Managing family conflict and resilience. Results of a universal socio-educative family drugs prevention program developed in school settings*

Resiliencia y gestión del conflicto familiar. Resultados de un programa socioeducativo de prevención universal de drogas desarrollado en entornos escolares

**VICTORIA QUESADA SERRA**
Departamento de Pedagogía y Didácticas Específicas
Facultad de Ciencias de la Educación
Universitat de les Illes Balears
Carretera de Valldemossa, km 7.5, 07122, Palma, Illes Balears (España)
victoria.quesada@uib.eu
https://orcid.org/0000-0002-8881-2358

**MARIA ANTÒNIA GOMILA GRAU**
Departamento de Pedagogía y Didácticas Específicas
Facultad de Ciencias de la Educación
Universitat de les Illes Balears
Carretera de Valldemossa, km 7.5, 07122, Palma, Illes Balears (España)
ma.gomila@uib.es
https://orcid.org/0000-0003-2691-5594

**CARMEN ORTE**
Departamento de Pedagogía y Didácticas Específicas
Facultad de Ciencias de la Educación
Universitat de les Illes Balears
Carretera de Valldemossa, km 7.5, 07122, Palma, Illes Balears (España)
carmen.orte@uib.es
https://orcid.org/0000-0002-4695-4411

*Acknowledgements: This study is part of the Research project “VALIDACIÓN DEL PROGRAMA DE COMPETENCIA FAMILIAR UNIVERSAL 10-14, PCF-U” (reference number: EDU2016-79235-R), funded by the Ministry of Economy and Competitiveness.

ISSN: 1578-7001 / DOI: 10.15581/004.42.008
ESTUDIOS SOBRE EDUCACIÓN / 2022 169
Resumen: Este trabajo evalúa los cambios en los conflictos familiares y la resiliencia entre las familias que participan en un programa socioeducativo universal, de corta duración, para la prevención de drogas (PCF-U 11-14). Se implementó un diseño cuasi experimental pre-post test con grupos control y experimental con 275 familias. Se aborda la conveniencia de la capacitación familiar en habilidades sociales y de crianza para fortalecer la capacidad de las familias para hacer frente a las dificultades y fomentar la cohesión familiar, pero también se destaca la necesidad de investigar más a fondo los factores que afectan al conflicto entre padres y adolescentes para crear nuevas estrategias de capacitación para familias.

Palabras clave: Conflicto familiar, Resiliencia familiar, Programa de prevención de drogas, Estrategias familiares.

Abstract: This paper assesses changes in family conflict and resilience among families participating in a socio-educative short universal drug prevention program (PCF-U 11-14). A pre-post test quasi experimental design with control and experimental groups was implemented with 275 families. The work addresses the convenience of family training in social and parenting skills to strengthen families’ capacity to cope with difficulties and boosting family cohesion, but it also highlights the need to research deeper into the factors that affect parent and adolescent conflict to create new training strategies for families.

Keywords: Family conflict, Family resilience, Drugs prevention program, Family strategies.

INTRODUCTION

Socio-educative family-based interventions are one of the most recommended strategies at international level for disruptive behaviors and drug misuse prevention (UNODC, 2018). Positive family dynamics and relations have been proven to be a key preventive factor in substance misuse (Ballester and Orte, 2018; Segrott, 2019) as well as other disruptive behaviors (Brennan et al., 2013; Gill and Shaw, 2020).

Clashes between parents and their children are regarded as being an integral part of family dynamics and play an important role in adolescent development and in the transition to becoming autonomous, independent individuals (Coyle, 2012; Pajkic, 2013; Smetana, Campione-Barr and Metzger, 2006). Research has largely shown that much of the friction between parents and adolescents starts during transitional periods, such as the passage from primary education to secondary/middle school, where children are more susceptible to developing disruptive behaviours (Moolgard and Spoth, 2001). The changes that take place during these periods in relations between parents and adolescents and the factors that are involved, such as power, autonomy and identity construction, call for constant family re-adjustments as part of a gradual process of negotiation in which relationships are established. These processes are usually linked to clashes. Parent-adolescent conflicts increase from pre-adolescence to mid-adolescence (Smetana et al., 2006; Steinberg and Morris, 2001) and, from then on, they tend to decrease with age (Razali, 2013).
Socio-educative family interventions appear to have the best potential for addressing the factors associated with parent-family conflict (Coyle, 2012) and promoting family resilience and cohesion, especially those focusing in family strengths, such as positive expectations, family beliefs, emotional connectedness, learning opportunities and organizational patterns.

This paper presents the results of a drug prevention program directed at non-risk families and developed in school settings called Universal Family Competence Program 11-14 (PCF-U 11-14). It is targeted at families with early adolescent children (aged 11 to 14), the stage when conflictive relations are considered to increase (Pajkic, 2013), when children are more receptive to family influences (Spoth and Molgaard, 2001) and a critical period in the Spanish education system, since it is when the transition from primary to secondary school takes place, in many cases implying a change of school and classmates.

