



"A Sense of Community at School and the Subjective Well-being of Chilean Students"

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“A Sense of Community at School and the Subjective Well-being of Chilean Students”

Summary

Objectives: To understand the degree to which a Sense of Community at School predicts the Life Satisfaction of Chilean students in fifth and seventh grades, distinguishing between classroom and school components.

Method: A random stratified sample of 1,917 students. Multiple linear regression analysis, using the dimensions of the *Multidimensional scale of sense of community (SOC-S) and Classroom sense of community in the school scale (SOC-C)* as predictors of Life Satisfaction measured by the *Students' Life Satisfaction Scale (SLSS)*.

Results: The sense of belonging and emotional connection of SOC-C and membership of the SOC-S predict life satisfaction for fifth grade students. The SOC-S emotional connection scale was added for seventh grade.

Conclusions: The relevance of socio-community dimensions at the school system level for studying childhood life satisfaction was determined. The prevalence of a Sense of Community is unique and differentiated by age group.

Keywords: Community, Personal Satisfaction, Schools, Child, Student, Chile

1. INTRODUCTION

1.1 School Sense of Community

A line of research has recently been undertaken that looks at how a sense of community is experienced in contexts other than the neighborhood or residential milieu. Associations regarding the sense of belonging in the school community felt by its members have been studied in order to understand how schools and social relationships that develop inside of them play a role in the development of children and adolescents insofar as the school context not only provides cognitive and instrumental learning, but also socio-cognitive education via relationships of children and adolescents with their teachers and classmates (Vieno, et al., 2007).

Although the concept of community is frequently associated with a geographic area such as a neighborhood or residential area, it also notably focuses on the idea of relationships between individuals. Alongside this, a growing body of research is being developed regarding the multiple positive relationships that are cultivated in the daily lives of children and adolescents. This includes relationships that are established when children have solid connections with others in the places where they live, learn and play given the fact that once children reach school age, they spend more time at school than anywhere else outside of the home (Grover et al., 2015). This means that both the school and classroom are viewed as social spaces that play a key role in the lives of these age groups (Vieno et al., 2007; Casas et al., 2012).

Thus, understanding the nature of the school community and the dynamics created by its members as well as the importance of such relationships has become increasingly relevant, especially the needs that are satisfied by the interactions among participating children and youths (Grover et al., 2015). It is within this context that the idea of a Sense of Community at School first arose. It is defined as a feeling of belonging to the school as a community, having an emotional

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3 connection and attachment to other students and the sense that personal needs are satisfied
4 through such membership (Prati et al., 2017a; 2018). This construct has been measured using the
5 Multidimensional Scale of Sense of Community in the School (SOC-S) proposed by Prati, Cicognani
6 and Albanesi (2017b). It considers three dimensions: (1) opportunities, (2) emotional connection,
7 and (3) membership. The opportunities dimension looks at the fulfillment of needs that reinforces
8 a sense of community, including essentially four psychological needs in adolescence: (a) to be
9 listened to, (b) to have positive experiences, (c) to explore between different options, and (d) to
10 participate and have an active role. The emotional connection dimension measures the attributes
11 of social contact, the quality of interaction and spiritual bonding that takes place in the school
12 community. Lastly, the membership dimension includes attributes of emotional safety, sense of
13 identification and sharing positive representations of the school (Prati et al., 2017b).

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17 The Sense of Community in the Classroom was created in like manner. According to Rovai (2002)
18 and Owens (1987), this refers to the feelings of a learning community's members in terms of the
19 degree to which they share group norms and values as well as the extent to which their
20 educational goals and expectations are met through classroom group membership. In order to
21 measure the classroom sense of community, Petrillo and collaborators (2016) created the
22 Classroom Sense of Community Scale (SOC-C) based on the analysis of qualitative material on the
23 experience of community in the classroom (Cicognani et al., 2012; Petrillo et al., 2012). This scale
24 when first created included 36 items organized firstly around five components that contained the
25 original theoretical dimensions of McMillan and Chavis (1986). Specific attributes were added to
26 this about the experience of community during adolescence, such as feelings of loneliness and the
27 centrality of relationships with peers (Cicognani et al., 2006; Chiessi et al., 2010). Petrillo and
28 collaborators (2016) have corroborated the structure of factors connected to the Sense of
29 Community in the Classroom (SOC-C), as suggested in the model made by Cicognani and
30 collaborators (2006), identifying five factors, (1) sense of belonging and emotional connection with
31 peers, (2) satisfaction of needs and opportunities for involvement, (3) support and emotional
32 connection with peers and teachers, (4) support of peers, and (5) opportunities for influence.

