RESEARCH ARTICLE

Impact of the School Coexistence on Academic Performance according to Perception of Typically Developing and Special Educational Needs Students

Impacto de la convivencia escolar sobre el rendimiento académico, desde la percepción de estudiantes con desarrollo típico y necesidades educativas especiales

Gamal A. Cerda Diversidad de Concepción, Concepción, Chile. ORCID: https://orcid.org/0000-0002-3662-4179

Yasna S. Salazar² Universidad de Concepción, Concepción, Chile. ORCID: https://orcid.org/0000-0002-0974-8125

Cristian E. Guzmán³ Universidad Técnica del Norte, Ibarra, Ecuador. ORCID: https://orcid.org/0000-0002-3217-5169

Gabriela Narváez* Universidad Técnica del Norte, Ibarra, Ecuador. ORCID: https://orcid.org/0000-0001-5347-884X

¹PhD in Applied Psychology, Associate Professor, Psychologist and Professor of Philosophy. ²Proffesor of Mathematics, Master's degree in Applied Statistics. ³Master's degree in Intelligence Development

and Education, Professor. 4Master's degree in Special Education. Professor.

Received on 11-17-17 Reviewed on 11-30-17 Approved on 01-18-18 Online on 01-19-18

*Corresponding author	How to cite:		
Email: sgnarvaez@utn.edu.ec	Cerda, G.A., Salazar, Y.S., Guzmán, C.E., & Narváez, G. (2018). Impact of the School Coexistence on the Academic Performance according to the Perception of Typically Developing and Special Educational Needs Students. <i>Propósitos y Representaciones</i> 6(1), 247-300. doi: http://dx.doi.org/10.20511/pyr2018.v6n1.194		

© Universidad San Ignacio de Loyola, Vicerrectorado de Investigación, 2018 © BY-NC-ND This article is distributed under CC BY-NC-ND 4.0 International license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Summary

This descriptive correlational study aims to compare the perception about eight dimensions of school coexistence of typically developing high school students (n = 545) and students with special educational needs (n = 75) from Chile and their relationship with the general academic performance. Based on the analysis of hierarchical and non-hierarchical clusters, multiple regression and logistic regression, it was found that students with special educational needs have a less favorable perception in almost every dimension analyzed; especially, in those aspects related to school victimization, aggression, and indiscipline. Likewise, they perceive that they have a limited peer social network, as well as limited normative adjustment and a lower perception about their own positive interpersonal skills. The multiple regression and logistic regression models allow confirming that the dimensions of school coexistence account for between 20% and 27% of the academic performance variability. The aforementioned models highlight the role and negative effect of the level of victimization perceived by students, as well as the perception about the occurrence of indiscipline situations in the classroom, and the fact of belonging to the group of students with special educational needs, and to the group of male students. The findings are analyzed and discussed in light of the implications for high social vulnerability educational contexts.

Keywords: School coexistence, special educational needs, typical development, academic performance, victimization.

Resumen

Estudio descriptivo-correlacional que busca comparar la percepción acerca de ocho dimensiones de la convivencia escolar de estudiantes chilenos de educación media con desarrollo típico (n=545) y con necesidades educativas especiales (n=75), y su relación con el rendimiento académico general. A partir de los análisis de conglomerados jerárquico y no jerárquico, regresión múltiple y regresión logística, se constata que los estudiantes con necesidades

educativas especiales tienen una percepción más desfavorable en casi todas las dimensiones analizadas, especialmente en aquellos aspectos asociados a la victimización escolar y agresión e indisciplina, de igual forma, perciben tener una menor red social de iguales, menor ajuste normativo y una más baja percepción respecto de la gestión interpersonal positiva. Los modelos de regresión múltiple y regresión logística, permiten constatar que las dimensiones de la convivencia escolar explican entre el 20% y el 27% de la variabilidad del rendimiento académico. En dichos modelos destaca el papel y efecto negativo que tiene el grado de victimización que perciben los estudiantes, como también la percepción respecto de la ocurrencia o presencia de situaciones de indisciplina al interior del aula, como también el hecho de pertenecer al grupo de estudiantes con necesidades educativas especiales, y el pertenecer al grupo de estudiantes hombres. Se analizan y discuten los hallazgos a la luz de las implicaciones para contextos educativos de alta vulnerabilidad social.

Palabras clave: Convivencia escolar, necesidades educativas especiales, desarrollo típico, rendimiento escolar, victimización.

Introduction

The government is currently defending itself from the idea that school is one of the most appropriate and relevant spaces of social interaction to experience coexistence in its broadest sense. Furthermore, the School Violence Act expressly and clearly states that an adequate school coexistence is based on harmonious coexistence and a positive interrelation of all members of the educational community, and that the authorities and the school community must promote a good school coexistence and prevent all forms of physical or psychological violence, and avoid all forms of aggression or harassment (MINEDUC, 2011). If this harmonious coexistence exists, it is very likely that there is an environment conducive to learning, and that this environment has a positive impact on learning (Arístegui, Bazán, Leiva, Muñoz & Ruiz, 2005).

