

UNIVERSAL PREVENTION. EVALUATION OF THE EFFECTS OF THE UNIVERSAL SPANISH STRENGTHENING FAMILIES PROGRAM IN ELEMENTARY SCHOOLS AND HIGH SCHOOLS (SFP-U 11-14)¹

PREVENCIÓN UNIVERSAL. EVALUACIÓN DE LOS EFECTOS DEL PROGRAMA DE COMPETENCIA FAMILIAR UNIVERSAL

EN CENTROS EDUCATIVOS DE PRIMARIA Y SECUNDARIA (PCF-U, 11-14)

PREVENÇÃO UNIVERSAL. AVALIAÇÃO DOS EFEITOS DO PROGRAMA DE COMPETÊNCIA FAMILIAR UNIVERSAL EM ESCOLAS PRIMÁRIAS E SECUNDÁRIAS (PFF-U, 11-14)

Carmen ORTE*, Josep Lluís OLIVER*, Joan AMER*, Marga VIVES* & Rosario POZO*
Universidad de las Islas Baleares*

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ABSTRACT: Introduction. To evaluate the process and the results of the validation phase of the Strengthening Families Program-Universal (SFP-U 11-14), evidence-based program applicable in educational contexts (elementary schools and high schools). In the state of the art, the absence of socio-educational work programs with families based on evidence, for universal population, is noted.

Method: Pre-post quasi-experimental design with a control group for the evaluation of the pilot stage of the SFP-U 12-16 validation phase (2018) carried in Balearic Islands and Castilla y León. 16 experimental groups and 17 control groups were established with the participation of 353 fathers and mothers and 289 adolescents. The intervention consisted of 6 sessions. Information was collected with validated questionnaires.

Results. The analysis of the effects on the parents and children confirms the good results obtained. The number of participants was reduced to 305 parents (retention of 86.40%) and to 262 children (retention of 90.66%). Participants showed a high level of satisfaction with different dimensions of the program. Key aspects and areas of improvement for the future of the intervention were identified. Improvements were observed in most of the dimensions evaluated.

Discussion: The results of the validation stage of SFP-U 11-14 indicate that this is a universal socio-educational intervention with relevant effects of parental improvement in fathers and mothers.

CONTACT WITH THE AUTHORS

JOAN AMER FERNÁNDEZ. Correo: joan.amer@uib.es

<p>PALABRAS CLAVE: educación familiar competencia familiar prevención universal adolescentes</p>	<p>RESUMEN: Introducción. Evaluar el proceso y los resultados de la fase de validación del Programa de Competencia Familiar Universal (PCF-U 11-14), basado en la evidencia y aplicable en contextos educativos (centros de primaria y secundaria). En la revisión del marco teórico se constata la ausencia de programas de trabajo socioeducativo con familias basados en la evidencia, de carácter universal.</p> <p>Método. Diseño quasi-experimental antes-después con grupo de control para la evaluación de la fase de validación del PCF (2018) en Baleares y Castilla y León. Se desarrollaron 16 grupos experimentales y 17 grupos de control, en los que participaron 353 padres y 289 adolescentes. La intervención consistió en 6 sesiones. La información se recogió con cuestionarios validados.</p> <p>Resultado. El análisis de los efectos sobre los padres y los hijos confirma los buenos resultados obtenidos. El número de participantes se redujo a 305 padres y madres (retención del 86,40%) y a 262 hijos (retención del 90,66%). El grado de satisfacción de los participantes con diversos aspectos del programa fue muy alto. Se identificaron aspectos clave y áreas de mejora para el futuro de la intervención. Se observaron mejoras en la mayoría de las dimensiones evaluadas.</p> <p>Discusión: Los resultados de la fase de validación del PCF-U 11-14 indican que se trata de una intervención socioeducativa universal con efectos relevantes de mejora parental en padres y madres.</p>
<p>PALAVRAS-CHAVE: educação familiar competência familiar prevenção universal adolescentes</p>	<p>RESUMO: Introdução. Avaliar o processo e os resultados da fase de validação do Programa de Competência Familiar Universal (PCF-U 11-14), com base em evidências e aplicáveis em contextos educacionais (escolas primárias e secundárias). Na revisão do referencial teórico, observa-se a ausência de programas de trabalho socioeducativo com famílias baseadas em evidências, de caráter universal.</p> <p>Método. Desenho quase experimental pre-post com um grupo de controle para a avaliação da fase de validação do PCF (2018) nas Ilhas Baleares e Castela e Leão. Dezasseis grupos experimentais e 17 grupos controle foram desenvolvidos, envolvendo 353 pais e 289 adolescentes. A intervenção consistiu em 6 sessões. As informações foram coletadas com questionários validados.</p> <p>Resultado A análise dos efeitos sobre pais e filhos confirma os bons resultados obtidos. O número de participantes foi 305 pais (retenção de 86,40%) e 262 crianças (retenção de 90,66%). O grau de satisfação dos participantes com vários aspetos do programa foi muito alto. Os principais aspetos e áreas para melhoria foram identificados para o futuro da intervenção. Melhorias foram observadas na maioria das dimensões avaliadas.</p> <p>Discussão: Os resultados da fase de validação do PCF-U 11-14 indicam que é uma intervenção socioeducativa universal com efeitos relevantes de melhora em pais e mães.</p>

