

Perceived Social Support in Middle School Students

MA. CONCEPCIÓN RODRÍGUEZ

Universidad Autónoma de Nuevo León, México
Email: fapsi.mcce@uanl.mx

JORGE RICARDO VIVAS

CIMEPB-Universidad Nacional del Mar del Plata, Argentina
Email: jvivas@mdp.edu.ar

ANA COMESAÑA

CONICET-CIMEPB-Universidad Nacional del Mar del Plata, Argentina
Email: acomesan@mdp.edu.ar

LAURA MINERVA RAMÍREZ

Universidad Autónoma de Nuevo León, México
Email: laura.ramirez333@hotmail.com

JOSÉ ARMANDO PEÑA

Universidad Autónoma de Nuevo León, México
Email: Jose.Pena@uanl

Abstract

Research on school climate has among its purposes to contribute to improving the quality of education, one of the main challenges of the Mexican educational system, particularly at the level of basic education. Our aim was to explore the relationships between the dimensions of school climate of perceived social the support teacher-student, support student-student and opportunities for autonomy and academic performance. The study was non-experimental and correlational. The sample consisted of 325 students from a middle school in northeastern Mexico, with a mean age of 13.4 years who responded to a scale of perceived school climate. The results show that students perceive great teacher support associated with student-student support and opportunities for autonomy. In addition, we found that academic achievement related to teacher support and opportunities for autonomy. These data are consistent with the country's educational policy, which emphasizes the teacher's role as facilitator of student learning to improve learning outcomes and the quality of education.

Keywords: *School Climate, Perceived Social Support, Support Teacher-Student, Support Student-Student, Opportunities for Autonomy.*

Introduction

In Mexico, Secretary of Public Education (2011) developed a public policy aimed at increase the quality of education that places the learner, the learning achievement and teacher facilitator of learning as factors of great important for this purpose. In the Education Sector Program 2013-2018 stipulates that the center of the educational process is the school with one of his challenges is to achieve sufficient quality of learning

through the promotion of pedagogical practices where the student guided by the teacher (Ministry of Education, 2013). Improving the quality of education in the middle school level is associated with a profile of a teacher able to establish a working environment that promote classroom attitudes of trust, respect, pleasure in studying and strengthening the autonomy of students among other aspects (Ministry of Education, 2010). The profile also projects a teacher who understands the sequences and articulation of the contents of the courses given to guide learning in a consistent and progressive process based on the use of teaching strategies adapted to the topics and previous experience of the student.

The perspective of the school as the center of the educational process is associated to the school context and has generated interest in how social relations and the classroom environment influence goals and academic achievement. The context / school climate is a research area which has developed in various countries in order to contribute to the improvement of educational quality and has been recognized as an important component of successful schools and a predictor of different outcomes in the student (Mithcell, Bradschaw, & Leaf, 2010). Explore and understand the school climate is important because students spend much time in school where they interact with teachers and classmates and the perception of these social relations have been associated with school outcomes (Ladd, 1990) as the achievement and academic performance (Stewart, 2007)

School climate refers to the characteristics and quality of life at school including norms, values and expectations that can support feelings of security physical, emotional and social development of educational actors (Cohen, McCabe, Michelli & Pickeral, 2009). Several academic behaviors related to the school climate. For example, a school environment where students feel supported and perceived optimism about their potential for achieving promotes academic, social and emotional learning for middle and high school students (Blum, McNelly, & Rinehart, 2002). In addition, the perception of a friendly school context has been associated to behaviors, attitudes and positive academic, personal and social reasons (Battisich *et al.* 1995), welfare and academic performance (Brand *et al.* 2003) and negatively with low performance in examinations (Elliot & Murayama, 2008)

Despite the importance of school context in psychological and academic achievement, research has been mainly in the United States (Roeser, Eccles & Sameroff, 1998; Ling *et al.* 2009). Decker, Dona and Christenson (2007) point out those studies on the perception of teacher support and peer and relationship with academic results are insufficient. Furthermore, these dimensions of school climate and opportunities for autonomy in the classroom are associated and may vary between nationalities. Ling *et al.* (2009) reported that Chinese students perceive more support student teacher and American students report greater support student teacher. In Mexico, research on middle school level on the relationship between perceived social support teacher-student and peer and opportunities for autonomy is very low, particularly when the association with academic achievement understood as a grade added. This context is to support the purpose of this study was to explore the relationships between these variables.