In particular, it has been determined that students with special educational needs (SEN) tend to have difficulties in their academic performance, due to their characteristics, the factors determining their academic performance may vary with respect to their typically developing peers (Iglesias, Gutiérrez, John & Rodríguez, 2015). Students with special educational needs tend to show low levels of success expectation with respect to school work. This negatively affects their school performance, as they often leave their homework aside, and feel less confident when they have to respond themselves, that is why they look for external guides for that. In the case of students with autism spectrum disorders or learning difficulties, they are more vulnerable to victimization. This implies a higher risk, as there may be consequences for their health, a lower academic performance and a negative school adjustment, among other aspects (Timmermanis & Wiener, 2011).

On the other hand, teachers may have prejudices, which, if not recognized as such, may have direct repercussions on their teaching job with respect to students with special educational needs (Vega, 2009). This fact is of great importance in the educational field, since teachers' personal beliefs will

affect the way they treat students and, therefore, the school performance of students with these educational characteristics (Sánchez, Díaz, Sanhueza & Friz, 2008). For instance, they may relate —in an arbitrary and stereotypical manner—those students who exhibit indiscipline behavior or maladjustment, and, who probably have a worse academic performance in comparison with those students described as docile by teachers or who are easier to handle in the classroom. Based on the abovementioned information, it can be stated that teachers' expectations are based on the feasibility of these students' disciplined behavior (Mares, Martínez & Rojo, 2009).

School coexistence refers to the different interactions that take place among all levels of the school institution, and which may have a significant impact on students' ethical, intellectual and socio-affective development (Retuert & Castro, 2017). From this perspective, the school is not only a place for training and transferring knowledge, but a legitimized space for promoting attitudes and values aimed at developing peaceful coexistence among human beings. However, this ideal is often not adequately accomplished because, due to different situations and social or individual factors, some of the levels or agents that intervene in it end up being involved in conflict situations that are sometimes handled violently (Díaz & Sime, 2016).

In addition, school coexistence involves a complex web of diverse relationships among the actors involved in the educational process of an institution, and constitutes dynamics of relationship and power that influence the emotional climate, relationship and communication styles, which are specific to the place in which they take place. School coexistence also includes practices to be performed during interactions among students, and among them and their teachers, as well as during their relationship with their parents. These practices include, among others, the reaching of agreements and conflict resolution. So if these practices work, they may have positive consequences, such as appropriate inclusion behaviors, participation, and peaceful conflict resolution. There may also be opposite cases, in which inclusive practices are not adequately implemented, and may lead to negative

consequences, such as exclusion, segregation and violent conflict resolution (Retuert & Castro, 2017).

For the reasons mentioned above, school coexistence has been analyzed from different research perspectives, in order to legitimize it as a subject of study and a base for developing educational policies. Firstly, the emergence of various forms of violence in school has boosted the need for diagnoses and policies that help recognize it and prevent it. Worth to be mentioned are the observatories and systems — created in Latin America from the departments of education and civil institutions— that allow to visualize, investigate, report, and intervene on, problems of coexistence at schools, such as physical and verbal aggression, and forms of discrimination. Secondly, school coexistence has been considered as a factor that influences learning based on the type of interactions that prevail at school, which have been analyzed as one of the associated indicators of greater influence on student performance (Díaz & Sime, 2016).

In Chile, studies on school coexistence appear to be preferably aimed to set the prevalence of school-violence related situations, such as situations of aggression, victimization, bullying, and indiscipline (MINEDUC, UNESCO IDEA, 2005; MINEDUC, 2012; Agencia de Calidad de la Educación - Chilean Education Quality Agency, 2015). These research studies show that a significant number of students perceive behaviors and acts associated with insults, mocking, and fights at their schools. The highest rate of occurrence takes place in public schools and medium-low socioeconomic levels. 9% of students report having been victims of verbal, social and physical bullying or mistreatment, either directly or through social networks. Under these situations, boys show higher levels of involvement, in a more direct manner compared to girls (Postigo, González, Mateu, Ferrero & Martorell, 2009).

Students that claim to experience rejection by their peers tend to show negative patterns regarding their educational goals, self-perception of academic efficacy, and academic performance (Arslam, 2016). Many research studies have reported evidence of positive relationships between a favorable school climate and the academic performance (Cohen, McCabe, Michelli & Pikeral, 2009; Høigaard, Kovac, Overby & Haugen, 2015; Koth, Bradshaw & Leaf, 2008). A positive climate at school may seemingly provide some protection for students, especially those from vulnerable families and situations. Besides, students' perception of school climate is a moderating factor with respect to such unfavorable family structure, as well as their academic performance, measured in their grade average (Maxwell, 2016; O'Malley, Voight, Renshaw, & Eklund, 2015). Moreover, it has been verified that, in those schools where there is a democratic coexistence, students attain higher levels of performance, when controlling the effect of socio-cultural baseline variables (Castro-Morera, García-Medina, Pedroza-Zúñiga & Caso-Niebla, 2015).

This research adopts a perspective of broad school coexistence, composed of multiple dimensions and aspects, considering its existing polysemic concept. For this reason, the definition assumed in this paper is close to a conception of "school climate" that involves all school agents (Cohen et al., 2009; Sánchez-Moreno y López Yáñez, 2010; Zullig, Koopman, Patton, & Ubbes, 2010).

