

# THE SKILLS FOR LIFE PROGRAM: A PROMISING APPROACH TO PREVENTION IN ADOLESCENT MENTAL HEALTH

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## Abstract

This paper shows the contribution of "Skills for Life Program" to prevention practices adolescent mental health in schools in Chile. Study included a sample of adolescents ( $N = 212$ ) who participated in the preventive intervention of the program. The goal was to examine changes in variables of school maladjustment (SM) and psychosocial dysfunction (PD) based on their attendance and their parents to the preventive intervention. Design was ex-post-facto, prospective longitudinal, pre and post measurements. Analysis considered repeated measures ANOVA and t tests for related samples. Results indicate a decrease in risk factors associated with SM and PD stability of adolescents. Study implications will be discussed for preventive science and public policy.

**Keywords :** school mental health; prevention; preventive intervention in school; preventive workshops; Skills for Life Program.

## Introduction

It is public knowledge that mental illnesses continue to increase; If in 2000 they explained 13% of global disability, by 2020 they will explain 15%. The consequences for health, as well as the resulting social and economic costs, are multiple: unemployment, reduced productivity and impact on families and



caregivers. Additionally, there are incalculable costs such as those derived from lost opportunities for children and adolescents who suffer from mental illness (Jané-Llopis & Barry, 2005; World Health Organization [WHO], 2004).

Various studies show that children and adolescents with mental disorders are not receiving the specialized care they require (Green et al., 2013; Mills, Stephan, Moore, Weist, Daly & Edwards 2006; Weist & Murray, 2008). , there is a significant care gap between children and adolescents who require specialized services and do not seek or receive them (Vicente, Saldivia, de la Barra, Melipillán, Valdivia & Kohn 2012; Weist & Murray, 2008).

There are also family limitations and the capacity of health systems to evaluate and treat psychopathologies (Offord & Bennett, 2002: Vicente et al., 2012). These limitations have motivated researchers and those in charge of designing public policies to develop promotional and preventive programs, especially if it is considered that the majority of disorders that would affect mental health begin in childhood or adolescence (de la Barra, 2011; Kessler , Berglund, Demler, Jin, Merikangas & Walters 2005; O'Connell, Boat, & Warner, 2009; Wille, Bettge, & Ravens-Sieberer, 2008).

Mental health promotion activities entail the creation of individual and social conditions that allow optimal psychological and psychophysiological development. With the activation of social networks, it contributes significantly to people's mental health as it provides emotional and instrumental support and increases confidence and courage to face challenges (Jané-Llopis & Barry, 2005).

On the other hand, prevention is based on public health principles with a focus on reducing risk factors and promoting protective factors related to a mental disorder or behavioral problem, with the ultimate goal of reducing its

prevalence and incidence. (Jané-Llopis & Barry, 2005; Jané-Llopis, Barry, Hosman, & Patel, 2005; Vicente et al., 2012). Preventive strategies not only address mental health problems before they appear, but also consider their application at the community level (Detels, Mcewan, Beaglehole & Tanaka, 2002).

The school is one of the optimal places to detect risk factors and disorders early and to carry out protective, compensatory and reparative interventions. Furthermore, this is the most likely space where children and adolescents can receive mental health services, considering the existing evidence of the association between learning and mental disorders (Domitrovich, Bradshaw, Greenberg, Embry, Poduska & Ialongo 2010; Macklem, 2014; Petras, Kellam, Brown, Muthén, Ialongo & Poduska 2008).

Several countries have recognized this relevance and have given priority in their agenda to health promotion and prevention in school, through government-funded initiatives (Weist & Murray, 2008). These long-term strategies are more effective if they are integrated into school mental health policies, implementing both promotional and preventive mental health interventions (George, Guzmán, Flotts, Scquicciarini, & Guzmán, 2012; Herrman & Jané-Llopis, 2005; World Health Organization [WHO] (2004). Prevention of Mental Disorders: Effective Interventions and Public Policy Options. Department of Mental Health and Substance Abuse, Prevention Research Center of the Universities of Nijmegen and Maastricht. Compendium Report, Geneva).

Promotional and preventive interventions in the school context have protective effects on their participants. At the individual level, these interventions contribute to the reduction of internalizing and externalizing problems and to strengthening academic performance. Furthermore, they generate favorable



effects in the family and school community, and are particularly useful when directed at populations with higher risks through comprehensive systems and multicomponent programs, combining efforts from the classroom, the school and the entire community. community (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011; Durlak & Wells, 1997; Weare & Nind, 2011).

Other achievements are a lower level of violence and bullying and greater prosocial behavior. Therefore, the link that can be established between schools and the strategies implemented to improve the well-being of students becomes a drive for the promotion and prevention of mental health (Durlak et al., 2011; Hoagwood, Olin, Kerker , Kratochwill, Crowe & Saka 2007; Suldo, Gormley, DuPaul & Anderson-Butcher, 2014).

The combination of efforts of teachers, administrators, fathers, mothers, caregivers based on the well-being of students is essential for promotion and prevention at school. Comprehensive intervention programs in their approach, which combine the contribution of various school actors, make their protective effects systemic and not only in the learning dimension.

