Community-based intervention in schools: a personal and social competence promotion program

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Abstract

Primary prevention, through universal interventions, aims at the development of personal and social resources, and nowadays, it is one of the most important strategies for the prevention of drugs abuse in youth. School setting is pointed out as one of the best scenarios for health promotion actions. In this article are shown results of a Personal and Social Competences Promotion Program - PSCPP [1] [2] which took place in two schools in Lisbon. The program aims to prevent substance use, by means of developing personal and social competences. 100 students, aged between eight and eleven years, participated, mostly boys. The intervention occurred during school classes and was based on role-playing activities. Evaluation showed significant positive results in what concerns psychological difficulties, perception of social support, and problem solving competences. Teachers' evaluation pointed out a better social behaviour among peers, as well as the importance of implementing programs promoting personal and social competences in schools. PSCPP had a positive impact on children positive health. Details of this project can be found in a manual [3].

Keywords: children, substance use, social competence.

Purpose

This project began in 2002 from a partnership between the "Social Adventure" Project/Faculty of Human Kinetics and Junta de Freguesia de Santa Maria de Belém,

with a study on substances abuse (alcohol, drugs and tobacco). The main results of this study [4] showed that citizens, who had already tried some of the substances, started tobacco and alcohol use during adolescence. The main aim of this project is the primary prevention of substance use in school-aged children. This goal was achieved developed through the promotion of personal and social competences, enabling decision-making and competences for managing conflicts [3]. This project lasts two years. During the first year community facilitators (peers) were trained and in the second year worked with other groups of children in the project. In both years, the intervention was based in a Personal and Social Competences Promotion Program - PSCPP [1] [2].

Introduction

Personal and social competences become an important tool for the development of prevention strategies. Nowadays, these competences are present in most of the programs for children and adolescents. The prevention focuses the promotion of personal and social competences [5].

According to the World Health Organization [6], health can be defined as "physical, social and mental wellbeing and not only as the absence of illness or disease" (p. 5). Therefore, it is possible to conceptualize health promotion not only as a way to prevent illnesses, but also as an approach for developing competences in order to protect and maintain health [7].

Adolescence is a stage with specific characteristics and tasks, which includes the development of psychosocial autonomy and personal identity. According to Matos et al. [8], boys and girls experience this stage in different ways, in what concerns reactions to challenges and difficulties. Boys show a bigger trend to externalizing behaviors (substance use, accidents, and violence, among others), while girls show a bigger frequency of internalizing behaviors (physical symptoms, body image and appearance, among others). However, finding is not considered in most prevention programs and interventions. This means that, in a global way, the effectiveness of programs is demonstrated, but it is not specified for gender [9]. A national study [7] carried out in 2002 concluded that boys begin substance use earlier. The same research showed that the level of drug abuse is higher in boys, special in the oldest ones. The main reasons for these results are that they want to try, their friends also use drugs, and they feeling lonely.School failure and use/abuse of substances (alcohol, tobacco and illicit substances) are some of the behaviors related with personal, school and social problems. Often, these behaviors are connected to difficulties in interpersonal relationship [3].

The absence of social competences leads to problems in the interpersonal and social relationships, which include difficulties making new friendships, ability to accept critics, dealing with provocation, resisting peer pressure [1,2,4].

Therefore, with this study, we intend to understand if a program based on the promotion of personal and social competences can be effective producing some personal and social gains in children and therefore may protect them from health compromising behaviors.

Methodos

Participants

Participants were selected from two schools in Lisbon. There were two initial meetings with the school's director and teachers in order to define which classes should be involved. To be eligible for the project, children had to be attending the 4th and 5th grade, in the first year of the project total of 10 teachers and 100 students were involved. Pupils were aged between 8 and 11 years old, mostly boys, were divided in the following groups: (1) Intervention group (IG) – pupils who attended the intervention program; (2) Waiting list group (WLG) –pupils who filled in the evaluation protocol, but didn't attend the program during that period. The IG had 50 students, mostly boys (68%), with an average age of 10 years old. Participants from this group attended 4th (70%) and 5th (30%) school year. The WLG, with 50 pupils, was mostly boys (60%), also with an average age of 10 years old.

