



# Life Satisfaction, Bullying, and Feeling Safe as a Protective Factor for Chilean and Brasilian Adolescents

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## Abstract

Life satisfaction is a cognitive and stable construct that comprises the subjective well-being and an accurate indicator of the perception of life circumstances among adolescents. Previous studies demonstrate that adolescents' life satisfaction is associated with developmental outcomes and positive psychological variables as well as protection against risk factors, such as bullying. Several international studies demonstrate that adolescents' life satisfaction can be negatively affected by bullying; consequently this behavior has become a matter of public concern. Our study hypothesized that the perception of safety plays a protective role against bullying and therefore maintains life satisfaction levels in adolescents. We examined a cohort of 1955 Chilean and 1789 Brazilian adolescents that participated in the International Survey of Children's Well-Being (ISCWeB) 3rd Wave in Latin America. Using multiple regression and moderation analyses we found that the interaction victim × feeling safety predicts adolescents life satisfaction. Hence, adolescents that report high victim scores and high safety also report high life satisfaction levels, versus adolescents that report high victim scores and low safety that report lower levels of life satisfaction; suggesting a protective role of the perception of safety against victim scores. Our results confirm the importance and the protective role of the perception of safety (i.e. "feeling safe") on adolescents' life satisfaction. Particularly, we provide evidence that supports the promotion of safer environments at schools, within families, and in our communities in Latin America.

**Keywords** Life satisfaction · Victim · Feeling safe · Adolescents

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The perception of safety or feeling safe is a key factor that contributes to the positive development of adolescents. Although previous studies have examined its impact on a variety of domains, studies on its potential protective role on life satisfaction of adolescents that suffer bullying are scarce. Previous reports demonstrate that bullying have negative consequences on the life satisfaction of Chilean and Brazilian adolescents. In this study, we hypothesized that feeling safe has a buffering effect on this relationship.

## 1 Life Satisfaction in the World and Latin America

Life satisfaction has been defined as a cognitive and stable construct that forms part of the subjective well-being. Therefore, it has been considered an accurate indicator for the perception of life circumstances in adolescents (Pavot & Diener, 2008). Indeed, life satisfaction is a good measure of how people evaluate their life in general. It can also serve to evaluate a particular moment in the life on an individual or for an integrated evaluation in relation to a longer time period (Diener, 2006).

The evidence shows that adolescents tend to report high levels of life satisfaction (González-Carrasco et al., 2017; Suldo et al., 2015). A study that involved 175,470 European and North American adolescents aged 11–16 years from 34 countries found a mean value of 7.58 ( $SD=1.89$ ) of life satisfaction on a 10-point scale (Looze et al., 2018). A longitudinal study that covered a 12-year period in five Nordic countries found that 28.6%–44.8% of adolescents reported high levels of life satisfaction. This study also reported a high variability across age groups, specifically higher levels of life satisfaction were more prevalent in 11 years-old female adolescents and less prevalent in 15 years-old counterparts (Due et al., 2019). Similarly, a Spanish study that included 12–17-year-old adolescents found that girls tended to report lower levels of life satisfaction versus boys. This gender difference increased with age (Atienza-González et al., 2020). Moreover, a longitudinal North American study assessed life satisfaction levels in adolescents and found a sustained downward trend due to the actual lifestyle (Twenge et al., 2018).

In contrast to Europe and North America, Latin American studies in life satisfaction of adolescents are scant and a few reports have included countries within the region. An international study that reports data from a total of 14 countries included data from Brazil and Chile and found that 83% of the variance in children's life satisfaction was attributable to individual or microsystem factors and only 17% was attributable to country-level factors. This study also found that girls reported lower life satisfaction levels and a decrease with age (Newland et al., 2018). In Brazil, a study by Sarriera et al. (2015) that included 1588 adolescents aged 12–16 found a mean of value of 8.09 ( $SD=1.84$ ) of life satisfaction on a 10-point scale. In Chile, a study that included data from a total of 2938 students aged between 8 and 12 included in the third wave of the ISCWeB survey found high reported levels of life satisfaction in boys and girls these were especially higher regarding their families and friends but lower in the school domain (Alfaro et al., 2021). Also in Chile, a study that included 2734 boys and girls aged 8 to 12 found that 70% reported high levels of life satisfaction (Oyanedel et al., 2015).

The evidence suggests that life satisfaction is associated with a wide variety of positive psychological outcomes while protecting against the emergence of risk factors (Proctor et al., 2017). Conversely, low life satisfaction levels in adolescents have been associated with the appearance of externalizing and internalizing behaviors, risky and problematic behaviors that may affect mental health and development (Guzmán et al., 2020). In this regard, studies agree on the importance of interpersonal relationships and their influence on life satisfaction, therefore victimization could affect satisfaction levels (Martin & Huebner, 2007). Particularly, Varela et al. (2017) postulates that life satisfaction can be indirectly affected by school violence via an impact on school satisfaction. Likewise, adolescents that perceive greater support from their peers are more likely to have high life satisfaction levels versus those that report lower perception of peer support (Huang et al., 2015). We have previously described a relationship between bullying and life satisfaction, however the existence of among these variables is yet to be determined.

## 2 Victims of Bullying and their Levels of Life Satisfaction

Bullying victims are repeatedly exposed to negative actions over time, these actions are perpetrated by one or more persons, this definition also involves an imbalance between victims and perpetrators (Olweus, 1993). Bullying includes verbal harassment, physical contact (hitting, pushing) or the intentional exclusion of a person from a group (Olweus & Limber, 2010). More recently, cyberbullying has emerged as novel form of aggression (Varela, Zimmerman, et al., 2018b) with negative consequences for victims.

Bullying is a major public health concern with multiple negative consequences for the mental health of adolescents, affecting well-being and life satisfaction levels (Moore et al., 2017; Varela, Sánchez, et al., 2021a; Varela, Tezanos, et al., 2021b) during childhood and adolescence and even in the adulthood (Brendgen & Poulin, 2017). Indeed, adolescents that have suffered high levels of victimization have lower levels of life satisfaction (Varela, Sánchez, et al., 2021a). Similarly, a Chinese study that included data from 3675 adolescents found that bullying or cyberbullying victims had lower levels of life satisfaction versus those not victimized (Chai et al., 2020). Another study in Spain included a total of 647 boys and girls aged 10 to 18 and found that female adolescent bullying victims were more likely to suffer negative effects on their life satisfaction versus male, preadolescent or non-victimized counterparts (Lázaro-Visa et al., 2019). Likewise, a Peruvian study found that bullying victims that perceived low support from their parents and teachers displayed consistently lower levels of life satisfaction versus those that perceived higher support levels (Miranda et al., 2018).

Given the negative impact of bullying on the mental health of children and adolescents, recent studies have sought to define the protective role of individual resources against victimization. Zych et al. (2019) found that self-oriented personal competences are strong protective factors against victimization. Previously, other studies have determined that emotional intelligence (Casas et al., 2015), pro-sociability (Kowalski et al., 2014), higher self-esteem (Chen et al., 2017; Overbeek et al.,

2010), resilience (Sapouna & Wolke, 2013), and problem solving abilities (Kowalski et al., 2014) also play a protective role against victimization.