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37 From these lines of research we have understood that feelings of membership in a school are
38 important for the well-being of children and adolescents (Vieno, et al., 2007). It is also surmised
39 that the various school environments create a sense of community for the majority of students.
40 However, there is also a significant proportion of students that do not feel that they belong, that
41 they are safe, that they matter to others, and that their needs will be met at school. Therefore,
42 understanding the degrees and ways in which a sense of community can be fostered as a resource
43 for improving the academic, behavioral, social and emotional well-being of students grows
44 increasingly relevant (Grover et al., 2015; Prati et al., 2017a).

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47 Similarly, studies done by Capone and collaborators (2018) report that the well-being of
48 adolescents is related to a number of classroom characteristics. This is consistent with studies
49 done in a range of contexts that show that sense of community in the classroom is an adequate
50 indicator of the quality of relationships between students and their classroom peer group in terms
51 of belonging, perceived influence, emotional connection and fulfillment of needs. This underscores
52 the idea that the psychological dimension of being part of a classroom community supports a
53 meaningful relationship with perceived fairness, psychological well-being, collective feelings of
54 efficacy and a positive school climate (Cicognani et al., 2008).

1.2.- Subjective Well-being and Life Satisfaction in Childhood and Adolescence

Interest in the study of the subjective well-being of children and adolescents has been growing in recent decades. Generally, reported evidence highlights the connection between subjective well-being and physical health, mental health, quality interpersonal relationships, educational and professional success (Park, 2004), and also integral human development. This goes for both individuals and the groups they belong to, incorporating indicators that highlight positive resources and the capabilities of groups and individuals (Alfaro et al., 2017). The literature also shows that this category negatively correlates to risky behavior such as substance abuse (alcohol, tobacco, illegal drugs), violence, aggression and sexual victimization (Proctor et al., 2009).

Despite notable and important progress around understanding the subjective well-being of this age group, the literature shows that the availability of data concerning the well-being of children and adolescents comes nowhere near the amount of study results about adults (Casas et al., 2014; Tomyn & Cummins, 2011). The vast majority of research into childhood well-being comes primarily from the developed world, in particular Europe and the USA, whereas research on this topic in developing nations is scant (Casas et al., 2014; Tiliouine, 2015).

Likewise, available information indicate that studies on well-being during childhood and adolescence have not delved into the dimensions related to the meso-systemic level, such as the community of belonging, leaving aside contextual dimensions that jointly study personal, relational and collective needs (Prilleltensky, 2004). This necessitates progress toward developing an ecological and multilevel understanding of wellness (Ben-Arieh, 2008) that integrates dimensions that go beyond personal or interpersonal variables that leave an individual isolated in the surroundings (Díaz et al. 2011). Progress must be made toward a socio-community well-being model that includes variables connected with a sense of community membership and resulting effects on life satisfaction (Sarriera, 2015; Castellá Sarriera & Bedin, 2016). This echoes the well-being study approach of Prilleltensky (2004) that highlights the notion that fundamental psychological needs and the experience of personal well-being are viewed as the result of supportive relationships, respect for diversity, a sense of equity and meaningful participation in family, work, civic and community life. Thus, achieving higher levels of personal well-being requires relational and collective spheres of social integration (Prilleltensky, 2004).

Taking the sum total of the above-described information as its framework, this research intends to understand the degree to which a Sense of Community at School predicts the Life Satisfaction of Chilean students aged 10 to 14 years, distinguishing between the components of classroom and the school.

2. METHOD

2.1. Design

This research was designed as a descriptive study using a survey with a probabilistic sample (Montero & León, 2007) that is applied in a standardized way in the various countries that have participated in the international study called *Children's Worlds*, developed by the *International Society for Child Indicators* (ISCI).