1. Introduction

One of the main challenges to be tackled in Spain is how to improve family dynamics in order to strengthen protective factors in childhood and adolescence. Over the last 20 years, different programmes have been developed aimed at reinforcing parenting skills or at selective prevention (Orte, Ballester & March, 2013; Quintana & López, 2013). What are lacking, however, are universal evidence-based family prevention programmes for use in differing family-related preventive frameworks, whether they are formal ones run by schools or the social services or non-formal contexts, organized by community centres or third-sector bodies. Evidence-based prevention programmes are directed at strengthening the protective factors and preventing the risk factors relating to a wide variety of behaviours and situations that occur during childhood and adolescence. International experience shows that these programmes have proven to be efficient in interventions. This has been confirmed through rigorous duly evaluated validated studies, generally based on quasi

experimental designs or randomized controlled tests, demonstrating the programmes' positive identifiable outcomes (Small & Huser, 2015; Spoth, Guyll & Shin, 2009).

One very important feature of these programmes is their broad dissemination so as to facilitate access to them by other professionals for appraisal and application purposes. They have clearly-identified documented curriculums to ensure their dissemination and use by public and private services and other organizations, offering guidance for future interventions and encouraging publication of the results, hence fostering good practices. Proven efficiency is demanded by the public authorities and by financial institutions before public funding is awarded to programmes in order to guarantee high standards and, by extension, the achievement of expected outcomes (Orte, Ballester & March, 2013). The Spanish Universal Family Competence programme was developed and tested in such a way (Orte and GIFES 2017a, 2017b, 2017c, 2017d).

The Family Competence Programme (PCF-U) is an adaptation of the universal preventive

version of the Strengthening Families Program (SFP) (Kumpfer & DeMarsh, 1985; Kumpfer, DeMarsh & Child, 1989; Spoth, Gyuill & Shin, 2009). This is a multi-component prevention programme (for parents, children and the family as a whole), whose original design was aimed at strengthening families' protective factors so as to boost their resilience (Walsh, 2016). It is considered to be a model programme in the classification by the Substance Abuse and Mental Health Services Administration (SAMHSA), whose quality criteria contemplate fidelity in the intervention, assessments of the process, measurements of changes in behaviours, and the validity of measurement procedures. The applications conducted by the University of the Balearic Islands' Research & Socio-Educational Training Group (GIFES-UIB according to its Spanish acronym) have focused on prevention in Spain and on interventions by primary-care social services, child protection services and education centres (Ballester, Valero, Orte & Amer, 2018; Orte, Ballester, Pozo & Vives, 2017; Orte, Ballester, Vives & Amer, 2016). On this occasion, the universal preventive version of the programme (aimed at families generally) was run at primary and secondary schools.

In the adaptation by GIFES (Orte, Ballester & March, 2013; Orte & GIFES, 2017), efforts were made to ensure optimum quality standards and so a pre-test/post-test assessment design was used with control groups, complemented by measurements of the process through assessments of the procedures and outcomes.

The programme was made up of six two-hour sessions, scheduled on consecutive weeks. These sessions included a first hour of separate work with the parents and children in different rooms, followed by a second joint session with both groups. The basic contents of the programme were tailored to suit each target group (the parents, children or whole family), and a series of key themes was worked on in order to influence their attitudes and foster preventive family dynamics, based on different factors associated with improvements in family skills.

