English Language Learners' Educational Resilience and Classroom Learning Environment

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Resilience is an area of research that has important implications for the educational improvement of English Language Learners (ELLs) because it focuses on ELLs who are successful in school despite the presence of adverse conditions such as living in economically- and socially-disadvantaged circumstances. This study compared the classroom and instructional learning environment of 189 fourth- and fifth-grade resilient, average and nonresilient ELLs. Resilient and average students perceived significantly (p < .05) more competition in the classroom than nonresilient students, while nonresilient students and average students perceived their reading classes to be significantly (p < .05) more difficult than resilient students. The classroom observation results revealed that resilient and average students were on task significantly (p < .001) more than nonresilient students.

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English language learners (ELLs) are the fastest-growing student population in the U. S., but they are among the country's lowest performing students (Alliance for Excellent Education, 2007; Garcia & Cuéllar, 2006). A significant proportion of ELLs have low academic achievement, high dropout rates, and high rates of grade retention (KewalRamani, Gilbertson, Fox, & Provasnik, 2007). Furthermore, many ELLs attend schools where the teaching quality and curriculum are inferior to their native-English-speaking peers (Gandara, Rumberger, Maxwell-Jolly, & Callahan, 2003). Consequently, ELLs have often been

characterized as the most vulnerable students to academic failure in the U. S. (Lesaux, 2006).

Resilience is a theoretical and empirical framework that focuses on indicators or behaviors that promote students' success (Benard, 2004; Condly, 2006). Theoretically, resilience is an area of research that has important implications for the educational improvement of ELLs because it focuses on ELLs who are successful in school despite the presence of adverse conditions such as living in economically- and socially-disadvantaged circumstances. Educational resilience should not be viewed as a fixed attribute of some students, but rather as alterable processes or mechanisms that can be developed and fostered in schools and classrooms. In order to achieve academic equity and narrow achievement gaps, educational interventions often need to be made within classrooms, so that all learners, regardless of gender, ethnicity, socio-economic status, or language can be successful.

The classroom learning environment is one of the alterable variables that have been found to promote student resilience (Waxman & Chang, 2006; Waxman, Huang, & Wang, 1997). There have only been a few studies, however, that have focused on the classroom learning environments of resilient and nonresilient students from disadvantaged circumstances. In one such study, Waxman and Huang (1996) compared the motivation and learning environment of 75 resilient and 75 nonresilient minority students from an inner-city middle school and found that resilient students had significantly higher perceptions of involvement, task orientation, rule clarity, satisfaction, pacing, and feedback than nonresilient students. Resilient students also reported significantly higher social self-concept, achievement motivation, and academic self-concept than nonresilient students. In this study, students were classified as resilient if

they scored on or above the 90th percentile on standardized mathematics achievement tests for a 2-year period. Students were classified as nonresilient if they scored on or below the 10th percentile for two consecutive years.

In a similar study, Waxman, Huang, and Padrón (1997) compared the motivation and learning environment of 60 resilient and 60 nonresilient Latino middle school students and found that resilient students had significantly higher perceptions of involvement, satisfaction, academic self-concept, and achievement motivation than nonresilient students. In this study, students were classified as resilient if they (a) scored on or about the 75th percentile on a standardized mathematics test for a two-year period and (b) reported receiving A's or B's in mathematics over a two-year period. Students were identified as nonresilient if they (a) scored on or below the 25th percentile on a standardized mathematics test for a two-year period, (b) reported receiving C's, D's, or F's for mathematics the current year, and (c) reported receiving B's, C's, D's, or F's in mathematics the previous year.

Very few studies, however, have looked at both classroom learning environments and students' classroom behaviors. In one such study, Chang (2004) identified the differences in perceptions of mathematics classroom learning environments among resilient, average, and nonresilient elementary students from three public elementary schools. Resilient, average, and nonresilient students were classified based on teachers' identification of students. Chang (2004) found that the resilient student group and the average group were significantly more satisfied with their class work and enjoyed their classroom environment more compared with the nonresilient student group. The classroom observation results indicated that the resilient students were observed on

task significantly more frequently (85%) than the nonresilient students (61%).