2.2 Participants

A random stratified sample in which a total of 1,917 students were selected (52.7% male and 47.3% female) in the fifth and seventh grades of primary school at different institutions in the cities in Concepción and Santiago in Chile. The sampling unit corresponds to a specific grade in a primary school in keeping with the various school types recognized by the Chilean education system. The grades were selected using an age criterion determined by the ISCWeB international study. The average age of the total sample is 11.5 years (SD = 1.19). The sample composition by sex and age group is shown in Table 1.

Table 1. Descriptors of the sample for gender and age by grade

		<i>Total</i>		<i>5th ES</i>		<i>7th ES</i>	
		<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
<i>Gender</i>	Male	1031	52.6	483	51.1	548	54.1
	Female	928	47.4	463	48.9	465	45.9
	Total	1959	100	946	100	1013	100
<i>Age (years)</i>	10	545	27.8	545	59.6	-	-
	11	346	17.7	346	36.6	-	-
	12	634	32.4	55	5.8	579	57.2
	13	350	17.9	-	-	350	34.6
	14	84	4.3	-	-	84	8.3
Mean		11.5		10.48		12.51	
SD		1.19		0.61		0.65	

Note. ES = Elementary School

2.3 Instruments

Students' Life Satisfaction Scale (SLSS, Huebner, 1991)

The SLSS is a self-report measure that assesses overall life satisfaction in children and adolescents between 8 and 18 years of age using seven items (Huebner, 1991). The seven items on the original scale are: 1) My life is going well, 2) My life is just right, 3) I would like to change many things in my life, 4) I wish I had a different kind of life, 5) I have a good life, 6) I have what I want in life, and 7) My life is better than most kids. This study utilized a version adapted from the International Survey of Children's Well-being project (ISCWeB 2017-2018 Project) called SLSS-4 comprised of items 1, 2, 5 and 6 above. The response scale ascends five levels (from 0 = "Strongly disagree" to 5 = "Strongly agree"). Cronbach's alpha of the scale for the sample was .88.

Classroom sense of community scale, (SOC-C, Petrillo, Capone & Donizzetti, 2016)

Likert scale with five response options (from 1 = "Strongly disagree" to 5 = "Strongly agree"). A higher score is interpreted as a higher classroom sense of community. The factorial analysis of the

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3 scale proposed by the authors gives five dimensions, which are described as: 1) Sense of belonging
4 and emotional connection with peers (items: 2, 9, 10, 11, 15, 16, 17, 18, 25, and 26), and includes
5 statements like; "I feel like I belong in this class" or "I like being with my classmates", 2)
6 Satisfaction of needs and opportunities for involvement, (items: 1, 4, 5 and 6), and includes
7 statements like "The people in this class work together to do things better", 3) Support and
8 emotional connection with peers and teachers (items; 3, 7, 8, 13 and 22), includes statements like
9 "I spend a lot of time with my classmates", or "If I need help I can speak with someone in this
10 class", 4) Support of peers (items: 12, 14, 19 and 20), includes statements like "There are activities
11 for young people in this class", 5) Opportunities for influence (items: 21, 23 and 24), includes
12 statements like "If given the opportunity I think we students could organize something good for
13 this class. Cronbach's alpha of the total scale for this sample was .97. The Cronbach alpha values
14 and correlations among dimensions and the other scales are presented in Table 3.
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17 *Multidimensional Scale of Sense of Community in the School (SOC-S, Prati et al., 2017b)*

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20 Likert scale with five response options (from 1 = "Strongly disagree" to 5 = "Strongly agree"). A
21 higher score is interpreted as a higher school sense of community. The factorial analysis of the
22 scale proposed by the authors sets out three dimensions, which are described as: 1) Opportunities
23 for integration and fulfillment of needs, comprised of items: 7, 8, 9 and 10, and includes items
24 such as "My school provides adequate support and counseling services for students", 2) Emotional
25 connection comprised of items: 4, 5 and 6, and includes items such as "At this school I feel safe
26 sharing my experiences and interests with other students", 3) Membership, this dimension is
27 comprised of items: 1, 2 and 3, and includes statements like "I think this is a good school".
28 Sequential numbers and an abbreviated heading for the name identify the factors in the tables.
29 Cronbach's alpha of the total scale for the sample was .93. The reliability values for each factor as
30 well as the correlations with the other dimensions are shown in Table 3.
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38 **2.4 Procedure**