In Chile, the largest-scale effort made in the aforementioned direction has been the "Skills for Life Program (HpV)" of the National Board of School Aid and Scholarships [JUNAEB], implementing stable and permanent strategies of promotion and prevention of child-adolescent mental health.

Currently, this program has national coverage and in collaboration with local governments it has been a structured public response for promotion and prevention in school mental health with a long history (George, Guzmán, Hartley, Squicciarini, & Silva, 2006). In its beginnings (1998), the HpV was implemented in primary school students (6-9 years), then it incorporated coverage of the pre-school level (4-5 years) and later, starting in 2008, the



intervention model It is implemented in adolescents (10-14 years) of the second basic cycle.

The purpose of the short-term program is to strengthen social cognitive and affective interpersonal skills, to improve school performance, reduce repetition and dropout, and achieve positive school coexistence. In the medium and long term, it is to increase quality of life (well-being, personal skills and life expectancy) and prevent mental health damage associated with violent behavior, depression and abusive consumption of alcohol and drugs (George et al., 2006). For the implementation of the Program at the local level, JUNAEB works in collaboration with the municipalities in project modality, according to the technical guidelines of the Program. Given the territorial presence of these entities, the feasibility of the sustainability and community insertion of the Program is greater.

The HpV program model includes universal interventions (promotion), focused on promoting well-being and psychosocial development in the entire educational community (principals, teachers, parents and students); research activities to detect psychosocial problems and risk behaviors in schoolchildren (using questionnaires adapted and validated for different ages) and preventive interventions (of the indicated type) for those who present risk behaviors.

In addition, HpV implements actions for those students detected at high risk and who require access to mental health diagnosis and treatment in the local health network, with monitoring by the program of the response of this health network. For better insertion at the community level, the HpV articulates and reinforces a local support network that facilitates and ensures coordination between the school and the support centers and psychosocial care programs



existing at the community level, with awareness-raising and information actions.

Regarding the preventive interventions carried out by the Program, there is evidence that suggests positive effects on school performance and behavior in the participating boys and girls (Delgado, Zúñiga, & Jadue, 2006; Guzmán et al., 2011; Leiva et al. , 2015; Murphy et al., 2014). Considering that the Program maintains the same conceptual and operational structure with school adolescents, the preventive strategy in this population has not been studied with the same intensity (Gallardo, Leiva, & George, 2015). Thus, the focus of this work is on the preventive strategy of the Skills for Life II Program, aimed at the school population between 10 and 14 years old.

### **The National Life Skills II Program and its Adolescent School Mental Health Prevention Strategy**

The HpV is a school mental health program that responds to the needs and characteristics of the Chilean reality, valuing the local reality and considering topics relevant to the life cycle of the participants (Cova, Aburto, Sepúlveda & Silva, 2006).

It considers a detection phase (risk investigation) and another intervention phase. Risk detection or screening is universally carried out in the 6th grade; allows us to identify adolescents who present a) school maladjustment [SD] (measured through the TOCA-RR questionnaire and b) psychosocial dysfunction [PD] (measured through the PSC.Y questionnaire). The combination of these instruments makes it possible to identify at an individual level those students who are not at risk from those who are, whether in DE and/or DP.



The inclusion criteria for preventive intervention is based on risk screening based on the questionnaire that evaluates ED, establishing specific interventions in order to modify the trajectories of the detected risks. Adolescents who present school maladjustment and who require attending preventive workshops are: (a) schoolchildren with poor relationships with their classmates or peers, and who do not integrate or interact with them in activities at school; (b) adolescents who find it difficult to persist in the tasks proposed for the course, are not interested in school work and are easily distracted; (c) schoolchildren who do not respect school rules,

With this approach, risk behaviors that have been evaluated as predictors of future mental disorders are identified and addressed early (Guzmán et al., 2011; Murphy, 2014; Werthamer-Larsson, Kellam & Wheeler, 1991). Given the characteristics of this intervention model (inclusion criteria, specific and individual risk and intervention intensity), it is assigned to a focused or indicated preventive intervention (Mrazek & Haggerty, 1994).

Preventive intervention is carried out in basic 7. Its objective is to develop skills and behaviors that prevent psychosocial difficulties that negatively affect the school performance of students with previously detected risk behaviors. It consists of a workshop of 10 regular sessions (weekly and continuous) of 2 hours with adolescents, 3 sessions with parents and 2 sessions with teachers. It lasts approximately 6 months, is group, closed, mixed and is carried out at school and is carried out mainly by psychologists who are part of the Program's executing team. Attendance records are made and the fulfillment of objectives per session is recorded.