In the second year of the project, only an IG was constituted with 40pupils, but only 36 completed the evaluation. 15 from these pupils had been in the IG of the first year. This group of participants had an average age of 11 years old, and 50% attended the 4th year of school, 13,9% the 5th,and 36,1% the 6th school year. This group had fewer boys (52, 8%) than the previous one.

Measures

In the first year, pupils of IG and WLG filled out a pre and post evaluation. In the second year, it was accomplished only a final evaluation. In the questionnaire filled out by the pupils, the following instruments were included. The *demographic questionnaire* included the following items: gender, age, the year of education and the attended school.

The anxiety scale was assessed with 37 items of the *revised children's manifest anxiety scale* -RCMAS (Reynolds & Richmond, 1994, [10] translated by Martins [11]), measuring the level and nature of anxiety. This questionnaire has four dimensions: physiological anxiety, worry/oversensitivity, social concerns and concentration. The items

are rated in a yes-no answer, with a total score ranging from 37 to 74, where a higher score means less anxiety.

The *school's subjective evaluation scale* [12] consists of 20 items, scored on a 1-5 point Lickert scale, concerning (in) adaptation to school's rules, (in) security in school's evaluation and self-esteem. The total score ranges between 20 and 100. In the first two dimensions, a higher score means more inadaptation and insecurity. In the third it means more positive influence of colleagues and teachers.

The *adolescents' psychological wellbeing scale* [13] is a 28 items self report measure of wellbeing. The items are rated in a 1-6 point Lickert scale and have a total score ranging from 28 to 168. It has five scales: anxiety, negative emotions and cognitive aspects, positive emotions and cognitive aspects, social support and self-perception competences. In the first two scales, a higher score means more wellbeing, but in the last three, means less perception of psychological wellbeing.

The final evaluation on the first year also included a small questionnaire concerning health behaviors. This last evaluation instrument was a reduced and adapted version of the questionnaire used in the study "*Health Behavior School-aged Children"* [7] for our target group, and was filled out by both groups (EG and WLG). This version had 32 items concerning parents, physical and psychological symptoms, substance use, eating habits, leisure time, bullying, school and peers.

The second year had a questionnaire about *feelings, knowledge and attitudes towards the program* [1; 2; 14]. This evaluation includes several types of questions and answers (free answer, 2 and 3-point Lickert scale, and multiple choices).

Procedure

The project was developed between November 2003 and July 2005 with the implementation of a PSCPP in the IG, with weekly basis sessions. The sessions were 45 minutes long, in a school's room. The theoretical background for the development of this *Intervention Curriculum* included main contents of the PSCPP [1] [2]: (1) interpersonal communication and emotional management/ problem solving (initial); (2) social competences and emotional management/problem solving (advanced); and (3) role-playing.

The program had two types of sessions. The regular sessions had the following structure: (1) Initial dialogue (where it was recalled and discussed the previous session); (2) Ice-breaking or cooperative activities (proposed to enable teamwork and group cohesion); (3) Main Content/activity (where situations related with specific contents were proposed) and (4) Final dialogue (designed to think and reflect on the activities proposed during the session). During the sessions, pupils could interrupt the activities whenever they felt they need, in order to express their feelings and opinions. Extra

sessions had a different structure and context, aiming at applying in real situations the knowledge acquired in the regular sessions, and also to develop group cohesion Those sessions included visits to monuments, activities with the elderly and activities organized by the children, themselves.

The IG had a total of 19 regular sessions and 4 extra sessions. The final evaluation, in the second year, was filled after a total of 25 regular sessions and 5 extra sessions.

Results

The Social Package for Social Sciences – SPSS (version 12.0) was used for all the analysis performed. The Wilcoxon test was used to carry out groups' comparisons.

Revised children's manifest anxiety scale

The results obtained in the anxiety scale show a generalized decrease of anxiety in both groups. There are significant differences for the IG in the sub-scale "social concerning/concentration", and for WLG in the sub-scale "concerning/hypersensitivity".