Protective factors such as feeling safe not only contribute to adaptive development in adolescence (Antamarian et al., 2008) they also play a central positive role in the development of children and adolescents through different life domains including family, neighborhood and school (Esteban-Cornejo et al., 2016; Lenzi et al., 2017; Varela et al., 2020). Within this context, a systematic review demonstrates that the perception of safety at school can affect the academic, emotional and social needs of students (Kutsyuruba et al., 2015). Also, a 20-year prospective study that included 851 ninth-graders found that feeling unsafe in the neighborhood was associated with long-term health deterioration and a poorer quality of life (Assari et al., 2015). As pointed, the precise role of feeling safe as protective factor for bullying victims and their life satisfaction is still undetermined.

### 3 Feeling Safe as a Protective Factor of Bullying Behavior

Feeling safe can be viewed as a sense of security in varying situations and contexts such as school, neighborhood, or family. This concept is directly related to psychological security, perception of support and availability of resources at the relationship, social, and material levels (Gilbert et al., 2008). International studies suggest that the perception of safety occurs at different levels, associated with the sociocultural diversity and the local context. Therefore, this perception of safety tends to be higher in developed countries and lower in developing countries or in countries that display high levels of social inequality (Bradshaw et al., 2013; González-Carrasco et al., 2019).

The evidence shows that feeling safe has a direct impact on human development, especially on children and adolescents, being a key factor for establishing bonds and improving the quality of family social and community interactions (Ben-Arieh & Shimon, 2014; Robinson & Graham, 2020; Uyan-Semerclı et al., 2017). Conversely, a lack of safety is related to adverse psychosocial contexts, such as higher rates of violence, family neglect, drug use and mental health problems and correlates with negative effects on children and adolescents such as stress (Côté-Lussier et al., 2015).

International studies have specifically assessed the effects of feeling safe on indicators such as children's subjective well-being. An Australian study by Tomyn and Cummins (2011) demonstrated that feeling safe at school contributes directly to satisfaction with school in a sample of 351 subjects aged 12 to 20. Another study that included 14 countries and 12,077 children found a positive correlation between the perception of safety at home/school and children's subjective well-being and, this correlation also included playing and feeling safe walking around their neighborhood (Lee & Yoo, 2015). In general, authors agree on the predictive role and the positive association between safety and students life satisfaction (Maciuszek et al., 2019).

In Latin America, a Brazilian study found a positive relationship between the perception of safety and children's subjective well-being in a sample of 2200 children

(Sarriera et al., 2021). Similarly, a Chilean study determined that school safety is a significant predictor of school and overall life satisfaction in students (Alfaro et al., 2016). Furthermore, more recent studies in Chile have confirmed that the perception of home and community safety has a direct effect on life satisfaction (Varela et al., 2020).

Although the correlation between feeling unsafe at school and being a bullying victim has been previously reported (Bowser et al., 2018), its precise role on modulating life satisfaction is still uncertain. On the other hand, the reports on this topic in the Latin American context are rare. Consequently, the purpose of our study was to explore the impact of the perception safety (“feeling safe”) on life satisfaction levels in Chilean and Brazilian adolescents and to evaluate its buffering role on bullying victims.

## 4 Method

### 4.1 Research Design

This study used data from the Wave Three of the Children’s Worlds Study, an international comparative survey of children’s lives and well-being, with a cross-sectional design. The survey instrument for the Children’s Worlds Study was translated into Spanish and Portuguese. The survey was adapted to the context of each country.

### 4.2 School System in Chile

Chile’s political constitution guarantees the free access to inclusive, and high-quality education. Chilean education model system is divided into four levels: preschool, elementary, secondary and superior. Both elementary education, which lasts 8 years, and secondary education, which lasts 4 years, are mandatory. According to the Ministry of Education (MINEDUC, 2020), which regulates the Chilean education system, there are currently a total of 3,906,611 students (11% preschool; 61% elementary; and 28% secondary education), distributed over a total of 15,919 institutions (70% urban; 30% rural) and 249,865 teachers or educators. Educational institutions are divided into public (59%), semi-public (35%), private (4%), delegated administration corporations (0.5%) and dependent on local services (1.5%). The education budget in Chile represents 7.4% of the Gross Domestic Product (GDP), of which 1.2% is allocated to Pre-school education with 22% coverage; 3.6% is allocated to primary and secondary education, and 2.6% to superior education (MINEDUC, 2019). In 2017, total public expenditure on primary to tertiary education as a percentage of total government spending in Chile was 17%, above the 11% average across OECD countries (OECD, 2020). On the other hand, Chile has a long instructional time in schools. In primary education, the mandatory instruction time is 1008 h per year (MINEDUC, 2019), the second longest among OECD member countries.

## 4.3 School System in Brazil

In Brazil, the Federal Constitution (1988) and the Law of Guidelines and Bases of National Education (LDB, 1996), n° 9394 contain the principles that regulate the educational system in the States, Cities and the Federal District. The formal structure of the educational system consists of: a) Basic education – that includes preschool (for 0 to 5 years old), primary/initial years (for 6 to 10 years old) and elementary/ final years (for 11 to 14 years old) and high school education (for 15 to 18 years old); and, b) Higher Education. According to data from the last Census of Basic Education of the Ministry of Education (MEC) in 2020, enrollment numbers are: in kindergartens: 3,651,989; preschools: 5,177,806; First years: 14,790,415; Final Years: 11,928,415; High School: 7,550,753. Technical High School: 9,486,847; Elementary Youth and Adult Education (EJA): 1,750,169; EJA High School: 1,252,580. The Fund for Maintenance and Development of Basic Education and Valorization of Education Professionals (Fundeb) was established as a permanent instrument for financing public education by Constitutional Amendment No. 108, of August 27, 2020, and is regulated by the Law No. 14,113, of December 25, 2020. The Union's contribution to this new Fundeb will increase from 10% (10 %) to 12% (12 %) in 2021 until gradually reaching 23% (23 %) in 2026. Basic education ended the year with R \$ 42.8 billion in investments, which is 10.2% lower than in 2019. Effectively, the amount disbursed was R \$ 32.5 billion. By law, early childhood schools have a mandatory minimum workload of 800 h that are required by the LDB (1996). Likewise, elementary and secondary schools must comply with the minimum 800-h workload required by law. Additionally, higher education institutions remain obliged to fulfill the workload of the curriculum of each course.

## 5 Chile

### 5.1 Data Collection

The participants completed self-reported questionnaires during a regular day at school. They were given 45 min to complete the questionnaire. Data were collected between May and December 2018. This study was approved by the ethics committee at the Universidad del Desarrollo. Based on this, ethical research protocols were met following these guidelines, with an important emphasis on the confidentiality of the information produced, informed consent of the participating schools, the participants themselves and their parents or guardian.

### 5.2 Sampling

We obtained a sample from the International Survey of Children's Well-Being (ISCWeB) 3rd Wave in Latin America and selected data from Chile and Brazil for our analyses. We examined a sample of 1955 adolescents (average age: 11.51 years

old; 47.60% female) from 26 urban schools in the two largest Chilean districts. We consider for this sample all active schools from those urban areas of the two districts based on a list provided by the Ministry of Education of Chile (<http://datosabiertos.mineduc.cl/>). Next, schools were randomly selected from each urban area (Santiago or Concepción), and also a class was randomly selected from each school. For schools with >1 class per level, the participation of the class was randomized.