At various different sessions, the following topics were worked on with the parents and families as a whole: closer ties between parents and children and improved family relations; improved communication (active listening, less criticism etc.); supervision of the adolescents, in particular control over their friends, free time, attitudes and risk behaviours (with special emphasis on tobacco, alcohol and other drug use); improved parental skills (attention, praising positive behaviour, withdrawing attention in response to negative behaviours, realistic expectations of the adolescent's

development and behaviour); efficient coherent discipline (setting rules on acceptable and unacceptable behaviour, including drug use); eliminating or reducing physical punishment and using time-out and time to calm down; attitudes, myths and co-parenting rules on tobacco, alcohol and drug use; improved child-rearing skills (suitable behaviour models, particularly in terms of drugs); conflict prevention; and improved quality time as a family.

Meanwhile, in the sessions with the adolescents, the following topics were tackled: closer ties between parents and children and improved family relations; improved communication (active listening, less criticism etc.); attitudes to tobacco, alcohol and other drugs; improved skills on the adolescents' part (i.e. social, resistance-related and coping skills); and conflict prevention.

The joint family sessions acted as a link between the individual parent and child ones. These joint sessions were more dynamic, based on the topics dealt with at the separate sessions so that the families could practise the skills they had learnt during the programme before transferring them to the home.

2. Justification & objectives

This paper presents the tests of hypotheses concerning the sample mothers and fathers and children, using data from a study of the PCF-U 11-14 run at primary and secondary schools in 2018 in the Balearic Islands and Castilla & León. The paper aims to assess the programme's efficiency in fostering parental and family skills able to boost the families' preventive competencies by reducing possible risk factors and increasing protective ones.

One recommended way of encouraging positive parenting is to use effective socio-educational programmes like the PCF-U 11-14. (Whittaker & Cowley, 2012). The PCF was targeted at families with adolescents aged between 11 and 14 in order to work on family skill, in particular, positive parenting by mothers and fathers.

In the case of the mothers and fathers, the following hypothesis was tested: effective participation in the 6 sessions of the Family Competence Programme significantly improves key aspects of parenting: a reduction in family conflicts, improved positive parenting, improved family supervision, higher resilience, closer involvement with the family and a better family atmosphere.

In the case of the adolescents, the following hypothesis was tested: effective participation in the 6 sessions of the Family Competence Programme significantly improves key factors in pro-social behaviour and wellbeing in adolescents: a reduction

in stress, depression and helplessness; more self-confidence; and better interpersonal relations and relations with parents. Lastly, a reduction in attitudes conducive to drug use (risk) was expected, such as their readiness to take drugs, in addition to a reduction in mistaken beliefs and an improvement in positive protective attitudes based on the acquisition of correct beliefs regarding the effects of drug use.

3. Methodology

The research study took the form of a validation process, based on a broad representative sample of the population aged between 11 and 14 from two Spanish regions of differing yet complementary characteristics: Castilla & León and the Balearic Islands. Key phases in the research process included:

1. The design of the programme, based on a systematic review of accredited sources and on consultations with expert interlocutors. Thanks to these consultations, a new clearly improved version of the initial design was developed. This second version is the one that was put to the test with our broad sample (Orte and GIFES 2017a, 2017b, 2017c, 2017d).
2. A comprehensive test of the improved version of the programme, testing the implementation process, the management of the programme, the teaching materials, assessment systems, and short and mid-term outcomes (6 months).

This part of the study had a quasi-experimental design with pre-test and post-test measurements, using 8 experimental groups and 8 control groups in each of the two regions taking part in the validation test.

Rigorous controls were made of the experimental conditions during the applications of the programme (the elimination of disturbance factors, the constancy of the experimental conditions) (Ballester, Nadal, Amer, 2017). More specifically, three main controls were applied:

- Disturbance factors of differing kinds were eliminated (by overcoming transport problems and providing a crèche for younger children and timetables to suit the participants). The creation of conditions conducive to participation in the programme is a fundamental factor in high retention rates, particularly in the case of adolescents.

