MEASURING KINDNESS AT SCHOOL: PSYCHOMETRIC PROPERTIES OF A SCHOOL KINDNESS SCALE FOR CHILDREN AND ADOLESCENTS

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In this study, we sought to create and validate a brief measure to assess students' perceptions of kindness in school. Participants included 1,753 students in Grades 4 to 8 attending public schools in a large school district in southern British Columbia. The School Kindness Scale (SKS) demonstrated a unidimensional factor structure and adequate internal consistency. The pattern of associations of the SKS to a corpus of theoretically relevant constructs obtained via student self-reports (classroom supportiveness, optimism, happiness, prosocial and social goals, satisfaction with life, and academic self-efficacy) provided evidence for convergent and discriminant validity. Furthermore, the SKS was significantly and positively associated with teacher reports on students' empathy, social skills, and peer acceptance. Analyses by gender and grade indicated that girls perceived significantly higher levels of kindness in school than did boys, and that students' perceptions of kindness in school decreased from fourth to eighth grade, with fourth-grade students reporting the highest levels of kindness in school and eighth-grade students reporting the lowest levels. The theoretical importance of investigating students' perceptions of kindness in the school context and the practical implications of this research for informing educational efforts to promote social and emotional competencies in school communities are discussed. © 2015 Wiley Periodicals, Inc.

Expectations for students and educators alike are shifting to reflect the increasing interest in promoting students' social and emotional learning (SEL) alongside academic skills traditionally taught in school, such as reading, writing, math, and science. SEL is "the process through which we learn to recognize and manage emotions, care about others, make good decisions, behave ethically and responsibly, develop positive relationships, and avoid negative behaviors" (Zins, Weissberg, Wang, & Walberg, 2004, p. 4). Although it has long been recognized that SEL programs lead to positive improvements in students' behavior, recent empirical findings demonstrating that SEL not only increases students' social and emotional skills but also improves their academic achievement (for a recent meta-analysis, see Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011) have led to a burgeoning empirical and practical interest in identifying the ways in which schools can create the conditions that support students' social and emotional competencies (Caprara, Barbanelli, Pastorelli, Bandura, & Zimbardo, 2000; Schonert-Reichl & Weissberg, 2014; Wang, Haertel, & Walberg, 1997).

Most of the research to date has been focused on explicating the dimensions of the school context that deter negative behaviors, with relatively scant attention given to those factors that foster students' positive human qualities, such as compassion and kindness. We begin our article with a review of the literature supporting the examination of kindness within school contexts and argue for the need for a self-report scale to measure students' perceptions of kindness in school.

SEL aligns with recent theory and research from the positive psychology movement, with its focus on the processes and mechanisms that build students' social–emotional competence (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). In contrast to deficit models that emphasize what is lacking, missing, or in need of repair, positive psychology builds on individuals' existing and emerging strengths (Clonan, Chafouleas, McDougal, & Riley-Tillman, 2004; Seligman & Csikszentmihalyi, 2000). Positive psychology shifts the focus from a deficit perspective (e.g., what is wrong or not working) to a strengths-based perspective—one in which "resilience is seen as a natural capacity all youth have for healthy development and learning" (Bernard & Slade, 2009, p. 353). Focusing on students' strengths within schools brings to the fore students' talents, competence, and abilities, and aligns with efforts in positive psychology that emphasize positive well-being, including optimism, happiness, and kindness.

The promotion of a positive school climate holds potential to foster students' social and emotional well-being (O'Brennan & Bradshaw, 2013) and academic learning (Blum, McNeely, & Rinehart, 2002; Cohen, McCabe, Michelli, & Pickeral, 2009). School climate is informed by the accepted and endorsed norms, values, and expectations that together reflect the quality of school life (Aldridge & Ala'l, 2013). Researchers who study students' perceptions of factors influencing school climate have found that students' perceptions change over time and not always favorably. Way, Reddy, and Rhodes (2007) followed 1,451 middle school students from the beginning of sixth grade through the end of eighth grade. Students' perceptions of school climate were less favorable over time and included decreases in perceptions of teacher support, peer support, and student autonomy, as well as decreases in perceptions of the clarity and consistency of school rules. One indication of a positive school climate is when healthy relationships exist among the various school-based stakeholders, whether they are aligned vertically (e.g., principal–teacher–student) or horizontally (teacher–teacher; Aldridge & Ala'l, 2013; Gregory, Henry, & Schoeny, 2007). For students, these healthy interpersonal relationships are facilitated, in part, by students' prosocial behavior, in which kindness can play a key role.