39 The data are part of the third collection for the international study *Children's Worlds: International*
40 *Survey of Children's Well-Being* (ISCWeB), organized by the *International Society for Child*
41 *Indicators* (ISCI). The studied sample includes fifth and seventh grade primary school students. The
42 surveys were given at school during class time after having obtained administrative approval from
43 the school (active consent of the school), agreement from the students, and the passive informed
44 consent of the parents.
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46 **2.5 Data analysis**

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49 Due to the fact than an average of 6% of the data were lost, a multiple imputation of the data was
50 conducted using a regression method. In order to be certain of the comparability of
51 measurements, a multi-group factorial invariance analysis was done by grade and sex. Successively
52 nested models were estimated and compared against each other.
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55 No restrictions were established (base model or configural invariance) for Model 1. Restrictions on
56 the equivalence of the regression coefficients (metric invariance) were included for Model 2. The
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invariance of the covariance was established for Model 3. Differences in the values of χ^2 ($\Delta \chi^2$) with $p > .001$, and in the CFI (ΔCFI) less than .01 were used as invariance values. To evaluate the AFC (correspondence factorial analysis) the adjustment indices of χ^2 (Chi squared), $SRMR$ (standardized root mean square residual), $AGFI$ (adjusted goodness of fit index), CFI (comparative fit index) and $RMSEA$ (root mean square error of approximation) were used. Values of χ^2 with $p > .001$; CFI and $AGFI \geq .95$; $SRMR$ and $RMEA \leq .05$ were considered acceptable (Blunch, 2013; Byrne, 2010).

Once the configural and metric invariances were established, the Pearson correlation coefficient was estimated in order to estimate the relationship among the variables as well as multiple linear regression models. The dimensions of both classroom and school sense of community were used as predictors and students' life satisfaction was taken as a criterion variable. The analyses were done using the SPSS 20 (Armonk, NY: IBM Corp.) and AMOS 20 software. The hypothesis test was applied using a 95% confidence interval.

3. RESULTS

Analysis of the invariance

Prior to making the respective comparisons for the SOC-C, SOC-S and SLSS scales, an analysis of the factorial invariance comparing grades (5th and 7th) and sex (males and females) using a multigroup analysis was conducted.

A reasonably adequate fit, although not an excellent one, is shown for the data model of the SOC-C scale by grade: $\chi^2 = 2355.557$, $p < .0001$, $\chi^2/df = 4.512$, $SRMR = .047$, $GFI = .907$, $AGFI = .884$, $CFI = .941$, $RMSEA = .042$ (90% CI = .041 - .044). Likewise, invariance by sex was analyzed: $\chi^2 = 2225.112$, $p < .0001$, $\chi^2/df = 4.263$, $SRMR = .0424$, $GFI = .912$, $AGFI = .890$, $CFI = .946$, $RMSEA = .041$ (90% CI = .0406 - .043).

When repeating this analysis with the SOC-S scale by grade we get: $\chi^2 = 264.537$, $p < .0001$, $\chi^2/df = 4.409$, $SRMR = .0473$, $GFI = .974$, $AGFI = .952$, $CFI = .984$, $RMSEA = .042$ (90% CI = .037 - .047), while for sex we get: $\chi^2 = 255.793$, $p < .0001$, $\chi^2/df = 4.263$, $SRMR = .0335$, $GFI = .97$, $AGFI = .95$, $CFI = .99$, $RMSEA = .041$ (90% CI = .036 - .047).

The same procedure was followed for the SLSS scale, obtaining: $\chi^2 = 85.064$, $p < .001$, $\chi^2/df = 7.733$, $SRMR = .047$, $GFI = .979$, $AGFI = .962$, $CFI = .98$, $RMSEA = .059$ (90% CI = .047 - .071). Similarly, invariance by sex was analyzed: $\chi^2 = 9.059$, $p < .011$, $\chi^2/df = 4.530$, $SRMR = .0424$, $GFI = .99$, $AGFI = .98$, $CFI = .99$, $RMSEA = .043$ (90% CI = .018 - .073).