For the abovementioned reason, validated measurement instruments that serve as a reference to assess this multidimensional perspective are not easy to find in Chile. Scales most used internationally for analyzing school climate are the scale of Delaware School Climate Survey-Student (Bear, Gaskins, Blank, & Chen, 2011) or its revised version (Yang, Bear, Chen, Zhang, Blank, & Huang, 2013), which includes five factors of the school climate construct: teacher-student relationships, student-student relationships, fairness of rules, school safety and violence issues, and affective-emotional aspects; which are validated with populations of different countries, and focus on interpersonal relationships. However, a relevant contribution in this regard is the recently validated Schoolwide Coexistence Scale (SCS), which indicates very robust psychometric characteristics (Del Rey, Casas & Ortega-Ruiz, 2017). The SCS scale is composed of eight positive and negative factors,

with varying degrees of relevance: positive interpersonal management, victimization, disruptiveness, peer social network, aggression, normative adjustment, indiscipline, and teacher apathy. Those eight factors allow us to visualize the complexity and specificity of the educational community that requires a kind of rigorous and valid radiography of its internal activity, since it reflects the community's perception of institutional aspects, such as teachers' positive interpersonal management and involvement, but at the same time, students' perception of the situations experienced by them in their classroom, or situations that may affect their learning, such as indiscipline or disruptiveness, or their manner of observing regulations or internal rules, in addition to the possible occurrence of aggression or bullying situations that they may experience or witness.

The purpose of this research is to characterize 12th grade students who have good academic performance profiles with respect to their perception of school coexistence in their classroom and school. The research questions that guided this study were: what aspects of school coexistence have a greater influence on academic performance? Do students with special educational needs have a different perception compared to typically developing students? Does the impact of the perception of school coexistence on academic performance is similar based on gender and whether or not the student has a disability?

Method

Participants

The sample of this research was composed of 620 students (See Table 1) with an average age of 16.5 years and a standard deviation of 0.8 years, who, during the development of this research, were in 12th grade in one of the 18 secondary schools located in the Bío Region, Chile, and are currently participating in the PACE-UDEC program (Program for Accompaniment and

Effective Access to Higher Education of Universidad de Concepción). These educational institutions have been classified by the department authorities as having high social vulnerability (SVI index over 60%).

A non-probability sampling method was adopted due to students' accessibility and consent to answer the survey. With respect to ethical regulations, an informed consent protocol was developed, and then approved by the Ethical Committee of Universidad de Concepción. After obtaining accredited permits duly singed, the instrument described below was applied.

 Table 1

 Distribution of students by gender and type of learning development

	Man		Woman	
Type of learning development	N	%	N	%
Typical development	250	40.3	295	47.6
Special educational needs	33	5.3	42	6.8

Instruments

For the purposes of analysis, the grade average of the 12th grade students (value ranging from 1 to 7) and the diagnosis of their learning development, defined by a professional in the area, were considered. This information was obtained thanks to the consent of the guardians and the institution.

On the other hand, in order to measure the students' perception of school coexistence at their school, the Schoolwide Coexistence Scale, an instrument composed of 50 items grouped into eight dimensions statistically validated by Del Rey et al. (2017), was applied. The survey asks students about their experience regarding three subjects: situations that occur at school and their general and particular course, number of times situations affecting coexistence at school occur, and finally if they have participated in specific events and how often they do it.

Validation of the scale made by the author allowed to identify a factorial solution comprised of eight dimensions that explain 63% of the total variance with a Cronbach's alpha of 0.75. Each factor presented a different degree of relevance: positive interpersonal management (29%), victimization (8%), disruptiveness (7%), peer social network (6%), aggression (3%), normative adjustment (2 %), indiscipline (2%), and teaching apathy (2%). The score obtained in each factor shows the student's perception of their behavior and that reflected at their school.

In Chile, the factorial analysis of the scale confirmed the 8-factor model; $\chi^2SB = 2708.8$, p < .001, CFI = .969, NNFI = .966, RMSEA = .035, IC (.033-.036), with a Cronbach's alpha of 0.80 (Cerda & Pérez, 2015).

School performance operationalized by a student's qualifications, in a scale from 1 to 7, was considered as a dependent variable. This performance is understood as the result of the learning produced by the teacher's didactic activity and generated on the student (Lamas, 2015). The dimensions of the schoolwide coexistence scale, the type of learning development, and the student's gender were considered as independent variables.

Procedure

A descriptive analysis of the SCS was initially carried out through the calculation of statisticians, and hierarchical and non-hierarchical cluster analysis. Then, tests were conducted to assess the dimensions of the schoolwide coexistence scale based on the type of cluster and the type of learning development, evaluating in each case the assumptions involved. In the situations in which homoscedasticity was not evident, the degrees of freedom were adjusted; for normality the Kolmogorov-Smirnov test was used, or adopted due to the size of the sample (greater than 30 in each group) (Triola, 2009). Multiple regression and logistic regression models were subsequently constructed to identify predictors that could influence academic performance positively or negatively. For logistic regression, the dependent variable was arbitrarily categorized, considering a grade equal, to

or higher than, 6.0 as "good performance", positioning 48.4% of the sample in this category.

Results

The statisticians of the eight dimensions of the SCS were calculated in the descriptive analysis, in order to characterize the sample based on the different constructs that this instrument intends to estimate (See Table 2). To make the evaluation more efficient, the dimensions were re-categorized with a minimum of zero points and a maximum of ten points, then these scores were graphically represented based on the type of learning development and gender (See Figure 1).