Purpose of the Study

The purpose of the present study is to investigate the classroom learning environment of resilient, average, and nonresilient students in reading classrooms consisting of predominantly Hispanic ELLs. This research is important for several reasons. First, most of the research on resilience has been done in mathematics and there have only been a few studies that have focused on resilience in reading classrooms. Second, few studies have used both students' perceptions of their learning environment and systematic classroom observations of individual students. Classroom observation methods can answer important questions about whether some students are being treated differently or behave differently in the classroom, while the learning environment measures focus on the ways students actually perceive their instructional and classroom environment (Waxman & Chang, 2006). The use of multiple methods enhances the validity of the study.

The present study addresses the following research questions: (1) Are there significant differences among resilient, average, and nonresilient urban students on their perceptions of their classroom learning environment in reading? and (2) Are there significant differences among resilient, average, and nonresilient urban students in their classroom behaviors in reading? Students were identified as resilient by their classroom teacher based on high achievement on standardized reading achievement tests and daily schoolwork, excellent attendance, and highly motivated as perceived by the teacher. Students were identified as nonresilient by their classroom teacher based on low achievement on standardized reading achievement tests and

daily schoolwork, poor attendance, and low motivation as perceived by the teacher. Average students were students who were not identified as either resilient or nonresilient by their classroom teacher.

Methods

Participants
The participants were189 fourth and fifth grade students and their teachers from 15 classrooms in one elementary school located in a major metropolitan area in the south central region of the United States. Nearly all of the students were Hispanic ELLs and most of them were from low-socioeconomic families. The academic achievement of students is lower than other students in the same school district and lower than the state average.

Instruments
An adapted version of the My Class Inventory (MCI) (Dryden & Fraser, 1996) was used to collect data on students' perceptions of their classroom learning environment near the end of the school year. The inventory is a 48-item questionnaire read to students in Spanish or English by researchers. Students circle either "Yes" or "No" in response to statements about their reading class. The questionnaire contains eight scales that assess students' perceptions in the following areas: (a) Satisfaction, (b) Friction, (c) Competition, (d) Difficulty, (e) Cohesion, (f) Self-Esteem in Reading, (g) Teacher Support, and (h) Equity. The instrument has been found to be reliable and valid in many different school settings and it is especially applicable for elementary school students (Padrón, Waxman, & Huang, 1999; Rivera & Waxman, 2007). For the present study, the internal consistency reliability coefficients for the eight scales were found to be adequate, ranging from .62 to .80, with an

average of .70. The discriminant validity for the sample (i.e., the mean correlation coefficient of a scale with each of the other scales) ranged from .01 to .59, with an average of .22, suggesting that there was adequate scale discriminant validity, although a few scales overlapped to a certain degree.

The observation instrument used in the study was the Classroom Observation Schedule (COS) (Waxman & Padrón, 2004). It is designed to obtain reliable, low-inference data on students' classroom behaviors. It documents observed student behaviors in the context of ongoing classroom instructional learning processes. Individual students are observed with reference to (a) their interactions with the teacher or other students, (b) whether the teacher or student has the responsibility for selecting the classroom activity, (c) the type of activity they are working on, (d) the classroom setting in which the observed behavior occurs (e.g., whole class or small group), (e) their academic engagement (e.g., on-task or off-task behavior), and (f) the language used (e.g., English or Spanish). This observation schedule has been found to be valid and reliable in previous studies (Padrón, Waxman, & Huang, 1999; Rivera & Waxman, 2007). The inter-observer agreement for the present study was found to be excellent, with an inter-observer reliability of .97.

Procedures
About two months before the end of the school year, teachers were asked to identify their population of students at risk (e.g., students from families of low socio-economic status, living with either a single parent, relative, or guardian). Students identified as gifted, talented, or special education were excluded from the population to avoid potential effects related to ability differences. From this pool of at-risk students, 15 classroom teachers selected up to three resilient (i.e., high-achieving students on both standardized achievement test and daily school work, excellent attendance,

and highly motivated as perceived by the teacher) and three nonresilient students (i.e., low-achieving students on both standardized tests and daily school work, poor attendance, and low motivation as perceived by the teacher) in their class. Average students were students who were not identified as either resilient or nonresilient by the teacher.