After having established the base models by grade and gender for each scale, the nested models were established using the base models. Significant changes in the chi-squared value for grade and sex are notable, which is reasonable given the elevated sensitivity of this statistic to the sample size (Lévy & Iglesias, 2006); however, the differences in CFI are not relevant ($\Delta CFI < .01$ by grade and $\Delta CFI < .001$ by gender), as they are less than .01, meaning configural and metric invariances are surmised (Cheung & Rensvold, 2002). The goodness of fit indicators for the scales are shown in Table 2.

Table 2. Goodness of fit of the multigroup confirmatory factor model by grade and sex in successive nested models for the sense of community and life satisfaction scales

Invari- ance for	Invari- ance Model	χ^2	<i>gl</i>	<i>p</i>	$\Delta\chi^2$	Δgl	<i>p</i>	<i>CFI</i>	ΔCFI
SOC-C									
Course/Gra de	Model 1	2355.56	522	.000				.94	
	Model 2	2402.81	542	.000	47.25	20	.001	.94	.000
	Model 3	2464.52	557	.000	61.71	15	.000	.94	.002
Sex	Model 1	2225.11	522	.000				.95	
	Model 2	2247.01	542	.000	21.90	20		.95	.000
	Model 3	2306.96	557	.000	59.95	15		.95	.001
SOC-S									
Course/Gra de	Model 1	264.54	60	.000				.98	
	Model 2	292.87	67	.000	28.33	7	.000	.98	.001
	Model 3	395.51	73	.000	102.64	6	.000	.98	.008
Sex	Model 1	255.79	60	.000				.99	
	Model 2	257.96	67	.000	2.17	7		.99	.000
	Model 3	297.50	73	.000	39.54	6		.98	.002
SLSS									
Course/Gra de	Model 1	85.06	11	.000				.98	
	Model 2	85.06	11	.000	0	0		.98	.000
	Model 3	85.06	11	.000	85	11		1	.017
Sex	Model 1	9.06	2	.011				.99	
	Model 2	12.96	5	.240	3.9	3	.273	.99	.000
	Model 3	41.41	6	.000	28.45	1	.000	.99	.007

SOC-C= Classroom Sense of Community, SOC-S= School Sense of Community, SLSS= Students' Life Satisfaction Scale

Model 1 = base model / configural invariance, Model 2 = metric invariance, Model 3 = invariance of the covariance structure

Once the variance between the measurements was estimated, the same scores were then used to estimate the degree of association between the variables using the Pearson correlation coefficient for the total scores of both scales as well as the scale factors for both the classroom and the school senses of community, respectively. In general, a direct correlation coefficient is presented in all variables with moderate and high levels of correlation in the expected direction. The specific correlation coefficients for each grade is shown in Table 3, which additionally include the Cronbach's alpha internal consistency reliability coefficient of the total scales and their respective dimensions.

Table 3. Correlations of satisfaction with life and sense of community in the classroom and school between total scores and dimensions for 5th and 7th grade of elementary school

	1	2	3	4	5	6	7	8	9	10	11
1. Life satisfaction (SLSS)	.88	.49	.49	.41	.44	.43	.42	.44	.42	.37	.39
2. SOC-Classroom	.42	.97	.96	.86	.89	.89	.84	.80	.73	.68	.75
3. Sense of belonging (F1)	.42	.96	.91	.78	.83	.82	.77	.79	.73	.67	.72
4. Satisfaction of needs (F2)	.34	.86	.77	.87	.70	.73	.66	.67	.59	.57	.63
5. Emotional connections (F3)	.37	.90	.83	.71	.85	.71	.68	.69	.60	.62	.62
6. Peer support (F4)	.36	.90	.84	.74	.74	.85	.73	.73	.65	.58	.72
7. Opportunities to influence (F5)	.36	.83	.75	.67	.72	.72	.82	.68	.63	.54	.65
8. SOC-School	.38	.83	.80	.67	.74	.74	.74	.93	.90	.86	.93
9 Opportunities to integrate (F1)	.33	.71	.69	.57	.63	.61	.68	.88	.90	.66	.78
10. Emotional connections (F2)	.30	.67	.64	.53	.64	.57	.59	.86	.65	.82	.67
11. Belonging (F3)	.37	.80	.77	.67	.69	.75	.69	.90	.70	.65	.88
M	32.7	106.2	36.7	15.8	20.5	16.0	12.8	42.1	12.9	12.4	16.6
SD	8.92	20.65	7.64	3.64	4.32	3.61	2.56	8.05	2.73	2.85	3.50