From Table 2, we can observe that the highest score is obtained in positive interpersonal management, peer social network, and normative adjustment, with some degree of homogeneity in the answers. For negative characteristics, heterogeneity is observed, particularly, in the dimension of aggression.

 Table 2.

 Statisticians of the eight dimensions of the schoolwide coexistence scale

	x	S	cv
Positive Interpersonal Management (PIM)	7.3	1.4	19.5%
Victimization (VIC)	1.4	1.3	97.0%
Disruptiveness (DIS)	4.7	1.7	36.2%
Peer Social Network (PSN)	7.2	1.5	20.9%
Aggression (AGGR)	1.3	1.5	118.1%
Normative Adjustment (NA)	7.8	1.6	20.9%
Indiscipline (IND)	2.9	1.7	60.8%
Teacher Apathy (TA)	3.9	1.8	47.9%

With respect to Figure 1, it can be seen that the highest scores in aggression, indiscipline and teacher apathy correspond to those of male students with special educational needs, while the highest scores in peer social network

and positive interpersonal management correspond to those of typically developing male students; and in the case of the dimension of normative adjustment, the highest score correspond to those of the typically developing female group. In the particular case of the dimension of victimization, the highest scores correspond to those of the male and female group with special educational needs.

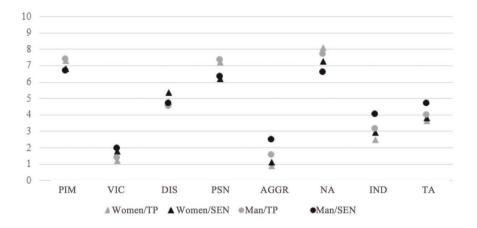


Figure 1. Graphical representation of rescaled scores by gender and type of learning development

A cluster analysis was subsequently conducted to identify groups based on the perceptions of the different dimensions of the SCS and the possibility that they were classified in terms of gender, special educational needs or typical development. In order to identify the approximate number of groups, a hierarchical cluster analysis was used with Ward's classification algorithm and Euclidean distance (cophenetic correlation: 0.463). When considering a 50% cut, two groups can be observed, but if done at a lower percentage, four groups can be observed (See Figure 2). Therefore, we started with four groups in a non-hierarchical cluster analysis. The best classification was achieved with two groups in such analysis, reaching the largest silhouette with the squared Euclidean distance (0.44).

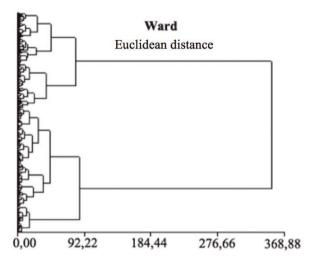


Figure 2. Dendrogram regarding the perception of school coexistence

It was determined that the second cluster, compared to the first one, had a higher perception of positive interpersonal management (t (526,776) = 19,759, p < .001), peer social network (t (512,464) = 15,693, p < .001), and normative adjustment (t (449.518) = 17.178, p < .001); and lower degree of victimization (t (416.864) = -14.397, p < .001), disruptiveness (t (536.875) = -11.662, p < .001), aggression (t (379.157) = -15.351, p < .001), indiscipline (t (490.691) = -17.756, p < .001), and teacher apathy (t (618) = -19.675, p < .001). On the other hand, boys with special educational needs belong mostly to cluster 1, and typically developing girls are in greater numbers in cluster 2 (See Figure 3).

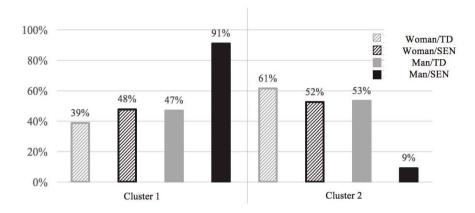


Figure 3. Distribution of students by type of learning development and gender in clusters

On the other hand, when analyzing the different dimensions of the school coexistence scale according to the type of learning development, the group with special education needs has significantly higher scores in Victimization (t(86.293) = 2.946, p<.01), Aggression (t(618) = 2.764, p<.01) and Indiscipline (t(618) = 2.868, p<.01); and statistically lower scores in Positive Interpersonal Management (t(86.901) = -2.891, p<.01), Peer Social Network (t(618) =-5.657, p<.001) and Normative Adjustment (t(88.401)=-4.138, p<.001) than the group with a typical learning development.

The multiple regression was conducted considering the 8 Student Census Evaluation (ECE, by its Spanish initials) dimensions, the gender and the type of learning development as independent variables, and performance, as independent variable. The backward method was used considering first order interactions.

In the model proposed (F(6,613)=27.71, p<.001), coefficients related to indiscipline, disruptiveness, type of learning development, gender and interaction between victimization and gender (see Table 3), which together accounted for 20.57% of the variability of the academic performance, were

significant. No significant evidence was found to reject the assumptions of this technique.

 Table 3.

 Estimation of multiple regression parameters

Parameter	В		
Intercept	6.241	***	
Type (SEN)	-0.459	***	
Gender (Man)	-0.308	***	
VIC	-0.014		
IND	-0.055	***	
DIS	0.011	*	
VIC*Gender(Man)	0.036	**	

Note. **p*<.05, ***p*<.01, *** *p* <.001

According to the results, students, regardless their type of learning development, reduce their academic performance by 5 hundredths by raising a point in the perception of Indiscipline and around 5 tenths if they have special needs. On the other hand, victimization has a different influence on the academic performance according to gender.

