

The Development and Validation of the Ethical Climate Index for Middle and High Schools

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Abstract

One school characteristic that needs to be considered as important in keeping schools safe is school climate. The purposes of this study were to develop and validate an instrument that measures the ethical climate of middle and high schools. To create the School Ethical Climate Index (SECI), we adapted the Ethical Climate Index for graduate and professional school programs to apply to middle and high schools. The SECI measures a school's sense of community by assessing student and teacher interactions and relationships through the application of five ethical principles: respect for autonomy, nonmaleficence, beneficence, justice, and fidelity. To provide evidence of the SECI's reliability and validity, we distributed the SECI to 101 teachers and administrators who worked at middle and/or high schools. The reliability coefficients for each of the SECI subscales were greater than .80. Differences between middle and high school teacher and administrator perceptions provided evidence of construct validity. The SECI could be used in school districts to assess areas for school improvement and, thereby, help to reduce school disorder and violence.

Introduction

With the general concern for disorder and violence in schools today and the efforts of school staff to provide a safe environment for students, school climate is one school characteristic that needs to be considered as important in keeping schools safe. Each school has a unique climate or personality that research indicates may be unrelated to student body size or socioeconomic level (Jobe & Parrish, 1995). Several programs have been utilized to enhance school climate, such as student leadership, conflict resolution, peer mediation, and violence prevention programs (Gallagher & Satter, 1998; Nor, Tait, & Winfield, 1996). Before these programs can be used successfully to prevent school disorder and violence, school leaders need to assess a school's climate in order to tailor programs to each school's unique climate (Rojewski & Wendel, 1990; Welsh, 2000).

The purposes of this study were to develop and to validate an instrument that measures the ethical climate of middle and high schools. In this study we focused on the ethical climate because a review of the research indicated that the common element in maintaining a safe school environment is a climate of mutual trust and respect among students and school staff (Gallagher & Satter, 1998; "A Guide to Safe Schools," 1999; MacDonald, 1997; Wanat, 1996; Welsh, 2000). In fact, MacDonald (1997) found that the school climate may cultivate "a culture of violence through lack of empathy and caring towards students" (p. 12). Schools need to identify the causes of school disorder and violence, such as teasing, bullying, and the lack of mutual respect among students and staff ("It Can Happen in Your School," 1999). Students who survived the tragic shootings at Columbine High School have been speaking at schools around the country to send a message to students to accept and respect others (O'Connor, 2000). The assessment of the nature of the interactions and relationships among students and staff could enable school staff to pinpoint areas where changes could be made to enhance the climate and, thereby, reduce school disorder and violence.

Evidence is plentiful for why there is a need for a positive ethical climate within schools, which is characterized by caring relationships (Byrk & Driscoll, 1988; Noddings, 1988, 1992) that involve an "acceptance of others with respect, justice, and appreciation and . . . peaceful cooperation within difference" (Furman, 1998, p. 312). When students experience caring relationships and a sense of belonging within a school, positive student attitudes and increased motivation and participation in school occur (Byrk & Driscoll, 1988; Deci, Vallerand, Pelletier, & Ryan, 1991; Goodenow, 1993; Goodenow & Grady, 1993; Ryan, Stiller, & Lynch, 1994; Wentzel, 1998). Many student problems have been associated with students' lack of belonging within a school, such as increased incidence of mental and physical illness, behavior problems, teen suicide, violence in schools, loneliness,

delinquency, withdrawal, aggression, drug and alcohol abuse, eating disorders, depression, drop outs, teen pregnancy, vandalism, diminished motivation, and poor academic performance (Battistich & Hom, 1997; Baumeister & Leary, 1995; Byrk & Driscoll, 1988; Deci et al., 1991; Kagan, 1990; Newmann, 1981; Osterman, 2000). Creating a positive ethical climate within schools today seems especially important considering the increased violence and disorder and lack of respect for persons throughout the world.