Students were administered the MCI in their reading classrooms about a month before the end of the school year. Trained, university researchers read the survey to all students and told the students that the survey was not a test and any school personnel would not see their responses. Approximately two resilient, two nonresilient, and four average students from each classroom also were observed with the COS in their classrooms about a month before the end of the school year. The COS was used to observe each student for ten 30-second intervals during their reading class. Two university researchers who were very experienced using the COS conducted the observations.

Results

Learning Environment Results

Descriptive statistics are used to report the means and standard deviations of students' perceptions of their classroom learning environment scales. The mean values for each scale range from 1 to 3. A mean scale score close to the value of 3 indicates that students perceived that the particular scale was very prevalent (i.e., agreed with all the items on the scale), while a mean score of 1 indicates that all the students disagreed with all the items on the scale. In general, the results indicate that students in all three student groups (i.e., resilient, average, and nonresilient) had positive perceptions of their classroom learning environment. The results for resilient students indicate that the scales with the highest means were cohesion, competition, reading self-esteem, and teacher support. Difficulty was the scale that had the lowest

mean for resilient students. Average students similarly reported high perceptions of cohesion, competition, and teacher support, and low perceptions of difficulty. Nonresilient students reported high perceptions of cohesion, satisfaction, and teacher support. The standard deviations revealed that there were many differences in the ways (i.e., wide variation) students in each group responded to the items on the survey. Generally, there was more variation in the nonresilient student group than in the other two student groups.

Table 1
Differences Between Resilient, Average, and Nonresilient Students' Perceptions of Classroom Learning Environment

Scales	Resilient *n* = 45		Average *n* = 103		Nonresilient *n* = 41		
	M	*SD*	*M*	*SD*	*M*	*SD*	*F*
Cohesion	2.58	0.54	2.50	0.55	2.54	0.65	0.888
Competition	2.46a	0.61	2.42a	0.62	2.13b	0.69	4.075*
Difficulty	1.30b	0.56	1.56a	0.67	1.72a	0.65	4.104*
Friction	1.87	0.62	1.95	0.57	1.97	0.63	0.820
Satisfaction	2.20	0.70	2.34	0.71	2.40	0.73	1.621
Reading Self-Esteem	2.43	0.54	2.26	0.57	2.12	0.60	1.957
Equity	2.29	0.59	2.28	0.60	2.19	0.61	0.391
Support	2.41	0.61	2.40	0.67	2.40	0.70	0.235

Note. A score of 3 indicates that the student responded positively to all the items on the scale. A score of 1 indicates that the student responded negatively to all the items on the scale. Means with the same letter are not significantly ($p <$ .05) different according to the Duncan multiple post range test. *$p < .05$

An analysis of variance (ANOVA) was used to examine if there were significant differences between resilient, average, and nonresilient students on the eight scales of "My Class Inventory." The ANOVA results reveal that there were significant differences among resilient, average, and nonresilient students on two scales: Competition, $F (2, 192) =$ 4.08, $p < .05$; and Difficulty, $F (2, 192) = 4.10, p < .05$. The Duncan multiple range post hoc results indicate that the resilient and average student groups scored significantly higher on Competition than the nonresilient group. On the other hand, nonresilient and average students scored significantly higher on their perceptions of difficulty than resilient students. These two findings also are educationally significant since their effect sizes were greater than .50.

Classroom Observation Results

Table 2 reports the classroom observation results in percentages of time the behavior was observed overall by the resilience classification (i.e., resilient, average, and nonresilient). The descriptive observational results revealed that for all student groups, the predominant mode of instruction was whole class (> 90%), followed by small group activities (~5%), and individual work (~3%). The predominant instructional activities observed were: (a) watching or listening (~40%), (b) working on written work (i.e., doing seatwork) (~20%), and (c) reading individually (~18%). Students were observed interacting with their teacher for instructional purposes only about 8% of the time

and students were observed interacting with their teachers on social matters less than 1% of the time.