- The experimental conditions were held constant through direct supervision by the members of the research team. That is, the same programme and sessions were given to the different experimental groups. The fidelity of the sessions and the process the participants followed were assessed using different procedures, such as self-reports and evaluations by independent observers. The fidelity of applications of family prevention programmes is essential in the transfer and dissemination of evidence-based interventions.
- The same instruments were used—validated for the Spanish population—at the three data-gathering points (pre, post 1 and post 2 at the 6-month stage), using the same procedure and encompassing all the participants.

The programme consisted of 6 socio-educational work sessions, using an interactive group-based design. The aim was to boost relevant protective factors and to reduce relevant risk factors among families with children aged 11 to 14 in the 5th and 6th years of primary school and the 1st and 2nd years of secondary school.

3.1. The Sample

The sample was made up of two sub-samples from Castilla & León and the Balearic Islands respectively, following the application of a selection process of primary and secondary schools. Half the sample was from the 5th and 6th years of primary education and the other was from the 1st and 2nd years of secondary education. In all the families, only one child was used in the analysis, with an equal number of adolescents and families taking part. In total there were 275 families, 249 of whom completed the programme (90.55% retention rate).

The experimental group was made up of 16 groups, with 165 families beginning the programme and 154 completing the six sessions. 11 families abandoned the programme for various different reasons (93.33% retention rate).

The control group was made up of 17 groups, with 110 families at the beginning and 95 who completed the process and provided data (86.36% retention rate). The experimental group took part in the application, while the control group was informed of possible future applications.

Table 1 summarizes salient data relating to the analysed sample.

Table 1. Sample used for the PCF-U 11-14, 2018 application

	No. of people		No. of people		No. of families	
	Mothers & fathers		Sons & daughters		Families	
	BEGINNING	END	BEGINNING	END	BEGINNING	END
Primary schools						
EXPERIMENTAL	151	139	116	111	110	106
		92.05%		95.69%		96.36%
CONTROL	74	64	63	58	64	59
		86.49%		92.06%		92.19%
Secondary schools						
EXPERIMENTAL	73	59	59	53	55	48
		80.82%		89.83%		87.27%
CONTROL	55	43	51	40	46	36
		78.18%		78.43%		78.26%
WHOLE SAMPLE						
EXPERIMENTAL	224	198	175	164	165	154
		88.39%		93.71%		93.33%
CONTROL	129	107	114	98	110	95
		82.95%		85.96%		86.36%
TOTAL EXPERIMENTAL & CONTROL	353	305	289	262	275	249
		86.40%		90.66%		90.55%
Source: Analysis based on data from the GIFES-UIB applications.						

As mentioned earlier and as Table 1 shows, the retention rates are quite high for both the experimental and control groups. In the case of the experimental groups, rates of more than 90% were achieved for the parents and adolescents from the primary schools and rates of 80 to 90% in the case of the secondary schools. These retention rates are good indicators of the quality of the programme's activities, in particular the teaching materials, organization of the sessions and work by the trainers, creating positive relations that kept these participation levels up.

3.2. Instruments

To gather data from each family, a single instrument was used for the parents and a single one

for the adolescents, both based on the following instruments and sources of information:

For the analysis, the parent and child questionnaires developed by Kumpfer were taken (Orte and GIFES, 2017a). These were validated for the Spanish population and their factorization was used to build the analysed scales.

The Behaviour Assessment System for Children (BASC) questionnaires were also used (BASC) (Reynolds and Kamphaus, 2004), working exclusively with the scales provided by this assessment system, validated specifically for the Spanish population.

A questionnaire was also used on substance use and attitudes to drugs, based on international standards adopted in the Spanish National Drugs Plan, together with a questionnaire to evaluate

the programme and various different associated aspects (the trainers, materials, sessions, and changes that were achieved). This questionnaire included open-ended questions administered at a face-to-face interview with the trainer at each centre.

The basic selection criteria for the instruments were: i) their suitability for the factors to be assessed; ii) their validation for the Spanish population; iii) their adaptability for joint use with the other instruments (internal validity); and iv) their possible more widespread use in applications of the programme under non-experimental conditions. It is important to bear in mind that they measure changes in the participants' subjective perceptions (improvements/worsened situations).

3.3. Procedure

The outcomes that were achieved by the parents and adolescents were measured by comparing the experimental group's initial (pre-test) situation with the final one (the post-test at the end of the PCF and current situation). A comparison

with the control group was made for each of the factors, using an analysis of variance.

To establish the significance of the results, the differences between the initial pre-test situation and the post-test situation four months later at the end of the PCF were considered.