Given the challenges that the beginning of adolescence entails, this preventive intervention requires a different evaluation compared to the evaluation carried



out with schoolchildren from the previous educational cycle (Delgado et al., 2006; Guzmán et al., 2011; Leiva et al. 2015; Murphy et al., 2014). Keeping in mind that those who participate in this preventive intervention are school adolescents, this study also considers adjustments to work on subjective aspects (socio-affective, emotional, self-perception or self-image) and the vision of their well-being in the natural contexts of development), which is why it is not only evaluated ED but also PD (Gallardo et al., 2015). Evaluating variables related to more subjective aspects of adolescent well-being, such as DP, could enrich the intervention and the program,

Given these conditions, the present work aims to examine whether the adolescents participating in the preventive workshops (preventive strategy) present a pre-post intervention difference in the DE and DP variables, according to their level of attendance at the sessions implemented and according to the attendance. of parents to workshops organized for them.

## **Method**

### **Procedure**

An ex post facto, prospective longitudinal study was implemented, with pre and post measurements (Campbell & Stanley, 1973). The first measurement was carried out when the students were in 6th grade (2010). Then, in 7th grade (2011), the preventive intervention was carried out. Finally, the second measurement was carried out in 8th grade (2012), after the implementation of the preventive workshop. The study group attended the preventive workshop described, and also participated in psychosocial well-being promotion activities that apply to the entire population of their respective schools within the framework of the HpV II program.

### **Participants**



472 adolescents from 68 schools in 11 communes throughout the country participated in the preventive intervention. Of this group, only 212 had a record of attendance at the workshops; The rest of the adolescents ( $n = 260$ ) were also evaluated with the instruments used in this study, but since they did not have their attendance record, they were not considered in the analyses. In view of the above and considering sex, the sample was made up of 121 women (55.1%) and 91 men (42.9%). The average age of the group at the beginning of the study was 12.02 years ( $SD = 0.8$  years) and no significant differences were found in the average age according to the sex of the adolescent ( $t(210) = 1.07$ ;  $p = 0.454$ ) ( $n = 212$ ).

### **Information collection**

Two research instruments were used, and records of attendance at the preventive intervention. The instruments used were the following.

#### **Teacher Observation of Classroom Adaptation Revised (TOCA-RR)**

It reports on classroom behavior and is responded to by the teacher in the context of an interview conducted by trained interviewers. It measures school maladjustment (SD) and allows the identification of risk factors and maladaptive behaviors associated with mental health problems and with a greater probability of presenting psychiatric disorders (Kellam, Mayer, Rebok, & Hawkins, 1998; Kellam et al., 2008) .

In the local adaptation of this instrument (JUNAEB, 2011), four dimensions of risk are identified for the adolescent population: (1) poor relationships with peers (MRP), which accounts for low integration and interaction with peers and participation in activities, (2) low autonomy (BA) understood as dependence on the teacher for school activities and dependence on classmates to integrate, (3) poor school performance (PDE), which translates into low motivation in school

work, in the persistence of the task and high degree of distractibility and (4) aggressive responses (AR), where the adolescent is evaluated as disobedient, with low tolerance for frustration and with aggressive physical and verbal reactions. Each of these conditions informs classroom behavior. Examples of questions are: "harms or hurts others physically," "pays attention," or "has a lot of friends." This instrument has been recently validated in Chile and has a reliability, for each subscale, determined with Cronbach's alpha, which fluctuates between 0.81 and 0.95 (Leiva, George, Guzmán, Squicciarini, Simonsohn & Antivilo 2015a).

### **Pediatric Symptom Checklist-Youth Report (PSC-Y)**

It measures psychosocial dysfunction (PD), understood as difficulties in meeting expectations for age or difficulties arising in establishing relationships with peers and/or family (Jellinek, Murphy, & Burns, 1986; Jellinek, Murphy, Robinson, Feins, Lamb & Fenton 1988; Murphy & Jellinek, 1988; Murphy, Jellinek, & Milinsky, 1989). The PSC-Y is the adolescent version of the PSC (Jellinek et al., 1986; Murphy & Jellinek, 1988; Jellinek et al., 1988; Murphy et al., 1989). In the case of adolescents, psychosocial dysfunction is assessed through self-report on a 3-point ordinal scale from 1 (never) to 3 (often). Examples of these questions are "do you complain of aches and pains?" "you have little energy/you get tired easily" and "you are irritable and angry." This instrument was developed as a screening instrument to be used in the child population (Gall, Pagano, Desmond, Perrin, & Murphy, 2000), later the adolescent version was created (Pagano, Cassidy, Little, Murphy, & Jellinek, 2000 ); There is currently a self-administered version validated in Chile (Leiva, George, Guzmán et al., 2015) that presents good internal consistency (Cronbach's alpha = 0.97). 2000); There is currently a self-

administered version validated in Chile (Leiva, George, Guzmán et al., 2015) that presents good internal consistency (Cronbach's alpha = 0.97). 2000); There is currently a self-administered version validated in Chile (Leiva, George, Guzmán et al., 2015) that presents good internal consistency (Cronbach's alpha = 0.97).

Although the criterion for inclusion in the workshops is the result obtained in DE via TOCA-RR, all school adolescents answered PSC-Y, whose score serves as a comparison measure in a different and complementary dimension to DE.

### **Attendance at workshops**

The attendance of the adolescents, their parents and head teachers at the workshop was recorded. The number of participants as well as the categorizations used for the analyzes carried out are detailed in [Table 1](#).

