

# Bullying, Cyberbullying, Student Life Satisfaction and the Community of Chilean Adolescents

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**Abstract** Feeling support from the community is a vital aspect of adolescents' quality of life. Negative experiences at school, such as bullying and cyberbullying can have an adverse impact on adolescents' life satisfaction that can expand to different domains of their lives including community variables. The goal of the present study was to examine the association between peer victimization, life satisfaction and community support among Chilean adolescents. We used a sample of 497 youths enrolled in grades 9 to 12 of public and private schools in different Chilean districts. Results indicate a negative association between bullying and cyberbullying behavior on community support through life satisfaction. Peer victimization can have negative consequences for youths at a personal level on their assessments of life satisfaction, which can expand to feeling less support from the community. Feeling less support from the community can be detrimental to healthy youth development and adolescents' quality of life. Community prevention efforts can thus provide emotional support for youth victims of bullying and cyberbullying.

**Keywords** Quality of life · Life satisfaction · Community · Bullying · Cyberbullying · Adolescence

## Bullying and Cyberbullying

Bullying is considered as a worldwide concern for youth populations based on its negative consequences on mental health, well-being and the quality of life of the victims (Bilić et al. 2014; Felix et al. 2009; Flannery et al. 2004; Kerr et al. 2011; Smith and Brain 2000).

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During adolescence, bullying behavior is a common experience among youths across different countries in the world. For example, a previous international comparison with data from 40 countries found a range for victims of bullying behavior from 8.6% to 45.2% for boys and 4.8% to 35.8% for girls among adolescents 11 to 15 years old (Craig et al. 2009). Even though international trend comparisons show a decrease in bullying behavior in the last decade, differences among countries indicate the importance of more local cultural contextual analyses (Chester et al. 2015) and a deeper analysis of the consequences in different domains. Unfortunately, South American countries have been little studied regarding this topic, considering various quality of life aspects.

Cyberbullying is a more recent concern for youth development, which has appeared due to the rise of new technologies as part of the way of life of a new generation of children and teenagers and the relationships between them (Smith et al. 2008). Moreover, prevalence rates of becoming a victim of cyberbullying range from 10% to 40% (Kowalski et al. 2014). International comparisons, however, are complicated because studies use different instruments to assess this behavior and therefore can introduce possible biases in these prevalence reports. Nevertheless, cyberbullying has opened new challenges to educators, psychologists and school communities in general because it is complicated to understand the covert identities and e-technologies involved (Spears et al. 2009). Cyberbullying is defined based on the use of different technologies and the intention to harm others (Smith et al. 2008; Ybarra and Mitchell 2004). This type of aggression can be conceptualized as its own form of aggression compared to bullying behavior (Bauman et al. 2013), based on specific features such as the use of technologies (Patchin and Hinduja 2012), and an unrecognizable audience as a bystander of the perpetration (Kowalski et al. 2012).

In Chile, recent evidence highlights the presence of bullying and cyberbullying phenomena in school settings. In the last national study of violence in the school context, conducted in 2014 with a sample of 38,367 students from 7th to 12th grades, results identified 26.2% of students as victims of aggression during the school year. These results are similar compared to previous national studies, and are similar to other national studies. Moreover, aggressions using social networks among students represent more than 50% for verbal and social aggressions (Chile, Ministerio del Interior 2016). In the Third National Survey of School Violence in Chile (Chile, Ministerio del Interior and Adimark 2009), 10.6% reported being a victim of cyberbullying through the internet (blogs and fotolog), and 6.4% self-reported becoming a perpetrator of cyberbullying during the school year.

A deeper examination of bullying behavior indicates that it is defined as a complex phenomenon explained by individual and contextual factors based on an ecological framework (Espelage 2014; Swearer and Hymel 2015). At the community level, the associations examined so far highlight that an influence explained with violence, crime rates and safety in the community can influence bullying behavior (Espelage 2014; Espelage et al. 2000; Goldweber et al. 2013). Previous studies have examined the association between inequality and bullying behavior, and found a positive association. For instance, Elgar et al. (2013) examined an international dataset with samples from 117 countries measuring bullying behavior and income inequality based on the Gini coefficient, which found a positive relationship with bullying victimization. Yet, other mechanisms remain unclear (Swearer and Hymel 2015), such as more community involvement and perceived support. This situation is important because higher levels of community participation can also be beneficial for adolescents' quality

of life (Cicognani et al. 2014; Gracia and Herrero 2004). Previous studies have examined variables from the community as a risk factor for bullying behavior (Jiménez et al. 2009), instead of the negative consequences of this behavior which can have an effect at the community level. Moreover, victims of bullying behavior have negative emotional consequences associated with different adjustment problems, especially at the individual level (Juvonen and Graham 2014). The negative effects of this behavior to the extent of the community variables, however, has been less considered in the literature.

Therefore, we expect to expand our knowledge of bullying, cyberbullying and life satisfaction by exploring its consequences with community involvement and support in the Latin American context.

## **Well-Being and Life Satisfaction**

The use of the concept of subjective well-being has been associated with a hedonic perspective, where the predominant view refers to the experience of pleasure versus displeasure, including judgments about life (Ryan and Deci 2001). Thus, subjective well-being is defined as a category that includes positive affect, negative affect, and life satisfaction (Diener et al. 1999). The affective components are based on the emotional responses that, although always of short duration and fluctuating, they are representative of the nature of daily life. Positive affect, negative affect, and life satisfaction are separable constructs and can therefore be evaluated as independent components of subjective well-being (Pavot and Diener 2004).

Life satisfaction refers to an overall cognitive assessment of the quality of life, which is less susceptible to change. Such evaluations are not entirely stable and refer to an overall cognitive assessment of the individual on the quality of his or her life. This assessment can be referred to as global life satisfaction, as well as specific domains such as family, friends, or school (Huebner 2004). The construct considers both cognitive and affective appreciation, which may be indirectly influenced by transient emotional states or affections (Huebner 2004). However, the evaluative component is dominant (Lau et al. 2005), which implies that the notion of life satisfaction expresses a cognitive response (Huebner 2004).