The analysed data must necessarily be presented in summarized form, highlighting the main factors that were identified. The analyses are based on comparisons of the data gathered at the two points, using the following types of tests in this particular study: t-tests for a comparison of the pre and post-test measurements.

4. Results

The first set of analysed factors relates to the family as a whole or to the parents. Six factors were considered from the factorization of the questionnaire for parents. Table 2 shows the dimensions of the assessed sub-samples. In this presentation, data is only shown for the parents from the experimental groups who provided all the necessary information. The factor values are not dimensional.

Table 2. Group dimensions and the descriptive statistics of the factors relating to the parents and families (PCF-U 11-14, 2018)

Group: EXPERIMENTAL		N	Mean	Standard deviation	Standard error of mean
Factor 1-Family conflicts	PRE	223	0.228	1.057	0.071
	POST	196	0.016	0.948	0.068
Factor 2-Positive parenting	PRE	223	-0.333	1.024	0.069
	POST	196	-0.082	0.921	0.066
Factor 3-Family supervision	PRE	223	-0.073	1.019	0.068
	POST	196	-0.049	0.976	0.070
Factor 4-Resilience	PRE	215	-0.405	1.013	0.069
	POST	191	0.06	0.9	0.065
Factor 5-Family involvement, quality time	PRE	217	-0.094	0.974	0.066
	POST	192	0.162	0.962	0.069
Factor 6-Family atmosphere	PRE	207	-0.197	1.036	0.072
	POST	185	-0.023	1.059	0.078

Source: Analysis based on data from the GIFES-UIB applications

As for the main results, Table 3 shows the data from the analysis of the comparison of means.

The first factor provides information on family conflicts. In the questionnaire for parents, it seeks to identify whether there is a shift toward fewer conflicts and better relations (respect, family cohesion). The results show a significant moderate drop in the values by the end of the PCF ($t=2.153$; $p=0.032$).

The second factor provides information on positive parenting, assessed through positive discipline and the capacity to provide efficient guidance, to set limits, to motivate the adolescents and through other aspects of parenting. The results show a significant improvement when the initial situation is compared with the final one after taking part in the PCF 11-14 ($t=-2.619$; $p=0.009$).

The third factor deals with family supervision. This factor takes into account a wide range of important information, in particular information

about the adolescents' activities and friendships. The results show a slight increase in the values by the end of the PCF, and so the level is not statistically significant ($t=-0.251$; $p=0.802$).

The fourth factor provides information about the family's resilience, construed as its capacity to tackle any challenges that arise (health, emotional relations, family support etc.). There is a noticeable increase in the values at the end of the PCF, with a significant difference between the initial and final situations ($t=-4.861$; $p=0.000$). According to the parents, this represents one of the most consistent improvements.

The fifth factor focuses on family involvement. As with the previous factors, the PCF pays special attention to this through a series of activities aimed at boosting family involvement, in particular quality time between the parents and children. The results show a significant improvement ($t=-2.668$; $p=0.008$) in the values by the end of the PCF.

Table 3. Difference in means tests (PCF-U 11-14, 2018)

	t	DT	Sig. (bilateral)	95% CI for the difference	
				Lower	High
Factor 1-Family conflicts	2.153	417	0.032	0.018	0.406
Factor 2-Positive parenting	-2.619	417	0.009	-0.439	-0.063
Factor 3-Family supervision	-0.251	417	0.802	-0.217	0.168
Factor 4-Resilience	-4.861	404	0.000	-0.653	-0.277
Factor 5-Family involvement, quality time	-2.668	407	0.008	0.445	0.067
Factor 6-Family atmosphere	-1.642	390	0.101	-0.382	0.034

Source: Analysis based on data from the GIFES-UIB applications.

Lastly, the sixth factor provides information on one component of the family atmosphere: the capacity to improve the climate of relations between the parents and children and between both parents. This factor includes changes that might be better confirmed in the mid-to-long term as a result of other changes in family dynamics (Orte et al., 2015) There is no significant difference between the initial and final situation on conclusion of the PCF 11-14 but changes are made in the right direction ($t=-1.642$; $p=0.101$).