These interpretations of factors affecting students' prosocial behavior provided a framework for the present investigation, which sought to empirically assess students' perceptions of kindness in school. Eisenberg (1986) defined kindness as "voluntary, intentional behaviors that benefit another and are not motivated by external factors such as rewards or punishments" (p. 63). Others see kindness more simply as "Doing favors and good deeds for others" (Seligman, Steen, Park, & Peterson, 2005, p. 412).

Despite this increased interest in students' SEL and in promoting prosocial behavior in schools, there is a general absence of reliable and valid instruments for measuring kindness in school. Although there have been measures designed to assess dimensions of kindness, such as in the context of Buddhist teachings (Kraus & Sears, 2009) and as a dimension of altruism (e.g., Costa & McCrae, 1992; Rushton, Chrisjohn & Fekken, 1981), to our knowledge, there has only been one measure designed to date to specifically assess the construct of kindness in a sample that included adolescents and that approximates our conceptualization of kindness. More specifically, Communian (1998) developed the Kindness Scale and piloted it with 407 participants, ages 13 to 60. The Kindness Scale was theoretically derived from Kohlberg's (1969, 1984) developmental stage model and consisted of 25 items that asked participants to report their perceptions of kindness in response to items such as "I am kind because people need kindness," "I also know how to be kind to others," and "I am kind only with friends." Nonetheless, Communian's measure was designed to assess kindness as a personality trait and not from the perspective of an individual's perceptions of kindness in a specific context. Accordingly, we developed the School Kindness Scale (SKS) to assess students' perceptions of kindness within one specific context—the school.

In a recent policy report on SEL programs and strategies, Jones and Bouffard (2012), posited a number of recommendations for advancing SEL-based research and practice. These authors argued that reliable and valid measures must be identified and developed to assess the SEL practices and skills of varied school stakeholders (i.e., administrators, teachers, and students), in addition to the assessment of how school-based practices and programs are implemented. This call for reliable and valid SEL measures is echoed in recent work by Thapa, Cohen, Guffey, and Higgins-D'Alessandro (2013). In their extensive review of school climate research, these authors argue for the need to assess perceptions of safety, relationships, teaching and learning, and institutional environments.

We endeavored to respond to these calls to develop instruments to assess SEL within school contexts and developed the SKS to assess students' perceptions of the prevalence of kindness and the extent to which school-based relationships were perceived to encourage kindness. Items were thus crafted to tap into students' perceptions of both the extent or prevalence of kindness in their classroom and in their school, and the extent to which students perceive that their teachers and the school climate at large encourage kind behavior.

The Importance of School Culture and School Climate for Promoting Development

Although often used interchangeably, the terms school culture and school climate are differentiated in the educational literature because they offer distinct perspectives on the conditions underlying and supporting both student development and achievement (Thapa, Cohen, Higgins-D'Alessandro, & Guffey, 2012). Admittedly, both terms describe school conditions that contribute to establishing the tone of the school, contribute to the quality of relationships within the school, and are a reflection of the beliefs about how teaching and learning are supported within the school context.

School culture is the product of the prevalent norms, beliefs, and practices found within a school. As Hemmelgarn, Glisson, and James (2006) describe it, it is "the way things are done around here" (p. 75). There is a historic quality describing school culture, as schools operate according to values and expectations deeply rooted in often long-standing structures and practices. These norms, values, and expectations are promoted, upheld, and maintained in both explicit (e.g., the status and funding accorded a school's football team) and implicit (e.g., the social status afforded school athletes over band members) ways.