Family conflict and resilience in adolescence

There are many factors that influence parent-adolescent relations and define the family’s capacity to manage conflicts, such as gender (Allison and Shultz, 2004; Bush, Peterson and Chung, 2013; Cutrín, Gómez-Fraguela and Sobral, 2017; Kelly et al., 2011; McKinney and Renk, 2011; Park, Nix, Duncan, Coathsworth and Greenberg, 2020), dispositional family functioning and daily variability (Fosco and Lydon-Staley, 2020), individual characteristics or personality traits, mental health, substance use, economic distress and peer relationships (Coyle, 2012).

While conflicts are regarded as being usual temporary phenomena during adolescence, their escalade or contention depends very much on how they are managed and assessed within the family (Razali, 2013; Rodríguez Gutiérrez, Martín-Quintana and Cruz-Sosa, 2016; Smetana et al., 2006). Positive management of family conflicts has important effects on child development, as it helps in both the individualization process and in the construction of personal identity (Rodríguez Gutiérrez et al., 2016). In contrast, poor management has negative effects on key aspects of family functioning, such as family cohesion and resilience (Matejevic, Jovanovic and Lazarevicb, 2014; Walsh, 2016). Both aspects –family cohesion and resilience– are protective factors that are positively correlated with family functioning and negatively correlated with behaviour problems in adolescence, such as drug addiction and antisocial behaviour (Baer, 2002; Smetana et al., 2006).

In the resolution of parent-teen conflicts, different strategies have been identified. Pajkic (2013) highlights four categories of conflict-resolution strategies: (1) submission, (2) communication, (3) evasion and (4) punishment. In combination,
the first two strategies—submission and communication—tend to alleviate friction, whereas a combination of submission, evasion and punishment lead to high levels of conflict. Similarly, Rodríguez Gutiérrez et al. (2016) highlight three styles of conflict resolution: (1) integration/negotiation, which entails trying to understand the other person’s point of view and the use of constructive reasoning strategies to agree on commitments; (2) domination, which involves maintaining the same stance, without taking the other person into account, and expressing negative feelings; and (3) avoidance, similar to Pajkic’s evasion, which implies the denial of any conflict. Whenever a conflict is suitably resolved, it has an adaptive function, helping both the parents and the adolescents to readapt their relationship and responsibilities, leading to a positive relationship model, based on confidence, communication and tolerance (Rodríguez Gutiérrez et al., 2016).

Family resilience is a suitable framework for interventions dealing with deadlock situations between parents and adolescents (Coyle, 2012; Walsh, 2016). Walsh (2016, p. 315) defines family resilience as “the capacity of the family, as a functional system, to withstand and rebound from stressful life challenges emerging strengthened and more resourceful”. The key characteristics often present in resilient families include family cohesion, positive parenting, affective involvement, parent engagement, communication, problem solving, and adaptability (Sheridan, Peterson and Rosen, 2013).

Positive management of parent-adolescent conflicts and the ability to negotiate and collaborate in the problem-solving process are directly linked to assertive communication, active listening, the positive formulation of wishes and demands and to emotional skills—recognition of one’s own emotions and those of the others—the expression of one’s own emotions, emotion management, etc.—as key elements in this process (Collins and Steinbert, 2006; Orte, Ballester, Amer and Vives, 2019; Sillars, Koerner and Fitzpatrick, 2005; Sorkhabi, 2010; Steinberg and Morris, 2001; Walsh, 2016). Low levels of conflict and high levels of family cohesion in western families have been associated with authoritative parenting (Bi et al., 2018), a model that fosters negotiation and agreement among family members.

Family interventions in the field of prevention: the role of family resilience, cohesion and conflict

Family interventions must focus on family strengths, such as positive expectations, family beliefs, emotional connectedness, learning opportunities and organizational patterns. Selective socio-educational interventions that promote positive parenting, while also strengthening and developing family communication and social
skills (among the parents and adolescents), have had positive results in reducing conflicts and in boosting family cohesion and resilience (Coyle, 2012; Orte et al., 2019). Universal programs directed at low-risk families also attempt to consolidate these same key components in fewer sessions (Ennett et al., 2016; Moral and Ovejero, 2005; Spoth, Guyl and Shin, 2009; Spoth, Trudeau, Redmond and Shin 2014).

Resilience is a key factor in many evidence-based family interventions, both in universal and selective prevention in substance misuse, mental health, and disruptive behaviors. These family-based interventions promote child and family competences, with important effects in terms of the above problems (Borden, Schultz, Herman and Brooks, 2010), and sufficient evidence has been found of their positive results in the reinforcement of parent-child relations. An outline is given below of some such programs.