A review of the research that utilized school climate instruments failed to identify an instrument that specifically measures the ethical climate of schools (e.g., Davis & Peck, 1992; Hanna, 1998; Hattler & Taylor, 1992; Johnson & Johnson, 1996; National Association of Secondary School Principals, 1989; Riehl & Sipple, 1996). To develop an instrument that measures the ethical climate of middle and high schools, we adapted the Ethical Climate Index (ECI), a perceptual instrument that assesses the ethical climate of graduate and professional school programs (Schulte, Brown, & Wise, 1991). Research indicates that the ECI has strong psychometric characteristics and can differentiate among faculty and student perceptions of the ethical climate across academic areas (Schulte, 2001; Schulte et al., 1991).

Ethical Principles

Schulte et al. (1991) developed the ECI items by applying five ethical principles—respect for autonomy, nonmaleficence, beneficence, justice, and fidelity—to the interactions and relationships between students and faculty, specifically *student to faculty*, *student to student*, and *faculty to student* interactions and relationships (Brown & Krager, 1985; Kitchener, 1984, 1985). Respect for autonomy refers to allowing a person to act independently; nonmaleficence means doing no harm to others; beneficence refers to benefiting others; justice requires one to treat others fairly; and fidelity requires one to be faithful and trustworthy. At the core of these principles lies respect for persons. To create the School Ethical Climate Index (SECI), we adapted the ECI items to middle and high schools.

Research Questions

We addressed the following research questions during the development and validation of the SECI: (1) Can the ethical climate of middle and high schools be assessed with an acceptable degree of reliability and validity? (2) What are teacher and administrator perceptions of the ethical climate at their schools? (3) Is the ethical climate considered important in keeping schools safe? (4) Do teacher and administrator perceptions of the ethical climate differ between middle and high schools?

Method

The procedures used to develop and validate the SECI included an item development phase as well as procedures to provide evidence of the SECI's content and construct validity and an estimation of its reliability.

Item Development

We served as the item development panel. Included in our group were 3 university professors, 2 middle school teachers, 1 high school teacher, and 2 high school administrators. At the time of this study, we had a mean of 15.63 [Standard Deviation (SD)=10.25] years of experience in the field of education.

Of the 16 original ECI items that measure *student to faculty* interactions and relationships, we reworded 12 items to apply to middle and high schools, discarded 4 items, and added 2 new items for a total of 14 SECI *student to teacher* items. Of the 29 original ECI items that measure *student to student* interactions and relationships, we reworded 22 items to apply to middle and high schools, discarded 7 items, and added 8 new items for a total of 30 SECI *student to student* items. We adapted 3 of the new *student to student* items from the Get Real About Violence instrument (Rockstad, 1996). Of the 58 original ECI items that measure *faculty to student* interactions and relationships, we reworded 36 items to apply to middle and high schools and discarded 22 items for a total of 36 SECI *teacher to student* items. In summary, the SECI contained 80 items after the item development phase. The 80 items included 14 *student to teacher* items, 30 *student to student* items, and 36 *teacher to student* items.

Validation of the SECI

Content Validity

A group of 23 persons with experience at the middle and/or high school level reviewed the 80 SECI items to provide evidence of the SECI's content validity. None of the members of the content validity panel was a member of the item development group. The content validity panel included 3 teachers, 3 students, 7 administrators, and 7 counselors from middle and high schools, and 3 professors who teach in a College of Education at a midwestern metropolitan university. The reviewers' years of experience in the field of education ranged from 2 to 33 years with a mean of 22.32 years (SD =8.17).

We asked the reviewers to rate the appropriateness of the SECI items in measuring the ethical climate of middle and high schools on a 3-point scale (1=not appropriate, 2=marginally appropriate, and 3=very appropriate). We provided

the reviewers with information about the theoretical framework of the SECI, which included information on the five ethical principles that the SECI assesses. We asked the reviewers to provide ways to improve the items that they rated “1” or “2” if possible.