Differences Between Resilient, Average, and Nonresilient Students' Observed Classroom Behaviors

	Resilient (*n* = 31)		Average (*n* = 55)		Nonresilient (*n* = 29)		
Interactions	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*
No interactions/independent	85.06	26.15	85.07	20.76	80.21	28.65	.43
With teacher- Instructional	5.87	14.08	5.24	9.40	7.69	12.80	.42
With student- instructional	7.06	18.77	5.53	11.19	3.93	13.79	.36
With students- social	2.00	7.76	3.20	12.37	4.48	11.20	.38
Selection of activity							
Teacher-assigned activity	95.84	18.53	95.84	19.19	97.69	12.44	.12
Student-selected activity	4.16	18.53	4.16	19.19	2.31	12.44	.12
Activity Types							
Working on Written work	32.13	31.51	22.78	28.55	14.69	22.95	2.90
Interacting- Instructional	12.29	22.13	9.71	15.64	9.31	15.82	.27
Interacting- Social	2.00	7.76	2.60	8.50	4.00	9.68	.43
Watching or listening	38.87	32.55	44.11	33.51	35.38	30.79	.73
Reading	20.65	28.87	15.38	21.74	14.66	24.54	.58

Not attending to task	8.32b	14.25	14.76b	19.06	32.14a	30.00	10.16***
No activity/ transition	1.26b	5.07	0.47b	2.46	5.07a	12.80	4.09*
Classroom Setting							
Whole class	93.55	24.97	90.96	26.60	93.10	25.79	.12
Small group	4.61	19.31	4.73	17.46	3.45	18.57	.05
Individual	1.84	10.24	4.31	16.86	3.45	18.57	.24
Academic Engagement							
On task	83.03a	14.94	80.93a	24.50	57.48b	29.17	13.94***
Waiting for teacher	2.06	6.62	1.56	5.99	4.55	12.08	1.34
Distracted	8.19b	13.32	15.31b	18.90	34.93a	28.00	14.05***
Disruptive	1.06	5.93	2.16	8.30	3.10	8.06	.53
Language Used							
English	88.71	30.17	93.22	21.21	81.62	38.40	1.54
Both English and Spanish	10.90	29.39	6.78	21.21	16.89	37.64	1.21

Note.   The results are reported in percentages of time observed. Categories that were observed less than 3% of the time were omitted from the table. Means with the same letter are not significantly ($p < .05$) different according to the Duncan multiple post range test. $*p < .05; ***p < .001$.

ANOVA was used to examine possible significant differences between resilient, average, and nonresilient students' classroom behaviors on the COS. The results revealed that resilient and average students were observed "On Task" more frequently than nonresilient students, ($F (2, 192) = 13.94, p < .001$). The results also revealed that nonresilient students were observed more frequently "Not Attending to Task" than resilient and average students ($F (2, 192) = 10.16, p < .001$). Nonresilient students similarly were observed more frequently "Distracted" than resilient and average students ($F (2, 192) = 14.05, p < .001$). Resilient (83%) and average students (81%) were observed being on task approximately 80% of the time, while nonresilient students were observed being on task only 57% of the time. The magnitude of these differences is both statistically and educationally significant, and much larger than engaged-time differences found in previous research.

Discussion
The findings from the present study reveal that there were significant differences between resilient and nonresilient students in their classroom behaviors and learning environment. Nonresilient students find their work in reading more difficult than resilient students and they are much more likely to be off-task in their classroom. They also perceive less competition in the classroom, which may be due to the fact that they find the work more difficult and consequently do not even attempt to compete academically with other

students in the class. The high off-task behavior is especially problematic since prior research has found that students' spending more time on task leads to higher reading achievement (Friedman, Harwell, & Schnepel, 2006; Marzano, 2007). Average students also find their work in reading more difficult than resilient students, but they are similar to resilient students in terms of perceiving competition and being on task.