Bridges Program (Gonzales, Dumka, Mauricio and Germán, 2007) is a family prevention program aimed at reducing the risk of later mental health and substance use disorders. It focuses on improving youth and family competences in order to strengthen family bonds and collaboration in the management of ordinary family challenges, especially those affecting parent-adolescent dynamics (Jensen et al., 2014). Jensen et al. (2014) have reported effects on dimensions of parenting, coping and family cohesion among Mexican American families participating in the Bridges High School Program (Bridges).

The Incredible Years Parent Program (Hartman, Stage and Webster-Stratton, 2003; Reid, Webster-Stratton and Baydar, 2004; Reid, Webster-Stratton and Hammond, 2007; Webster-Stratton and Herman, 2008; Webster-Stratton, Reid and Hammond, 2001) is also based on a resilience-related preventive approach. The program focuses on the prevention of behavioral problems, substance abuse and violence by strengthening parenting competences and promoting social competences, positive attributions, academic readiness and emotional regulation. The program helps parents to identify prosocial child behavior, using strategies such as positive communication, emotive language, perspective-taking, and encouraged calm and focused persistence with difficult tasks, so as to foster positive youth development. Evaluations of the program have shown its efficiency in promoting effective parenting practices and child competences and in reducing problem behavior (Borden et al., 2010).

The Strengthening Families Program for Parents and Youths 10-14 (SFP 10-14) (Moolgard and Spoth, 2001; Spoth, Guyl and Shin, 2009) is a program for middle-school youths and their parents which is designed to reduce substance abuse and behavior problems in young people, to build parenting skills, and to
create stronger family units. It is a universal preventive version of the selective intervention Strengthening Families Program (SFP) developed by Kumpfer, Moltgard and Spoth (1996). The SFP is based on a resilience framework that involves fostering child strengths and family dynamics and the community context (Orte et al., 2019). While research on SFP 10-14 in the US has showed significant increases in positive parent-child involvement and affective quality, and a significant reduction in aggressive behavior and hostility in interaction with parents (Spoth, Redmond and Shin, 2000), five replication studies in Europe have not yielded positive results in youths’ substance use and abuse outcomes (Gorman, 2017).

With a focus similar to the resilience-prevention approach, the EcoFIT intervention model (Stormshak et al., 2011) combines universal, selected and indicated components in family interventions that address the improvement of parenting practices and child behavior through a combination of different strategies, tailored to individual family strengths, parenting values and growth areas. The Family Check-up selective prevention program (Dishion and Stormshak, 2007) forms part of these strategies. This intervention has proven positive effects on parenting strategies, such as increased supervision and monitoring, and on the development of skills to alleviate family conflicts (Dishion and Kavanagh, 2003; Stormshak and Dishion, 2002).

**Materials and Methods**

*Objective of the study*

The outcomes presented in this study are part of a larger research project. The aim of this paper is to analyze possible changes in family conflict and resilience, assessed by parents and adolescents, after taking part in a socio-educative family universal prevention program developed in school premises, and whether the gender of the adolescent has an effect on such change. More specifically, we explore whether the PCF-U 11-14 helps families with adolescents aged 11 to 14 to manage family conflicts and whether it impacts on family resilience.

The hypotheses that we aimed to test were:
- The group condition and gender of the adolescent have an effect in family conflict.
- The group condition and gender of the adolescent have an effect in family resilience.
The Universal Family Competence Program (PCF-U 11-14)

The PCF-U 11-14 is a reduced version for universal prevention of the Spanish adaptation of a selective prevention program (PCF 7-11 and PCF 12-16) that has been implemented in different regions in Spain and Portugal.

The theoretical framework behind the PCF-U 11-14 is based on the Biopsychosocial Vulnerability Model and other family risk and protective factors (Kumpfer, Molgaard and Spoth, 1996; Kumpfer, Trunnel and Whiteside, 1990; Spoth and Molgaard, 2001). According to this framework, family coping skills and resources—such as family management, conflict resolution, problem-solving skills, communication skills, and social and material support— influence adolescent adjustment outcomes. The PCF-U 11-14 has a multicomponent structure, combining sessions just for parents with some just for children and others for the family as a whole (parents and children). It has a six-session structure, with one session per week during six consecutive weeks, with each session lasting for 2 hours (See Table 1). The first part of the session, when the children and parents train separately in parallel, takes one hour. The second half, also lasting for one hour, is a practical joint session for the families. Table 1 shows a breakdown of the contents per session.