SLSS = Student life satisfaction, SOC-Classroom = Classroom sense of community scale (5 factors), SOC-School = School sense of community scale (3 factors)

Cronbach's alpha on the diagonal

Over the diagonal line 7th grade, under the diagonal 5th grade of Elementary School.

All correlations are statistically significant at $p < .05$

The *Student's t* for independent samples was used to address the mean differences in the scores between the groups of fifth- and seventh-grade children finding statistically significant mean differences for both the dimensions and total scales, always in favor of the younger age group. This group presents statistically significant average scores that are higher than the older group. In every case there is a low effect size. The results are presented in Table 4.

Table 4. Comparison of the total scores on satisfaction with life and sense of community in the classroom and in the school by grade

Scales and factors	5 th ES (n=946)		7 th ES (n=1013)		<i>t</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Life satisfaction (SLSS)	33.6	8.33	31.6	9.30	4.93*	.23
SOC-Classroom	109.7	19.46	101.0	20.23	9.70*	.44
Sense of belonging (F1)	38.1	7.07	35.2	7.54	8.82*	.40
Satisfaction of needs (F2)	16.4	3.60	15.0	3.47	8.91*	.40
Emotional connections (F3)	21.2	4.14	19.7	4.36	7.66*	.35
Peer support (F4)	16.7	3.52	15.3	3.53	8.99*	.40
Opportunities to influence (F5)	13.3	2.36	12.2	2.64	9.30*	.44
SOC-School	43.3	7.63	40.4	8.22	8.05*	.37
Opportunities to integrate (F1)	13.4	2.73	12.6	2.67	6.44*	.30
Emotional connections (F2)	12.8	2.71	12.0	2.92	5.61*	.28
Belonging (F3)	17.5	3.19	15.9	3.60	9.55*	.47

* $p < .001$

To determine the degree to which classroom and school sense of community scores predict students' life satisfaction for fifth- and seventh-graders, a multiple linear regression analysis was used, employing every dimension of the scales as predictors of students' life satisfaction after ascertaining that the regression model assumptions were satisfactorily fulfilled. The outcome for both fifth and seventh grades is a statistically significant model ($F=103,4$, $p<.001$, $F=109,8$, $p<.001$, respectively). Significant predictors for the fifth-graders include a sense of belonging in both the classroom and the school with emotional connection being a third predictor for the seventh-graders. The coefficients of both estimated models are shown in Table 5.

Table 5. Multiple linear regressions for life satisfaction (SLSS) by grade (5th-7th)

		Non-standardized Coefficients		Standardized Coefficients		p	CI for B (95%)	sr ²	VIF	DW
		B	EE	β	t					
5 th grade	(Constant)	13.42	1.436		9.34	.001	(10.60-16.24)			2.03
	Sense of belonging *	0.36	.054	.306	6.69	.001	(0.255-0.47)	.039	2.41	
	Belonging **	0.37	.119	.141	3.09	.001	(0.14-0.60)	.008	2.41	
$R=.42$, $R^2=.18$, $R^2_{adj}=.18$										
7 th grade	(Constant)	8.24	1.330		6.19	.001	(5.63-10.85)			1.80
	Sense of belonging *	0.31	.070	.251	4.42	.001	(0.17-0.45)	.015	2.75	
	Emotional connections **	0.51	.139	.148	3.68	.001	(0.24-0.78)	.010	2.75	
	Belonging **	0.31	.104	.144	2.97	.003	(0.51-0.44)	.007		
$R=.50$, $R^2=.25$, $R^2_{adj}=.24$										

*SOC-Classroom, **SOC-School

Of all the utilized variables, only two were statistically significant as predictors of overall students' life satisfaction for fifth-graders, which may explain the 18% change in the variance of life satisfaction measured with the SLSS. The variables that are maintained in the model as predictors are Factor 1 of SOC-C that has been named *Sense of belonging and emotional connection with peers* and Factor 3 of the SOC-S scale named *Membership*. In the case of seventh-graders, in addition to the two factors listed above, Factor 2 of the school sense of community scale called *Emotional connection* is included.