Theoretical Framework

School Climate

The school climate is the learning environment generated by the interaction of human relationships, physical space and the psychological atmosphere (Perkisin, 2006). Therefore, social interactions are critical (Cohen & Gejer, 2010). The main dimensions of school climate are support from teacher to student, student-student support and opportunities for autonomy (Ling *et al.* 2009). Teacher support is a combination of emotional and academic student support (Reddy, Rhodes, & Mulhall 2003), is the sense of warmth, closeness and importance perceived by the student (Osterman, 2000). The student-student support is the feelings of respect and aid from peers (Baumeister & Leary, 1995).

Autonomy is the extent to which the person believes that the origin of the action is in itself (Eccles & Wang, 2013). It is achieved when a student has the choice to determine their own behavior or perceived school activities as relevant to their interests and goals (Assor, Kaplan, & Roth, 2002) and presents a challenge that drives the personal achievement (Dela Rosa & Bernardo, 2013).

A variable of school climate is the teacher-student social interaction (Wang, Haertel, & Walberg, 1997) which is a key element in the classroom (Roeser & Eccles, 2009). Research has shown the importance of teacher-student interactions in academic and social development of students (Hamre & Pianta, 2005). The support from teacher to student characterized by warmth and open communication has been related to an increased the engagement that is manifested in on class participation and study (Hughes, Zhang, & Hill, 2006; Hughes et al., 2008; Patrick, Ryan, & Kaplan, 2007; Skinner, Furrer, Marchand, & Kinderman, 2008; Turner, et al, 2002). This teacher support has also been associated with higher academic performance in students (Hamre & Pianta, 2001; Hanson, 2011; O'Connor & McCartney, 2007), to seek help from the teacher when you encounter difficulties (Marchand & Skinner, 2007) and more likely to high academic achievement (Wentzel & Wigfield, 1998).

In the classroom, students affected by relationships with teachers and classmates (Goodenow, 1993) which are an integral part of the school that shapes the social and academic life of the individual (Rubin *et al.* 2005). Teacher support related to the interaction with adults and authority and peer with greater reciprocity (Hartup, 1989). Students who feel emotionally supported in their learning by teachers and peers, are more likely to be interested and appreciate learning activities at school (Eccles & Wang, 2013), to develop greater trust in their academic abilities (Murdock & Miller, 2003). The emotional and academic teacher and peer support and grades are associated with positive attitudes toward learning (Johnson, Johnson, & Anderson, 1983).

Kindermann (2007) argues that the student's academic performance influenced by the student's interaction with his classmates. A school environment where the students support each other helps promote greater learning (Klem & Connell, 2004). Students who receive nominations from his peer more pleasant than unpleasant tend to get better grades (Ladd, Buhs, & Troop, 2002) and more academic progress (Lubbers *et al.* 2006). Furthermore, research has shown that students who rejected by their peers have poor academic achievement (Buhs, Ladd, & Herald, 2006). Low scores e related to students who less accepted by peers (Wentzel, 2003; Wentzel & Caldwell, 1997; Zettergren, 2003). Eccles and Wang (2013) argue that the feeling of support and warmth from peers satisfies the need for an adolescent to interact, promoting pleasure at the school.

The perceived teacher support and autonomy play an important role in motivation and academic performance of the student (Coxley & Chapman, 2008). Specifically, teacher behaviors that support the autonomy encourage student engagement with learning (Jang, Reeve, & Deci, 2010). The perceived teacher support and autonomy play an important role in motivation and academic performance of the student (Coxley & Chapman, 2008). Specifically, teacher behaviors that support the autonomy encourage student engagement with learning (Jang *et al.* 2010). In learning environments that support autonomy, teacher recognizes the feelings and perspectives of students, presents activities with an appropriate challenge, flexibility in its implementation and justifying participation which enables intrinsic motivation and academic performance (Assor *et al.* 2002; Reeve, Bolt & Cai, 1999; Skinner *et al.* 2008). Therefore, educational outcomes are more positive when teachers encourage autonomy which when controllers (Reeve & Jang, 2006).

Research comparing the dimensions of school climate in different countries is very limited. One of these studies is that of Jia, et al. (2009), which analyzes the dimensions of perceived social support teacher, student-student support and opportunities for autonomy in students from China and the United States and finds variations between the two countries in the perception of the importance of these variables.

Materials and Methods

Design

No experimental, descriptive, cross-sectional and correlational

Sample

The sample was non-probabilistic of 325 students of a private middle school. The 50.5% (164) students enrolled in the 2nd Secondary and 49.5% (161) students in 3rd grade. The ages ranged from 12-17 years with a mean of 13.48 years. The 45.5% (148) students were male and 54.5% (177) women.