Table 1. Structure of the sessions of the PCF-U 11-14

<table>
<thead>
<tr>
<th>SESSION Nº.</th>
<th>PARALLEL 1st HALF OF THE SESSION (1 HOUR)</th>
<th>SUBSEQUENT 2nd HALF OF THE SESSION (1 HOUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PARENTAL SESSIONS</td>
<td>CHILDREN’S SESSIONS</td>
</tr>
<tr>
<td>Stage I.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and communication skills, rewards, goals and objectives</td>
<td>1 Presentation: Introduction and group training</td>
<td>Presentation: Introduction and group training</td>
</tr>
<tr>
<td>Positive time</td>
<td>2 Communication skills: empathy</td>
<td>Communication skills: empathy</td>
</tr>
<tr>
<td></td>
<td>3 Differential attention</td>
<td>Assertiveness skills and conflict management</td>
</tr>
<tr>
<td>Stage II.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The avoidance of risk factors, strategies to cope with anger and problem-solving</td>
<td>4 Creating and using behavioural programmes Setting limits</td>
<td>Communication: expression of feelings and emotions, dealing with criticism</td>
</tr>
<tr>
<td>Setting limits, and creating and using behavioral programs</td>
<td>5 Preventing drug-related problems. Talking about drugs and risk factors</td>
<td>Handling group pressure, Learning to say “no”</td>
</tr>
</tbody>
</table>
Table 1. Structure of the sessions of the PCF-U 11-14

<table>
<thead>
<tr>
<th>SESSION NO.</th>
<th>PARALLEL 1ST HALF OF THE SESSION (1 HOUR)</th>
<th>SUBSEQUENT 2ND HALF OF THE SESSION (1 HOUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PARENTAL SESSIONS</td>
<td>CHILDREN’S SESSIONS</td>
</tr>
<tr>
<td>6</td>
<td>Achieving and maintaining good behaviour</td>
<td>Dealing with anger. Conflict management and problem-solving strategies</td>
</tr>
</tbody>
</table>

**Design**

The study follows a pre-test post-test quasi-experimental design, with both experimental and control groups. The experimental part consists of the PCF-U 11-14, a six-session program with a booster session six months after the program finished.

**Participants**

A total of 275 families participated in the study in either the experimental or control groups, made up of 353 caregivers and 289 children or pre-adolescents (Table 2). 249 families from both the experimental and control groups completed the whole intervention, representing a retention rate of 90.55%. Table 2 shows that 164 families formed part of the experimental group, with 154 of them completing the program and its 6 sessions (retention rate of 93.33%) and 11 families abandoning the program. Likewise, the control group comprised 110 families at the beginning, with 95 of them participating in both the pre-test and post-test sessions and 15 being lost along the way (retention rate of 86.36%).

Table 2. Size and characteristics of the sample

<table>
<thead>
<tr>
<th>EXPERIMENTAL GROUP</th>
<th>CONTROL GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAMILIES</td>
<td>CAREGIVER</td>
</tr>
<tr>
<td>N started</td>
<td>165</td>
</tr>
<tr>
<td>N finished</td>
<td>154</td>
</tr>
<tr>
<td>Mean age&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-</td>
</tr>
<tr>
<td>SD age&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-</td>
</tr>
<tr>
<td>Minimum age</td>
<td>-</td>
</tr>
</tbody>
</table>

[CONTINÚA EN LA PÁGINA SIGUIENTE]
MANAGING FAMILY CONFLICT: RESULTS OF A FAMILY PREVENTION PROGRAM IN SCHOOL SETTINGS

Table 2. Size and characteristics of the sample

<table>
<thead>
<tr>
<th></th>
<th>EXPERIMENTAL GROUP</th>
<th>CONTROL GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAMILIES</td>
<td>CAREGIVER</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MALE</td>
<td>FEMALE</td>
</tr>
<tr>
<td>Maximum age</td>
<td>57</td>
<td>56</td>
</tr>
</tbody>
</table>

aIn the experimental group, all the caregivers were parents. In the control groups, two caregivers (a male and a female) were grandparents.

As for the caregivers, as usually happens, a higher number of females (n=144) than males (n=54) joined and completed the program (See Table 2). The number of participants by gender also differed in the control group, with 19 males versus 88 females. At the end of the program, the minimum age of the caregivers was slightly lower in the control group (Min.=29) when compared with the experimental group (Min.=31), while the maximum age in the control group (Max.=73) was much higher than the experimental group (Max.=57). It must be noted that, in the experimental group, all the caregivers were parents, whereas, in the control group, two caregivers (a male and a female) were grandparents. This explains why the differences in the mean ages of the control and the experimental group.

The pre-adolescent and adolescent children were attending either the last stage of primary education –the fifth or sixth year (ages 11-12)–, or the first stage of secondary education –the first or second year (ages 13-14)–. A total of 175 were in the experimental group and 114 were in the control group, all of them with ages ranging from 11 to 14 (Table 2). The mean age of the adolescents in the control group (M=12.15; SD=1.15) was slightly higher than the mean age of the experimental group (M=11.49; SD=1.21).

Measurement instruments

Four main instruments are used in the overarching project: a questionnaire for parents, a questionnaire for adolescents, fidelity questionnaires with external observers, and satisfaction questionnaires for families (parents and adolescents). As stated above, for the purpose of the intended study, this paper focuses solely on the two factors that offer an insight into family conflicts (reported by both the caregivers and the adolescents) and family resilience (reported by the caregivers), results of other outcomes are reported elsewhere.