Although closely linked to school culture, school climate reflects perceptions of the environment (Thapa et al., 2012), and the intent of the SKS is to assess perceptions of kindness in the context of school climate, not school culture. More specifically, school climate reflects perceptions of the influences or effects this environment has on the psychological well-being of school members (e.g., Is the school a safe place? Do teachers care about students at this school?). In their recent review of 206 articles on school climate, Thapa and colleagues (2013) identified five dimensions of school climate that include (1) safety, (2) relationships, (3) teaching and learning, (4) institutional environment, and (5) school improvement.

Positive school climate has been empirically linked to a number of favorable outcomes, notably, the promotion of feelings of safety; establishing and maintaining healthy relationships, reductions in misbehavior, increases in students' academic, emotional, and behavioral success at school; teaching that is engaging and promotes learning, and improvements in the overall quality of schools (Aldridge & Ala'l, 2013; Sherman et al., 1998; Wang, Selman, Dishion, & Stormshak, 2010; see Thapa et al., 2013 for a review). Several studies have found associations of low ratings of school climate with a plethora of unfavorable outcomes, including increased relational aggression, poor classroom

behavior, and decreased academic achievement (Aldridge & Ala'l, 2013; Kuperminc, Leadbeater, & Blatt, 2001; MacNeil, Prater, & Busch, 2009).

Of all the findings linking school climate to positive outcomes for students, it is perhaps the link between a positive school climate and its buffering or protective effect on the learning and positive development of students that is most relevant for the present investigation. In early adolescence, the target population for this study, a positive school climate has been found to predict better psychological well-being (Ruus et al., 2007; Shochet, Dadds, Ham, & Montague, 2006; Virtanen et al., 2009). For example, In their study of more than 3,000 middle and high school students, Ruus and colleagues (2007) found that students' coping skills were best predicted by a school climate characterized by close teacher–student relationships. In their study of more than 24,000 Finnish eighth and ninth graders, Virtanen and colleagues (2009) found that a nonthreatening school climate, characterized by trust and opportunities for participation, significantly predicted positive students' mental health. We argue that students' perceptions of kindness within their school will be linked to multiple dimensions of their well-being.

The Hidden Curriculum

One important aspect contributing to both school climate and culture is a school's "hidden curriculum." A term with origins in Dewey's (1916) writings on democracy and education, the notion of the hidden curriculum was first coined by Jackson (1968) and later expanded on by Kohlberg (1983). The term reflects "the overt lessons and subtle messages" (Jerald, 2006, p. 3) that are evident within a school and communicates what is expected and supported both academically, socially, and emotionally. It is the unspoken and unofficial norms and expectations that students learn as part of their experiences at school (e.g., what is valued in a school).

An assessment of perceptions of kindness within a school potentially offers insights into a school's hidden curriculum. As Jerald (2006) acknowledges, effective schools address the hidden curriculum in explicit ways and recognize that "even the smallest aspects of daily life align with the core ideology and envisioned future. No symbol or ceremony is too minor to be coopted into serving the larger vision" (p. 5). Thus, both the prevalence and modeling of kindness, as seen through students' perceptions, reflect the hidden curriculum and, in turn, can be seen as salient factors contributing to the creation of a positive school climate and culture.

Kindness and School Climate

Theory and research on school climate provided a framework for the development of the SKS. Assessing the prevalence of kindness including the extent to which adults model kindness and are perceived as agents of kindness in a school are important indicators of school climate. The promotion of kindness as one dimension of school climate is in alignment with the call for SEL to be integrated, infused, and embedded within daily instruction. Although many pre-packaged programs are available promoting SEL in schools (e.g., MindUP, PATHS, RULER), there has been recent recognition that SEL should be incorporated within the routine school experience of students and not uniquely introduced as isolated lessons initiated by and found within external programs (Embry & Biglan, 2008; Hymel, Shonert-Reichl, & Miller, 2006; Jones & Bouffard, 2012; Schonert-Reichl & Weissberg, 2014). Elias (2006) argues that SEL should not be taught as a separate subject but, rather, should be linked to and integrated within and throughout all subject areas. The promotion and modeling of kindness within the daily school experience of students and across multiple and varied subject areas are ways of infusing or integrating SEL.