Table 1. First year's initial and final evaluation - Wilcoxon test

		Media		N	z
		Baseline	Final		
IG	Global scale	60,5	60,7	26	- 2.32*
	Sub-scales				
	Physiologic Anxiety	17,2	16,8	33	- 0.11
	Concerning/Hypersensitivity	18	17,6	29	- 0.89
	Social Concerning/Concentration	12,1	12,5	32	- 2.23*
WLG	Global scale	55,9	58,3	32	- 2.43*
	Sub-scales				
	Physiologic Anxiety	15,8	16	44	- 0.85
	Concerning/Hypersensitivity	15,6	16,5	44	- 2.52**
	Social Concerning/Concentration	11,8	12	42	- 0.41

* $p < .05$; ** $p < .01$

Those results were kept in the intervention group, in the one-year follow-up.

School's subjective evaluation scale

Results of the *school's subjective evaluation scale* showed a generalized decreasing pattern in both groups, although only significant in the WLG.

Table 2. One-year follow-up (Wilcoxon test)

		Media 1st year	Media 2nd year	N	z
IG	Global scale	58,8	63	10	- 1.48
	Sub-scales				
	Physiologic Anxiety	16,4	17	11	- 0.84
	Concerning/Hypersensitivity	16,4	18,7	10	- 1.49
	Social Concerning/Concentration	12,6	12,6	10	- 0.64

Table 3. First year's initial and final evaluation - Wilcoxon test

		Media Baseline	Media Final	n	z
IG	Global scale	61,1	60,4	24	- 0,89
	Sub-scales				
	(In)Adaptation to school's rules	11,1	11,5	32	- 0.07
	(In)Security to school's evaluation	17,8	17,2	30	- 0.28
	Self-esteem through school experience	32,1	32,2	28	- 1.12
WLG	Global scale	65,4	61,3	32	- 2,04*
	Sub-scales				
	(In)Adaptation to school's rules	12,2	10,5	43	- 1.8
	(In)Security to school's evaluation	21,1	19,7	36	- 2.21*
	Self-esteem through school experience	32,7	31,1	44	- 2.85**

* $p < .05$; ** $p < .01$

Results from the sub-scale "self-esteem through school experience" were not kept at the one-year follow up, confirming the decrease trend that was verified in the waiting list group the previous year

Table 4. One year follow-up (Wilcoxon test)

		Media 1st year	Media 2nd year	n	z
IG	Global scale	61,8	59,2	9	- 0.65
	Sub-scales				
	(In)Adaptation to school's rules	11,3	12,9	10	- 0.92
	(In)Security to school's evaluation	17,7	17,1	10	- 0.18
	Self-esteem through school experience	33,6	28,9	10	- 1.96*

* $p < .05$

Adolescents' psychological wellbeing scale

Through the analysis of the results obtained with the *adolescent's psychological wellbeing scale*, there is a significant improvement pattern in the IG. There are significant positive differences in the following sub-scales: "cognitive-emotional negative", "cognitive-emotional positive", "social support", and "competences perception".

Table 5. First year's initial and final evaluation - Wilcoxon test

		Media		N	Z
		Baseline	**Final**		
IG	Global scale	91,5	89,1	24	- 0,27
	Sub-scales				
	Anxiety	25,8	26,6	28	- 1.35
	Cognitive-emotional negative	27,4	27,9	28	- 2.15*
	Cognitive-emotional positive	15	12,7	33	- 3.3***
	Social support	14,4	12,5	29	- 3.06**
	Competences perception	11,2	10,1	32	- 2.11*
WLG	Global scale	87,5	86,1	22	- 0,16
	Sub-scales				
	Anxiety	24,5	25,1	37	- 1.21
	Cognitive-emotional negative	15	15,4	42	- 0.49
	Cognitive-emotional positive	15,8	15,9	39	- 0.38
	Social support	16,5	16,8	38	- 0.7
	Competences perception	14,9	14,6	43	- 0.4

* $p < .05$; ** $p < .01$; *** $p < .001$

Those results were kept in the intervention group, in the one-year follow-up.