**TABLA 1**  
*Asistencia de adolescentes, padres y profesores a las sesiones del taller*

N=212	Asistencia adolescentes		Asistencia padres		Asistencia profesores	
	1-7 sesiones (A1)	8-10 sesiones (A2)	0 Sesiones (P1)	1-3 Sesiones (P2)	0 Sesiones (PR1)	1-2 Sesiones (PR2)
N	85	127	70	142	2	210
%	40.1	59.9	33	67	0.9	99.1

Fuente: elaboración propia

### **Analysis of data**

Two-way ANOVA, with repeated measures in one factor, and Student's t-test for independent and dependent samples were used. The analyzes were carried out considering the raw or direct scores returned by the instruments.

### **Results**

To evaluate the effect of the preventive workshop, all the risk factors identified by the TOCA-RR, as well as the psychosocial dysfunction evaluated by the PSC-Y, were compared pre-post intervention. This depends on (1) the

attendance of the adolescents at the preventive workshop (group A1 and A2) and (2) the attendance of the parents at the preventive workshop (group P1 and P2). The attendance of teachers at the preventive workshop was not considered, since as seen in Table 1, the majority of teachers attend the sessions.

To visualize the changes in the variables evaluated according to the attendance of adolescents (A1-A2) and parents to the workshops (P1-P2), the means and standard deviations for each dimension evaluated, pre and post workshop, are presented (Table 2) . .

**TABLA 2**  
*Promedios y desviaciones estándar en cada variable evaluada pre-post taller*

	<b>Grupos</b>	Pre intervención		Post- intervención		Pre-intervención		Post-intervención	
		<b>A1</b>	<b>A2</b>	<b>A1</b>	<b>A2</b>	<b>P1</b>	<b>P2</b>	<b>P1</b>	<b>P2</b>
DE	MRP	12.4 (5.88)	13.43 (5.84)	20.46 (5.4)	20.08 (5.72)	20.03 (5.46)	20.33 (5.66)	14.1 (5.62)	12.48 (5.79)
	BA	20.51 (5.04)	19.8 (4.29)	16.62 (6.38)	15.87 (5.38)	20.59 (4.69)	19.82 (4.57)	16.87 (5.01)	15.83 (6.13)
	PDE	14.26 (4.45)	12.89 (4.48)	17.6 (7.49)	16.6 (6.12)	13.41 (3.98)	13.45 (4.76)	18.26 (5.6)	16.38 (7.21)
	RA	16.98 (4.91)	18.02 (5.34)	16.51 (7.96)	16.04 (7.25)	17.92 (4.9)	17.42 (5.33)	17.43 (5.19)	15.63 (7.56)
DP	PSC	54.94 (18)	55.61 (14.35)	55.37 (15.89)	53.86 (16.6)	54.43 (18)	55.79 (14.77)	55.49 (16.8)	53.97 (16.53)

Fuente: elaboración propia

To find out if the changes in the average scores turned out to be significant when comparing the groups according to the attendance of the adolescents and the parents at the workshops, a two-factor analysis of variance was applied, with repeated measures in one factor (Table 3) . .

**TABLA 3**

*Valores F observados en la comparación de grupos en las variables de DE y DP pre-post taller preventivo*

	Variable	Asistencia de adolescentes al taller		Asistencia de padres al taller	
		F	$\eta^2$	F	$\eta^2$
Tiempo	MRP	133.4**	0.39	108.22**	0.34
	BA	72.3**	0.26	65.1**	0.24
	DE PDE	32.65**	0.14	36.92**	0.15
	RA	5.23*	0.02	4.33*	0.2
DP	PSC	0.18		0.05	
	MRP	1.22		2.11	
	BA	0		0.09	
	DE PDE	0.09		2.24	
Tiempo * grupo	RA	1.99		1.24	
	DP PSC	0.49		0.78	
	MRP	0.44		1.69	
	BA	1.64		2.28	
Grupo	DE PDE	5.47*	0.03	3	
	RA	0.16		2.4	
	DP PSC	0.06		0	

\*p < 0.05. \*\* p < 0.01.

Fuente: elaboración propia

When analyzing the impact of adolescents' attendance at workshops, the results showed that there were favorable changes over time (pre-post preventive workshop) in the BA and RA dimensions, that is, adolescents from both groups (A1 and A2). They increased their level of autonomy and decreased their aggressive responses. On the other hand, the MRP and PDE dimensions worsened over time; This translates into adolescents who show worse relationships with their peers and poor school performance. The effect size of these differences was small for all the variables evaluated.

When observing the impact of parents' attendance at the workshops over time, it was found that in both group P1 and P2 the results were favorable in the MRP, BA and RA dimensions; This indicates that all the scores obtained by adolescents in the aforementioned variables improve, regardless of whether or not their parents attend the sessions implemented by the Program. Specifically, adolescents are able to establish better relationships with their peers, present

greater autonomy and express less aggressive behavior. On the contrary, there is a drop in school performance (PDE). However, the effect size of these differences was small ( [Table 3](#) ).