## 6 Brazil

### 6.1 Data Collection

The selected schools in Brazil were contacted and, following authorization by the Institutional Agreement Term, children were invited to participate in the research, after clarifying the objectives and procedures involved. The Informed Consent Forms were delivered to take home, and the term was signed by those responsible, as well as the Assent Forms to the students who agreed to participate. For the application of the questionnaire, a day was defined with the schools coordinators, upon return of the terms of consent and assent, being applied collectively, in a room provided by the schools, with an approximate duration of 45 min. At least two trained researchers from the team were present in the application, in order to clarify doubts and assist in filling in the data. All ethical procedures foreseen for research with human beings were ensured and the research project was approved by the research ethics committee.

### 6.2 Sampling

In Brazil, we examined a sample of 1789 adolescents (mean age: 11.33 years old, 55.2% female) from 50 public and private schools in five Brazilian states: Rio Grande do Sul, Santa Catarina, Paraná, Rio de Janeiro and São Paulo. Schools were randomly selected from a list made available by the Department of Education of each state and also a class was randomly selected from each school.

### 6.3 Data Analysis

We used a general linear model (GLM) to compare the differences between boys and girls, and countries. Multiple regression analysis was also used for the moderation model of the principal variables. All models met the assumptions of parametric analyses, but the main multiple regression analysis did not meet the homoscedasticity assumption. We used the robust method of heteroskedasticity-consistent standard error estimator type 4 (HC4, Hayes & Cai, 2007). All analyses were performed in the R programming language (R Core Team, 2021) in the RStudio platform.

## 7 Measures

### 7.1 Life Satisfaction

Our dependent variable was Life Satisfaction as a significant dimension of adolescent well-being. Thus, we used a version of Huebner's (1991) subjective well-being measures labeled Students' Life Satisfaction Scale (SLSS). The SLSS was based on 6 items that rate students' self-satisfaction with their lives, with the aim of evaluating their lives in a general context-free manner (Casas & Rees, 2015; Huebner, 2004), adapted from Casas and Rees (2015). The SLSS uses a 11-point Likert scale (0=strongly disagree, 10=very much agree), asking questions about the level of agreement with different dimensions of student life satisfaction with their life. Examples of items are: "I like my life", "I have what I want in life". Higher scores indicate greater life satisfaction. For the present study, the Cronbach's alpha of the measure was = .94.

### 7.2 Victim

Bullying victimization was measured using three items from the Children's Worlds Study survey that examined the frequency of self-reported aggressions from peers in the school during the last month. These items asked adolescents about the frequency of physical ("How often: Hit by other children in your school"), psychological ("How often: Called unkind names by other children in your school"), and relational aggression ("How often: Left out by other children in your class"). The items are scored on a 4-point Likert scale (0=Never; 1=Once; 2=2–3 times; and 3=More than 3 times), with higher scores indicating a higher frequency of bullying victimization. These items have been used in previous studies forming part of the Children's Worlds Study (Savahl et al., 2019; Varela et al., 2019). For the present study, the Cronbach's alpha of the measure was .62. We also calculated the McDonald's omega coefficient, resulting .63.

### 7.3 Feeling Safe

The Feeling Safe measure was our moderator variable. This scale was measured by using five items from the Children's Worlds study survey. Adolescents self-reported their levels of feeling safe at home ("I feel safe at home"), in the way to/from school ("How safe do you feel on your way to and from school"), at the school ("I feel safe at school"), at local areas ("I feel safe when I walk in the area I live in"), and at the country ("[Country] is a safe place to live"). Four of the five items were scored on a 5-point Likert scale (0=I do not agree to 4=Totally agree). One item, "How safe do you feel on your way to and from school" was scored on a 4-point scale (0=Not at all safe to 3=Very safe). For the present study, the Cronbach's alpha of the measure was .68, and McDonald's omega was .69.

## 7.4 Demographic Variables

We used self-reported age as a continuous variable, and gender as a control variable dummy coded (1 = boy; 2 = girl). We also used the country as a variable as dummy (1 = Brazil; 2 = Chile), for some analyses.

## 8 Results

### 8.1 Descriptive Statistics and Correlations

Descriptive statistics were initially obtained for the entire sample and then separately analyzed by country and gender. In the total sample, the mean Life Satisfaction value was 8.44 ( $SD=2.24$ ), the Victim scale reported a mean of 0.71 ( $SD=0.77$ ) and mean Safety was 2.74 ( $SD=0.75$ ). Descriptive statistics by country and gender are summarized in Table 1.

We also performed a product moment Pearson's correlation, for each country, among age, life satisfaction, victim and safety. Our analyses found that age is negatively correlated with life satisfaction and safety. In contrast, we did not find a correlation between age and victim score in both countries analyzed. As expected, we found a negative correlation between Life satisfaction and victim score, and a strong positive correlation between Life satisfaction and safety in both countries. Finally, safety shows a negative correlation with victim score in both countries (see Table 2).

**Table 1** Descriptive Statistics by Gender and Country

	Boys		Girls		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<i>Chile</i>					
Life satisfaction	8.76	1.83	8.37	2.41	3.87***
Victim	0.65	0.75	0.57	0.68	2.37*
Safety	2.99	0.65	2.95	0.7	1.30
<i>Brasil</i>					
Life satisfaction	8.63	1.99	8.06	2.49	5.11***
Victim	0.77	0.76	0.84	0.82	-1.64
Safety	2.58	0.72	2.47	0.77	2.83**
Brazil Chile					
Life satisfaction	8.30	2.31	8.56	2.16	-3.43***
Victim	0.81	0.80	0.61	0.72	7.56***
Safety	2.52	0.76	2.98	0.68	-17.48***

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , two-tailed

**Table 2** Correlations Among Study Variables

	1	2	3	4
1. Age	—	-.27***	.06	-.23***
2. Life satisfaction	-.19***	—	-.31***	.54***
3. Victim	.02	-.28***	—	-.27***
4. Safety	-.22***	.59***	-.32***	—

Coefficients below the diagonal correspond to Chile. Coefficients above the diagonal correspond to Brazil; \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

## 8.2 General Linear Model (GML) Taking Gender and Country as Predictors

In the first model Life Satisfaction was defined as the outcome showing non-significant effects on the interaction term, and country, but a significant effect on gender ( $B = -0.58$ ,  $t = -5.16$ ,  $p < .001$ ) showing lower reported levels of life satisfaction in female adolescents versus males. This model explains 1.4% of the variance ( $F[3, 336] = 17.52$ ,  $p < .001$ ). In the second model the safety score was defined as the outcome, showing a non-significant interaction effect, but a significant main effect for country ( $B = 0.41$ ,  $t = 10.82$ ,  $p < .001$ ) and gender ( $B = -0.11$ ,  $t = -2.95$ ,  $p = .003$ ) showing that Chilean adolescents report higher safety levels compared to Brazilian adolescents; also females report lower safety versus males. The second model explains 9.3% of the variance ( $F[3, 2906] = 100.8$ ,  $p < .001$ ). The third model was defined with the victim scale as the outcome, showing a significant interaction effect for gender  $\times$  country ( $B = -0.15$ ,  $t = -2.79$ ,  $p = .005$ ). This last model explains the 1.8% of the variance ( $F[3, 3243] = 21.06$ ,  $p < .001$ ). The follow up comparisons show a non-significant effect of gender for Brazil, showing no significant male/female differences on the victim scale ( $F[1, 3243] = 2.94$ ,  $p = .086$ ). In contrast, Chile shows a significant effect of gender, showing that females report less victim scores than males ( $F[1, 3243] = 4.97$ ,  $p = .025$ ) (see Table 3).