Logistic regression was conducted by selecting variables with the backward method considering first order interactions. The model accounted for, according to Nagelkerke R-squared, a 26.8% and classified both categories properly (over 67% correct). The same coefficients related to multiple linear regression and others, the dimension Teacher Apathy, were significant. It is worth mentioning that, according to the variables considered, if a student has a typical learning development, the opportunity to have a good performance is around 7 times more than if they have special educational needs.

 Table 4

 Estimation of logistic regression parameters.

Parameter	В		Exp(B)
Constant	1.291		3.637
Type (SEN)	-1.910	***	0.148
Gender (Man)	-1.174	***	0.309
VIC	-0.048	*	0.953
DIS	0.075	**	1.078
IND	-0.243	***	0.784
DIS	-0.063	*	0.939
VIC* Gender (Man)	0.160	**	1.174

Note.*p<.05, **p<.01, *** p <.001

Discussion

The study states the predictive role of the different school coexistence dimensions with respect to the general academic performance of students in the last year of high school. The complex models analyzed, multiple regression and logistic regression, indicate that a percentage of the variability (between 20% and 27%) of such academic performance, can be accounted for by the perception of such students about school coexistence. Such models highlight the role and negative effect of the victimization level perceived by students, as well as the perception of the occurrence of indiscipline situations in the classroom, in addition to the fact of belonging to a group of students with special educational needs, and to a group of male students. In addition, there is a differential influence on the performance of the perception of victimization according to the gender of students, since victimization has a negative effect on women's performance. Moreover, logistic regression

incorporates the negative effect of the perception about the higher level of teacher apathy by teachers, associated with the teaching-learning process.

These results about the level of victimization and indiscipline perceived coincide with other studies showing that being a victim of harassment or intimidation has a considerably negative effect on the student's performance (Ammermueller, 2012; Ponzo, 2013), the occurrence of victimization and indiscipline situations tend to be associated with the worst academic performance in students, which coincides with other national and international research works (Cohen et al., 2009; De Pedro, Gilreath, & Berkowitz, 2016; Treviño, Place & Gempp, 2012). Experiencing in classrooms indiscipline situations during the development of the teaching-learning processes affects the academic performance in a significant way, since they are not only related a good environment for learning, but it also has a negative influence on students' motivation to learn (Arens, Morin & Watermann, 2015), whereas a school organization with a more discipline structure is associated with more commitment to learn of the students (Cornell, Shukla, & Konold, 2016). On the contrary, in schools without regulations, structures and support relationships, students have more possibility to be affected by peer harassment or violence, which generally causes more school absenteeism and lower academic performance (Astor, Guerra, & Van Acker, 2010).

Additionally, the logistic regression model replaces the negative role of the students' strong perception about the teacher apathy that affects the academic performance. This is relevant, since it proves that the teacher's commitment to teaching, expressed in specific actions, like promoting the participation in class and correct student's tasks, positively relates to a better performance and learning of students. This teacher's active supervision does not only mitigate some indiscipline events, but also, promote good interpersonal relationship with parents, which in turn, has a positive effect on such performance. (Kodzi, et al., 2014).

The research results clearly reflect that high school SEN students from high social vulnerability schools analyzed have a more unfavorable perception about several aspects of school coexistence than their typically developing peers. In particular, it is observed that students perceive that they are more exposed to victimization situations in schools than their typically developing classmates. This finding coincides with international studies stating that young people with any type of disability experience more levels of victimization among classmates and they need more psychosocial help than young people without disabilities (Del Barrio, y Van der Meulen, 2016; McGee, 2015; Zeedyk, Rodríguez, Tipton, Baker, & Blacher, 2014). It has been reported that these students who are disabled, are those more at risk of victimization, which can represent a higher risk of health consequences, worst school setting and a lower academic performance (Cappadocia, Weiss, & Pepler, 2012; Christensen, Fraynt, Neece, & Baker, 2012; Twyman et al., 2010).

SEN students have lower level of social networks than typically developing students. As supported by other studies (Larkin, Jahoda, MacMahon, & Pert, 2012), it is possible that they perceive themselves as less competent and less accepted by their peers (Monjas, Martín-Antón, García-Bcete, & Sánchez, 2014). Perception and peer experience with respect to experiencing harassments and aggressions, can derived from the fact that they feel lonely and anxious, which in turn, affects their social skills in a significant way and, consequently, the expansion or richness of their social networks (Pijl, Frostad & Flem, 2010). This is relevant, since the peer network is a support network that promotes and makes it possible a better personal and socioemotional development of the student, especially disable people.

The results show that SEN students, especially male students, perceive a higher level of involvement in aggressive behaviors than their typically developing peers. This finding could have sense since these students tend to have difficulties to control their behavioral, motor behavior and especially, their emotions when they are negative, expressing an easily irritating character (Martos-Pérez, y Paula-Pérez, 2011; Ortiz, Ayala, Reyes, López, & Mexicano, 2013). SEN male students perceive in the classroom a higher

level of occurrence of indiscipline situations than their typically developing peers, and their female peers. These indiscipline situations perceived have a negative impact, since students' attention is obstructed, so they are more distracted. The results of the study show that typically developing students perceive themselves that they can be better adjusted to and accept the school's regulations compared to SEN students. When students perceive that the school's regulations are focused on a more pacific conflict resolution, this perception has a positive effect on the participation in less risky behaviors (LaRusso & Selman 2011).