Regarding the interaction between time and adolescent attendance (group A1 and A2) and parental attendance (group P1 and P2), no interaction effects were observed for any of the variables evaluated. Regarding the analysis by group, in most of the variables evaluated, no differences were found according to the number of sessions attended by adolescents and their parents; only school performance presented significant changes; which, although it worsens in both groups (A1 and A2) pre-post intervention, improves comparatively in those adolescents who attend 8-10 sessions; However, the effect size is low ( $q^2 = 0.03$ ). Regarding PD, no differences were found over time or in the groups.

Likewise, the existence of pre-post application of the workshop differences according to the sex of the adolescents was evaluated. It was found that post-intervention in both men and women their relationships with peers improved, their autonomy increased but their school performance worsened. Regarding the level of aggressive responses and psychosocial dysfunction, no differences were found in any of the sexes. However, it should be noted that with respect to psychosocial dysfunction (PSC-Y), the average for women post-intervention tends to improve while that for men worsens ( [Table 4](#) ).



**TABLA 4**

*Comparación de promedios pre-post taller, según sexo*

Factor	Mujer (n = 121)						Hombre (n = 91)					
	Media		t	p	d	95% IC	Media		t	p	d	95% IC
	pre	post					pre	post				
MRP	19.55	14.26	6.83	0	0.61	[3.75; 6.82]	21.14	11.36	10.1	0	1.05	[7.85; 11.7]
DE BA	19.36	15.85	6.37	0	0.58	[2.42; 4.6]	21.02	16.6	5.94	0	0.62	[2.94; 5.89]
RA	14.13	17.12	-4.34	0	0.4	[-0.03; 2.02]	12.52	16.85	-4.06	0	0.42	[3.90; 1.86]
PDE	16.59	15.60	1.91	0.05			18.96	17.07	1.86	0.07		
DP PSC	57.65	53.94	1.83	0.07			52.2	55.2	-1.31	0.19		

*d = d de Cohen. IC para diferencia de medias.*

Fuente: elaboración propia

In general terms, post-intervention adolescents showed favorable changes in their level of autonomy and aggressive responses, these two aspects being the most favored by the preventive strategies implemented.

## Discussion

This work examined and evaluated the preventive intervention in relation to its capacity to reverse and favorably modify the initial risk conditions, identifying elements that could affect the success of its implementation in the educational context within a public program, of national scope in Chile.

Those adolescents initially identified with ED at risk and who attended the preventive workshops show post-intervention improvement in the level of autonomy and aggressive responses. Parents' attendance at the workshop has a positive influence on improving relationships with peers, the level of autonomy and the levels of aggressive responses in the adolescents involved. Regarding the frequency of attendance, a difference was only found in school performance, which, although it does not improve with the intervention, is comparatively better in those adolescents who attend 8-10 sessions.



Overall, a statistically significant change ( $p < 0.001$ ) is observed in most of the variables related to ED as a result of the preventive intervention. This result suggests that the interventions carried out at school based on the psychosocial risk investigated by the teacher are effective for their purpose: to increase psychosocial competencies that are expressed at school.

For its part, the PD variable does not present differences before and after preventive intervention. This result is partially explained because PD was not a criterion for inclusion in the intervention, so changes in this variable accentuate the non-coincidence between the subjectivity of students and the teachers' observation of behavior. Furthermore, the workshop was designed with greater emphasis on developing impact competencies in the school context, which possibly reduced the repertoire of activities carried out. The latter suggests the idea that working on school adaptation does not necessarily increase the level of self-perceived psychosocial functioning in adolescents.

When analyzing the impact that the attendance of adolescents and parents at the workshops had on the variables evaluated, the result is similar, since in both situations the adolescents improved their ED indices: they increased their level of autonomy, decreased aggressive responses and improved performance. school. However, the relationship that adolescents establish with their peers is different, since their attendance at the workshops does not have an impact on the improvement of established relationships; On the contrary, when parents attend the workshops, the relationship that adolescents establish with their peers improves, when comparing the average values obtained pre-post intervention.

These results show the consistency of the design of the preventive intervention with respect to the change in ED, since the preventive strategy manages to reverse and favorably modify certain dimensions of the ED; But in addition, the



use of standardized ED measures such as TOCA-RR allows us to identify those aspects that need to be worked on in greater depth to significantly reverse the risk conditions initially identified.

Now, if the preventive intervention seeks to generate change in PD, it is necessary to expand both its design and the possibilities of support for those who are at greatest risk in PD. The subjectivity of adolescents does not change significantly with the intervention, which is particularly relevant for issues of high incidence in adolescents such as internalizing problems (depression, anxiety) and their consequences on physical health. The results obtained reinforce the learning from the work of Gallardo et al. (2015) on the same preventive intervention, given that it was also identified that the affective and emotion management area requires greater attention in the design and execution of the preventive intervention.

In general terms, post-intervention adolescents showed favorable changes in their level of autonomy and aggressive responses, these two aspects being the most favored by the preventive strategy. These results would be relevant because in schools, in general, these are aspects that generate confusion and disorientation in management teams and teachers, sometimes proposing solutions closer to exclusion than to the inclusion of students who present aggressive or aggressive behavior. who are not very autonomous in their academic performance. Furthermore, recent studies show that these pathologizing consequences can generate a lot of violence, both physically and mentally for the most vulnerable school population (Berger, Álamos, Milicic, & Alcalay, 2014; Rojas & Leiva, 2015).