4. DISCUSSION AND FINAL CONSIDERATIONS

The results show the importance of the classroom and school sense of community as predictors in the overall life satisfaction of students. The *Sense of belonging and emotional connection with peers* dimension on the Classroom Sense of Community scale (SOC-C) is the best individual predictor of life satisfaction, as well as the *Membership* dimension on the Multidimensional Scale of Sense of Community in the School (SOC-S). These two dimensions together explain the 18% of the variance of life satisfaction measured with the SLSS for fifth-graders. This value increases when trying to predict the change in life satisfaction of seventh-graders, since *emotional connection* on the Multidimensional Scale of Sense of Community in the School (SOC-S) is added to the first two dimensions. In this case, these three dimensions taken together explain the 24% change in the variance of students' life satisfaction. The other identified scale factors are not determinants when it comes to explaining the change in students' life satisfaction.

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3 The consistency of the predictive capacity of a *sense of belonging and emotional connection* with
4 peers and the consequent inclusion of the various models tested for life satisfaction show the
5 importance of said dimension for students. Upon examining that which is included in closer detail,
6 we see that for a *sense of belonging and emotional connection with peers* a range of aspects are
7 considered such as feeling safe with the class, assessing the class in a positive light, the classroom
8 environment itself, and feeling that a number of attributes are shared with other classmates,
9 meaning that one feels they are a part of a given class or grade. On the same scale, the *support*
10 *and emotional connection with peers and teachers* dimension includes aspects such as spending
11 time with classmates, feeling that they are friends, feeling that they can ask others for help and
12 that they are available when needed.
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16 Described in this way, it seems essential that a *sense of belonging and emotional connection*
17 with peers as well as *support and emotional connection with peers and teachers* that provide an
18 emotional connection are elements that determine life satisfaction more than other dimensions
19 included on this scale, such as: *Support of peers, fulfillment of needs and opportunities for*
20 *influence* in the class are elements that seem more distanced from the sense of belonging and
21 emotional connection. When considering the age range of the sample (10 to 14 years), it seems
22 entirely understandable that the above aspects may be the most relevant for children as
23 determinants of satisfaction with their own life, providing relevant indicators that the functioning
24 of the Sense of Community variable in childhood is unique and works differently than in other age
25 groups.
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28 When the environment under study is the school rather than the classroom, it seems that a
29 relevant differentiator is *emotional connection*, in concert with the importance that the reach and
30 focus of peer relationships acquire over the shift toward adolescence (Shaffer, D. R. 1996; Shaffer,
31 D. R., & Kipp, K. 2013), just as would happen for seventh-graders who are further along in this
32 process compared to fifth-graders. In keeping with the foregoing, it is important to point out that
33 the results show that emotional connection fills a key function both for the grade level (classroom)
34 as well as the school level overall, demonstrating its effects on life satisfaction for all ages.
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37 The total set of these aspects predicts and ultimately best explains an increased satisfaction with
38 life in the school setting in general (varying by 18% to 24%). These values are similar to those
39 reported by a previous study, whose sample was comprised of adolescents in three Chilean cities
40 (Santiago, Concepción and Valparaíso). It was able to explain life satisfaction using a range of items
41 that depicted the kind of relationships they had with classmates and teachers. Enjoyment of the
42 school, satisfaction with grades, satisfaction with classmates, feeling safe at school, and being
43 treated well by teachers were the attributes that best predicted life satisfaction measured with
44 the Overall Life Satisfaction scale (Alfaro, et al., 2016). Furthermore, these results are in line with
45 what has been reported by a range of International studies that conclude that satisfaction at
46 school and relevant dimensions are directly connected to life satisfaction as well as high levels of
47 students' socio-emotional development (Baker, et al., 2003).
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51 This research helps us better understand those factors that conceptually make up the socio-
52 community dimension of subjective well-being at the school setting level, including the school
53 setting overall, and also the level of experiences of the grade or class in terms of membership. It
54 provides evidence on how the sense of community, especially the sense of membership in this
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3 community, plays a central role. The opportunities provided by the school so that students may