As for the factors relating to the adolescents, 9 factors were selected. The first six coincide with the scales of the BASC questionnaire and the last three with the attitude scales of the questionnaire on drug-related knowledge and attitudes. Tests

were made to see whether the changes were sufficiently big to be statistically significant. To do so, the difference in means was calculated between the situation at the beginning of the programme and at the end, using a t-test. When the differences were confirmed, changes could be observed in the different factors. The interpretation outlined below is based on the data shown in Tables 4 and 5.

Table 4 shows the direction of the changes. The samples for the factors can be seen to differ. These variations are due to the fact that it was not always possible to calculate the factors for all the participants, since sometimes they did not answer all the items. From the means, it can be seen that changes in the expected direction occurred. Their significance is shown in the following table.

Table 4. Dimensions and descriptive statistics of the factors for the adolescents (PCF-U 11-14, 2018)

Group: EXPERIMENTAL		No.	Mean	Standard deviation	Standard error of mean
1 BASC_Stress	PRE	172	49.25	10.256	0.789
	POST	164	46.90	9.936	0.776
2 BASC_Depression	PRE	170	49.30	10.912	0.842
	POST	164	46.51	9.018	0.704
3 BASC_Helplessness	PRE	170	50.43	9.734	0.751
	POST	163	47.39	8.380	0.656
4 BASC_Interpersonal relations	PRE	170	50.68	10.028	0.774
	POST	163	51.18	8.529	0.668
5 BASC_Relations with parents	PRE	170	50.17	11.435	0.880
	POST	164	52.85	8.810	0.686
6 BASC_Self-esteem	PRE	170	52.47	8.697	0.667
	POST	164	54.21	6.413	0.498
7 ATTITUDES. Readiness to take drugs	PRE	167	8.94	4.170	0.328
	POST	159	8.70	4.227	0.335
8 ATTITUDES. Mistaken beliefs. RISK	PRE	167	13.01	3.624	0.287
	POST	159	12.91	3.752	0.298
9 ATTITUDES. Correct beliefs. PROTECTION	PRE	167	20.66	5.166	0.406
	POST	159	21.25	4.993	0.396

Source: Analysis based on data from the GIFES-UIB applications

Factor 1. Social stress: This scale assesses the level of stress (tension, anxiety etc.) the adolescents experience in interpersonal relations. High scores indicate problems of shyness, introversion, social anxiety and irritability. As expected, there was a drop in the values, with a moderate level of statistical significance ($t=2.130$; $p=0.034$).

Factor 2. Depression: This scale assesses feelings like sadness, loneliness and little enjoyment of life, sometimes due to anxiety and stress. High scores indicate a problem of depression. No high values were observed in the adolescents taking part. The values could be seen to fall by the end of the programme, with a difference that denoted a moderate statistical significance ($t=2.538$; $p=0.012$).

Factor 3. Feelings of helplessness: This scale assesses the adolescents' possible lack of confidence due to their incapacity to achieve certain goals. High scores are representative of an adolescent who believes him or herself to be incapable of achieving certain goals, and this might encourage him or her to look for other alternative challenges outside conventional frameworks. A drop of sufficient statistical significance in the values was observed by the end of the programme (3.049 ; $p=0.002$).

Factor 4. Interpersonal relations: This scale assesses the adolescents' success in and satisfaction with relations with others. Low scores indicate big difficulties in relations with their peers.

The scores improved, although the change was not statistically significant ($t=-0.482$; $p=0.630$).

Factor 5. **Relations with parents:** This scale assesses the adolescents' relations with their parents and their role in the family. High scores show that they feel at ease in the family, while low scores reveal problems with their parents. An improvement in the scores was observed, with a statistically significant change ($t=-2.405$; $p=0.017$). According to the adolescents, this change was

more relevant and positive than changes in relations with their peers.

Factor 6. **Self-esteem:** This scale assesses the adolescents' level of satisfaction with themselves. A high score indicates a healthy sense of self-esteem, synonymous with an adolescent who fits in well, both personally and socially. An improvement could be seen in the scores, with a moderate statistical significance ($t=-2.091$; $p=0.037$).