## **Life Satisfaction and Adolescence**

The increase in a the study of well-being and life satisfaction in children and adolescents is important as this is a relatively new research area and few studies and instruments exist compared to the large development and research on well-being among adults (Dex and Hollingworth 2012). This is especially important considering that the data available in childhood and adolescence show that during the earliest stages of life the functioning of well-being has its evolutionary idiosyncrasy, so that it cannot be assumed that the results with samples of adults are extrapolated to young populations, even though these study groups belong to the same sociocultural context (Casas 2010).

Researchers such as Ben-Arieh (2008) and Casas (2010) point out that there is a need to develop indicators for children that include: (1) The use of outcome indicators

and direct measures of well-being rather than the use of indirect indicators; (2) To use the child as a unit of analysis and information (instead of parents, family or household); (3) To give priority to indicators of the current well-being of children, rather than indicators of future well-being or achievement as adults (diagnose what happens to their present living conditions); and (4) to use indicators of their feelings and life satisfaction, which are often called subjective indicators.

Moreover, it should also be considered that research on subjective well-being in children and adolescent populations has not progressed sufficiently in developing countries, as Webb (2009) and Yiengprugsawan et al. (2010) reported. Particularly in Latin America, it is necessary to advance knowledge about the quality of life of children and adolescents, and especially about their quality of life in subjective dimensions. Most of the available studies have been carried out in the Anglo world, with some exceptions (Alfaro et al. 2014; Elvas and Moniz 2010; Rodrigues et al. 2014; Varela et al. 2017), and it is necessary to make cross-cultural comparisons that allow for the exploration of the possibility of generalizing the findings of western cultures to children and young people of other cultures (Park and Huebner 2005).

Preliminary research examining international differences among different cultures suggests significant similarities and differences in response styles from diverse national groups. Thus, progress in this research area will increase the understanding of the incidence of cultural, educational and social variables in well-being and life satisfaction of children and young people (Casas 2010). Researchers indicate significant differences with age regarding life satisfaction. In particular, children obtain higher scores compared to adolescents, and some studies report that as adolescents age their life satisfaction decreases (Casas 2010; Tomyn and Cummins 2011).

### **Bullying, Cyberbullying and Adolescents' Life Satisfaction**

Adolescent's life satisfaction can be influenced by different emotional, social and behavioral variables (Proctor et al. 2009). During adolescence, the role of peers becomes a vital part of their lives, highlighting the importance of peer influence on life satisfaction (Wentzel et al. 2004). At this age, peer influence becomes a part of daily life in the school context. Even though higher levels of satisfaction with the school experience are positively related to life satisfaction (Huebner et al. 2014) and well-being (García et al. 2014), victimization within the school context can become a major risk factor for this experience. One specific form of victimization is being a victim of bullying behavior, which can have a negative influence on adolescents' life satisfaction (Olweus and Breivik 2014).

Being a victim of bullying and cyberbullying has negative consequences for adolescents. For example, Bond et al. (2001) found an association between a history of bullying victimization and later self-reported symptoms of anxiety and depression. In Taiwan, Chang et al. (2013) examined a sample of 2992 10th graders, and found a negative association between bullying and cyberbullying with lower self-esteem and risk of depression. Other studies have correlated bullying and cyberbullying forms of aggression and different psychological and emotional well-being indicators (Hinduja and Patchin 2010; Ortega et al. 2012). Navarro et al. (2015), using a Spanish sample of 1058 youth ages 10 to 12 years old, examined the association between bullying and life satisfaction. They found that victims of bullying and cyberbullying report lower levels of life satisfaction compared to students that are not involved in that behavior.

Moreover, life satisfaction can be influenced by school climate and school violence (Buelga et al. 2008). For instance, a better school climate and the perception of closeness with peers increases life satisfaction (Ma and Huebner 2008). Also, school dissatisfaction is associated with dropping out of school (Baker and Maupin 2009), and school dropouts report less life satisfaction compared to those who do not leave school (Liem et al. 2010).

The negative association between bullying victims and life satisfaction has been examined in several school and cultural settings. Flaspohler et al. (2009), based on a sample of 4331 students from elementary and middle schools, found that victims of bullying compared to bystanders reported lower levels of life satisfaction. In Chile, Varela et al. (2017) examined a sample of 802 7th graders and found an association between school violence and life satisfaction using school satisfaction as a mediated factor, providing evidence for this relationship. Other studies have also included cyberbullying behavior, associating negative effects with different life satisfaction domains (Moore et al. 2011). Although research on bullying and cyberbullying is related to life satisfaction, the effects on the community have not been simultaneously considered in this relationship. This research gap is significant because the community can have a meaningful effect on adolescents' life (Sirgy and Cornwell 2002; van Ham et al. 2012).

### Community Support for Adolescents

Recent evidence on adolescent life satisfaction highlights the importance of considering the feeling of belonging and levels of satisfaction with the community, beyond the traditional comprehension of life satisfaction (Sarriera and Bedin 2015). There is a relationship between the place of residence or neighborhood and life satisfaction (Elvas and Moniz 2010; Homel and Burns 1987), based on differences depending on the physical and social characteristics of the neighborhood. Qualitative studies about the characteristics of neighborhoods with Australian (Fattore et al. 2012) and Irish (Rogers 2012) children show how the features of the neighborhood influence their well-being.

Moreover, different researchers have reported positive relationships between integration to the neighborhood of residence, psychological well-being and health of its members (Cohen et al. 2000; Delgado et al. 2012; Gracia and Herrero 2004). Davidson and Cotter (1991) indicated that people with a high sense of community score better on subjective well-being and happiness. Other authors report positive correlations between low subjective well-being, poor mental health, and lack of a sense of community in both adults (Farrell et al. 2004) and youths (Pretty et al. 1996). Similarly, the neighborhood (Cicognani et al. 2008), social capital (Harpham et al. 2004) and community participation (Herrero et al. 2004) are positively associated with psychological well-being.