## 8.3 Moderation Analysis for Life Satisfaction as Outcome Variable

We performed a multiple regression with moderation, using life satisfaction as the outcome, victim as predictor and safety as moderator. The interaction term was statistically significant, showing that victim and safety together were predictors life satisfaction ( $B = 0.38$ ,  $t = 5.34$ ,  $p < .001$ ). This model explains the 35.6% of the total variance ( $F[1, 2532] = 469.3$ ,  $p < .001$ ) (see Table 4). A simple slope analysis shows that adolescents that report high victim scores and low safety ( $-1$  SD from de mean) will have lower life satisfaction ( $B = -0.58$ ,  $t = -10.34$ ,  $p < .001$ ). Accordingly, adolescents that report high victim scores and a mean score of safety will have lower life satisfaction ( $B = -0.30$ ,  $t = -6.10$ ,  $p < .001$ ). However, adolescents that report high victim and high safety scores ( $+1$  SD from de mean) also report high life satisfaction ( $B = -0.01$ ,  $t = -0.18$ ,  $p = .86$ ) (see Fig. 1).

**Table 3** GLM with gender and country as predictors

	B	SE	t	p	R <sup>2</sup>
<i>Life satisfaction</i>					.014*
Intercept	8.63	0.08	103.66	< .001	
Gender:Girl	-0.58	0.11	-5.16	< .001	
Country:Chile	0.13	0.11	1.17	-243	
Genger×Country	0.18	0.15	1.20	.229	
<i>Safety</i>					.093*
Intercept	2.58	0.03	93.04	< .001	
Gender:Girl	-0.11	0.04	-2.95	.003	
Country:Chile	0.41	0.04	10.82	< .001	
Genger×Country	0.06	0.05	1.20	.231	
<i>Victim</i>					.018*
Intercept	0.71	0.01	53.14	< .001	
Gender:Girl	-0.01	0.03	-0.36	.716	
Country:Chile	-0.20	0.03	-7.37	< .001	
Genger×Country	-0.15	0.05	-2.79	.005	

B = Unstandardized Parameter, SE = Standard Error, CI = Confidence Interval, LL = Lower Limit, UL = Upper Limit, \*  $p < .001$

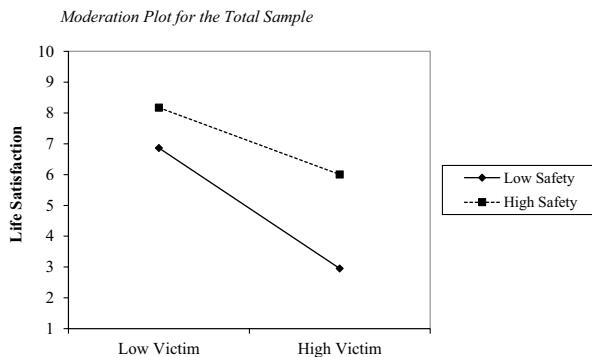
**Table 4** GLM taking Life Satisfaction as Outcome

	B	SE	B 95% CI		t	p	R <sup>2</sup>
			LL	UL			
Intercept	5.60	0.28	5.04	6.16	19.82	< .001	.356*
Victim	-1.35	0.22	-1.77	-0.92	-6.17	< .001	
Safety	1.18	0.09	1.01	1.35	13.53	< .001	
Victim × Safety	0.38	0.07	0.24	0.52	5.34	< .001	

B = Unstandardized Parameter, SE = Standard Error, CI = Confidence Interval, LL = Lower Limit, UL = Upper Limit, \*  $p < .001$

#### 8.4 Moderation Analysis for Life Satisfaction as Outcome Variable for Chile

Next, we divided the entire sample by country to analyze the moderation. In the Chilean sample the interaction effect was statistically significant ( $B=0.27$ ,  $t=2.25$ ,  $p=.025$ ). This model explained 38.3% of the variance ( $F[3, 1238]=258.4$ ,  $p < .001$ ) (see Table 5). The simple slope analysis indicates the same as in the entire sample. Adolescents with high victim score and high safety will report high life satisfaction ( $B=-0.02$ ,  $t=-0.18$ ,  $p=.86$ ). As shown in the entire sample, adolescents with high victim and low ( $B=-0.38$ ,  $t=-4.88$ ,  $p < .001$ ) or average safety ( $B=-0.20$ ,  $t=-2.93$ ,  $p < .001$ ) will report lower life satisfaction (see Fig. 2a).



**Fig. 1** Moderation Plot for the Total Sample. Note. Low Safety = -1 Standard Deviation, High Safety = +1 Standard Deviation

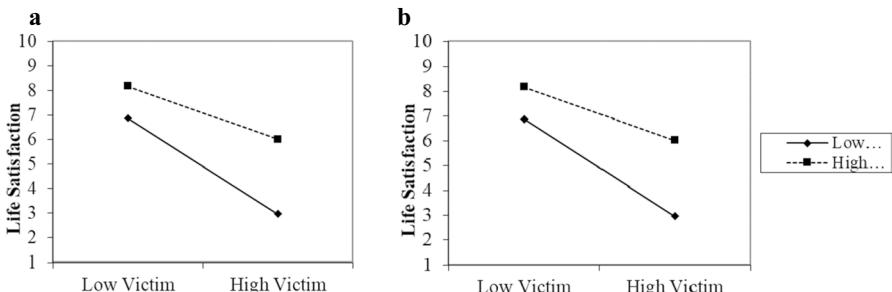
**Table 5** GLM taking Life satisfaction as Outcome by Country

	<i>B</i>	<i>SE</i>	B 95% CI		<i>t</i>	<i>p</i>	<i>R</i> <sup>2</sup>
			<i>LL</i>	<i>UL</i>			
<i>Chile</i>							
Intercept	4.63	0.46	3.72	5.53	10.01	< .001	.383*
Victim	-0.99	0.38	-1.75	-0.24	-2.59	.010	
Safety	1.45	0.14	1.18	1.72	10.59	< .001	
Victim × Safety	0.27	0.12	0.03	0.50	2.25	.025	
<i>Brazil</i>							
Intercept	6.00	0.38	5.25	6.74	15.78	< .001	.337*
Victim	-1.52	0.27	-2.06	-0.98	-5.53	< .001	
Safety	1.09	0.13	0.84	1.34	8.64	< .001	
Victim × Safety	0.44	0.10	0.25	0.62	4.57	< .001	

B = Unstandardized Parameter, SE = Standard Error, CI = Confidence Interval, LL = Lower Limit, UL = Upper Limit, \*  $p < .001$

## 8.5 Moderation Analysis for Life Satisfaction as Outcome Variable for Brazil

As occurred with the Chilean sample, the interaction effect for Brazil was statistically significant ( $B = 0.44$ ,  $t = 4.57$ ,  $p < .001$ ). This model explained 33.7% of the variance ( $F[3, 1290] = 219.8$ ,  $p < .001$ ) (see Table 5). The simple slope analysis indicates the same results as in the entire sample. Adolescents with high victim scores and high safety will report high life satisfaction ( $B = -0.09$ ,  $t = -0.10$ ,  $p = .38$ ). As shown in the entire sample, adolescents with high victim and low ( $B = -0.74$ ,  $t = -8.98$ ,  $p < .001$ ) or average safety ( $B = -0.41$ ,  $t = -5.98$ ,  $p < .001$ ) will report lower life satisfaction (see Fig. 2b).