Table 5. Difference in means tests (PCF-U 11-14, 2018)

	t	df	Sig. (bilateral)	95% CI for the difference	
				Lower	Higher
1 BASC_Stress	2.130	331	0.034	0.180	4.536
2 BASC_Depression	2.538	321.3	0.012	0.626	4.945
3 BASC_Helplessness	3.049	329	0.002	1.081	5.015
4 BASC_Interpersonal relations	-0.482	329	0.630	-2.509	1.522
5 BASC_Relations with parents	-2.405	315.1	0.017	-4.877	-0.488
6 BASC_Self-esteem	-2.091	310.9	0.037	-3.378	-0.103
7 ATTITUDES. Readiness to take drugs	0.512	319	0.609	-0.68195	1.16226
8 ATTITUDES. Mistaken beliefs. RISK	0.228	316	0.820	-0.71963	0.90831
9 ATTITUDES. Correct beliefs. PROTECTION	-1.031	319	0.303	-1.70076	0.53118

Source: Analysis based on data from the GIFES-UIB applications.

As for the three factors concerning attitudes to substance use –and one of the programme's aims was to improve such attitudes–, the changes were not statistically significant but they were positive and coherent with our expectations.

Factor 7. **Readiness to take drugs.** This scale considers possible acceptance of proffered drugs and the adolescent's own readiness to take them. By the end of the programme, there was a drop in their willingness to take drugs, although the results were not statistically significant ($t=0.512$; $p=0.609$).

Factor 8. In the case of the second attitude scale, which concerns **mistaken beliefs** (risk factor), the values also fall but not to a significant degree ($t=0.228$; $p=0.820$).

Factor 9. In the case of the third attitude scale pertaining to **correct beliefs** or protective ones, a bigger change could be seen, with improved protection, but not to a statistically significant degree ($t=-1.031$; $p=0.303$).

5. Discussion & conclusions

The Family Competence Programme is a universal prevention programme based on scientific evidence, with socio-educational interventions aimed at families as a whole. Important outcomes have been achieved by mothers and fathers taking part in these interventions and also by their children.

The PCF (11-14) for adolescents has been proven to achieve consistent high-quality results with the participation of families not selected on the basis of any specific criteria (universal prevention). In particular, noteworthy outcomes were achieved by the adolescents' parents and the adolescents themselves.

From the factors that were considered, relevant changes were observed among most of the families, with relatively good results for a broad series of factors associated with how the families function and certain factors relating to the

adolescents' subjective perceptions of their well-being and relations.

As for the factors specifically related to the parents or families as a whole, the best outcomes were a reduction in family conflicts, improved positive parenting, a higher resilience and more family involvement.

The factors with the best outcomes for the adolescents were a reduction in stress and symptoms associated with depression and helplessness, an improvement in relations with their parents, and a higher self-esteem.

When the experimental and control groups were compared, conclusive expected differences were found for a wide variety of factors, particularly those reflecting the most positive changes.

One limitation of the study might be its too brief six-session format. In addition, data on the mid-term impacts is still lacking.

From the identified results, a series of points can be considered:

1. The PCF 11-14 has demonstrated its efficiency in maintaining the participants' commitment to the programme, with a very good retention rate for the sample. Most members of the families who took part understood what they were doing, found the process to be a meaningful one, and acknowledged

improvements to have occurred in certain aspects encompassed by the programme.

2. Despite this version of the programme's limitations and its short length (6 sessions), the PCF 11-14 proved its efficiency by achieving positive outcomes in a broad range of factors.
3. In all socio-educational family-based programmes, certain important issues regarding their longer-term effects must await clarification. In the case of the PCF, they are:

What the long-term effects of the programme are and which factors are most influential in the maintenance or loss of the effects;

- How the PCF 11-14 interacts with other developmental changes and with changes that families undergo.
- The outcomes of the Spanish adaptation of the SFP (PCF 11-14) held in the Balearic Islands and Castilla & León are as consistent as those of the SFP in its benchmark applications and in international adaptations (Kumpfer & Alvarado, 2003; Kumpfer, Pinyuchon & Whiteside, 2008), and its efficiency has been demonstrated in accordance with the criteria established in the said studies.

Note

- ¹ EDU2016-79235-R - "VALIDACIÓN DEL PROGRAMA DE COMPETENCIA FAMILIAR UNIVERSAL 10-14, PCF-U", 2017-2019. State Programme of R+D+i Aimed at Societal Challenges: R+D Projects. Ministry of Economy and Competitiveness. Agencia State Research Agency: AEI and FEDER.