Table 6. One-year follow-up (Wilcoxon test)

		Media		n	z
		1st year	**2nd year**		
IG	Global scale	91,1	97,5	8	- 0.91
	Sub-scales				
	Anxiety	27,2	26,5	10	- 0.36
	Cognitive-emotional negative	26,1	28,3	11	- 1.12
	Cognitive-emotional positive	14,5	12,7	11	- 0.36
	Social support	12,5	15,2	9	- 1.61
	Competences perception	10,8	12,3	11	- 0.2

Questionnaire on health behaviors

111 questionnaires were filled, for IG and WLG. This number is higher than the total group because pupils were excluded from the pre-post evaluation when they missed one of these evaluations.

In this sample 53, 2% were boys and 46, 8% girls, with an average age of 11 years. These students attended the following school's year: 6, 3% in the 3rd 15, 3% in the 4th, and 78, 4% in the 5th year. Most of the students involved live with the mother or/ and father (91%).

Most of the students of this sample had never tried tobacco (98, 1%), and never drank alcohol (90, 0%). The majority of the students refer that they "never or rarely" have physical symptoms – headache (63,6%), stomachache (80%), back pain (74,3%), neck and shoulder's pain (66,1%), dizziness (81,5%), and exhaustion (46,8%); and psychological symptoms – being sad (66,4%), being irritated or with bad mood (58,2%), nervous (55,5%), trouble sleeping (62,7%) and fear (75,5%). Most of the pupils included in the study referred that they like school (57, 3%), however some of them consider that going to school is "sometimes" (50, 5%) boring. A significant number of pupils have already been involved in bullying in school in the last year, whether as a victim (46, 3%) or as a " bullier" (39, 8%). Half of the participants feel happy (48, 1%), and 46, 3% said that they are very happy.

Final (subjective) evaluation of the PSCPP

The main results of pupil's opinion concerning the PSCPP in the end of the second year are as following: most of them considered it as "useful and nice" (52, 9%); they like more the "activities/games" (38, 2%); 38, 2% refer that they like everything; half of the students say that the fact of PSCPP being "very nice", would be an argument to convince a colleague to be involved in the program in the future; if they had the opportunity to be involved in another PSCPP, 67,6% referred that will "accept immediately".They learned: "to say my opinion" (85,3%); a way to solve problems (88,2%); "to respect others" (91,2%); "to say how I feel through the facial expression" (76,5%); "to solve a problem I have to think" (79,4%); "to distinguish passive, aggressive and assertive behavior" (88,2%); "assertive persons respect them selves and the others" (82,4%); "there are several ways to solve a problem" (91,2%).After the program pupils report that they feel more: responsible (73, 5%); confidant (79, 4%); satisfied (88,2%); happy (91, 2%); organized (79, 4%); assertive (70, 6%); and friendly (94, 1%).

Discussion

Most of the pupils had never tried alcohol or tobacco, and had no physical or psychological symptoms. However, they had already been involved in bullying. When comparing these results with the ones observed in the Portuguese national study [7], it is verifiedy that in the national (older) sample a higher number of students had already tried tobacco (37, 1%) or alcohol (43, 9%). However a similar percentage has already been involved in bullying.

The evaluation in the first year of intervention showed an improvement in the pattern in the group that followed the program ,. This positive pattern didn't occur in the waiting list group. In this last group, sometimes the pattern was even showing a negative trend, as for exemple in the subjective school evaluation scale or the anxiety scale.

The follow-up evaluation in the end of the second year of the project showed that positive gains were in general kept. The exception is the school's subjective evaluation scale, where the self-esteem through school experience dimension lowered. However, it is interesting to note that this decrease seems to be a general trend, because in the previous year the waiting list group showed a significant decrease in this same measure.

he final evaluation of the PSCPP allows the claim that an intervention based on the promotion of personal and social competences.is relevant for pupils health and wellbeing This kind of intervention gave the participants useful "tools" for their personal and social development, and participation in community life. This approach seems thus a way to prevent future risk behaviors, empowering those children with important tools for their life.

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