*Moderation Plot for Life Satisfaction by Country*

**Fig. 2** Moderation Plot for Life Satisfaction by Country. Note. Figure 2a represents the moderating effect of feel safety on the relationship between victimization and life satisfaction in Chile. Figure 2a presents the moderating effect of feel safety on the relationship between victimization and life satisfaction in Brazil. SD = Standard Deviation

## 9 Discussion

Our findings suggest that feeling safe is a protective factor for life satisfaction on adolescent victims of bullying. Despite the evident cultural differences these results confirm our hypothesis in Chilean and Brazilian adolescents and therefore they could contribute to prevention programs, especially for school practitioners.

As expected, and in line with previous studies (Looze et al., 2018; Oyanedel et al., 2015; Sarriera et al., 2015) our results confirm high life satisfaction levels among adolescents ( $M=8.44$ ;  $SD=2.24$ ). However, we observed a marked negative relationship between life satisfaction levels and age. An association previously described by González-Carrasco et al. (2017) that reported a decline in the levels of adolescents' well-being between the ages of 11 and 12. More recently, a study that included 48,040 adolescents from 15 countries described the same phenomenon, reporting a decline that started at the age of 10 (Casas & González-Carrasco, 2019). In terms of gender, our study found lower levels of life satisfaction among female adolescents versus males. Interestingly, the evidence in the literature regarding this matter is rather inconsistent. A recent meta-analysis found that life satisfaction levels were unaffected by gender, however authors report a non-significant trend in favor of males (Chen et al., 2020). In turn, a study by Esteban-Gonzalo et al. (2020) included a total of 1407 children and adolescents and concluded that gender differences in life satisfaction are manifested in adolescents but not in children and suggest these start by the age of 12.

Also in line with previous studies, we found a negative and significant correlation between life satisfaction and being a bullying victim (Varela, Guzmán, et al., 2018a; Varela, Tezanos, et al., 2021b). Interestingly, this relationship was unaffected by gender in Brazilian adolescents. In contrast, we observed significant gender differences in Chilean adolescents, where females reported lower levels of victimization. Although several studies suggest that boys are more likely to be victims of bullying, especially in terms of physical aggression (Iossi et al., 2013; Stubs-Richardson

et al., 2017), the evidence in this regard is still inconsistent. While some studies demonstrate that females are more likely to be bullied, others show no differences in terms of gender (Jiménez, 2019; Lázaro-Visa et al., 2019). In view of the above mentioned differences observed between Chile and Brazil and the supporting literature in this topic, it seems evident that future studies should examine these differences and design novel strategies aiming to understand the variables behind them. Moreover, bullying is a systemic phenomenon and as such preventive/intervention programs should focus on improving the school climate by committing the entire school system (Olweus & Limber, 2019).

Unlike the association between life satisfaction and bullying that displayed differences between Brazilian and Chilean adolescents, the perception of safety was consistently higher among male adolescents in both countries. This is an observation previously reported by international studies (Bowser et al., 2018; Lee & Yoo, 2015). Our results demonstrate that safety levels were higher in Chilean students versus Brazilian counterparts, a difference that may be related to sociocultural variables and the Brazilian context that involves a higher perception of crime and violence that expands even into domestic violence (Fernandes et al., 2020; Sarriera et al., 2021). Consistent with the current national and international literature, feeling safe was negatively correlated with the victim score, but positively associated with life satisfaction, confirming the protective role of safety against victimization, and its promoting role on well-being and life satisfaction (Varela et al., 2020).

Our analyses on the mediating role of feeling safe on victimization found that life satisfaction levels remained high when safety levels were high even in the presence of high victimization levels, proving its protective role in both Brazilian or Chilean adolescents. To our knowledge, this is the first Latin American report on the protective role of safety under these circumstances and encourage the active promotion of individual, family, school and community safety as protective factors of children's well-being and mental health (González-Carrasco et al., 2019; Maciuszek et al., 2019). These findings are further supported by similar international and Latin American reports that highlight the role of safety in promoting children's physical and mental health (Côté-Lussier et al., 2015; Robinson & Graham, 2020), subjective well-being and life satisfaction (Sarriera et al., 2021).

The results of our study have profound implications for Latin American adolescents especially for their social and school contexts. While research has postulated that the feeling of security in adolescents can be determined by biological or individual factors, both ecological and social determinants have an outstanding influence, particularly during the adolescence (Ben-Arieh & Shimon, 2014; Craggs & Kelly, 2018). Indeed, Allen and Kern (2017) propose that peers in the school context can be a great source of connection and support, however they can become risk factors in cases of bullying and victimization, and thereby detrimental for safety, ultimately affecting adolescents' own identity. The same study points out that peer relationships and the sense of belonging to the school are closely related to the feeling of safety in the school context. Accordingly, Saewyc and Tonkin (2008) report that the sense of school safety has a predictive value for adolescents' sense of belonging to their school and positively influence self-rated physical health. Both factors are positively associated with well-being and mental

health. Furthermore, the authors report that feeling safe at school is a protective factor against risky behaviors such as suicide attempts, early onset of sexual activity, substance use, involvement in fights, and carrying weapons in school. At the same time, it favors the pursuit of goals after school and improves academic performance. This poses a challenge for schools, where school community policies and norms should promote the feeling of safety its members. Moreover, in particular cases when individual or biological factors put adolescents at risk, the school must constitute a safe space that acts as a protective factor against adversity.

## 9.1 Limitations

Our study has some limitations that should be noted. First, while both Chile and Brazil participated in the Children's World Project, sampling procedures were different. Hence, the results and particularly the comparisons between these populations should be interpreted with caution, despite the proper validation of measurements in each country. A second limitation is the transversal design of the study that may limit the data analysis and the trajectories of victimization, safety feelings, and life satisfaction. Despite this, the model fits the collected data, providing solid results on the role of safety. Third, we used the measures and items provided by the Children's World Project, which include international measures for comparison. However, in this case two of our measures had lower levels of internal consistency. Future studies should developed measures in the context of the project this may facilitate international collaboration and cross-cultural research studies. Nevertheless, the use of similar measures across countries is a positive aspect of the Children's World Project which allows international comparisons. In summary, our study not only confirms the importance of feeling safe for South American adolescents but also demonstrates its protective role against bullying, maintaining life satisfaction levels.