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AUTHOR'S ADDRESS

CARMEN ORTE SOCIAS. Correo: carmen.orte@uib.es

JOSEP LLUÍS OLIVER TORELLÓ. Correo: josepluis.oliver@uib.cat

MARGA VIVES BARCELÓ. Correo: marga.vives@uib.cat

JOAN AMER FERNÁNDEZ. Correo: joan.amer@uib.es

ROSARIO POZO GORDALIZA. Correo: rosario.pozo@uib.es

ACADEMIC PROFILE

CARMEN ORTE SOCIAS. Licenciada en Psicología y Doctora en Ciencias de la Educación. Es Catedrática de Universidad. Tiene 4 quinquenios de docencia reconocidos y 4 sexenios de investigación. Es la IP en temáticas de programas de prevención familiar basados en la evidencia científica del Grupo de Investigación y Formación Educativa y Social (GIFES), de la UIB. En el ámbito de la educación familiar y en el del aprendizaje a lo largo de toda la vida tiene tres investigaciones competitivas activas, una nacional y dos europeas. Es la directora de la Cátedra de Atención a la Dependencia y Promoción de la Autonomía personal y la directora del Anuario del Envejecimiento Islas Baleares y la Codirectora del Anuario de la Educación de las Islas Baleares 2015. Es la directora del Laboratorio de Investigación sobre Familia y Modalidades de Convivencia (LIFAC).

JOSEP LLUÍS OLIVER TORELLÓ. Profesor titular de Pedagogía Social y Decano de la Facultad de Educación desde el año 2010. Tesis doctoral con el título de 'El proceso de transición a la vida adulta de los jóvenes acogidos en centros de protección de menores', obteniendo la calificación de Excelente Cum Laude solicitando el Presidente del Tribunal la mención a premio extraordinario de doctorado. En lo que respecta a la investigación el autor se ha especializado en investigación y evaluación en los contextos de los servicios sociales, intervención en protección a la infancia en situación de desamparo y riesgo, sistema educativo formal y competencias parentales. Miembro de GIFES.

MARGA VIVES BARCELÓ. Profesora del Departamento de Pedagogía y Didácticas Específicas de la UIB. Miembro de GIFES. Doctora Europea en Ciencias de la Educación. Licenciada en Psicopedagogía, Diplomada en Magisterio. Profesora en Pedagogía y Educación Social online y Máster (MISO y MFP) en asignaturas relacionadas con la convivencia, la mediación, la gestión de conflictos, la intervención educativa en la inadaptación infantil y juvenil. Profesora de la Universitat Oberta per a Majors en asignaturas relacionadas con el envejecimiento activo, la calidad de vida y las relaciones intergeneracionales. Líneas de investigación: Programas de competencia familiar, gestión de conflictos, mediación, inadaptación social con jóvenes, apoyo social, calidad de vida y aprendizaje a lo largo de toda la vida.

JOAN AMER FERNÁNDEZ. Profesor del Departamento de Pedagogía y Didácticas Específicas. Pertenece al Grupo de Investigación GIFES (<http://gifes.uib.eu>) de la UIB. Trabaja en los ámbitos de los programas educativos familiares basados en evidencia, la pedagogía social, la sociología de la familia y de la educación y la investigación cualitativa. Selección de publicaciones recientes: Ballester, L., Valero, M., Orte, C., Amer, J. (2018). An analysis of family dynamics: a selective substance abuse prevention programme for adolescents. *European Journal of Social Work*, 21, 3, 1-13. Orte, C., Ballester, L., Amer, J., & Vives, M. (2017). Training of practitioners and beliefs about family skills in family-based prevention programmes. *British Journal of Guidance and Counselling*, 45, 5, 573-582.

ROSARIO POZO GORDALIZA. Profesora del Departamento de Pedagogía y Didácticas Específicas y miembro de GIFES. Doctora Europea en Sociología por la UGR (2011), Diplomada en Educación Social (UVA) y Licenciada en Psicopedagogía (ULE) con varias especializaciones de Máster en problemas sociales, metodología de investigación social cualitativa, etnicidad y género a nivel nacional e internacional. Ha sido becaria y contratada FPU o Programa de formación de personal investigador del MEC en el Departamento de sociología de la UGR (2004-2009). Desde el año 2009 hasta el 2011 trabajó en proyectos de cooperación internacional, consultoría e investigación social en la AECID y en diversas ONGs en el sudeste asiático.