The family conflict scale is assessed by the caregivers and the adolescents, with ‘family conflict’ relating to the degree of family friction and level of adequate family
relations. This is tied in with their ability to tackle family issues and difficulties, their capacity to deal with quarrels and disagreements, the family members’ respect for one another, proper family relations and family cohesion. The family conflict scale also gathers information about what is going on in the family, and it is an indicator of family change, since the informants describe situations without appraising them.

Family resilience, assessed by the caregivers, concerns the family’s capacity to successfully cope with new challenges that emerge, such as health issues, emotional interaction, etc., as well as their ability to adapt to new situations and to overcome the challenges that the family might encounter. Family resilience is closely linked to family cohesion, and it is an excellent indicator of positive changes in families. The items in this factor assess the family’s strategies and resources in adapting, coping with and overcoming adverse situations.

Two questionnaires are used. Both (one for parents and one for children) were developed by Kumpfer, and they had been validated for the Spanish population.

– The KK-Parents Kumpfer questionnaire (Kumpfer, 1998) is used with caregivers to analyze family conflicts and resilience. The questionnaire, which also examines other factors related to family dynamics, consists of 13 scales comprising 135 items, and it takes about 30 minutes to complete. The questionnaire uses a 5-point Likert scale ranging from (1) never to (5) always. It has a test-retest reliability rate of 0.91 and shows an adequate consistency in all the factors. More specifically, both factors studied in this paper show a high Cronbach \( \alpha \): family conflict \( (\alpha=0.813) \), and family resilience \( (\alpha=0.746) \).

– The KK-Children Kumpfer questionnaire (Kumpfer, 1998) is used with adolescents and it comprises 134 items. It also takes around 30 minutes to complete. This questionnaire uses a 5-point Likert scale ranging from (1) never to (5) always. It has a test-retest reliability rate of 0.89 and shows an adequate consistency in each factor. The factor studied in this paper, family conflicts, shows a high Cronbach \( \alpha \) \( (\alpha=0.813) \).

**PROCEDURE**

The primary and secondary schools eligible to participate in the study had to meet the following inclusion criteria: (1) based in the Balearic Islands or Valladolid, (2) no participation in prevention programs during the two years prior to the implementation, (3) state schools or private state-subsidized schools. In the end, 16 schools were included in the experimental group and 17 in the control group. Schools in the Balearic Islands were public schools, with a strong balance between urban and rural settings, whereas schools in Valladolid were mainly urban and private
state-subsidized. After contacting the schools, once they had agreed to participate, the caregivers and children were given written information about the PCF-U 11-14. Additionally, prior implementation, there was a meeting at each school with the parents, where the program was explained and any queries were answered.

All the families interested in participating that met the inclusion criteria were recruited. The inclusion criteria were families with children aged 11 to 14 who were able to understand the language and were available to participate in the program. The exclusion criteria were refusal to participate, a mental disorder that had gone untreated or had not been stabilized, or an intellectual disability involving serious attention problems.

A total of 16 experimental groups and 17 control groups were formed. The experimental conditions and length of the sessions were held constant in all the interventions. The main extraneous variables were controlled for. The fidelity of the implementations was assessed by an external observer at each session in order to check that the contents of the session and the procedure used in the implementation followed PCF-U 11-14 guidelines. No intervention was given to the control group, they were asked to participate completing the self-reports.

Research shows that leader training is key for success (Gilmer et al., 2016; Pascual, Sánchez-Prieto, Gomila, Quesada and Nevot, 2019; Sheffield Morris, Jespersen, Cosgrove, Ratliff and Kerr, 2020). In this study the trainers responsible for the interventions had extensive prior experience and high interpersonal and intrapersonal skills and they had undergone specific training in the PCF-U 11-14.

The caregivers and their children were evaluated by comparing the pre-test and post-test results. The pre-test evaluation took place at the beginning of session 1 and the post-test evaluation at the end of session 6. During the same period of time, the control groups also took part in the evaluation.

The questionnaire was self-administered, with the group of caregivers and the group of children each completing the questionnaire in different rooms so that they would not influence each other. Specific instructions were given to each group of participants. The instructions were the same regardless of the group and the group status. Two people were present in each room to clear up any queries and to assist the participants with the questionnaire, if needed. Each participant answered their own questionnaire in the style of a self-report.

Ethical approval to the study was granted by the Ethical Committee of the University of the Balearic Islands and the Spanish Government (Ref. EDU2016-79235-R). It should also be noted that all the families were informed about the research and they all agreed to sign an informed consent form. This also specified the confidentiality terms regarding their personal data.
Data analysis

Descriptive statistics were used to inspect the data. Two-way ANOVA (Harring and Johnson, 2018) was performed to compare the interaction effects for pre-test and post-test mean change scores by condition group (between the control and the experimental groups) and gender of the teenager for both the caregivers and children. For statistically significant interaction effects, additional ANOVAs were performed to examine the main effects separately for the experimental and control groups and for males and females.