**Data Availability** Not applicable.

**Code Availability** Not applicable.

**Authors' Contributions** Jorge J. Varela: Conceptualization, Formal analysis, Investigation, Methodology, Writing - original draft. Andrés Muñoz-Najar Pacheco: Formal analysis, Methodology, Software. María Josefina Chuecas: Conceptualization, Writing - original draft. Matías E. Rodríguez-Rivas: Data curation, Investigation, Writing - original draft. Paulina Guzmán: Conceptualization, Writing - original draft. María Angela Mattar Yunes: Conceptualization, Funding acquisition.

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## Declarations

**Conflicts of Interest/Competing Interests** The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**Ethics Approval** The study was approved by the Ethical Committee of Universidad del Desarrollo, Chile.

## References

- Alfaro, J., Benavente, M., Chuecas, J., Reyes, F., Varela, J., Melipillán, R., Fábrega, J., Yaikin, T., & Rodríguez C. (2021, July 10). Resultados proyecto “International Survey of Children’s Well-Being” (ISCWeB)- Chile. En Centro de Estudios en Bienestar y Convivencia Social (CEBCS), *El bienestar antes, durante y después de la pandemia* (pp. 12–40). Universidad del Desarrollo. <https://psicologia.udd.cl/cebcos/files/2021/01/El-bienestar-antes-durante-y-despu%C3%A9s-de-la-pandemia-CEBCS.pdf>.
- Alfaro, J., Guzmán, J., Reyes, F., García, C., Varela, J., & Sirlopú, D. (2016). Satisfacción Global con la Vida y Satisfacción Escolar en Estudiantes Chilenos. *Psykhe*, 25(2), 1–14. <https://doi.org/10.7764/psykhe.25.2.842>
- Allen, K. A., & Kern, M. L. (2017). *School belonging in adolescents: Theory, research and practice*. Springer.
- Antamarian, S. P., Huebner, E. S., & Valois, R. F. (2008). Adolescent life satisfaction. *Applied Psychology*, 57(s1), 112–126. <https://doi.org/10.1111/j.1464-0597.2008.00357.x>.
- Assari, S., Howard, C., & Zimmerman, M. (2015). Perceived neighborhood safety during adolescence predicts subsequent deterioration of subjective health two decades later: Gender differences in a racially-diverse sample. *International Journal of Preventive Medicine*, 6. <https://doi.org/10.4103/2008-7802.170431>.
- Atienza-González, F., Martínez, N., & Silva, C. (2020). Life satisfaction and self-rated health in adolescents: The relationships between them and the role of gender and age. *The Spanish Journal of Psychology*, 23, 1–9. <https://doi.org/10.1017/SJP.2020.10>
- Ben-Arieh, A., & Shimon, E. (2014). Subjective well-being and perceptions of safety among Jewish and Arab children in Israel. *Children and Youth Services Review*, 44(1), 100–107. <https://doi.org/10.1016/j.childyouth.2014.05.017>
- Bowser, J., Larson, J. D., Bellmore, A., Olson, C., & Resnik, F. (2018). Bullying victimization type and feeling unsafe in middle school. *The Journal of School Nursing*, 34(4), 256–262. <https://doi.org/10.1177/1059840518760983>
- Bradshaw, J., Martorano, B., Natali, L., & Neubourg, C. (2013). Children’s subjective well-being in rich countries. *Children Indicator Research*, 6(4), 619–635. <https://doi.org/10.1007/s12187-013-9196-4>
- BRASIL. Constituição. (1988). *Constituição da República Federativa do Brasil, promulgada em 5 de outubro de 1988* (p. 2002). IMESP.
- Brasil. (2021, July 15) Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. Censo da educação básica 2020 : resumo técnico Brasília : Inep, 2021.70 p. Disponível em: [http://portal.inep.gov.br/informacao-da-publicacao/-/asset\\_publisher](http://portal.inep.gov.br/informacao-da-publicacao/-/asset_publisher).
- Brasil. (1996). Lei n. 9.394, de 20 de dezembro 1996. Estabelece as Diretrizes e Bases da Educação Nacional. Diário Oficial da União, Brasília, DF, 23 dez. 1996. p. 27894. Disponível em: <http://www.mec.gov.br/legislacao>.
- Brendgen, M., & Poulin, F. (2017). Continued bullying victimization from childhood to adulthood: A longitudinal study of mediating and protective factors. *Journal of Abnormal Child Psychology*, 46(1), 27–39. <https://doi.org/10.1007/s10802-017-0314-5>
- Casas, F., & González-Carrasco, M. (2019). Subjective well-being decreasing with age: New research on children over 8. *Child Development*, 9(2), 375–394. <https://doi.org/10.1111/cdev.13133>
- Casas, F., & Rees, G. (2015). Measures of Children’s subjective well-being: Analysis of the potential for cross-National Comparisons. *Child Indicators Research*, 8(1), 49–69. <https://doi.org/10.1007/s12187-014-9293-z>
- Casas, J. A., Ortega-Ruiz, R., & Del Rey, R. (2015). Bullying: The impact of teacher management and trait emotional intelligence. *British Journal of Educational Psychology*, 85(3), 407–423. <https://doi.org/10.1111/bjep.12082>
- Chai, L., Xue, J., & Han, Z. (2020). School bullying victimization and self-rated health and life satisfaction: The gendered buffering effect of educational expectations. *Children and Youth Services Review*, 116. <https://doi.org/10.1016/j.childyouth.2020.105252>
- Chen, L., Ho, S. S., & Lwin, M. O. (2017). A meta-analysis of factors predicting cyberbullying perpetration and victimization: From the social cognitive and media effects approach. *New Media & Society*, 19(8), 1194–1213. <https://doi.org/10.1177/1461444816634037>