We analyzed the appropriateness ratings of the 23 reviewers in order to determine which items to retain in the SECI. With the exception of one *student to teacher* item that we reworded, we discarded items with mean ratings less than 2.50 and retained items with mean ratings of 3.0. Based on the input provided by the reviewers, we attempted to reword items with mean ratings between 2.50 and 2.99.

Of the 14 original *student to teacher* items, we discarded 4 because of mean ratings less than 2.5 and reworded 2 items based on reviewer comments. These changes resulted in a 10-item *student to teacher* subscale.

Of the 30 original *student to student* items, we discarded 10 because of mean ratings less than 2.5 and an additional 3 because of wording ambiguities. We reworded two items and added one new item based on reviewer comments. These changes resulted in an 18-item *student to student* subscale.

Of the 36 original *teacher to student* items, we discarded 6 because of mean ratings less than 2.5 and an additional 3 because of wording ambiguities. These changes resulted in a 27-item *teacher to student* subscale.

In summary, we discarded 26 items and added 1 new item as a result of the content validity procedures. After the content validity procedures, the SECI contained a total of 55 items, 10 *student to teacher* items, 18 *student to student* items, and 27 *teacher to student* items (see Table 1).

Table 1. School Ethical Climate Index (SECI) Items

Student to teacher subscale
1. Students' work shows effort.
2. Students follow teachers' directions.
3. Students complete assignments on time.
4. Students are respectful to teachers.
5. Students actively participate in class discussions.
6. Students pay attention during class.
7. Students accept responsibility for getting help when they need it.
8. Students let their teachers know when commitments cannot be met.
9. Teachers can trust students to behave appropriately in unsupervised situations.
10. When students are not successful, they blame teachers.

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Table 1, continued

Student to student subscale
1. Students feel free to discuss their ideas with their classmates.
2. Students are considerate of their classmates' feelings.
3. Students make new students feel welcome at this school.
4. Students make fun of classmates who are different from themselves.
5. Students go out of their way to help their classmates.
6. Students encourage their classmates when appropriate.
7. Without cheating, students share ideas, class notes, and other materials with their classmates.
8. Students can trust their classmates with secrets.
9. When working in a group with their classmates, students do their fair share of the work.
10. In classes, students feel comfortable sharing opinions that differ from their classmates'.
11. Students treat their classmates with respect.
12. Students defend classmates who are being picked on by others.
13. Students respect classmates' personal belongings.
14. Students are treated differently because of the way they dress.
15. Honor roll students are accepted by their classmates.
16. Students feel it is O.K. to walk away from a fight.
17. Students who fight are respected by their classmates.
18. Students feel there are cliques that do not accept them.
Teacher to student subscale
1. Teachers are available to students outside of class time.
2. Teachers praise students for excellent work.
3. Teachers help students improve their study habits.
4. Teachers present more than one point of view.
5. Teachers treat all students with respect.
6. Teachers encourage students to ask questions if they are appropriate.
7. Teachers give students the opportunity to practice what they learn.
8. Teachers are well-prepared for their classes.
9. Teachers are positive role models for students.
10. Students and teachers cooperate with each other.
11. Teachers respect the cultures of all students.
12. Teachers' tests cover what was taught.
13. Teachers are available to all students on an equal basis.
14. Teachers help students with special needs.
15. Teachers provide students with praise when appropriate.
16. Teachers return assignments in a reasonable amount of time.
17. Students who have questions about grades feel free to talk to their teachers.

18. Students feel comfortable seeking help from teachers outside of class time.
19. When school-related problems arise, students feel free to talk with teachers.
20. Students can trust teachers with personal information.
21. Teachers criticize students in front of their classmates.
22. Teachers promote cooperation among students.
23. Course exams, projects, and papers are graded fairly.
24. Teachers follow through on reasonable requests made by students.
25. Teachers allow students to choose topics for course projects or papers.
26. Teachers are attentive to students during meetings.
27. Teachers allow students to express their opinions even if they are different from the teachers'.