The benefits of the relationship between life satisfaction and the community can be found in different cultural contexts. Elvas and Moniz (2010) found that children and young people in a historic district of Lisbon showed higher levels of satisfaction, higher quality of life, more citizen participation in the neighborhood and a greater sense of community compared to people of the same age of one new residential neighborhood. In a study conducted in Brazil, children who reported a greater sense of community with their neighborhood and community obtained higher subjective well-being scores compared to those who showed little integration with their community (Rodrigues et al. 2014). Yet, community variables were considered as predictors for the most part. Conversely, exploring the effect of life satisfaction as a mediator variable can extend

the negative consequences of bullying behavior to perceive lower community support, and increase the negative effects for victims.

Research on life satisfaction and the role of the community is growing in the region, yet we are still far from reaching levels seen in developed countries where they explore underlying mechanisms to better understand this relationship. For example, Cicognani et al. (2014) observed a direct relationship between belonging to community organizations and youth wellbeing, as well as a relationship mediated by a sense of community and empowerment. The community can have a positive effect on youth life satisfaction, so victims of bullying and cyberbullying can benefit from this proximal context instead of increasing isolation and emotional trauma.

The theoretical model depicted in Fig. 1 summarizes the conceptual model that guides this study. We hypothesize a direct effect of being a victim of bullying and cyberbullying on community support with a negative association (paths c and d). In addition, we hypothesize an indirect effect through life satisfaction (paths a, b and e).

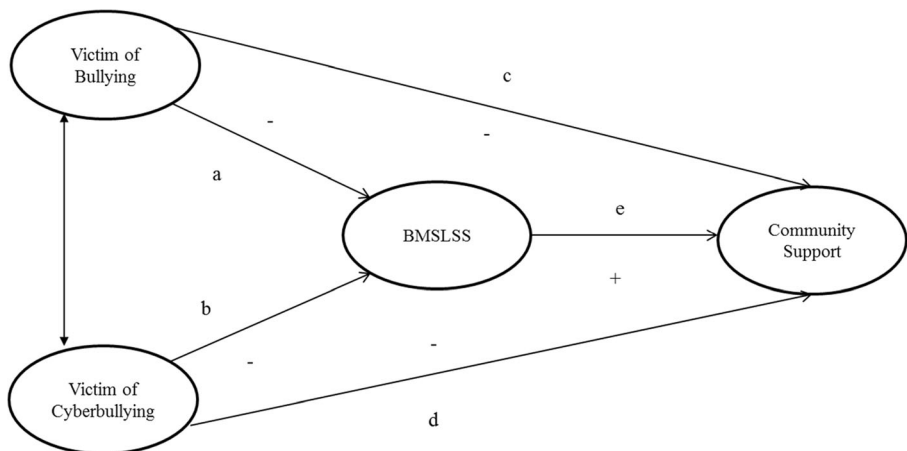
## Methods

### Sample

The sample included 497 Chileans adolescents (35.3% woman) enrolled in grades 9 to 12 of public and private schools in seven districts of Chile. The participant ages ranged from 14 to 19 years ( $M = 15.8$  years;  $SD = 1.22$ ).

### Data Collection

Data collected was part of a larger research project funded by the Universidad del Desarrollo, Chile, with the purpose of adapting and validating scales of subjective wellbeing and other psychosocial variables associated with adolescents' quality of life.



**Fig. 1** The figure depicts the theoretical model of the study. Sex and age were included in the model as control variables

Data was collected in student classrooms grouped by grade level during regular class hours under the supervision of trained personnel from the project. Ethical protocols were met with particular emphasis on the confidentiality of the information by using informed consent of the participating schools, the assent of adolescents, and parents or guardians consent.

## Measures

### Community Support

This concept is the dependent variable of the study. It belongs to a larger scale that assesses community support features developed by Herrero and Gracia (2007). In particular, this subscale focuses on the self-report about the perceived support from voluntary groups and organizations in their communities. It is based on 5 items such as “I could find people that would help me feel better”, “I would find someone to listen to me when I feel down”, “I would find a source of satisfaction for myself”, “I would be able to cheer up and get into a better mood”, and “I would relax and easily forget my problems”. Each item has a 5 points Likert scale (1 = strongly disagree, 5 = strongly agree). A bigger score indicates a higher perception of support. In the original studies the internal consistency for that subscale ranged from .87 to .88 in three different samples (Herrero and Gracia 2007). In the current study the Cronbach Alpha for this subscale was .90.

### Brief Multidimensional Students’ Life Satisfaction Scale

The scale we used to capture adolescent well-being is the Brief Multidimensional Students’ Life Satisfaction Scale (BMSLSS) originally developed by Seligson et al. (2003), and validated in Chile by Alfaro and colleagues (2014). This measure provides a general life satisfaction score based on different significant domains such as family, school, friends, the self, and living. The measure contains a seven-point Likert scale (1 = strongly unsatisfactory, 7 = strong satisfactory). A higher value indicates overall a better evaluation of their life satisfaction. Examples of items are: “I would describe my satisfaction levels with my family life as”, “I would describe my satisfaction levels with my school experiences as”. Previous research showed that the internal consistency of the scale ranged from .68 to .89 for the five items of the BMSLSS (Funk et al. 2006; Seligson et al. 2005; Siyez and Kaya 2007; Tian et al. 2015). In Chilean child population was .70 (Alfaro et al. 2014). In the present study, the Cronbach’s alpha coefficient was .82.

### Victim of Bullying Behavior

To capture the role of the victim of bullying behavior we used the Illinois Bullying Scale (Espelage and Holt 2001), which has been used in other studies in Chile (Berger and Caravita 2016). This measure assesses whether a respondent reported being a victim of bullying based on the last 30 days in school, using a four Likert scale range from 1 (never) to 4 (almost always). Higher scores indicate more victim bullying

behavior experienced. Example items include “I got hit and pushed by other students” and “Other students make fun of me”. The Cronbach Alpha reported in the original version was .88 (Espelage and Holt 2001) and for the current study was .84.