The results obtained also warn that the impact of a preventive intervention in school mental health, even in the adolescent population, would depend not only



on the application of a good design and good fidelity in its execution, but also on the commitment and participation of the adults significant to them, by attending the sessions proposed in this preventive strategy (Leiva et al. 2015).

In the same sense, it shows the importance (mutual and reciprocal) of the commitment of all subsystems of the educational community. From there, new challenges arise for the implementation of preventive strategies in mental health, such as involving the different actors of the educational community and not only the adolescent, in order to produce an additive or synergistic effect in achieving favorable results in the short and medium term regarding risk reduction (Ialongo, Poduska, Werthamer, & Kellam, 2001).

These results reinforce the importance of evaluating, in the future, from a qualitative perspective the mental health preventive actions of the program, identifying, for example, what contents are recurrent in the intervention scenario for the adolescents who participate and especially delving into how and what they evaluate as positive or negative for them about the different activities of the preventive workshop.

As part of the limitations of this study, it should be noted that it was not possible to have a control group. Given the characteristics and particularities of the HpV II program and the strategies implemented in its execution, it is complex to have deferred intervention groups or randomized control groups; hence the impossibility of establishing another type of design. However, it was possible to evaluate what the preventive intervention in adolescent mental health achieves or does not achieve and also served to guide a national program with broad coverage, which requires research that identifies its achievements and guides future studies.



The results of this study show that the model that implements the HpV program is an interesting alternative that can be transformed, with the necessary adjustments in those areas where favorable changes were not obtained, into an opportunity for public policy, reinforcing and supporting the promotion of Mental health and risk prevention in school adolescents in vulnerable contexts. Likewise, the results of this study could be used in the construction of a public policy that is oriented towards the psychosocial well-being of adolescents and their school community, with intersectoral work by convening the different local actors for the development of a Network of Community Support of Mental Health at School, allowing the joint construction of a common objective.

The dynamics of the educational system contribute to the formation of interaction patterns that both children and adolescents use in their social relationships. Furthermore, the social practices that occur within the school are excellent learning not only to live with others and be supportive, but also to organize, coordinate and exercise citizenship. In this sense, the school constitutes itself as a significant social network in the community context, allowing multiple central and local actions to converge, at the level of social and public policies (George et al., 2012).

Finally, the main challenges for this line of applied research are associated with the examination of new cohorts of students and the exploration of differences according to geographic distinctions, expertise of the professionals executing the interventions, and the potential effects that prevention has on academic performance. (both in course promotion and in standardized tests), as well as aspects related to the specific contribution of teachers' attendance at the workshops.

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## References

- Berger, C., Álamos, P., Milicic, N., & Alcalay, L. (2014). Academic performance and the personal and contextual dimensions of social-emotional learning: evidence of their association in Chilean students. *Universitas Psychologica*, 13, 627-638. doi:10.11144/Javeriana.UPSY13-2 radp [ ]
- Campbell, D.T., & Stanley, J.C. (1973). *Experimental and quasi-experimental designs in social research*. Buenos Aires: Amorrortu. [ ]
- Cova, F., Aburto, B., Sepúlveda, MJ, & Silva, M. (2006). Potentials and obstacles of preventing depression in children and adolescents. *Psyche*, 15(1), 57-65. doi:10.4067/S0718-22282006000100005 [ ]
- de la Barra, F. (2011). Epidemiology of psychiatric disorders in children and adolescents in Chile: prevalence studies. *Chilean Journal of Neuro-Psychiatry*, 47(4), 303-314. [ ]
- Delgado, I., Zúñiga, V., & Jadue, L. (2006). Comparative study of schoolchildren who participated in the Skills for Life Program and SIMCE fourth grade 2005: executive summary. Santiago: National Board of School Aid and Scholarships. [ ]
- Detels R., McEwan J., Beaglehole R., & Tanaka, H. (2002). *Oxford textbook of public health* (4th<sup>ed</sup> ). Oxford: Oxford University Press. [ ]
- Domitrovich, CE, Bradshaw, CP, Greenberg, MT, Embry, D., Poduska, JM, & Ialongo, NS (2010). Integrated models of school-based prevention: Logic and theory. *Psychology in the Schools*, 47, 71-88. doi:10.1002/pits.20452 [ ]
- Durlak, JA, Weissberg, RP, Dymnicki, AB, Taylor, RD, & Schellinger, KB (2011). The impact of enhancing students' social and emotional learning: A

meta-analysis of school-based universal interventions. *Child Development*, 82, 405-432. doi:10.1111/j.1467-8624.2010.01564.x [ ]

Durlak, J., & Wells, A. (1997). Primary prevention mental health programs for children and adolescents: A meta-analytic review. *American Journal of Community Psychology*, 25, 115-152. doi: 10.1023/A:1024654026646 [ ]