Although the perception of SEN students is not statistically significant compared to typically developing students, the latter has a lower score with respect to the level of teacher's non-involvement or commitment in the classroom. It is important to highlight this fact, since it is known that those schools promoting teachers' positive expectations towards their participant, have a higher level of assumption of responsibility for school failure, they generate a better school environment and a better coexistence space that, in turn, improves the academic performance (Ekeh & Oladayo, 2013). This is consistent with the perception of typically developing students about evaluating the quality of interactions in the classroom between teachers, family and students, compared to their SEN peers.

These findings of the study are relevant to make decisions in schools, since the role of the teacher or of the school community as a whole can be important when inhibiting or preventing the occurrence of rejection or harassments of SEN students (Kiuru, et al, 2012).

That is, male students tend to have higher level of involvement in this type of aggressive behavior towards their classmates, and probably this is due to the fact that they have more difficulties in their personal relationships, while girls are usually more adapted to the school environment (Cerezo & Ato, 2015).

Finally, there is a very negative impact on the academic performance of those students suffering from violence or intimidation, especially those with special educational needs. This situations requires the intervention of the teacher and peers, since their support and help can mitigate these negative effects, and strengthen the development of their skills for daily life (Coohey, Renner, Hua, Zhang, & Whtney, 2011; Schenke, Lam, Conley, & Karabnick, 2015). It is worth mentioning that the effect of victimization is more important in female students, regardless their condition, since apparently, male students have certain coping mechanism that helps to reduce this impact. In contexts of higher vulnerability, female students seem to require learning situations with higher levels of normative regulation and support in case of school harassment

Regarding study limitations, since it is a descriptive study performed with an instrument that collects the perception of students about several aspects of school coexistence, this could not have a real measurement of facts in the dimensions analyzed. This could be checked with an ethnographic record that could corroborate the perceptions through behavior or interaction indicators. Furthermore, this will authenticate even more the emotional exhaustion scale potential to support interventions based on the analysis of the information obtained, aimed at promoting an adequate school coexistence, and mitigating or eliminating negative determinants, especially in SEN students. The study also shows that there is a limitation when comparing average grades of students with or without special educational needs, although some grades of the group with needs consider curricular or evaluative adjustments that cannot be directly compared. Begging the question is assumed based on the fact that the groups analyzed are students with high academic performance, and that most of the group with needs is temporary.

References

- Agencia de Calidad de la Educación. (2015). Los Indicadores de desarrollo personal y social en los establecimientos educacionales chilenos: una primera mirada. Santiago, Gobierno de Chile.
- Ammermueller, A. (2012). Violence in European schools: A widespread phenomenon that matters for educational production. *Labour Economics*, *19*, 908-922. Doi: https://doi.org/10.1016/j.labeco.2012.08.010
- Arens, K., Morin, A., & Watermann, R. (2015). Relations between classroom disciplinary problems and student motivation: Achievement as a potential mediator? *A Learning and Instruction*, *39*, 184-193. Doi: https://doi.org/10.1016/j.learninstruc.2015.07.001
- Arístegui, R., Bazán, D., Leiva, J., Muñoz, B., & Ruiz, J. (2005). Hacia una pedagogía de la convivencia, *Psykhe, 14*(1), 137-150. Doi: https://doi.org/10.4067/S0718-22282005000100011
- Arslam, G. (2016). Relationship between sense of rejection, academic achievement, academic efficacy, and educational purpose in high school students. *Egitim ve Bilim, 41*(183), 293-304. **Doi:** https://doi.org/10.15390/EB.2016.5562
- Astor, R., Guerra, N., & Van Acker, R. (2010). How Can We Improve School Safety Research? *Educational Researcher*, *39*(1), 69-78. Doi: https://doi.org/10.3102/0013189X09357619
- Bear, G., Gaskins, C., Blank, J., & Chen, F. (2011). Delaware School Climate SurveyStudent: Its factor structure, concurrent validity, and reliability. *Journal of School Psychology*, 49, 157-174. Doi: https://doi.org/10.1016/j.jsp.2011.01.001
- Cappadocia, M. C., Weiss, J. A., & Pepler, D. (2012). Bullying experiences among children and youth with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, *42*(2), 266–277. Doi: https://doi.org/10.1007/s10803-011-1241-x
- Castro-Morera, M., García-Medina, A., Pedroza-Zúñiga, H., & Caso-Niebla, J. (2015). Escuelas de enseñanza media y valor añadido bajo. Perfiles diferenciales de escuelas secundarias en Baja California.