### Victim of Cyberbullying

This measure reports the frequency of being a victim of aggressive behaviors using technologies and digital media, developed by Ybarra et al. (2007). The scale is based on four self-reported items considering how often they were the victim of these behaviors using a five Likert scale range 1 (Not sure) to 5 (Often) during the school year. A higher value indicates more levels of cyberbullying as a victim. The scale items are “Someone made a rude or mean comment to me online”, “Someone made a threatening or aggressive comment to me online”, “Someone sent a text message that said rude or mean things”, and “Someone spread rumors about me online, regardless of whether they were true or not”. The Cronbach Alpha reported in the original version was .79 (Ybarra et al. 2007) and for the current study was .75.

### Demographic Variables

Two variables were included in the model as control variables: Sex and Age. Sex was dummy coded (0 = male; 1 = female), and age was entered as a continuous variable based on students’ self-reported birth date.

## Results

### Missing Data Analysis

The Little’s MCAR test resulted in a chi-square = 1088.22 ( $df=948$ ;  $p < .001$ ), indicating some patterns for study variables. For most of the variables, no relationship was found between them, except for two items for cyberbullying victims and two items for community support, providing some evidence for missing at random (MAR) (Tabachnick and Fidell 2007). Also, missing values in all study variables represent less than 5% (range from .04% to 4.8%).

**Table 1** Descriptive statistics

	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>%</i>	<i>Minimum</i>	<i>Maximum</i>	$\alpha$
Age	15.8	1.22	495		14	19	–
Sex (Female = 0)	–	–	485	35.3	0	1	–
Community Support	3.51	1.03	469		1	5	.90
BMSLSS	5.57	.98	496		1	7	.82
Victim	1.99	.77	496		1	4	.84
Cyber victim	2.10	.68	492		1	5	.75

**Table 2** Zero-order correlations

Variable	Age	Sex	CS	BMSLSS	Bullying Victim	Cyber victim
Age	–					
Sex	–.05	–				
Community Support (CS)	–.01	.07	–			
BMSLSS	–.01	.12**	.22**	–		
Victim	–.08	.21**	.01	–.19**	–	
Cyber victim	.03	.02	.01	–.17**	.32**	–

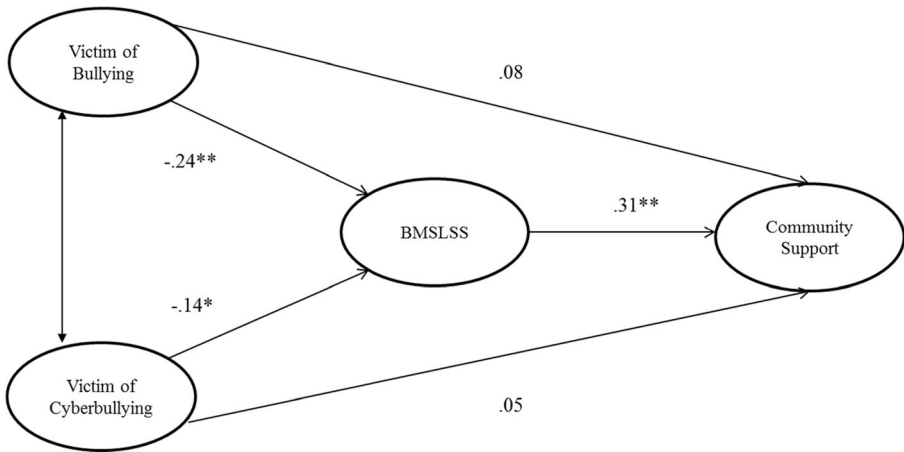
\*  $p < .05$ ; \*\*  $p < .01$

Table 1 describes means and Table 2 describes correlations for the variables. Community Support is correlated with Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS), but not with the rest of the variables. The victim and cyber victim scales are correlated with the measure of life satisfaction. Age is not correlated with any of the variables and sex only with life satisfaction and victim of bullying behavior. We found no difference in our dependent variable based on the sex of the participants ( $F(1,464) = 1,56; p < .210$ ).

**Table 3** Standardized and unstandardized regression coefficients for the measurement model

Item Factors	Latent Factor	$\beta$	B	S.E.
I could find people that would help me feel better	Community Support (CS)	.72	1	.03
I would find someone to listen to me when I feel down		.83	1.10	.02
I would find a source of satisfaction for myself		.88	1.23	.02
I would be able to cheer up and get into a better mood		.82	1.18	.02
I would relax and easily forget my problems		.72	1.11	.02
I would describe my satisfaction with my family	Brief Multidimensional	.68	1	.03
I would describe my satisfaction with my friends	Students' Life Satisfaction	.65	.77	.03
I would describe my satisfaction with my school	Scale (BMSLSS)	.70	1.02	.03
I would describe my satisfaction with my self		.62	1.23	.03
I would describe my satisfaction with my neighborhood		.57	.93	.04
I would describe my satisfaction with my life in general as a whole		.69	1.11	.03
Other students make fun of me	Victim of Bullying	.82	1	.02
Other students pick on me		.88	1.09	.02
Other students call me names		.75	1.06	.02
I got hit and pushed by other students		.58	.64	.03
Someone made a rude or mean comment to me online	Victim of Cyberbullying	.75	1	.04
Someone spread rumors about me online, whether they were true or not		.73	1.01	.04
Someone sent a text message that said rude or mean things		.48	.99	.03
Someone made a threatening or aggressive comment to me online		.55	1.01	.03

\* All coefficients are significant at  $p < .01$



**Fig. 2** Standardized Regression Coefficients for the Structural Model. Results are controlled by gender and age. \*  $p < .05$ ; \*\*  $p < .01$

**Measurement Model**

Table 3 reports coefficients for the measurement model. All items are significant for the latent factors in the expected direction, providing support for the psychometric properties of latent factors.