Materials

Scale of Perceived School Climate (Jia *et al.* 2009). This instrument is a Likert-type scale with four response options (1 = never to 4 = always) and has 25 items distributed in three dimensions: Support teacher-student ($\alpha = .81$), support of student-student ($\alpha = .86$) and opportunities for autonomy ($\alpha = .69$) having an acceptable internal consistency in the USA shows (Jia *et al.*, 2009). The dimension of teacher-student support has seven items that measure emotional and academic support teacher to the student (e.g. "I talk to my teachers about my problems"). Support The student-student is composed of 13 items (e.g. "The students respect each other"). The dimension of opportunities for autonomy is formed by 5 items (e.g. "Students can help decide some of the rules").

Perception of School Climate (Jia *et al.* 2009) Scale translated into Spanish by back-translation technique. Subsequently, the Scale to 31 students in groups applied in a session to examine linguist understanding and clarity of the translation of the items. The results were positive for all participants reported that the translation was acceptable.

Grade point average. For Asante (2010) student achievement is the product of learning achievement tests, standardized tests and teacher assessments in school year and manifested in grades. In this study, the academic performance was average scores for each student prior school year and obtained from school records of the school. The average grade was 85. Subsequently, mean scores transformed into percentiles that used as indicators of the level of student achievement.

Procedure

Before application of instruments, he requested and obtained written permission from the parents of students. The implementation of social support scale was group in a single session of classes, without time limit. For data analysis, the mean and internal consistency of the complete instrument and its dimensions obtained. Subsequently, a factor analysis with principal components method and Oblimin rotation performed as the first occasion that this instrument used in our social environment. The comparison of the dimensions of support teacher-student, student-student support and opportunities for autonomy was used descriptive statistics and analysis of variance to examine relationships with academic performance.

Results

The internal consistency of the scale of perceived social support Cronbach's alpha was .83; subscale of social support teacher-student the Cronbach's alpha was .81, in the opportunities for autonomy subscale the Cronbach's alpha was .77 and in the subscale support student-student a Cronbach's alpha was .78. Factor analysis performed by the method of principal components (PCA) with Oblimin rotation (Table 1). The explained variance was 41%.

Table 1. Internal consistency and factorial distribution of Perceived Social Support Scale

Item	Dimensions		
	Support teacher-student	Opportunities for autonomy	Support student-student
1	.508		
2	.790		
3	.732		
4	.750		
5	.566		
6	.678		
7	.713		
8		.667	
9		.770	
10		.749	
11		.668	
12		.571	
13			.671
14			.713
15			.624
16			.580
17			.229
18			.134
19			.671
20			.486
21			.518
22			.414
23			.612
24			.566
25			.519

The comparison of mean size shows that the perception of teacher-student support is greater than the opportunities for autonomy and student-student support (Table 2).

Table 2. Means of the dimensions of Perceived Social Support Scale

	Support teacher-student	Opportunities for autonomy	Support student-student
Mean	3.37	2.44	3.15
SD	.45	.65	.12
Variance	.203	.435	.125

Social support teacher-student is positively correlated with autonomy opportunities $p = .421$ and with the support of student-student $p = .301$. The opportunities for autonomy weakly correlated with support student-student $p = .179$. The grade point average (academic performance) were not significantly correlated with any of the dimensions of the scale of social support perceived school climate applied (Table 3).

However, transforming the academic performance variable in three levels: high, medium and low significant correlations were found with the support of teacher-student $F(2, 316) = 4.465 P = .012$ and opportunities for autonomy $F(2, 319) = 4.331 P = 0.014$.

Table 3. Correlation between GPA and dimensions of perceived social support

Dimensions	Support teacher-student	Opportunities for autonomy	Support student-student
Pearson correlation	-.059	-.058	-.063
Sig.(bilateral)	.290	.301	.276

** The correlation is significant at the 0.01 level (bilateral).

A post-hoc carried out to clarify the differences in the relation between academic performance levels and dimensions of perceived teacher-student support and opportunities for autonomy (Table 5).

Table 5. Differences in dimensions of perceived social support and academic performance

Dimension	Levels academic performance	Mean difference	Sig
Support teacher-student	Tukey HSD High	.20395(*)	.009
Opportunities for autonomy	Tukey HSD High	.28826(*)	.011

* The mean difference is significant at the .05 level

Discussion

Being the first time the School Climate Perception Scale (Jia *et al.* 2009) applied to our socio-cultural context (Northern Mexico) was obtaining relevant internal consistency and factorial distribution of the items in the dimensions that compose it. The results on these aspects were adequate and similar to those reported by Jia *et al.* (2009). However, in the dimension of student-student support two items they had low factor loadings.