- Archivos Analíticos de Políticas Educativas, 23(67). Doi: https://doi.org/10.14507/epaa.v23.1917
- Cerezo, F., & Ato, M. (2010). Social status, gender, classroom climate and bullying among adolescents pupils. *Anales de Psicología*, *26*, 137-144.
- Cohen, J., McCabe, L, Michelli, N.M & Pickeral, T. (2009). School Climate: Research, Policy, Teacher Education and Practice. *Teachers College Record*, 111(1), 180-213.
- Coohey, C., Renner, L., Hua, L., Zhang, Y., & Whtney, S. (2011). Academic achievement despite child maltreatment: A longitudinal study. *Child Abuse & Neglect*, *35*, 688-699. Doi: https://doi.org/10.1016/j.chiabu.2011.05.009
- Cornell, D, Shukla, K., & Konold, T. (2016). Authoritative School Climate and Student Academic Engagement, Grades, and Aspirations in Middle and High Schools. *AERA Open, 2*(2), 1-18. Doi: https://doi.org/10.1177/2332858416633184
- Christensen, L., Fraynt, R., Neece, C., & Baker, B. (2012). Bullying adolescents with intellectual disability. *Journal of Mental Health Research in Intellectual Disabilities*, *5*, 49-65. Doi: https://doi.org/10.10 80/19315864.2011.637660
- De Pedro, K.T., Gilreath, T., & Berkowitz, R. (2016). A latent class analysis of school climate among middle and high school students in California public schools. *Children and Youth Services Review*, *63*, 10-15. Doi: https://doi.org/10.1016/j.childyouth.2016.01.023
- Del Barrio, C., & Van der Meulen, K. (2016). Maltrato por abuso de poder entre iguales en el alumnado con discapacidad. *Pensamiento Psicológico*, *14*(1), 103-118. Doi: http://dx.doi.org/10.11144/ Javerianacali.PPSI14-1.mapi
- Del Rey, R., Casas, J. A., & Ortega Ruiz, R. (2017). Desarrollo y validación de la Escala de Convivencia Escolar (ECE). *Universitas Psychologica*, *16*(1), 1-12.
- Díaz, S., & Sime, L. (2016). Convivencia escolar: una revisión de estudios de la educación básica en Latinoamérica. *Revista Virtual Universidad Católica del Norte, 49*, 125-145. Recuperado de: http://revistavirtual.ucn.edu.co/index.php/RevistaUCN/article/view/801/1321

- Ekeh, P., & Oladayo, O. (2013). Academic achievement of regular and special needs students in inclusive and non-inclusive classroom settings. *European Scientific Journal*, *9*(8), 141-150.
- Høigaard, R.; Kovač, V.; Øverby, N., & Haugen, T. (2015). *School Psychology Quarterly*, *30*(1), 64-74. Doi: https://doi.org/10.1037/spq0000056
- Iglesias, M., Gutiérrez, N., Loew, S., & Rodríguez, C. (2015). Hábitos y técnicas de estudio en adolescentes con trastorno por déficit de atención con o sin hiperactividad. *European Journal of Education and Psychology*, *9*(1), 29-37. Doi: https://doi.org/10.1016/j.ejeps.2015.07.002
- Kiuru, N., Pikkeus, A.M., Lerkkanen, M.K., Pakarinen, E., Siekkinen, M., Ahonen, T., & Nurmi, J.E. (2012). Teacher-perceived supportive classroom climate protects against detrimental impact of reading disability risk on peer rejection. *Learning and Instruction*, 22, 331-339. Doi: https://doi.org/10.1016/j.learninstruc.2011.12.003
- Kodzi, I., Oketch, M., Ngware, M., Mutisya, M., & Nderu, E. (2014). Social relations as predictors of achievement in math in Kenyan primary schools. *International Journal of Educational Development*, 39, 285-292. Doi: https://doi.org/10.1016/j.ijedudev.2014.02.007
- Koth, C. W., Bradshaw, C. P., & Leaf, P. J. (2008). A Multilevel Study of Predictors of Student Perceptions of School Climate: The Effect of Classroom-Level Factors. *Journal of Educational Psychology*, 100(1), 96-104. Doi: https://doi.org/10.1037/0022-0663.100.1.96
- Lamas, H. (2015). Sobre el rendimiento escolar. *Propósitos y Representaciones*, 3(1), 313-386. Doi: https://doi.org/10.20511/pyr2015.v3n1.74
- Larkin, P., Jahoda, A., MacMahon, K., & Pert, C. (2012). Interpersonal sources of conflict in young people with and without mild to moderate intellectual disabilities at transition from adolescence to adulthood. *Journal of Applied Research in Intellectual Disabilities*, 25(1), 29-38. Doi: https://doi.org/10.1111/j.1468-3148.2011.00652.x
- LaRusso, M., & Selman, R. (2011). Early adolescent health risk behaviors, conflict resolution strategies, and school climate. *Journal of Applied Developmental Psychology*, *32*(6), 354-362. Doi: https://doi.org/10.1016/j.appdev.2011.05.003