**Structural Model**

Results for the structural model are depicted in Fig. 2 and Table 4. Results from the analysis provide evidence for good fit of data [ $\chi^2 (179, N = 499) = 364.47, p < .001$ , with  $TLI = 0.95, CFI = 0.95, RMSEA = 0.05$ , within 90% confidence interval]. Victims of bullying and of cyberbullying have a direct effect on the BMSLSS ( $\beta = -.24, p < .01$ ;  $\beta = -.14, p < .05$ , respectively), an indirect effect on Community Support ( $\beta = -.09, p < .01$ ;  $\beta = -.05, p = .06$ , respectively). Students who self-reported higher levels of

**Table 4** Standardized and unstandardized coefficients of the structural model

	$\beta$	<i>B</i>	<i>SE</i>	95% <i>CI</i>	$R^2$
Community Support					.09
BMSLSS	.31**	.30**	.06	.19	.42
Victim of bullying	.08	.10	.07	-.04	.23
Victim of cyberbullying	.05	.06	.07	-.08	.20
Age		.01	.08	-.15	.17
Sex		.05	.03	-.00	.11
BMSLSS					.10
Victim of bullying	-.24**	-.29**	.07	-.42	-.15
Victim of cyberbullying	-.14*	-.17*	.08	-.33	-.01

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

bullying and cyberbullying behavior as a victim, reported lower levels of life satisfaction, measured by BMSLSS and an indirect effect of lower community support. BMSLSS has an effect on Community Support ( $\beta = .31$   $p < .01$ ). Students that reported higher levels of life satisfaction reported higher levels of community support. Lastly, victims of bullying and cyberbullying had no direct effect on Community Support ( $\beta = .08$ , *ns*;  $\beta = .05$ , *ns*; respectively).

## Discussion

The purpose of the study was to examine the effect of bullying and cyberbullying on victims' life satisfaction and community support. Results of the study provide partial evidence for this hypothesis indicating an association between becoming a victim of bullying and cyberbullying on the levels of community support reported by adolescents through life satisfaction. Our results expand our knowledge of the negative effects of peer victimization in different ways.

We found a negative association of life satisfaction with victims of bullying and cyberbullying behavior, as expected from previous studies (Flaspohler et al. 2009; Hinduja and Patchin 2010; Moore et al. 2011; Ortega et al. 2012). Despite cultural differences from the Chilean cultural context, the association between these two forms of victimization and life satisfaction remain significant. Therefore, the concern about negative effects of bullying and cyberbullying behavior can be similarly compared to other cultural settings.

Moreover, the study highlights the relevance of life satisfaction as a mediational variable between community support and peer victimization. This is important because life satisfaction can be influenced by emotional, social and behavioral variables (Proctor et al. 2009). Therefore, school and communities can find a way to compensate the negative effects of bullying behavior through life satisfaction. For instance, future studies could examine the effect of different variables, such as peer support, if they moderate the negative effect of bullying and cyberbullying behavior. By recognizing underlying mechanisms of these relationships, it is possible to provide extra support for victims in order to ameliorate negative effects of victimization.

In addition, peer victimization can influence other contextual variables, such as community support, adding more risk for adolescents by isolating them from other important social contexts, such as the community. Therefore, prevention programs of bullying behavior at the school level could incorporate aspects from the community too. Considering that adolescents' relationships belong to a larger system in the school, other variables must be considered. In particular, prevention and promotion at different levels, including the community, should be presented together in a bullying and cyberbullying prevention program (Berger et al. 2008). In this study, we provide evidence of the negative effects of bullying and cyberbullying that can take place beyond the school setting.

Bullying and cyberbullying are usually recognized as peer group phenomena within the school context (Espelage et al. 2003; Swearer and Hymel 2015). Our study adds to the literature by highlighting more negative consequences of this behavior among adolescents beyond the usual analysis. In this case, our results are consistent with previous studies by including other dimensions, such as the community (Bowes et al. 2009). In addition, considering that victims of bullying can have higher rates of

depression later in life (Ttofi et al. 2011), isolating from their communities can increase this negative association.

Life satisfaction is a significant aspect of quality of life for adolescents (Gilman and Huebner 2006; Huebner 2004). Our findings are consistent with previous studies connecting bullying and cyberbullying with life satisfaction (Moore et al. 2011). Our results provide additional evidence of the importance of life satisfaction to better understand the negative consequences of bullying behavior. In this case, the impact of quality of life is not only focused on individual or school variables. In addition, bullying behavior can affect feeling less support from the community through life satisfaction. By recognizing life satisfaction as a mediational variable, our results highlight the benefits of this construct to better understand the negative consequences of peer victimization.

Even though previous studies have considered community variables as predictors of bullying behavior, we decided to focus on the consequences of bullying and cyberbullying, beyond individual and mental health consequences. Based on this, our results highlight the extent of the negatives consequences of bullying for adolescents. Previous studies highlight the importance of the community for adolescents' life satisfaction (Rodrigues et al. 2014; Sarriera and Bedin 2015). If victims of bullying and cyberbullying also feel less support from their communities, the negative consequences for them can be even higher, especially in the long term. Our results confirmed this association and, therefore, highlight the importance of this relationship in the Chilean cultural context.

Some limitations of our study can be recognized. We used self-reported data for the study measures. Although more sources of information can be useful, self-reported data is one of the most common ways to assess student life satisfaction (Gilman and Huebner 2003). We used a cross-sectional research design for the present study, collecting data at one time point only. Future research should collect data over time to examine variations considering the effect of bullying behavior over time. Yet, our study can still establish relevant associations for youth quality of life by recognizing the important role of life satisfaction between peer victimization and community support. Another limitation of the study is the underrepresented amount of female participants compared to males. Even though no differences were found in the self-report of perception of community support based on gender, still we must be careful to understand these results. Moreover, previous studies in the South American cultural context have not found gender differences in the levels of subjective well being as described by Castellá et al. (2012) when they compared Argentinian and Brazilian adolescents. Finally, our dependent variables belong to a larger assessment of community and well-being. We decided to use this subscale because it can be more directly associated with victims of bullying and cyberbullying. Future research should include other dimensions from the community for adolescent development. Despite these limitations, we highlight the significant negative effect of peer victimization beyond individual variables, such as life satisfaction, to the community level.