- Chen, X., Cai, Z., He, J., & Fan, X. (2020). Gender differences in life satisfaction among children and adolescents: A meta-analysis. *Journal of Happiness Studies*, 21, 2279–2307. <https://doi.org/10.1007/s10902-019-00169-9>
- Côté-Lussier, C., Jackson, J., Kestens, Y., Henderson, M., & Barnett, T. A. (2015). A child's view: Social and physical environmental features differentially predict parent and child perceived neighborhood safety. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 92(1), 10–23. <https://doi.org/10.1007/s11524-014-9917-0>
- Crags, H., & Kelly, C. (2018). School belonging: Listening to the voices of secondary school students who have undergone managed moves. *School Psychology International*, 39(1), 56–73. <https://doi.org/10.1177/0143034317741936>
- Diener, E. (2006). Guidelines for national indicators of subjective well-being and ill-being. *Journal of Happiness Studies*, 7, 397–404. <https://doi.org/10.1007/s10902-006-9000-y>
- Due, P., Eriksson, C., Torsheim, C., Potrebny, T., Valimaa, R., Suominen, S., Rasmussen, M., Currie, C., & Trab Damgaard, M. (2019). Trends in high life satisfaction among adolescents in five Nordic countries 2002–2014. *Nordic Welfare Research*, 4(2), 55–66. <https://doi.org/10.18261/issn.2464-4161-2019-02-03>
- Esteban-Cornejo, I., Carlson, J., Conway, T., Cain, K., Saelens, B., & Frank, L. (2016). Parental and adolescent perceptions of neighborhood safety related to adolescents' physical activity in their neighborhood. *Research Quarterly for Exercise and Sport*, 87(2). <https://doi.org/10.1080/0270367.2016.1153779>
- Esteban-Gonzalo, S., Esteban-Gonzalo, L., Cabana-Sánchez, V., Miret, M., & Veiga, O. (2020). The investigation of gender differences in subjective wellbeing in children and adolescents: The up & down study. *International Journal of Environmental Research and Public Health*, 17(8). <https://doi.org/10.3390/ijerph17082732>
- Fernandes, G., Yunes, M. A. M. & Finkler, L. (2020). The social networks of adolescent victims of domestic violence and bullying. *Paidéia*, 30. <https://doi.org/10.1590/1982-4327e3007>
- Gilbert, P., McEwan, K., Mitra, R., Franks, L., Richter, A., & Rockliff, H. (2008). Feeling safe and content: A specific affect regulation system? Relationship to depression, anxiety, stress, and self-criticism. *The Journal of Positive Psychology*, 3(3), 182–191. <https://doi.org/10.1080/1743760801999461>
- González-Carrasco, M., Casas, F., Ben-Arieh, A., Savahl, S., & Tiliouine, H. (2019). Children's perspectives and evaluations of safety in diverse settings and their subjective well-being: A multi-National Approach. *Applied Research in Quality of Life*, 14(2), 309–334. <https://doi.org/10.1007/s11482-018-9594-3>
- González-Carrasco, M., Casas, F., Malo, S., Viñas, F., & Dinisman, T. (2017). Changes with age in subjective well-being through the adolescent years: Differences by gender. *Journal of Happiness Studies*, 18, 63–88. <https://doi.org/10.1007/s10902-016-9717-1>
- Guzmán, J., Greif, J., Oblath, R., & Holt, M. (2020). Life satisfaction mediates the association between mental health risk and perception of school functioning among children and adolescents. *Contemporary School Psychology*, 24, 389–399. <https://doi.org/10.1007/s40688-019-00257-w>
- Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, 39(4), 709–722. <https://doi.org/10.3758/BF03192961>
- Huang, J., Wang, K., & Ringel-Kulka, T. (2015). Predictors of life satisfaction among Asian American adolescents—analysis of add health data. *Springer Plus*, 4, 216. <https://doi.org/10.1186/s40064-015-1008-5>
- Huebner, E. S. (1991). Initial development of the student's life satisfaction scale. *School Psychology International*, 12(3), 231–240. <https://doi.org/10.1177/0143034391123010>
- Huebner, E. S. (2004). Research on assessment of life satisfaction of children and adolescents. *Social Indicators Research*, 66(1), 3–33. <https://doi.org/10.1023/B:SOCI.0000007497.57754.e3>
- Iossi, M., Pereira, B., Mendonça, D., Nunes, B., & Abadio di Oliveira, W. (2013). The involvement of girls and boys with bullying: An analysis of gender differences. *International Journal of Environmental Research and Public Health*, 10(12), 6820–6831. <https://doi.org/10.3390/ijerph10126820>
- Jiménez, R. (2019). Multiple victimization (bullying and cyberbullying) in primary education in Spain from gender perspective. *Multidisciplinary Journal of Educational Research*, 9(2). <https://doi.org/10.1007/s12103-017-9408-4>

- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, 140(4), 1073–1137. <https://doi.org/10.1037/a0035618>
- Kutsyuruba, B., Klinger, D., & Hussain, A. (2015). Relationship among school climate, school safety, and student achievement and well-being: A review of the literature. *Review of Education*, 3(2), 103–135. <https://doi.org/10.1002/rev3.3043>
- Lázaro-Visa, S., Palomera, R., Briones, E., Fernández-Fuertes, A., & Fernández-Rouco, N. (2019). Bullied adolescent's life satisfaction: Personal competencies and school climate as protective factors. *Frontiers in Psychology*, 10, 1691. <https://doi.org/10.3389/fpsyg.2019.01691>
- Lee, B. J., & Yoo, M. S. (2015). Family, school, and community correlates of Children's subjective well-being: An international comparative study. *Child Indicators Research*, 8(1), 151–175. <https://doi.org/10.1007/s12187-014-9285-z>
- Lenzi, M., Sharkey, J., Furlong, M., Mayworm, A., Hunnicutt, K., & Vieno, A. (2017). School sense of, teacher support, and students' school safety perception. *American Journal of Community Psychology*, 60(3–4), 527–537. <https://doi.org/10.1002/ajcp.12174>
- Looze, M. E., Huijts, T., Stevens, G. W. J. M., Torsheim, T., & Vollebergh, W. A. M. (2018). The happiest kids on earth. Gender equality and adolescent life satisfaction in Europe and North America. *Journal of Youth and Adolescence*, 47, 1073–1085. <https://doi.org/10.1007/s10964-017-0756-7>
- Maciuszek, J., Polczyk, R., & Tucholska, K. (2019). Direct and indirect relationships between life satisfaction, values, and time perspectives: Research on a sample of polish students. *Advances in Cognitive Psychology*, 15(2), 133–142. <https://doi.org/10.5709/acp-0263-0>
- Martin, K. M., & Huebner, E. (2007). Peer victimization and prosocial experiences and emotional well-being of middle school students. *Psychology in the Schools*, 44(2), 199–208. <https://doi.org/10.1002/pits.20216>
- Ministerio de Educación, Centro de Estudios. (2019, June 4). Education at a Glance 2019: Análisis de los resultados más relevantes para Chile. *Evidencias No 45*. Santiago, Chile. <https://centroestudios.mineduc.cl/wp-content/uploads/sites/100/2019/09/EVIDENCIAS-45.pdf>.
- Ministerio de Educación, Centro de Estudios. (2020, June 10). Resumen estadístico de la educación 2019. [https://centroestudios.mineduc.cl/wp-content/uploads/sites/100/2020/02/Resumen-Estad%C3%ADstico-de-la-Educaci%C3%B3n-2019-FINAL\\_f01.pdf](https://centroestudios.mineduc.cl/wp-content/uploads/sites/100/2020/02/Resumen-Estad%C3%ADstico-de-la-Educaci%C3%B3n-2019-FINAL_f01.pdf)
- Miranda, R., Oriol, X., Amutio, A., & Ortúzar, H. (2018). Adolescent bullying victimization and life satisfaction: Can family and school adult support figures mitigate this effect? *Revista de Psicodidáctica (English Ed.)*, 24(1), 39–45. <https://doi.org/10.1016/j.psicoe.2018.07.001>
- Moore, S., Norman, R., Suetani, S., Thomas, H., Sly, P., & Scott, J. (2017). Consequence of bullying victimization in childhood and adolescence: Systematic review and meta-analysis. *World Journal of Psychiatry*, 7(1), 60–76. <https://doi.org/10.5498/wjp.v7.i1.60>
- Newland, L., Giger, J., Lawler, M., Roh, S., Brockevelt, B., & Schweinle, A. (2018). Multilevel analysis of child and adolescent subjective well-being across 14 countries: Child-and country-level predictor. *Child Development*, 90(2), 395–413. <https://doi.org/10.1111/cdev.13134>
- OECD. (2020). Education at a glance 2020: OECD indicators. *OECD Publishing*, Paris. <https://doi.org/10.1787/69096873-en>
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Blackwell.
- Olweus, D., & Limber, S. P. (2010). Bullying in school: Evaluation and dissemination of the Olweus bullying prevention program. *American Journal of Orthopsychiatry*, 80(1), 124–134. <https://doi.org/10.1111/j.1939-0025.2010.01015.x>
- Olweus, D., & Limber, S. P. (2019). The Olweus bullying prevention program (OBPP): New evaluation and current status. In P. K. Smith (Ed.), *Making an impact on school bullying: Interventions and recommendations* (pp. 23–44). Routledge.
- Overbeek, G., Zeevalkink, H., Vermulst, A., & Scholte, R. H. J. (2010). Peer victimization, self-esteem, and ego resilience types in adolescents: A prospective analysis of person-context interactions. *Social Development*, 19(2), 270–284. <https://doi.org/10.1111/j.1467-9507.2008.00535.x>
- Oyanedel, J., Alfaro, J., & Mella, C. (2015). Bienestar subjetivo y calidad de vida en la infancia en Chile. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud*, 13(1), 313–327. <https://doi.org/10.11600/1692715x.13118040414>
- Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, 3(2), 137–152. <https://doi.org/10.1080/1743760701756946>