Importance Scale

In order to determine the importance of the ethical climate in keeping schools safe, we developed a 4-item importance scale (see Table 2). The items assess the perceived importance of positive *student to teacher*, *student to student*, and *teacher to student* interactions and relationships in keeping a school safe on a 5-point scale: 1=not important, 2=seldom important, 3=somewhat important, 4=important, and 5=very important.

Table 2. Importance Scale Items

1. A positive ethical climate.
2. Positive <i>student to student</i> interactions and relationships.
3. Positive <i>teacher to student</i> interactions and relationships.
4. Positive <i>student to teacher</i> interactions and relationships.

Subjects

To further validate the SECI and to provide an estimation of its reliability, we distributed the 55-item SECI to 101 teachers (75%) and administrators (25%) who worked at middle and high schools in a midwestern metropolitan area and were enrolled in graduate classes in the College of Education at a midwestern metropolitan university. There were 47 males and 54 females in the sample. The age of the respondents ranged from 22 to 57 years with a mean of 35.27 years ($SD=8.97$). Ninety-four percent of the respondents were employed full-time at middle and/or high schools. The number of years employed at their current school ranged from 1 to 24 years with a mean of 4.97 years ($SD=4.90$). The respondents' total number of years of experience in the field of education ranged from 1 to 35 years with a mean of 10.09 years ($SD=8.18$). Respondents worked at both public (79%) and private (21%) schools with 43% employed at high schools, 38% at middle schools, and 19% at combined middle and high schools.

Data Collection Procedures

We surveyed subjects by going to 14 graduate classes in the College of Education at a midwestern metropolitan university. The survey information included (a) a cover letter that explained the purposes of the study and informed the subjects that participation was voluntary and that responses would be anonymous, (b) demographic questions used to describe the sample, (c) the 55-item SECI, (d) the 4-item importance scale, and (e) a bag of candy that served as a small incentive. Before distributing the survey information, we contacted the Dean of the College of Education, the departmental chairpersons within the College of Education, and the professors of the surveyed classes to gain their approval to distribute the survey. We explained the purposes of the study before distributing the surveys to the classes, and then waited while the respondents completed the surveys which took approximately 10 minutes. We asked the respondents to respond to the SECI items by giving their perception of the ethical climate of their school based on their experiences and/or the experiences of their peers. We asked them to consider how true each SECI item was in their school using the following response scale: 1=rarely or never true, 2=seldom true, 3=sometimes true, 4=often true, and 5=usually or always true.

Data Analyses

We conducted the following statistical analyses to investigate the construct validity and reliability of the SECI:

1. We evaluated the construct validity and dimensionality of the SECI with exploratory factor analyses using a principal axis factoring method followed by a varimax rotation of the number of factors extracted. We used exploratory factor analyses rather than confirmatory because the results of the factor analyses of the original ECI indicated that the ECI was unidimensional (Schulte et al., 1991). Thus, we did not specify beforehand the structure and number of dimensions measured by the SECI. We used the principal axis factoring method rather than the principal components method because we wanted to investigate common variance in order to determine the number of dimensions that the SECI measured (Kachigan, 1991).
2. We estimated the reliability of the SECI subscales using coefficient alpha (Cronbach's alpha) (Crocker & Algina, 1986).
3. We summarized the respondents' perceptions of the ethical climate at their schools and the perceived importance of the ethical climate in keeping schools safe by calculating mean scores for each of the SECI subscales and the 4-item importance scale.

4. To provide additional evidence of the SECI's construct validity, we conducted independent t-tests to determine if teacher and administrator perceptions of the ethical climate as measured by their mean scores on the SECI subscales and the importance scale differed between middle and high schools. We used a .05 level of significance.