Not surprisingly, the instructional and classroom learning environment differences found in this study may be consistent with teachers' expectations and attitudes toward resilient and nonresilient students. Thus, the use of teacher nomination to identify "resilient" and nonresilient" students could be considered a limitation of this study because there is the danger that having teachers identify or classify students as nonresilient could impact their treatment of students and ultimately impact students' success. On the other hand, the teacher nomination approach appears to be a more valid identification procedure to identify resilient and nonresilient students than those exclusively based on grades and/or test scores which have been used in many other resiliency studies (e.g., Gonzáles & Padilla, 1997; Waxman, Huang, & Padrón, 1997) because teachers generally make accurate inferences that are based on a large sample of formal and informal student assessments such as teacher-made tests, quizzes, daily work, homework, and responses in class (Nichols & Berliner, 2007). Our informal discussions with teachers about the nomination process revealed that they had no difficulty categorizing the students in their class. Several teachers, for example, shared specific examples with us of why certain students in their class were clearly resilient and nonresilient. The teachers also indicated that the resilience framework was a useful approach that helped them understand why certain students may be successful or unsuccessful.

The combination of both survey and observational data in this study provides rich insights to our understanding of the "resilience" phenomena as well as our interpretations of what distinguishes resilient and nonresilient students. Future research should examine if these learning environment and classroom behavior differences are stable or consistent across the entire school year, as well as investigate whether the differences persist beyond a given school year. Finally, future research needs to explicitly test instructional interventions where teachers try to alter their classroom teaching and the learning environment in order to promote resilience for all students and narrow achievement gaps within their classes.

While student success and failure in school is dependent upon a number of influential determinants, it appears that the classroom learning environment and students' classroom behavior are contributing factors. The combination of both survey and observational data in this study provides rich insights to our understanding of the "resilience" phenomena as well as our interpretations of what distinguishes resilient and nonresilient students. The results of the present study are discouraging in that they paint a bleak picture of nonresilient, elementary school ELLs who are not doing well in school. Many of the fourth- and fifth-grade students in this study appear to have already "given up" on school and several of the students that we informally talked to indicate that they don't even plan to finish high school.

Furthermore, since the teachers in this study easily identified the resilient and nonresilient students in their classrooms, it is troublesome that we observed few remediation or corrective activities for the nonresilient students. In other words, teachers were aware that their nonresilient students were not doing well in their classrooms, but there were no specific efforts to individually help them or

address their learning needs. Other studies that explicitly focused on teachers' perceptions of resilient and nonresilient students have similarly found that teachers did not feel that students' academic failure was their responsibility (Read, 1999). The "equity consciousness" (i.e., belief that all students are capable of academic success) of teachers needs to be addressed so that we can help teachers assume more responsibility and do everything possible to ensure that all students reach high levels of academic success (Skrla, McKenzie, & Scheurich, 2007). Focusing on individual student differences is one of important domains of the American Psychological Association's Learner-Centered Psychological Principles (1997), yet there is evidence that many teachers do not tailor instructional strategies or modify the curriculum to differing student needs (McCombs, 2007). The nonresilient students in the present study found their work more difficult than resilient students, yet we did not find teachers interacting more with them or assisting them more than average or resilient students.

The findings from the present study also provide some insight for educators who wish to foster optimal learning conditions for all students. It seems that without an improvement in the classroom and instructional learning environment, students' academic performance will continue to decline (Gordon & Mejia, 2006). Teachers, however, often are unaware of how students perceive their learning environment (Waxman & Chang, 2006). Teachers also appear to have difficulty discussing issues related to fostering students' resilience because they do not know their students well. Schools today often are very depersonalized and teachers appear to spend very little time learning about their students or interacting with them (Waxman, Garcia, & Read, 2008). The educational failure of students may be indicative of the failure of the school to teach and connect to students'

lives in meaningful ways. As Darling-Hammond (1997) puts it, the teacher's job is to get into the hearts and minds of their students by developing caring relationships with students. Effective teachers understand the various social and economic factors that may hinder their students' success, but they focus on the affective domain and help students become resilient by providing: (a) caring and supportive relationships, (b) positive and high expectations, and (c) opportunities for meaningful participation (Mitchell, 2007).

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