Gall, G., Pagano, M., Desmond, M.S., Perrin, J., & Murphy, M. (2000). Utility of psychosocial screening at a School-based Health Center. *Journal of School Health*, 70, 292-298. doi: 10.1111/j.1746-1561.2000.tb07254 [ ]

Gallardo, I., Leiva, L., & George, M. (2015). Evaluation of the pilot application of a preventive mental health intervention at school: variations in school maladjustment and adolescent psychosocial dysfunction. Article accepted. [ ]

George, M., Guzmán, J., Flotts, M., Scquicciarini, AM, & Guzmán, MP (2012). Mental health in vulnerable schools: evaluation of the promotional component of a national program. *Revista de Psicología Universidad de Chile*, 21(2), 55-81. [ ]

George, M., Guzmán, MP, Hartley, M., Squicciarini, AM, & Silva, C. (2006). JUNAEB Life Skills Program: Patent ISBN 956-858601. Santiago: JUNAEB. Available at <http://www.junaeb.cl/habilites-para-la-vida> [ ]

Green, J., McLaughlin, K., Alegría, M., Costello, E., Gruber, M., Hoagwood, K.,... Kessler, R. (2013). School mental health resources and adolescent mental health service use. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(5), 501-510. doi:10.1016/j.jaac.2013.03.002 [ ]

Guzmán, MP, Jellinek, M., George, M., Hartley, M., Squicciarini, AM, Canenguez, KM, . Murphy, J.M. (2011). Mental health matters in elementary school: First-grade screening predicts fourth grade achievement test



scores. *European Child & Adolescent Psychiatry*, 20, 401-411. doi: 10.1007/s007B7-011-0191-3 [ ]

Herrman, H., & Jane-Llopis, E. (2005). Mental health promotion in public health. *Global Health Promotion*, 12, 42-47. doi: 10.1177/10253823050120020107 [ ]

Hoagwood, KE, Olin, SS, Kerker, BD, Kratochwill, TR, Crowe, M., & Saka, N. (2007). Empirically based school interventions targeted at academic and mental health functioning. *Journal of Emotional and Behavioral Disorders*, 15, 66-92. doi:10.1177/10634266070150020301 [ ]

Ialongo, N., Poduska, J., Werthamer, L., & Sheppard, K. (2001). The distal impact of two first-grade preventive interventions on behavioral problems and disorder in early adolescence. *Journal of Emotional & Behavioral Disorders*, 9(3), 146-161. doi: 10.1177/106342660100900301 [ ]

Jane-Llopis, E., & Barry, M. (2005). What makes mental health promotion effective? *Promotion & Education*, 12(2), 47-54. doi: 10.1177/10253823050120020108 [ ]

Jane-Llopis, E., Barry, M., Hosman, C., & Patel, V. (2005). Mental health promotion works: A review. *Promotion & Education*, 12(2), 9-25. doi: 10.1177/10253823050120020103x [ ]

Jellinek, M.S., Murphy, J.M., & Burns, B.J. (1986). Brief psychosocial screening in outpatient pediatric practice. *The Journal of Pediatrics*, 109(2), 371-378. [ ]

Jellinek, M.S., Murphy, J.M., Robinson, J., Feins, A., Lamb, S., & Fenton, T. (1988). Pediatric symptom checklist: Screening school-age children for psychosocial dysfunction. *Journal of Pediatrics*, 112(2), 201-209. doi: 10.1016/S0022-3476(88)80056-8 [ ]



Kellam, SG, Brown, CH, Poduska, JM, Ialongo, NS, Wang, W., Toyinbo, P.,... Wilcox, HC (2008). Effects of a universal classroom behavior management program in first and second grades on young adult behavioral, psychiatric, and social outcomes. *Drug and Alcohol Dependence*, 95(Suppl. 1), S5-S28. doi: 10.1016/j.drugalcdep.2008.01.004 [ ]

Kellam, SG, Mayer, LS, Rebok, GW, & Hawkins, WE (1998). Effects of improving achievement on aggressive behavior and of improving aggressive behavior on achievement through two preventive interventions: An investigation of causal paths. In B. P. Dohrenwend (Ed.), *Adversity, stress, and psychopathology* (pp. 486-505). New York: Oxford University Press. [ ]

Kessler, R.C., Berglund, P., Demler, O., Jin, R., Meri-kangas, KR, & Walters, E.E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 593-602. doi: 10.1001/archpsyc.62.6.593 [ ]

Leiva, L., George, M., Antivilo, A., Squicciarini, A., Simonsohn, A., Vargas, B., & Guzmán, J. (2015). School mental health: achievements of a preventive mental health intervention in boys and girls in the first cycle of basic education. *Psychoperspective. Individual and Society*, 15(1), 31-41. Available at <http://www.psicoperspectivas.cl/index.php/psicoperspectivas/article/viewFile/508/402> [ ]

Leiva, L., George, M., Guzmán, J., Squicciarini, A., Simonsohn, A., & Antivilo, A. (2015). Psychometric properties of the Teacher Observation of Classroom Adaptation (TOCA-RR) and Pediatric Symptom Checklist Scale (PSC) in a sample of school-going adolescents participating in the National Life Skills II Program. Manuscript in preparation. [ ]