To do so, two new variables were created: conflict change scores [post-test score – pre-test score in family conflict] and resilience change scores [post-test score in family resilience – pre-test score in family resilience]. Residual analysis was performed to test for the assumptions of the two-way ANOVA for each cell (group condition and gender of the adolescent). Outliers were assessed by inspection of a boxplot; normality was assessed using Shapiro-Wilk’s normality test for each cell of the design and the Levene’s test was used to assess homogeneity of variances.

As assessed by Shapiro-Wilk’s test, data of conflict change scores was not normally distributed (p<0.05), still ANOVA is fairly robust to be used even when data does not comply with this assumption (Maxwell and Delaney, 2004). Levene’s test showed that there was homogeneity of variances (p>0.05). As to resilience change scores, data was normally distributed (p>0.05) and Levene’s test showed that there was homogeneity of variances (p>0.05).

RESULTS

A two-way ANOVA was conducted to examine the interaction effects of adolescent’s gender (male or female) and group condition (experimental or control) on resilience and conflict change scores. Data are mean ± standard error, unless otherwise stated.

Family conflict

The family conflict factor, as reported by the parents and children, assesses the level of conflict and relations in the family. It is interconnected with the ability to face up to and overcome family problems; to deal with disputes, squabbles and disagreements; to their respect for and opinions of each other; to the degree of family cohesion; and to how they get on with one another. This factor includes observations of what is going on in the family and it is an interesting indicator of
family changes, since the informants describe situations as opposed to appraising them. The lower the obtained values, the lower the amount of family conflict.

Table 4 shows the descriptive statistics for the change scores in family conflict, which portrays the difference between the post-test and pre-test values, by group condition and adolescent gender.

Visual inspection of the means based on parental report seems to show a reduction in family conflict both in the experimental and control groups and in both boys and girls, with a slightly higher reduction in girls from the experimental group (Figure 1).

Table 3. Descriptive statistics for change scores (post-test - pre-test) in family conflict by group condition and gender of the adolescent, based on parental and adolescent reporting

<table>
<thead>
<tr>
<th>GROUP CONDITION</th>
<th>GENDER OF ADOLESCENT</th>
<th>CAREGIVERS</th>
<th>ADOLESCENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Experimental</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>-0.15</td>
<td>0.66</td>
<td>93</td>
</tr>
<tr>
<td>Female</td>
<td>-0.26</td>
<td>0.72</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>-0.2</td>
<td>0.69</td>
<td>156</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>-0.24</td>
<td>0.58</td>
<td>42</td>
</tr>
<tr>
<td>Female</td>
<td>-0.11</td>
<td>0.48</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>-0.17</td>
<td>0.52</td>
<td>99</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>-0.18</td>
<td>0.64</td>
<td>135</td>
</tr>
<tr>
<td>Female</td>
<td>-0.19</td>
<td>0.62</td>
<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>-0.18</td>
<td>0.63</td>
<td>255</td>
</tr>
</tbody>
</table>

Still, after running the Two way ANOVA, the interaction effect between gender and group condition on “change scores in family conflict”, as reported by the parents, was not statistically significant, $F(1.255)=2.068$, $p=.152$, partial $\eta^2=.008$ (Table 5). An analysis of the main effect for group condition indicated that it was not statistically significant, $F(1.255)=0.136$, $p=0.713$, partial $\eta^2=.001$. Likewise, an analysis of the main effect for gender showed no statistically significant difference in “change scores in family conflict” values [$F(1.255)=0.006$, $p=.938$, partial $\eta^2=.000$]. This means that PCF 11-14, as reported by parents, did not reduce family conflict, and that the gender of the adolescent did not have an influence on the reduction or increasement of such factor.
Figure 1. Clustered Bar Mean of Change Scores in Family Conflict by group condition and gender, based on parental reporting

Table 4. Test of between-subjects effects for change scores in family conflict

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>TYPE III SUM OF SQUARES</th>
<th>DF</th>
<th>MEAN SQUARE</th>
<th>F</th>
<th>SIG.</th>
<th>PARTIAL ETA SQUARED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>.888a</td>
<td>3</td>
<td>0.296</td>
<td>0.751</td>
<td>0.523</td>
<td>0.009</td>
</tr>
<tr>
<td>Intercept</td>
<td>8.599</td>
<td>1</td>
<td>8.599</td>
<td>21.813</td>
<td>0</td>
<td>0.08</td>
</tr>
<tr>
<td>Group condition</td>
<td>0.054</td>
<td>1</td>
<td>0.054</td>
<td>0.136</td>
<td>0.713</td>
<td>0.001</td>
</tr>
<tr>
<td>Gender</td>
<td>0.002</td>
<td>1</td>
<td>0.002</td>
<td>0.006</td>
<td>0.938</td>
<td>0</td>
</tr>
<tr>
<td>Group_condition *Gender</td>
<td>0.815</td>
<td>1</td>
<td>0.815</td>
<td>2.068</td>
<td>0.152</td>
<td>0.008</td>
</tr>
<tr>
<td>Error</td>
<td>98.949</td>
<td>251</td>
<td>0.394</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108.5</td>
<td>255</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>99.837</td>
<td>254</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a R Squared=.009 (Adjusted R Squared=-.003)