Students perceive greater support from the teacher-student opportunities and autonomy support from their peers. This result related to the proposal on the educational policy of our country the teacher as facilitator of learning and student handbook (Ministry of Education, 2013; Ministry of Education, 2011). These two aspects are widespread, particularly in teacher training courses and in this study showed in the perception of students in the academic and emotional support teachers in their learning process.

From a comparative perspective on the dimensions of school climate with students from other countries found that Mexican students perceive more support from the teacher, student-student more support and opportunities for autonomy that Chinese and American students on the report Jia *et al.* (2009). This result is to explore in future research, but in general terms could be associated in socioeconomic class families are struggling for their children to attend private school that consider higher quality than public schools. Also, try to transmit to their children the idea that quality education is an important resource for better jobs in the future and the need take advantage the teachings of the teacher and attempt to learn as much as possible at school.

The positive correlations between perceived social support teacher-student with opportunities for autonomy and supported student-student may indicate that teachers choose and present learning activities with increasing difficulty and that related to student interests to encourage successful engagement. In addition, it is possible to infer that teachers have an open communication that enables questions students respond adequately so they perceived as generators of a positive learning environment. The low positive correlation between opportunities for autonomy and student-student support can be an indicator that when the teacher asks an activity that has several alternative embodiments students have difficulty agrees on the particular form in which it made. When in adolescence, students have difficulty agreeing on how to do homework

requested the teacher and there is a positive learning environment are usually not serious and permit the development of academic tasks with the criteria established by the teacher. However, they can also be a wakeup call to the need to promote more conditions for collaborative work among students.

The absence of correlations between GPA (academic performance) and dimensions of the school climate is associated with high student grades. This finding led to obtaining academic performance levels to explore whether under these conditions these variables related. The results showed that perceived social support teacher-student autonomy and opportunities correlated significantly with academic performance indicating that the characteristics of the interaction between teacher and students are more important than student-student interaction for achieving learning. These data confirm that teachers of students have integrated into their teaching practice student-centered learning proposal in the Mexican educational policy to strengthen the quality of education. In addition, an academic environment with opportunities for autonomy is best for students with good academic performance and that the students with poor academic performance tends to increase anxiety (Patrick, Skinner, & Connell, 1993).

In the perspective of school climate, the perception of a positive school environment product of teacher support and opportunities for autonomy consistently been associated with intrinsic motivation, goals oriented learning, self-regulation, self-efficacy, with the effort and commitment homework and academic achievement and social-emotional development of adolescents. The results of this study support the body of research that has allowed this support form.

Conclusions

Student perception of school climate, specifically positive social interactions such as teacher support, opportunities for autonomy and support of students are contextual factors associated classroom learning achievement. The greatest influence on academic performance was perceived social support teacher showing that teaching practice aimed primarily towards student learning in an environment of academic and emotional support. The opportunities of autonomy benefit more students with better academic performance than those of lower grades and have limited correlation with student-student support that may be an indicator of the need for greater attention to the development of collaborative work in the classroom.

References

- Asante, K. O. (2010). Sex differences in mathematics performance among senior high students in Ghana. *Gender and Behaviour*, 8(2), 3279-3289.
- Assor, A., Kaplan, H., & Roth, G. (2002). Choice is good, but relevance is excellent: autonomy-enhancing and suppressing teacher behaviors predicting students' engagement in schoolwork. *British Journal of Educational Psychology*, 72, 261- 278.
- Battistich, V., Solomon, D., Kim, D., Watson, M., & Schaps, E. (1995). Schools as communities, poverty levels of student populations, and students' attitudes, motives, and performance: A multilevel analysis. *American Educational Research Journal*, 32(3), 627-658.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.
- Blum, R. W., McNeely, C. A., & Rinehart, P. M. (2002). Improving the odds: The untapped power of schools to improve the health of teens. Minneapolis: Center for Adolescent Health and Development, University of Minnesota. Recuperado de <http://www.sfu.ca/cfrj/fulltext/blum.pdf>.
- Brand, S., Felner, R., Shim, M., Seitsinger, A., & Dumas, T. (2003). Middle school improvement and reform: Development of validation of a school-level assessment of climate, cultural pluralism and school safety. *Journal of Educational Psychology*, 95(3), 570-588.

- Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement? *Journal of Educational Psychology*, 98, 1-13.
- Cohen, J. & Geier, V. (2010). School climate research summary – January 21010. *School Climate Brief*, Vol. 1, No. 1. New York: Center for Social and Emotional Education
- Cohen, J., McCabe, E. M., Michelli, N. M., & Pickeral, T. (2009). School Climate: Research, Policy, Teacher Education and Practice. *Teachers College Record*, 111(1), 180-213.
- Cookley, K. O. & Chapman, C. (2008). The roles of ethnic identity, anti-White attitudes, and academic self-concept in African American student achievement. *Social Psychology of Education*, 11, 349-365.
- Dela Rosa, E. D., & Bernardo, A. B. I. (2013). Testing Multiple Goals Theory in an Asian Context: Filipino University Students' Motivation and Academic Achievement. *International Journal of School & Educational Psychology*, 1, 47–57. DOI: 10.1080/21683603.2013.782594
- Decker, D. M., Dona, D. P., & Christenson, S. L. (2007). Behaviorally at-risk African American students: the importance of student-teacher relationships for student outcomes. *Journal of School Psychology*, 45, 83-109.
- Eccles, J. & Roeser, R. W. (2009). Schools, Academic Motivation and Stage-Environment Fit. In Richard, M. Lerner & Laurence Steinberg (Eds.). *Handbook of Adolescent Psychology*. 3rd Ed. Vol. 1. Individual bases of adolescent development (pp. 404-433). John Wiley & Sons, Inc., Hoboken, New Jersey.
- Eccles, J. S. & Wang, M. T. (2013). School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using a multidimensional perspective. *Learning and Instruction*, 28, 12-23.
- Elliot, A. J. & Murayama, K. (2008). On the measurement of achievement goals: Critique, illustration, and application. *Journal of Educational Psychology*, 100, 613-628.
- Goodenow, C. 1993. Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, 13(1), 21-43.
- Hamre B. K. & Pianta R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72, 625-638.
- Hamre, B. K. & Pianta, R. C. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? *Child Development*, 76(5), 949-967.
- Hanson, T. (2011). Teacher Support: High Expectations and Caring Relationships. Los Alamitos: WestEd. Recuperado de: <http://www.oecd.org/HealthyMinds/Documents/High%20Expectations%20Caring%20Relationships%20S3factsheet1%20caring.pdf>.
- Hartup, W. W. (1989). Social relationships and their developmental significance. *American Psychologist*, 44, 120-126.
- Hughes, J. N., Zang, D., & Hill, C. R. (2006). Peer assessments of normative and individual teacher-student support predict social acceptance and engagement among low-achievement children. *Journal of School Psychology*, 43, 447-463.
- Hughes, J., Luo, W., Kwok, O., & Loyd, L. K. (2008). Teacher-student support, effortful engagement, and achievement- A 3-year longitudinal study. *Journal of Educational Psychology*, 100(1), 1-14.
- Instituto Nacional para la evaluación de la Educación (2013). México en PISA 2012. Instituto Nacional para la evaluación de la Educación. México. Retrieved from: http://www.sems.gob.mx/work/models/sems/Resource/11149/1/images/Mexico_PISA_2012_Informe.pdf
- Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *Journal of Educational Psychology*, 102(3), 588-600.
- Johnson, D. W., Johnson, R., & Anderson, D. (1983). Social interdependence and classroom climate. *The Journal of Psychology*, 114, 135-142.
- Kindermann, T. A. (2007). Effects of naturally-existing peer groups on changes in academic engagement in a cohort of sixth graders. *Child Development*, 78, 1186-1203.