Results

Factor Analysis

The initial factor analysis indicated that a two-factor solution fit the data. The scree plot provided visual confirmation of the initial eigenvalue information. The first factor had an eigenvalue of 17.37 and accounted for 31.59% of the total variance. The second factor had an eigenvalue of 5.60 and accounted for 10.18% of the total variance. The two factors accounted for approximately 42% of the variance in the SECI items.

Using a factor loading cutoff value of .40, the factor loadings for the two-factor solution revealed that the SECI items measured a teacher dimension and a student dimension (see Table 3). The SECI *teacher to student* items loaded on the first factor. The SECI *student to teacher* and *student to student* items loaded on the second factor.

Five of the original SECI items did not load on either the teacher or student factor. Therefore, we removed them before conducting the reliability analysis. Listed below are the items that we removed based on the results of the factor analysis.

1. When students are not successful, they blame teachers. (student to teacher 10)
2. Students can trust their classmates with secrets. (student to student 8)
3. In classes, students feel comfortable sharing opinions that differ from their classmates'. (student to student 10)
4. Students feel there are cliques that do not accept them. (student to student 18)
5. Teachers criticize students in front of their classmates. (teacher to student 21)

Table 3. Factor Loadings for the SECI Two-Factor Solution

SECI item	Factor 1	Factor 2
Student to teacher 1	.238	.478
Student to teacher 2	.197	.600
Student to teacher 3	.332	.465
Student to teacher 4	.271	.650
Student to teacher 5	.310	.414
Student to teacher 6	.357	.574
Student to teacher 7	.259	.470
Student to teacher 8	.263	.493
Student to teacher 9	.032	.716
Student to teacher 10	-.193	.387
Student to student 1	.397	.435
Student to student 2	.232	.672
Student to student 3	.220	.630
Student to student 4	-.148	.606
Student to student 5	.285	.676
Student to student 6	.236	.628
Student to student 7	.235	.529
Student to student 8	.182	.355
Student to student 9	.394	.421
Student to student 10	.294	.376
Student to student 11	.337	.746
Student to student 12	-.037	.601
Student to student 13	.197	.643
Student to student 14	-.008	.506
Student to student 15	.368	.444
Student to student 16	.235	.640
Student to student 17	-.078	.425
Student to student 18	.017	.297
Teacher to student 1	.585	.301
Teacher to student 2	.703	.132
Teacher to student 3	.736	.038
Teacher to student 4	.592	.067
Teacher to student 5	.680	.194
Teacher to student 6	.656	.186
Teacher to student 7	.659	.125
Teacher to student 8	.596	.240
Teacher to student 9	.689	.329
Teacher to student 10	.600	.439
Teacher to student 11	.617	.125

SECI item (cont.)	Factor 1	Factor 2
Teacher to student 12	.731	.024
Teacher to student 13	.582	.126
Teacher to student 14	.686	<.001
Teacher to student 15	.782	.150
Teacher to student 16	.578	.102
Teacher to student 17	.618	.267
Teacher to student 18	.522	.316
Teacher to student 19	.539	.127
Teacher to student 20	.595	.247
Teacher to student 21	.244	.314
Teacher to student 22	.641	.139
Teacher to student 23	.772	.072
Teacher to student 24	.645	.149
Teacher to student 25	.460	.162
Teacher to student 26	.676	.149
Teacher to student 27	.547	.160

Reliability Analysis

The results of the factor analysis revealed that there was a dominant teacher dimension and a student dimension. We constructed the SECI items to include *student to teacher*, *student to student*, and *teacher to student* interactions and relationships. Because we wanted to separate items that involved *student to teacher* interactions and relationships from those that involved *student to student* interactions and relationships in statistical analyses, we divided the *student to teacher* and *student to student* items into two subscales during the reliability analysis.

We calculated Cronbach's alpha for each of the three subscales, *student to teacher*, *student to student*, and *teacher to student*. We recoded the negatively worded items before conducting the reliability analyses. The reliability estimate for the 9-item *student to teacher* subscale was .8559. The mean of the corrected item-total correlations was .59 ($SD=.09$).