4 participate and build an emotional connection with peers is also fundamental. This further helps
5 provide explanations regarding the Chilean school setting that we did not have before.
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8 In view of the sample size and the fact that it is likely probabilistic, these findings appear to be a
9 good approximation of the importance of the socio-community dimension in the school setting for
10 urban populations. However, keep in mind that the sample is not representative of the national
11 level, meaning the results cannot be generalized to cover diverse settings beyond the urban
12 population. This is one limitation to keep in mind when interpreting these results.
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14 This research provides indications as to the suitability of the sense of community dimension for
15 the general education system level and how this determines the students' life satisfaction level.
16 This helps separate out aspects of these dynamics with respect to the classroom or grade level for
17 membership and the school level overall. Bearing in mind that the levels are complementary, it
18 seems that both are needed to better explain the impact of the school system on the life
19 satisfaction of children and adolescents. This reinforces findings connected to the association
20 between socio-community variables and well-being (Castellá Sarriera & Bedin, 2016), which
21 reinforces the contributions from community psychology in the study on well-being and life
22 satisfaction in childhood and adolescence (Guzmán, et al., 2019). The study shows the value of
23 continuing to research these relationships to specify more precisely the variables that have more
24 impact and power, not only in terms of creating said effect, but also in order to make progress in
25 our understanding so as to implement effective interventions that encourage life satisfaction at
26 school in view of the multiple benefits this produces for students.
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30 Similarly, the results from this research show that the two studied age groups share elements of
31 sense of community associated with life satisfaction (*sense of belonging and emotional connection*
32 *with peers* in the SOC-Classroom and *membership* at school on the SOC-School) and also other
33 specifics that are only significant for the older group (*emotional connection* on the SOC-S scale).
34 This provides evidence that, firstly, the particular dynamics of life satisfaction are standard to
35 childhood and adolescence, whereas additionally, they are distinctive and heterogeneous in terms
36 of the various development phases of each life stage (González-Carrasco et al., 2016; Shek & Liang,
37 2018).
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41 One limitation of this study stems from the fact that the instruments used to measure sense of
42 community (SOC-Classroom and SOC-School) do not have any psychometric studies that are
43 specific to Chile. To partially compensate for this deficiency, we did an exploratory factorial
44 analysis and internal consistency analysis for both scales to have some sort of proof regarding its
45 reliability. We found that, substantively, the items were grouped into the factors proposed by the
46 original validation studies for both instruments. However, as is shown by Cronbach's alpha
47 coefficient for the dimensions, they can be further refined to eliminate the redundancy in some of
48 the items (see Table 3). Although the dimensions in preliminary theoretical and empirical terms
49 seem to be the same, they do not effect the conclusions. Likewise, conducting a specific analysis
50 must be done that employs both scales after having been validated for the Chilean school
51 population.
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55 Lastly, recall that this study has limitations with respect to the control that is done for the socio-
56 economic diversity at schools in Chile, and we believe in Latin America in general as well. This is
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3 why these results have to be viewed with caution with respect to applying them to countries or
4 settings with other ways of organizing schools that are different from the common methods in the
5 Chilean school system. Chile has great socio-economic inequality that leads to broad diversity in
6 the student population economically and socio-culturally, as well as structurally and operationally
7 at every educational establishment (OCDE, 2010). This extends to social relationships and daily
8 coexistence. There is also diversity in terms of segregation inside of schools, within the classrooms
9 themselves and between groups of students inside the same classroom, which can produce
10 clustering of students in accordance with their learning capacities and performance (Treviño et al.,
11 2014). Thus, it is particularly important to view these results as an approximate identification of
12 the particularities with which the classroom and school sense of community materialize in the
13 current Chilean educational scenario. It is also key to add elements that continue to advance the
14 study in view of the differential characteristics of the school and their impacts on the well-being of
15 children and adolescents.
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For Peer Review

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