Macklem, G. (2014). Preventive mental health at school: Evidence-based services for students. New York: Springer. doi: 10.1007/978-1-4614-8609-1 [ ]

Mills, C., Stephan, S.H., Moore, E., Weist, M.D., Daly, B.P., & Edwards, M. (2006). The president's new freedom commission: Capitalizing on opportunities to advance school-based mental health services. *Clinical Child and Family Psychology Review*, 9(3), 149-161. [ ]

Mrazek, P.J., & Haggerty, R.J. (1994). Reducing risks for mental disorders: Frontiers for preventive intervention research. Washington, DC: National Academy Press. [ ]

Murphy, J.M., & Jellinek, M. (1988). Screening for psychosocial dysfunction in economically disadvantaged and minority group children: Further validation of the Pediatric Symptom Checklist. *American Journal of Orthopsychiatry*, 58, 450-456. [ ]

Murphy, J.M., Jellinek, M., & Milinsky, S. (1989). The Pediatric Symptom Checklist: Validation in the real world of medium school. *Journal of Pediatric Psychology*, 14(4), 629-639. [ ]

Murphy, M., Guzmán, J., McCarthy, A., Squicciarini, AM, George, M., Canenguez, K.,... Jellinek, M. (2014). Mental health predicts better academic outcomes: A Longitudinal study of elementary school students in Chile. *Child Psychiatry Human Development*, 1, 1-12. doi: 10.1007/s10578-014-0464-4 [ ]

O'Connell, M.E., Boat, T., & Warner, K.E. (Eds.). (2009). Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. Washington, DC: National Academies Press. [ ]

Offord, D.R., & Bennett, K.J. (2002). Prevention. In M. Rutter & E. Taylor (Eds.), *Child and adolescent psychiatry* (44 ed., pp. 881-899). Oxford, UK: Blackwell. [ ]

World Health Organization. (2004). *Prevention of mental disorders: effective interventions and public policy options* (Compendium report. Department of Mental Health and Substance Abuse/Prevention Research Center of the Universities of Nijmegen and Maastricht). Geneva, Switzerland: Author. Available

at [http://www.who.int/mental\\_health/evidence/Prevention\\_of\\_mental\\_disorders\\_spanish\\_version.pdf](http://www.who.int/mental_health/evidence/Prevention_of_mental_disorders_spanish_version.pdf) [ ]

Pagano, M., Cassidy, L., Little, M., Murphy, M., & Jellinek, M. (2000). Identifying psychosocial dysfunction in school-age children: The pediatric symptom checklist as a self-report measure. *Psychology in the Schools*, 37(2), 91-106. doi:10.1002/ (SICI)1520-6807(200003)37:23.0.CO;2-3 [ ]

Petras, H., Kellam, S., Brown, H., Muthén, B., Ialongo, N., & Poduska, J. (2008). Developmental epidemiological courses leading to antisocial personality disorder and violent and criminal behavior: Effects by young adulthood of a universal preventive intervention in first- and second-grade classrooms. *Drug and Alcohol Dependence*, 95 (Suppl. 1), S45-S59. doi: 10.1016/j.drugalcdep.2007.10.015 [ ]

Rojas, R., & Leiva, L. (2015). Psychopathology and occasional peer victimization in a sample of Chilean students. *Universitas Psychologica*, 14(1), 165-176. doi:10.11144/Javeriana.upsy14-1.pvop [ ]

Suldo, SM, Gormley, MJ, DuPaul, GJ, & Anderson-Butcher, D. (2014). The impact of school mental health on student and school-level academic outcomes:



Current status of the research and future directions. *School Mental Health*, 6, 84-98. doi:10.1007/s12310-013-9116-2 [ ]

Vicente, B., Saldivia, S., de la Barra, F., Melipillán, R., Valdivia, M., & Kohn, R. (2012). Child and adolescent mental health in Chile and health care gaps. *Medical Journal of Chile*, 140, 447-457. doi:10.4067/S0034-98872012000400005 [ ]

Weare, K., & Nind, M. (2011). Mental health promotion and problem prevention in schools: What does the evidence say? *Health Promotion International*, 26 (Suppl. 1), i29-i69. doi:10.1093/heapro/dar075 [ ]

Weist, M.D., & Murray, M. (2008). Advancing school mental health promotion globally. *Advances in School Mental Health Promotion*, 1(Suppl. 1), 2-12. doi:10.1080/1754730X.2008.9715740 [ ]

Werthamer-Larsson, L., Kellam, S., & Wheeler, L. (1991). Effect of first-grade classroom environment on shy behavior, aggressive behavior, and concentration problems. *American Journal of Community Psychology*, 19(4), 585-602. [ ]

Wille, N., Bettge, S., & Ravens-Sieberer, U. (2008). Risk and protective factors for children's and adolescents' mental health: Results of the BELLA study. *European Child & Adolescent Psychiatry*, 17(Suppl. 1), 133-147. doi:10.1007/s00787-008-1015-y [ ]