- Proctor, C., Linley, A., & Maltby, J. (2017). Life satisfaction. In R. J. R. Levesque (Ed.), *Encyclopedia of adolescence*. Springer International Publishing AG. [https://doi.org/10.1007/978-3-319-32132-5\\_125-2](https://doi.org/10.1007/978-3-319-32132-5_125-2)
- R Core Team. (2021). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing <https://www.R-project.org/>
- Robinson, S., & Graham, A. (2020). Feeling safe, avoiding harm: Safety priorities of children and young people with disability and high support needs. *Journal of Intellectual Disabilities*. Advance online publication. <https://doi.org/10.1177/1744629520917496>
- Saewyc, E. M., & Tonkin, R. (2008). Surveying adolescents: Focusing on positive development. *Pediatrics & Child Health*, 13(1), 43–47.
- Sapouna, M., & Wolke, D. (2013). Resilience to bullying victimization: The role of individual, family and peer characteristics. *Child Abuse & Neglect*, 37(11), 997–1006. <https://doi.org/10.1016/j.chab.2013.05.009>
- Sarriera, J. C., Bedin, L. M., & Strelhow, M. R. W. (2021). Perceptions of safety and subjective well-being of Brazilian children. *Journal of Community Psychology*, 49(1), 218–227. <https://doi.org/10.1002/jcop.22396>
- Sarriera, J., Bedín, L., Calza, T., Abs, D., & Casas, F. (2015). Relationship between social support, life satisfaction and subjective well-being in Brazilian adolescents. *Universitas Psychologica*, 14(2), 459–474. <https://doi.org/10.11144/Javeriana.upsy14-2.rbss>
- Savahl, S., Montserrat, C., Casas, F., Adams, S., Tiliouine, H., Benninger, E., & Jackson, K. (2019). Children's experiences of bullying victimization and the influence on their subjective well-being: A multinational comparison. *Child Development*, 90(2), 414–431. <https://doi.org/10.1111/cdev.13135>
- Stubs-Richardson, M., Sinclair, H. C., Goldberg, R., Elliothorpe, C., & Amadi, S. (2017). Reaching out versus latching out: Examining gender differences in experiences with and responses to bullying in high school. *American Journal of Criminal Justice*, 43, 39–66. <https://doi.org/10.1007/s12103-017-9408-4>
- Suldo, S., Minch, D., & Hearon, B. (2015). Adolescents life satisfaction and personality characteristics: Investigating relationship using a five factor model. *Journal of Happiness Studies*, 16, 965–983. <https://doi.org/10.1007/s10902-014-9544-1>
- Tomyn, A. J., & Cummins, R. A. (2011). The subjective wellbeing of high-school students: Validating the personal wellbeing index—School children. *Social Indicators Research*, 101(3), 405–418. <https://doi.org/10.1007/s11205-010-9668-6>
- Twenge, J. M., Martin, G. N., & Campbell, W. K. (2018). Decreases in psychological well-being among American adolescents after 2012 and links to screen time during the rise of smartphone technology. *Emotion*, 18(6), 765–780. <https://doi.org/10.1037/emo0000403>
- Uyan-Semerci, P., Erdogan, E., Akkan, B., Müderrisoğlu, S., & Karatay, A. (2017). Contextualizing subjective well-being of children in different domains: Does higher safety provide higher subjective well-being for child citizens? *Children and Youth Services Review*, 80, 52–62. <https://doi.org/10.1016/j.childyouth.2017.06.050>
- Varela, J. J., Savahl, S., Adams, S., & Reyes, F. (2019). Examining the relationship among bullying, school climate and adolescent well-being in Chile and South Africa: A cross cultural comparison. *Child Indicators Research*, 13(3), 819–838. <https://doi.org/10.1007/s12187-019-09648-0>
- Varela, J., Alfaro, J., Melipillán, R., Gómez, D. O., & González-Carrasco, M. (2020). Perceptions of safety, satisfaction with neighborhood and life satisfaction among Chilean adolescents. *Child Indicators Research*, 13(4), 1489–1502. <https://doi.org/10.1007/s12187-019-09649-z>
- Varela, J., Guzmán, J., Alfaro, J., & Reyes, F. (2018a). Bullying, cyberbullying, student life satisfaction and the community of Chilean adolescents. *Applied Research of Quality of Life*, 14(1). <https://doi.org/10.1007/s11482-018-9610-7>
- Varela, J., Sánchez, P., González, C., Oriol, X., Valenzuela, P., & Cabrera, T. (2021a). Subjective well-being, bullying, and school climate among Chilean adolescents over time. *School Mental Health*. Advance online citation. <https://doi.org/10.1007/s12310-021-09442-w>
- Varela, J., Tezanos, P., Sánchez, P., Benavenete, M., & Chuecas, J. (2021b). School climate, Bullying and Mental Health among Chilean Adolescents. *Child Indicators Research*. Advanced online citation. <https://doi.org/10.1007/s12187-021-09834-z>
- Varela, J., Zimmerman, M., Ryan, A., & Stoddard, S. (2018b). Cyberbullying among Chilean students and the protective effects of positive school communities. *Journal of School Violence*, 17(4), 430–442. <https://doi.org/10.1080/15388220.2017.1358640>

- Varela, J., Zimmerman, M., Ryan, A., Stoddard, S., Heinze, M., & Alfaro, J. (2017). Life satisfaction, school satisfaction, and school violence: A mediation analysis for Chilean adolescent victims and perpetrators. *Child Indicators Research*, 11, 487–505. <https://doi.org/10.1007/s12187-016-9442-7>
- Zych, I., Farrington, D., & Ttofi, M. (2019). Protective factors against bullying and cyberbullying: A systematic review of meta-analyses. *Aggression and Violent Behavior*, 45, 4–19. <https://doi.org/10.1016/j.avb.2018.06.008>

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