The reliability estimate for the 15-item *student to student* subscale was .8946. We removed the item "students who fight are respected by their classmates" from the subscale because it had a relatively low corrected item-total correlation (.31) and alpha increased to .8991 when we removed it. The mean of the corrected item-total correlations for the 14 items was .60 ($SD=.09$).

The reliability estimate for the 26-item *teacher to student* subscale was .9507. The mean of the corrected item-total correlations was .64 ($SD=.07$).

The reliability estimate for the 4-item importance scale was .8531. The mean of the corrected item-total correlations was .71 ($SD=.11$).

Respondent Perceptions of the Ethical Climate

Table 4 lists the means and standard deviations for each of the three revised (based on the factor and reliability analyses) SECI subscales and the importance scale for the 101 respondents. For the 81 respondents who were employed at middle schools ($n=38$) or high schools ($n=43$), but not a combination of both, we conducted independent t-tests of their mean scores on the three revised SECI subscales and the importance scale (see Table 5). On the revised 9-item *student to teacher* and the revised 14-item *student to student* subscales, respondents who were employed at middle schools rated the ethical climate significantly lower than respondents who were employed at high schools ($t(79) = -2.375, p=.020$ and $t(79) = -2.510, p=.014$, respectively). There were no significant differences in respondent mean ratings by middle or high school on the revised 26-item *teacher to student* subscale ($t(79) = .396, p=.693$) or the importance scale ($t(79) = .143, p=.887$).

Table 4. Means and Standard Deviations for the SECI Subscales and the Importance Scale

Scale	<i>M</i>	<i>SD</i>
Student to teacher	3.44	.51
Student to student	3.24	.50
Teacher to student	4.00	.51
Importance	4.68	.49

Table 5. Means, Standard Deviations, and t-tests between Middle and High School Respondents on the SECI Subscales and the Importance Scale

Scale	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Student to teacher			-2.375	79	.020
High school	3.63	.57			
Middle school	3.36	.47			
Student to student			-2.510	79	.014
High school	3.48	.60			
Middle school	3.18	.45			
Teacher to student			.396	79	.693
High school	4.00	.62			
Middle school	4.05	.45			
Importance			.143	79	.887
High school	4.67	.57			
Middle school	4.69	.44			

Discussion

Reliability and Validity of the SECI

The results of this study indicate that the ethical climate of middle and high schools can be assessed with an acceptable degree of reliability and validity. The reliability coefficients for all three SECI subscales were greater than .80 indicating that respondents were consistent in their responses to the SECI items. The item development phase and the content validity procedures ensured that the SECI measured the ethical climate of middle and high schools as defined by the five ethical principles: respect for autonomy, nonmaleficence, beneficence, justice, and fidelity (Kitchener, 1984, 1985). The results of the factor analysis indicated that the SECI measures a teacher dimension and a student dimension which provides evidence of construct validity. The results of the t-tests indicated that the SECI can differentiate between middle and high school levels which provides further evidence of construct validity.

Respondent Perceptions of the Ethical Climate

The mean of the respondent perceptions of the ethical climate was somewhat positive between “sometimes true” and “often true” for the *student to teacher* and *student to student* subscales and moderately positive, “often true”, for the *teacher to student* subscale. Respondents perceived the ethical climate as very important in keeping schools safe.

The respondents included only teachers and administrators. Further research needs to be conducted to determine if student perceptions of the ethical climate of their middle or high school differ from teacher and administrator perceptions. Schulte (2001) found differences between student and faculty perceptions of the ethical climate for some academic areas for some ECI subscales. In three of five academic areas surveyed, faculty rated *faculty to student* interactions and relationships significantly more positive than students. MacDonald (1997) reported that junior high students perceived teachers and administrators as mean. One student said that “once you get into here [junior high school] they consider you a delinquent, and trouble. I really miss how nice and caring the teachers all were in elementary school...it was a friendlier place” (p.12). Perhaps, a person’s perception of the ethical climate depends upon his or her power within the organization (Kipnis, 1976). When compared to teachers and administrators, students hold a position of less power within middle and high schools. Therefore, their perceptions of the ethical climate may differ from teacher and administrator perceptions.