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## References

- Alfaro Inzunza, J., Guzmán Piña, J., García Gómez, C., Sirlopú Díaz, D., Oyanedel Sepúlveda, J. C., & Gaudlitz Ruiz, L. (2014). Propiedades psicométricas de la escala Breve Multidimensional de Satisfacción con la Vida para Estudiantes (BMSLSS) en población infantil chilena (10 – 12 años). *Universitas Psychologica*, *14*(1), 29–42.
- Baker J.A. & Maupin, A.N. (2009). School satisfaction and children's positive school adjustment. En R. Gilman, E.S. Huebner & M.J. Furlong (Eds.), *Handbook of positive psychology in the schools* (pp. 189–196). New York: Routledge.
- Bauman, S., Cross, D., & Walker, J. L. (Eds.). (2013). *Principles of cyberbullying research: Definitions, measures and methodology*. New York: Routledge.
- Ben-Arieh, A. (2008). The child indicators movement: Past, present, and future. *Child Indicators Research*, *1*(1), 3–16.
- Berger, C., & Caravita, S. C. S. (2016). Why do early adolescents bully? Exploring the influence of prestige norms on social and psychological motives to bully. *Journal of Adolescence*, *46*, 45–56.
- Berger, C., Rodkin, P. C. & Karimpour, R. (2008). Bullies and victims at school: Perspectives and strategies for primary prevention. En T. Miller (Ed.), *School violence and primary prevention* (pp. 295–322). New York: Springer-Verlag.
- Bilić, V., Flander, G., & Rafajac, B. (2014). Life satisfaction and school performance of children exposed to classic and cyber peer bullying. *Collegium Antropologicum*, *38*(1), 21–29.
- Bond, L., Carlin, J. B., Thomas, L., Rubin, K., & Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. *BMJ (Clinical Research Ed.)*, *32*, 480–484.
- Bowes, L., Arseneault, L., Maughan, B., Taylor, A., Caspi, A., & Moffitt, T. E. (2009). School, neighborhood, and family factors are associated with children's bullying involvement: A nationally representative longitudinal study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *48*(5), 545–553.
- Buelga, S., Musitu, G., Murgui, S., & Pons, J. (2008). Reputation and aggressive behavior in adolescence. *The Spanish Journal of Psychology*, *11*, 192–200.
- Casas, F. (2010). El bienestar personal: Su investigación en la infancia y la adolescencia. *Encuentros en Psicología Social*, *5*(1), 85–101.
- Castellá, J., Saforcada, E., Tonon, G., Rodríguez de la Vega, L., Mozobanycyk, S., & Bedin, L. M. (2012). Bienestar Subjetivo de los Adolescentes: Un estudio comparativo entre Argentina y Brasil. *Psychological Intervention*, *21*(3), 273–280.
- Chang, F. C., Lee, C. M., Chiú, C. H., Hsi, W. Y., Huang, T. F., & Pan, Y. C. (2013). Relationships Among Cyberbullying, School Bullying, and Mental Health in Taiwanese Adolescents. *Journal of School Health*, *83*(6), 454–462.
- Chester, K. L., Callaghan, M., Cosma, A., Donnelly, P., Craig, W., Walsh, S., & Molcho, M. (2015). Cross-national time trends in bullying victimization in 33 countries among children aged 11, 13 and 15 from 2002 to 2010. *The European Journal of Public Health*, *25*(2), 61–64. <https://doi.org/10.1093/eurpub/ckv029>
- Chile, Ministerio del Interior. (2016). Encuesta Nacional de Violencia en el Ámbito Escolar (ENVAE) 2014. Santiago: Autor. Retrieved from <http://www.seguridadpublica.gov.cl/media/2016/11/Presentaci%C3%B3n-ENVAE.pdf>
- Chile, Ministerio del Interior & Adimark. (2009). III Encuesta Nacional de Violencia en el Ámbito Escolar 2009. Santiago: Autores. Retrieved from [http://www.seguridadpublica.gov.cl/filesapp/presentacion\\_violencia\\_escolar\\_2009\\_web.pdf](http://www.seguridadpublica.gov.cl/filesapp/presentacion_violencia_escolar_2009_web.pdf)
- Cicognani, E., Albanesi, C., & Zani, B. (2008). The impact of residential context on adolescents' subjective well-being. *Journal of Community and Applied Social Psychology*, *18*(6), 558–575.
- Cicognani, E., Mazzoni, D., Albanesi, C., & Zani, B. (2014). Sense of community and empowerment among young people: Understanding pathways from civic participation to social well-being. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *26*(1), 24–44.
- Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000). Social relationships and health. En S. Cohen, L. G. Underwood & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 3–25). Oxford: Oxford University Press.
- Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., Simons-Morton, B., et al. (2009). A cross-national profile of bullying and victimization among adolescents in 40 countries. *International Journal of Public Health*, *54*(Suppl 2), 216–224.