As for changes in the family conflict, as reported by the adolescent and pre-adolescent children, visual inspection of descriptive statistics and clustered bar portray
no reduction in the experimental group, with some variety among boys’ and girls’ values (Table 4, Figure 2).

**Figure 2. Clustered Bar Mean of Change Scores in Family Conflict by group condition and gender, as reported by adolescents**

In line with the results reported by parents, the interaction effect between gender and group condition on “change scores in family conflict”, was not statistically significant for adolescents, $F(1.253)=1.395, p=.239$, partial $\eta^2=.006$. An analysis of the main effect for gender showed no statistically significant difference values, $F(1.253)=0.999$, $p=.319$, partial $\eta^2=.004$. Likewise, no statistically significant difference was found between the experimental and control groups [$F(1.253)=2.085$, $p=.150$, partial $\eta^2=.008$], meaning that there was no change in the family conflict scores after participating in the PCF 11-14.

**Resilience**

Family resilience is a protective factor. As indicated earlier, this variable assesses the family’s resources and strategies for successfully coping, adapting to and overcoming the challenging situations that a family might encounter, such as a member’s health problems or difficulties in affective relations.
Visual inspection of the means of the change scores in family resilience by group condition and gender (Table 6 and Figure 3) seems to display an enhancement in family resilience in the experimental group, especially with girls, and a reduction in the families from the control group.

**Table 5. Descriptive statistics for change scores (post-test – pre-test) in family resilience by group condition and gender of the adolescent, based on parental reporting**

<table>
<thead>
<tr>
<th>GROUP CONDITION</th>
<th>GENDER OF ADOLESCENT</th>
<th>MEAN</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Male</td>
<td>0.09</td>
<td>1.02</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>0.20</td>
<td>0.87</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0.14</td>
<td>0.96</td>
<td>144</td>
</tr>
<tr>
<td>Control</td>
<td>Male</td>
<td>0.02</td>
<td>0.88</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>-0.39</td>
<td>0.88</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-0.22</td>
<td>0.90</td>
<td>94</td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td>0.07</td>
<td>0.97</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>-0.08</td>
<td>0.92</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0.00</td>
<td>0.95</td>
<td>238</td>
</tr>
</tbody>
</table>

The interaction effect between gender and group condition on family resilience change scores was not statistically significant, $F(1.238)=4.222$, $p=.041$, partial $\eta^2=.018$ (Table 7). An analysis of the main effect for group condition indicated that it was statistically significant, $F(1.238)=6.917$, $p=0.009$, partial $\eta^2=.029$. Pairwise comparisons were run. The unweighted marginal means of “change scores in family resilience” for group condition were $0.148 \pm 0.079$ for the experimental group and $-0.182 \pm 0.097$ for the control group, with a statistically significant mean difference of $0.329$ (95% CI, 0.083 to 0.576), $p<.0005$, which indicates that the experimental group was associated with a mean change score in family resilience $0.329$ points higher than the control group (Table 8). There was no statistically significant difference for boys and girls [$F(1.238)=1.427$, $p=.233$, partial $\eta^2=.006$]. This means that PCF 11-14 did boost family resilience, although the gender of the adolescent did not have an effect.
Figure 3. Clustered Bar Mean of Change Scores in Family Resilience by group condition and gender

![Clustered Bar Mean of Change Scores in Family Resilience by group condition and gender](image)

Table 6. Test of between-subjects effects for change scores in family resilience

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>TYPE III SUM OF SQUARES</th>
<th>DF</th>
<th>MEAN SQUARE</th>
<th>F</th>
<th>SIG.</th>
<th>PARTIAL ETA SQUARED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>11.328a</td>
<td>3</td>
<td>3.78</td>
<td>4.36</td>
<td>0.01</td>
<td>0.05</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.06</td>
<td>1</td>
<td>0.06</td>
<td>0.07</td>
<td>0.79</td>
<td>0</td>
</tr>
<tr>
<td>Group condition</td>
<td>5.99</td>
<td>1</td>
<td>5.99</td>
<td>6.92</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>Gender</td>
<td>1.24</td>
<td>1</td>
<td>1.24</td>
<td>1.43</td>
<td>0.23</td>
<td>0.01</td>
</tr>
<tr>
<td>Group_condition *Gender</td>
<td>3.65</td>
<td>1</td>
<td>3.65</td>
<td>4.22</td>
<td>0.04</td>
<td>0.02</td>
</tr>
<tr>
<td>Error</td>
<td>202.51</td>
<td>234</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>213.83</td>
<td>238</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>213.83</td>
<td>237</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a R Squared=.053 (Adjusted R Squared=.041)
Table 7. Pair-wise comparison by group condition for change scores in family resilience