SECI Differences Between Middle and High Schools

Middle school teachers and administrators rated *student to teacher* and *student to student* interactions and relationships significantly less positive than high school teachers and administrators. These differences could be related to the differences in the maturity levels of middle school and high school students and/or the perceptions of middle school students that the environment is not caring (MacDonald, 1997).

The SECI could be used to pinpoint areas where there are differences between middle and high school teacher and administrator responses. In this study, we found the largest differences (more than one-half of a standard deviation difference) between middle and high school teacher and administrator responses on the following *student to teacher* and *student to student* items: students follow teachers’ directions; students pay attention during class; students let their teachers know when commitments cannot be met; teachers can trust students to behave appropriately in unsupervised situations; students make fun of classmates who are different from themselves; students treat their classmates with respect; students defend

classmates who are being picked on by others; and students respect classmates' personal belongings. For each item, middle school teacher and administrator responses were less positive than high school teacher and administrator responses. Based on information such as this, school personnel could develop programs to enhance the ethical climate and, thereby, reduce school disorder and violence.

Conclusion

This study indicates that the SECI is a reliable and valid instrument for measuring the ethical climate of middle and high schools. The factor analysis indicated that the SECI items measure two unique factors: a teacher dimension and a student dimension. These two factors accounted for 42% of the variance in the teachers' and administrators' responses to the SECI items. Further research needs to be conducted to determine what other factors contribute to the variance (58%) in the respondents' scores that was not accounted for by the SECI. Such factors may include the students' family situation, teacher efficacy, student achievement, and school size, for example.

The teachers and administrators who participated in this study perceived the ethical climate to be a very important element in keeping schools safe. Thus, the SECI could be used in school districts to assess areas for school improvement and, thereby, help to reduce school disorder and violence. The SECI also could be used at individual schools to assess the effectiveness of special programs. The SECI currently is being used at a middle school in our metropolitan area to assess differences in the sense of community between a two-person team grouping of students and the more traditional grouping of students.

References

- Battistich, V., & Hom, A. (1997). The relationship between students' sense of their school as a community and their involvement in problem behaviors. *American Journal of Public Health, 87*(12), 1997-2001.
- 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.
- Brown, R. D., & Krager, L. (1985). Ethical issues in graduate education: Faculty and student responsibilities. *Journal of Higher Education, 56*(4), 403-418.
- Bryk, A. S., & Driscoll, M. E. (1988). *The high school as community: Contextual influences and consequences for students and teachers*. Madison, WI: National Center on Effective Secondary Schools, University of Wisconsin-Madison. (ERIC Document Reproduction Service No. ED 302 539)
- Crocker, L., & Algina, J. (1986). *Introduction to classical and modern test theory*. New York: CBS College Publishing.

