be motivated to take the program, which did in fact help them improve their well-being to the level of the more healthy individuals.

Follow-up studies could examine the effect of this program on depression or anxiety during other life transitions that require reorienting one's life and restructuring the hierarchy of personal goals (or priorities), such as mourning a spouse (death or divorce) or the loss of physical capacities.

6. Conclusion

The personal goal management program was built on a strong theoretical and empirical foundation; setting, planning, and pursuing a specific project was broken down into several steps that guided the participants through the process from desire to the attainment of their goals. The literature showed that each of the steps in this process enhances SWB.

The program was effective with young retirees. The intervention generated significant benefits in the participants and is promising since it also had positive effects in older adults (Bouffard et al., 1996; Dubé et al., 2000) and university students (Bouffard et al., 2001). It thus achieved one of its objectives: to develop lasting well-being.

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