- Mares, A. Martínez, R., & Rojo, H. (2009). Concepto y expectativas del docente respecto de sus alumnos considerados con necesidades educativas especiales. *Revista mexicana de investigación educativa*, 14(42), 969-996.
- Martos-Pérez J, y Paula-Pérez I. (2011). Una aproximación a las funciones ejecutivas en el trastorno del espectro autista. *Revista de Neurología*, 52(1), 147-153.
- Maxell, L. (2016). School building condition, social climate, student attendance and academic achievement: A mediation model. *Journal of Environmental Psychology*, 46(1), 206-216. **Doi:** https://doi.org/10.1016/j.jenvp.2016.04.009
- McGee, M. (2015). Peer victimization as a mediator of the relationship between disability status and psychosocial distress. *Disability and Health Journal*, *8*, 250-257. Doi: https://doi.org/10.1016/j.dhjo.2014.09.006
- MINEDUC (2011). Ley 20.536 Sobre Violencia Escolar en Base de Datos Diario Oficial. Recuperado de: http://www.leychile.cl/Navegar?idNorma=1030087
- MINEDUC, UNESCO IDEA (2015). Primer estudio nacional de convivencia escolar: La opinión de estudiantes y docentes. Informe ejecutivo. Santiago: Instituto de Evaluación y Asesoramiento Educativo.
- Monjas, M., Martín-Antón, L., García-Bacete, F., & Sanchiz, M. (2014). Rejection and victimization among first graders primary school with education support needs. *Anales de Psicología*, *30*(2), 499-511. Doi: https://doi.org/10.6018/analesps.30.2.158211
- O'Malley, M., Voight, A., Renshaw, T., & Eklund, K. (2015). School climate, family structure, and academic achievement: A study of moderation effects. *School Psychology Quarterly*, *30*(1), 142-157. Doi: https://doi.org/10.1037/spq0000076
- Ortiz, E., Ayala, F., Reyes, A., López, R., & Mexicano, G., (2013). Evaluación de las funciones cognitivas en niños con trastornos del espectro autista. *Neuropsicología Latinoamericana*, *5*(4), 53-60.
- Pijl, S., Frostad, P. & Flem, A. (2010). The social position of pupils with special needs in regular schools. *Scandinavian Journal of Educational Research*, *52*(4), 387-405. Doi: https://doi.org/10.1080/00313830802184558

- Ponzo, M. (2013). Does bullying reduce educational achievement? An evaluation using matching estimators. *Journal of Policy Modeling 35*, 1057-1078. Doi: https://doi.org/10.1016/j.jpolmod.2013.06.002
- Postigo, S., González, R., Mateu, C., Ferrero, J., & Martorell, C. (2009). Diferencias conductuales según género en convivencia escolar. *Psicothema*. 21, 453-458.
- Retuert, G., & Castro, P. (2017). Teorías subjetivas de profesores acerca de su rol en la construcción de la convivencia escolar. *Polis, 46*. Doi: https://doi.org/10.4067/S0718-65682017000100321
- Sánchez, A., Díaz, C., Sanhueza, S., & Friz, M. (2008). Percepciones y actitudes de los estudiantes de pedagogía hacia la inclusión educativa. *Estudios pedagógicos*, *34*(2), 169-178. Doi: https://doi.org/10.4067/S0718-07052008000200010
- Sánchez-Moreno, M. y López Yáñez, J. (2010). Culturas institucionales que facilitan y dificultan la mejora de la escuela. *Profesorado: Revista de curriculum y formación del profesorado, 14*(1), 93–110.
- Schenke, K., Lam, A.M., Conley, A. & Karabnick, S. (2015). Adolescents' help seeking in mathematics classrooms: Relations between achievement and perceived classroom environmental influences over one school year. *Contemporary Educational Psychology, 41*, 133–146. Doi: https://doi.org/10.1016/j.cedpsych.2015.01.003
- Timmermanis, V., & Wiener, J. (2011). Social Correlates of Bullying in Adolescents With Attention-Deficit/ Hyperactivity Disorder. *Canadian Journal of school Psychology*, *26(4)*, 301-318. Doi: https://doi.org/10.1177/0829573511423212
- Treviño, E., Place, K., & Gempp, R. (2012). *Análisis del clima escolar:* poderoso factor que explica el aprendizaje en América Latina y el Caribe. Santiago, Chile: UNESCO-OREALC.
- Twyman, K., Saylor, C., Saia, D., Macias, M., Taylor, L., & Spratt, E. (2010). Bullying and ostracism experiences in children with special health care needs. *Journal of Developmental Behavioral Pediatrics*, *31*, 1-8. Doi: https://doi.org/10.1097/DBP.0b013e3181c828c8
- Vega, A. (2009). Integración de alumnos con necesidades educativas especiales. ¿Existe coherencia entre el discurso y las prácticas pedagógicas

- ejercidas por los profesores básicos? *Estudios pedagógicos*, *35*(2), 189-202. Doi: https://doi.org/10.4067/S0718-07052009000200011
- Yang, C., Bear, G., Chen, F., Zhang, W., Blank, J., & Huang, X. (2013). Students' perceptions of school climate in the U.S. and China. *School Psychology Quarterly*, 28(1), 7-24. Doi: https://doi.org/10.1037/spq0000002
- Zeedyk, S., Rodriguez, G., Tipton, L., Baker, B., & Blacher, J. (2014). Bullying of youth with autism spectrum disorder, intellectual disability, or typical development: Victim and parent perspectives. *Research in Autism Spectrum Disorders*, 8, 1173-1183. Doi: https://doi.org/10.1016/j.rasd.2014.06.001
- Zullig, K. J., Koopman, T. M., Patton, J. M., & Ubbes, V. A. (2010). School climate: Historical review, instrument development, and school assessment. *Journal of Psychoeducational Assessment*, *28*, 139-152. Doi: https://doi.org/10.1177/0734282909344205

Acknowledgements:

We appreciate the support of the project Fondecyt 11150201, and the Baseline Project FB0003 of the Associative Research Program of the National Commission for Scientific and Technological Research (CONICYT, by its Spanish initials).