- Davis, L. E., & Peck, H. I. (1992). *Outcome measures: School climate: Curriculum and instruction*. Mid-South Research Association. (ERIC Document Reproduction Service No. ED 353 335)
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26(3&4), 325-346.
- Furman, G. C. (1998). Postmodernism and community in schools: Unraveling the paradox. *Educational Administration Quarterly*, 34(3), 298-328.
- Gallagher, P. A., & Satter, L. S. (1998). Promoting a safe school environment through a schoolwide wellness program. *Focus on Exceptional Children*, 31(2), 1-12.
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *Journal of Early Adolescence*, 13(1), 21-43.
- Goodenow, C., & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education*, 62(1), 60-71.
- A guide to safe schools. (1999, June). *Brown University Child and Adolescent Behavior Letter*, 15(6), 4-5.
- Hanna, J. W. (1998). School climate: Changing fear to fun. *Contemporary Education*, 69(2), 83-85.
- Hattler, J. A., & Taylor, B. L. (1992). *A study of school climate in four Japanese high schools*. New Orleans, LA: Association for Supervision and Curriculum Development. (ERIC Document Reproduction Service No. ED 349 685)
- It can happen in your school. (1999, September). *NEA Today*, 18(1), 14-15.
- Jobe, M. E., & Parrish, A. D. (1995). The secondary school climate: A study of two campuses. *NASSP Bulletin*, 79, 102-109.
- Johnson, W. L., & Johnson, A. M. (1996). Assessing school climate priorities: A Texas study. *Clearing House*, 70(2), 64-66.
- Kachigan, S. K. (1991). *Multivariate statistical analysis: A conceptual introduction* (2nd ed.). New York: Radius Press.
- Kagan, D. M. (1990). How schools alienate students at risk: A model for examining proximal classroom variables. *Educational Psychologist*, 25(2), 105-125.
- Kipnis, D. (1976). *The powerholders*. Chicago, IL: The University of Chicago Press.
- Kitchener, K. S. (1984). Intuition, critical evaluation and ethical principles: The foundation for ethical decisions in counseling psychology. *The Counseling Psychologist*, 12(3), 43-55.
- Kitchener, K. S. (1985). Ethical principles and ethical decisions in student affairs. In H. J. Canon & R. D. Brown (Eds.), *New directions for student services: Applied ethics in student services* (pp. 17-29). San Francisco: Jossey-Bass.
- MacDonald, I. (1997). *The de-meaning of schools: Seeking a safe and caring environment*. Chicago, IL: American Educational Research Association. (ERIC Document Reproduction Service No. ED 410 684)
- National Association of Secondary School Principals. (1989). *Technical manual: Comprehensive assessment of school environments*. Reston, VA: Author.
- Newmann, F. M. (1981). Reducing student alienation in high schools: Implications of theory. *Harvard Educational Review*, 51(4), 546-564.
- Noddings, N. (1988). An ethic of caring and its implications for instructional arrangements. *American Journal of Education*, 96, 215-230.
- Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education*. New York: Teachers College Press.
- Nor, L., Tait, D., & Winfield, C. L. (1996). Taking a stand against violence. *Schools in the Middle*, 5(4), 14-17.

- O'Connor, M. (2000, February 2). Teens hear tragedy's message. *The Omaha World-Herald*, p. 15.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323-367.
- Riehl, C., & Sipple, J. W. (1996). Making the most of time and talent: Secondary school organizational climates, teaching task environments, and teacher commitment. *American Educational Research Journal*, 33(4), 873-901.
- Rockstad, R. (1996, Winter). Getting real about violence prevention. *School Safety*, 20-22.
- Rojewski, J. W., & Wendel, F. C. (1990). Individualizing school-climate surveys. *Clearing House*, 63(5), 202-207.
- Ryan, R. M., Stiller, J. D., & Lynch, J. H. (1994). Representations of relationships to teachers, parents, and friends as predictors of academic motivation and self-esteem. *Journal of Early Adolescence*, 14(2), 226-249.
- Schulte, L. (2001). Graduate education faculty and student perceptions of the ethical climate and its importance in the retention of students. *Journal of College Student Retention: Research, Theory, and Practice*, 3(2), 119-136.
- Schulte, L. E., Brown, R. D., & Wise, S. L. (1991). The development and validation of the ethical climate index for graduate and professional school programs. *Research in Higher Education*, 32(4), 479-498.
- Wanat, C. L. (1996). Defining safe schools. *Journal for a Just and Caring Education*, 2(2), 121-132.
- Welsh, W. N. (2000). The effects of school climate on school disorder. *Annals of the American Academy of Political and Social Science*, 567, 88-107.
- Wentzel, K. R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology*, 90(2), 202-209.

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