- Davidson, W. B., & Cotter, P. R. (1991). The relationship between sense of community and subjective well-being: A first look. *Journal of Community Psychology, 19*(3), 246–253.
- Delgado, A. O., Suárez, L. A., Campos, R. M. E., & García, D. M. P. (2012). Activos del Barrio y Ajuste Adolescente. *Psychosocial Intervention, 21*(1), 17–27.
- Dex, S., & Hollingworth, K. (2012). *Children's and young people's voices on their wellbeing*. Retrieved from <http://webarchive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/eOrderingDownload/Children's%20voices%20on%20wellbeing.pdf>.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*(2), 276–302.
- Elgar, F. J., Pickett, K. E., Pickett, W., Craig, W., Molcho, M., Hurrelmann, K., & Lenzi, M. (2013). School bullying, homicide and income inequality: A cross-national pooled time series analysis. *International Journal of Public Health, 58*(2), 237–245.
- Elvas, S., & Moniz, M. J. V. (2010). Sentimento de comunidade, qualidade e satisfação de vida. *Análise Psicológica, 28*(3), 451–464.
- Espelage, D. L. (2014). Ecological theory: Preventing youth bullying, aggression, and victimization. *Theory Into Practice, 53*(4), 257–264.
- Espelage, D. L., Bosworth, K., & Simon, T. R. (2000). Examining the social context of bullying behaviors in early adolescence. *Journal of Counseling and Development, 78*(3), 326–333.
- Espelage, D. L., & Holt, M. K. (2001). Bullying and victimization during early adolescence: Peer influences and psychosocial correlates. *Journal of Emotional Abuse, 2*, 123–142.
- Espelage, D. L., Holt, M. K., & Henkel, R. R. (2003). Examination of peer-group contextual effects on aggression during early adolescence. *Child Development, 74*(1), 205–220.
- Farrell, S. J., Aubry, T., & Coulombe, D. (2004). Neighborhoods and neighbors: Do they contribute to personal well-being? *Journal of Community Psychology, 32*, 9–25.
- Fattore, T., Mason, J., & Watson, E. (2012). Locating the child centrally as subject in research: Towards a child interpretation of well-being. *Child Indicators Research, 5*(3), 423–435.
- Felix, E. D., Furlong, M. J., & Austin, G. (2009). A cluster analytic investigation of school violence victimization among diverse students. *Journal of Interpersonal Violence, 24*(10), 1673–1695.
- Flannery, D. J., Wester, K. L., & Singer, M. I. (2004). Impact of exposure to violence in school on child and adolescent mental health and behavior. *Journal of Community Psychology, 32*(5), 559–573.
- Flaspohler, P. D., Elfstrom, J. L., Vanderzee, K. L., Sink, H. E., & Birchmeier, Z. (2009). Stand by me: The effects of peer and teacher support in mitigating the impact of bullying on quality life. *Psychology in the Schools, 46*(1), 636–649.
- Funk, B. A., Huebner, E. S., & Valois, R. F. (2006). Reliability and validity of a brief life satisfaction scale with a high school sample. *Journal of Happiness Studies, 7*(1), 41–54. <https://doi.org/10.1007/s10902-005-0869-7>.
- García, F. J., Marande, G., Schneider, B. H., & Blanchard, C. (2014). Effects of school on the well-being of children and adolescents. In A. Ben-Arieh, F. Casas, I. Frønes, & J. E. Korbin (Eds.), *Handbook of Child Well-Being SE – 43* (pp. 1251–1305). Netherlands: Springer.
- Gilman, R., & Huebner, E. S. (2003). A review of life satisfaction research with children and adolescents. *School Psychology Quarterly, 18*(2), 192–205.
- Gilman, R., & Huebner, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence, 35*(3), 293–301.
- Goldweber, A., Waasdorp, T. E., & Bradshaw, C. P. (2013). Examining the link between forms of bullying behaviors and perceptions of safety and belonging among secondary school students. *Journal of School Psychology, 51*(4), 469–485.
- Gracia, E., & Herrero, J. (2004). Personal and situational determinants of relationship-specific perceptions of social support. *Social Behavior and Personality, 32*, 459–476.
- van Ham, M., Manley, D., Bailey, N., Simpson, L., & Maclennan, D. (2012). Neighbourhood effects research: New perspectives. In *Neighbourhood effects research: New perspectives* (pp. 1–21). Dordrecht: Springer Netherlands.
- Harpham, T., Grant, E., & Rodríguez, C. (2004). Mental health and social capital in Cali, Colombia. *Social Science & Medicine, 58*, 2267–2277.
- Herrero, J., & Gracia, E. (2007). Measuring perceived community support: Factorial structure, longitudinal invariance, and predictive validity of the PCSQ (perceived community support questionnaire). *Journal of Community Psychology, 35*(2), 197–217.
- Herrero, J., Meneses, J., Valiente, L., & Rodríguez, F. (2004). Participación Social en Contextos Virtuales. *Psicothema, 3*, 456–460.

- Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research : Official Journal of the International Academy for Suicide Research*, 14(3), 206–221.
- Hommel, R., & Burns, A. (1987). Is this a good place to grow up in? Neighbourhood quality and children's evaluations. *Landscape and Urban Planning*, 14(1), 101–116.
- Huebner, E. S. (2004). Research on assessment of life satisfaction of children and adolescents. *Social Indicators Research*, 66(1), 3–33.
- Huebner, E. S., Hills, K. J., Jiang, X., Long, R. F., Kelly, R., & Lyons, M. D. (2014). Schooling and children's subjective well-being. In A. Ben-Arieh, F. Casas, I. Frønes, & J. E. Korbin (Eds.), *Handbook of child well-being SE – 26* (pp. 797–819). Netherlands: Springer.
- Jiménez, T. I., Musitu, G., Ramos, M. J., & Murgui, S. (2009). Community involvement and victimization at school: An analysis through family, personal and social adjustment. *Journal of Community Psychology*, 37(8), 959–974. <https://doi.org/10.1002/jcop.20342>.
- Juvonen, J., & Graham, S. (2014). Bullying in schools: The power of bullies and the plight of victims. *Annual Review of Psychology*, 65, 159–185. <https://doi.org/10.1146/annurev-psych-010213-115030>.
- Kerr, J., Valois, R., Huebner, E. S., & Drane, J. W. (2011). Life satisfaction and peer victimization among USA public high school adolescents. *Child Indicators Research*, 4, 127–144.
- 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.
- Kowalski, R. M., Limber, S. E., & Agatston, P. W. (2012). *Cyberbullying: Bullying in the digital age, 2nd ed.* Malden: Wiley-Blackwell.
- Lau, A. L. D., Cummins, R. A., & McPherson, W. (2005). An investigation into the crosscultural equivalence of the personal wellbeing index. *Social Indicators Research*, 72(3), 403–432.
- Liem, J. H., Lustig, K., & Dillon, C. (2010). Depressive symptoms and life satisfaction among emerging adults: A comparison of high school dropouts and graduates. *Journal of Adult Development*, 17, 33–43.
- Ma, C., & Huebner, S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools*, 45(2), 177–190.
- Moore, P. M., Huebner, E. S., & Hills, K. J. (2011). Electronic bullying and victimization and life satisfaction in middle school students. *Social Indicators Research*, 107(3), 429–447.
- Navarro, R., Ruiz-Oliva, R., Larrañaga, E., & Yubero, S. (2015). The impact of cyberbullying and social bullying on optimism, global and school-related happiness and life satisfaction among 10-12-year-old schoolchildren. *Applied Research in Quality of Life*, 10(1), 15–36.
- Olweus, D., & Breivik, K. (2014). Pligh of victims of school bullying: The opposite of Well-Being. In A. Ben-Arieh, F. Casas, I. Frønes, & J. E. Korbin (Eds.), *Handbook of child well-being SE – 90* (pp. 2593–2616). Netherlands: Springer.
- Ortega, R., Elipe, P., Mora-Merchán, J. A., Genta, M. L., Brighi, A., Guarini, A., Smith, P. K., Thompson, F., & Tippett, N. (2012). The emotional impact of bullying and cyberbullying on victims: A European cross-National Study. *Aggressive Behavior*, 38(5), 342–356.
- Park, N., & Huebner, E. S. (2005). A cross-cultural study of the levels and correlates of life satisfaction among adolescents. *Journal of Cross-Cultural Psychology*, 36(4), 444–456.
- Patchin, J. W., & Hinduja, S. (2012). Cyberbullying: An update and synthesis of the research. In J. Patchin & S. Hinduja (Eds.), *Cyberbullying prevention and response: Expert perspectives* (pp. 13–35). New York: Routledge.
- Pavot, W., & Diener, E. (2004). The subjective evaluation of well-being in adulthood: Findings and implications. *Ageing International*, 29(2), 113–135.
- Pretty, G. M., Conroy, C., Dugay, J., Fowler, K., & Williams, D. (1996). Sense of community and its relevance to adolescents of all ages. *Journal of Community and Applied Social Psychology*, 24(4), 365–379.
- Proctor, C. L., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies*, 10(5), 583–630.
- Rodrigues, A., Schütz, F., Sarriera, J., Bedin, L., Strelhow, M., & Calza, T. (Septiembre 2014). Senso de Comunidade como predictor do bem-estar subjetivo infantil. 5ª Conferencia Internacional de Psicologia Comunitaria. Fortaleza - Brasil.
- Rogers, M. (2012). “They are there for you”: The importance of Neighbourhood friends to Children's well-being. *Child Indicators Research*, 5(3), 483–502.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141–166.
- Sarriera, J. C., & Bedin, L. (2015). Towards a socio-community model: A well-being approach. *Universitas Psychologica*, 14(4), 15–25.

- Seligson, J. L., Huebner, E. S., & Valois, R. F. (2003). Preliminary validation of the brief multidimensional students' life satisfaction scale (BMSLSS). *Social Indicators Research*, *61*(2), 121–145.
- Seligson, J. L., Huebner, E. S., & Valois, R. F. (2005). An investigation of a brief life satisfaction scale with elementary school children. *Social Indicators Research*, *73*(3), 355–374. <https://doi.org/10.1007/s11205-004-2011-3>.
- Sirgy, J. M., & Cornwell, T. (2002). How neighborhood feature affect quality of life. *Social Indicators Research*, *59*(1), 79–114.
- Siyez, D. M., & Kaya, A. (2007). Validity and reliability of the brief multidimensional students' life satisfaction scale with Turkish children. *Journal of Psychoeducational Assessment*, *26*(2), 139–147. <https://doi.org/10.1177/0734282907307802>.
- Smith, P. K., & Brain, P. (2000). Bullying in schools: Lessons from two decades of research. *Aggressive Behavior*, *26*(1), 1–9.
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *49*(4), 376–385.
- Spears, B., Slee, P., Owens, L., & Johnson, B. (2009). Behind the scenes and screens. *Zeitschrift Für Psychologie/Journal of Psychology*, *217*(4), 189–196. <https://doi.org/10.1027/0044-3409.217.4.189>.
- Swearer, S. M., & Hymel, S. (2015). Understanding the psychology of bullying: Moving toward a social-ecological diathesis–stress model. *American Psychologist*, *70*(4), 344–353.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). New York: Pearson.
- Tian, L., Zhang, J., & Huebner, E. S. (2015). Preliminary validation of the brief multidimensional students' life satisfaction scale (BMSLSS) among Chinese elementary school students. *Child Indicators Research*, *8*, 907–923. <https://doi.org/10.1007/s12187-014-9295-x>.
- 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.
- Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research*, *3*(2), 63–73. <https://doi.org/10.1108/17596591111132873>.
- Varela, J., Zimmerman, M., Ryan, A., Stoddard, S., Heinze, J., & 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>.
- Webb, D. (2009). Subjective wellbeing on the Tibetan plateau: An exploratory investigation. *Journal of Happiness Studies*, *10*, 753–768.
- Wentzel, K. R., Barry, C. M., & Caldwell, K. A. (2004). Friendships in middle school: Influences on motivation and school adjustment. *Journal of Educational Psychology*, *96*(2), 195–203.
- Ybarra, M. L., Espelage, D. L., & Mitchell, K. J. (2007). The co-occurrence of internet harassment and unwanted sexual solicitation victimization and perpetration: Associations with psychosocial indicators. *Journal of Adolescent Health*, *41*(6), S31–S41.
- Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry*, *45*(7), 1308–1316.
- Yiengprugsawan, V., Seubsman, S., Khamman, S., & Lim, L. L. (2010). Personal wellbeing index in a National Cohort of 87,134 Thai adults. *Social Indicators Research*, *98*, 201–215.