<table>
<thead>
<tr>
<th>GROUP CONDITION (I)</th>
<th>GROUP CONDITION (J)</th>
<th>MEAN DIFFERENCE (I-J)</th>
<th>STD. ERROR</th>
<th>SIG.B</th>
<th>LOWER BOUND</th>
<th>UPPER BOUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Control</td>
<td>.329*</td>
<td>0.125</td>
<td>0.009</td>
<td>0.083</td>
<td>0.576</td>
</tr>
<tr>
<td>Control</td>
<td>Experimental</td>
<td>-.329*</td>
<td>0.125</td>
<td>0.009</td>
<td>-0.576</td>
<td>-0.083</td>
</tr>
</tbody>
</table>

Based on estimated means

DISCUSSION

Recent systematic reviews of group parenting programs (Benedetti, Rebessi and Neufeld, 2020; Rubio-Hernández, Trillo Miravalles and Jiménez-Fernández, 2021) report common elements in effective programs, such as: coverage of key subjects (parent-child communication, problems solving, emotional regulation and positive parenting), and a minimum session duration of 60 to 90 minutes. The program analyzed in this paper complies with these elements.

The main aim of this paper was to analyze changes in family conflicts and family resilience in families participating in the PCF-U 11-14, a family universal prevention program developed in school settings. The obtained results show a positive effect in terms of boosted family resilience through participation in the PCF-U 11-14 but no effect in reducing family conflict.

The first hypothesis was that participation in PCF-U 11-14 would have an effect in family conflict and that this effect would be different depending on the gender of the adolescent or pre-adolescent. Based on both the adolescent and parents’ reports, no statistically significant difference in family conflicts was found. Similarly, in this study the gender of the adolescent did not have an effect on the results obtained. These results are in line with the results reported in several meta-analysis of program characteristics for youth with disrupted behavior that found no difference in effect for boys and girls (de Vries, Hoeve, Assink, Stams and Asscher, 2015; Granski, Javdani, Anderson and Caires, 2020). We agree with Granski et al. (2020, p. 216) in the fact that girls would benefit more if interventions would include gender-responsive components designed to address their position in a patriarchal society.

The second hypothesis predicted changes in family resilience after participating in PCF-U 11-14 with differences depending on the gender of the adolescents. No differences were found depending on the gender of the adolescents. Still, the
family resilience scores of families participating in the PCF-U 11-14, as reported by the caregivers, had a statistically significant increase. These results lead us to predict that, through the program, the family gains in cohesion, improving the parents’ expectations as a family.

The results of this study are consistent with other studies, which confirm that participation in family programs boosts family strengths and resilience (Borden et al., 2010; Henry, Sheffield Morris and Harrist, 2015; Sheffield Morris et al., 2020). Despite our results do not report significant effects when considering directly parent-adolescent levels of conflict, other studies have confirmed a positive correlation between increase in family cohesion and adolescent well-being and conflict with their parents (Fosco and Lydon-Staley, 2021).

The limitations of this study should be taken into account in the consideration of the results. This study assesses the changes that occur in families during the course of the program (proximal or immediate outcomes through pre-test post-test measures), meaning that possible changes that might occur long after implementation would be missing. In fact, to report the progressive impact of changes over time (distant outcomes), a longitudinal analysis is needed. In that regard, Hawkins, Clyde, Doty and Avellar (2020) suggest the need to evaluate both immediate or proximal outcomes and distal outcomes to analyze the effectiveness of a family intervention. Previous longitudinal research on selective prevention, PCF-U 12-16, (Orte et al., 2019) found that selective family prevention programs aimed at boosting life skills have an accumulated effect over time, and so future measurements would be needed to test whether this occurs with the PCF-U 11-14 when used in universal prevention.

All things considered, more research is needed to analyze other specific benefits of these type of short interventions aimed at universal prevention. In that regard, further research into school-based family interventions must explore not just the direct effects derived of the short universal prevention interventions and their longitudinal effects, but also the indirect effects of such programs and how to boost the efficient components of these interventions in order to make them more effective.

Another further direction of investigation could also be to focus on the effects of a parent-school-community approach, which could possibly lead to making this kind of socio-educational intervention a regular part of family-school dynamics with its own effects. The development of family prevention school programs based on evidence including teachers and other community agents as trainers contributes to strengthening positive links among the family, the school and the community (Álvarez, 2019; Collet and Tört, 2011; Epstein, 2001; Stormshak et al., 2016) with direct impact in the effectiveness of the intervention (UNODC, 2015).
REFERENCES