- Klem, A. M. & Connel, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health, 74*(7), 262-273.
- Ladd, G. W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development, 61*, 1081-1100.
- Ladd G. W., Buhs, E. S., & Troop, W. (2002) Children's interpersonal skills and relationships in school settings: Adaptive significance and implications for school-based prevention and intervention programs. In P. K. Smith, & C. H. Hart (Eds.), *Blackwell Handbook of Children Social Development* (pp. 394-415). Massachusetts: Blackwell Publisher.
- Ling, G., Yosikawa, H., Chen, X., Hugues, D., Ke, X. & Lu, Z. (2009). The influence of student perceptions of school climate on socioemotional and academic adjustment: A comparison of Chinese and American Adolescents. *Child Development, 80*(5), 1514-1530.
- Lubbers, M. J., Van Der Werf, M. P. C., Snijders, T. A. B., Creemers, B. P. M., & Kuyper, H. (2006). The impact of peer relations on academic progress in junior high. *Journal of School Psychology 44*, 491-512.
- Marchand, G. & Skinner, E. A. (2007). Motivational dynamics of children's academic help-seeking and concealment. *Journal of Educational Psychology, 99*(1), 65-82.
- Mithcell, M. R., Bradschaw, C. P., & Leaf, P. J. (2010). Student and Teacher Perceptions of School Climate: A Multilevel Exploration of Patterns of Discrepancy. *Journal of School Health, 8* (6), 271-279.
- Murdock, T. B., & Miller, A. D. (2003). Teachers as sources of middle school students' motivational identity: variable-centered and person-centered analytic approaches. *Elementary School Journal, 103*, 383-399.
- O'Connor, E., & McCartney, K. (2007). Examining teacher-student relationships and achievement as part of an ecological model of development. *American Educational Research Journal, 44*(2), 340-369.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*(3), 323-367.
- Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early Adolescents' Perceptions of the Classroom Social Environment, Motivational Beliefs, and Engagement. *Journal of Educational Psychology, 99*(1), 83-98.
- Perkins, B. K. (2006). Where we learn: The CUBE survey of urban school climate. Retrieved from <http://www.nsba.org/SecondaryMenu/CUBE/Publications/CUBEResearchReports/WhereWeLearnReport/WhereWeLearnFullReport.aspx>
- Reddy, R., Rhodes, J. E., & Mulhall, P. (2003). The influence of teacher support on student adjustment in the middle school years: A latent growth curve study. *Development and Psychopathology, 15*, 119-138.
- Reeve, J., Bolt, E., & Cai Y. (1999), Autonomy-supportive Teachers: How they teach and motivate students. *Journal of Educational Psychology, 91*(3): 537-548.
- Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology, 98*, 209-218.
- Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (1998). Academic and emotional functioning in early adolescence: longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology, 10*, 321-352.
- Rubin, K. H., Chen, X., Coplan, R., Buskirk, A. A., & Wojslawowics, J. C. (2005). Peer relationships in childhood. In M.N. Bornstein & M.H. Lamb (Eds.), *Developmental science: An Advanced Textbook* (pp. 513-555). New Jersey, London: Lawrence Erlbaum Association.
- Secretaría de Educación Pública (2010). Plan de estudios 1999. Licenciatura en Educación Secundaria. Documentos Básicos. Programa para la Transformación y el Fortalecimiento Académico de las Escuelas Normales. Dirección General de Normatividad de la Subsecretaría de Educación Básica y Normal de la Secretaría de Educación Pública. 3ª. Ed. México.
- Secretaría de Educación Pública (2011). Plan de estudios 2011. Educación Básica. Dirección General de Desarrollo Curricular. 1ª. Ed. México.
- Secretaría de Educación Pública (2013). Programa Sectorial de Educación 2013-2018. 1a. Ed. México.

- Skinner, E., Furrer, C., Marchand, G., & Kinderman, T. (2008). Engagement and disaffection in the classroom: part of a larger motivational dynamic? *Journal of Educational Psychology, 100*(4), 765-781.
- Stewart, E. B. (2007). School structural characteristics, student effort, peer associations, and parental involvement: The influence of school- and individual-level factors on academic achievement. *Education and Urban Society, 40*, 179 – 204.
- Turner, J. C., Midgley, C., Meyer, D., Gheen, M., Anderman, E., Kang, Y., Patrick, H. (2002). The classroom environment and students' reports of avoidance strategies in mathematics: a multimethod study. *Journal of Educational Psychology, 94*(1), 88-106.
- Wang, M., Haertel, C. D., & Walberg, H. J. (1997). Toward a knowledge base for school learning. *Review of Educational Research, 63*, 249-294.
- Wentzel, K. R. (2003). Sociometric status and adjustment in middle school: a longitudinal study. *Journal of Early Adolescence, 23*, 5-28.
- Wentzel, K. R., & Caldwell, K. (1997). Friendships, peer acceptance, and group membership: Relations to academic achievement in middle school. *Child Development, 68*, 1198–1209.
- Wentzel, K. R., & Wigfield, A. (1998). Academic and Social Motivational Influences on Students' Academic Performance. *Educational Psychology Review, 10*(2) 155-175.
- Zettergren, P. (2003). School adjustment in adolescence for previously rejected, average and popular children. *British Journal of Educational Psychology, 73*, 207–221.