Students' interactions with both peers and teachers influence their behavior and, in turn, informs school climate. Teachers in particular provide rich social cues for prosocial behavioral

expectations (Wentzel, Filisetti, & Looney, 2007). Wentzel and colleagues (2007) posit that teachers motivate prosocial behavior in students via their social power, social approval, and acceptance. The development of social competence in students is increasingly seen as the foundation for positive peer relations, contributing to positive perceptions of the school climate as safe and nurturing, and supporting optimal academic achievement (Elsaesser, Gorman-Smith, & Henry, 2013; Lamborn, Fischer, & Pipp 1994). Wentzel and Looney (2007), for instance, described social competence, in part, as the individual skills and attributes contributing to smooth social functioning and social cohesion. Nonetheless, although researchers have found that girls enact greater levels of helping and caring behaviors than do boys (Eisenberg, Fabes, & Spinard, 2006; Nantel-Vivier et al., 2009), the empirical findings in regard to gender differences in prosocial responding appear to vary greatly, depending on the age of participants and the way in which prosocial behaviors are assessed. Nantel-Vivier and colleagues (2009) argue for the importance of using multiple informants when assessing children's behaviors as different informants offer differing perspectives.

We propose that one dimension of prosocial behavior and a reflection of students' social–emotional competence can be found in students' perceptions of kindness. For the present study, kindness was identified as a construct of school climate because students' perceptions of kindness at school can reflect the extent to which they view their school as an environment in which they can consider others' needs and engage in prosocial acts that promote and safeguard positive relationships.

To date, there exists a plethora of school climate measures. The compendium of school climate measures compiled by the Safe and Supportive School Technical Assistance Center (2011) contains a thorough and comprehensive collection of school climate measures assessing a multitude of dimensions (e.g., leadership, student respect, engagement, faculty support, and learning barriers). Nonetheless, not one measure in the compendium assesses students' perceptions of kindness in their school.

The aim of this study was to better understand elementary and high school students' perceptions of kindness in school, with a specific intention of establishing the psychometric properties of a newly constructed kindness in school measure—the SKS. Given previous research indicating that girls are characterized by higher rates of prosocial behavior than boys (Fabes, Carlo, Kupanoff, & Laible, 1999; Nantel-Vivier et al., 2009; Wentzel et al., 2007), we hypothesized that perceptions of kindness in school would be higher for girls than for boys. Next, we hypothesized that students' perceptions of kindness would decrease from fourth grade to eighth grade, with younger students reporting higher levels of kindness in school and older students reporting lower levels of kindness in school.

Last, we hypothesized that the SKS would be positively and significantly correlated to a range of theoretically and empirically relevant constructs measured with students' self-reports, including classroom supportiveness and self-reports of optimism, happiness, prosocial and social goals, academic self-efficacy, and satisfaction with life. Because kindness falls under the umbrella term of prosocial behavior, we hypothesized that the association with self-report measures of similar constructs (i.e., classroom supportiveness, optimism, happiness, prosocial behavior, and social responsibility) would be significantly stronger than with a self-report measure of academic self-efficacy (cf. Thapa et al., 2013; i.e., evidence for convergent and discriminant validity, respectively). We also explored the association of the SKS with teacher reports on empathy, social skills, and peer acceptance. Previous research has not examined these associations, so this was more exploratory. However, given the overlap of the teacher-rated constructs with kindness in terms of the prosocial aspects, we expected that the SKS would be positively and significantly associated with the measures assessing these constructs.

<div align="center">METHOD</div>

Participants

Participants included fourth- through eighth-grade students in a suburban public school district in southern British Columbia, Canada. Participants were predominantly European Canadian, and schools were situated in both low- and middle-income neighborhoods. In the school district in which the research took place, students in kindergarten through seventh grade attend elementary schools, and students in eighth through 12th grade attend high school. In the present study, participants were recruited from 16 elementary and two high schools. An electronic flyer describing the research study and the requirements for participation was sent via e-mail to teachers of Grades 4 through 8 to solicit volunteer teachers. It was noted in the e-mail that teachers had 2 weeks to respond to the flyer and that the study could accommodate up to 75 participating classrooms. Within the 2-week time frame, 69 teachers (representing 73 classrooms because three teachers taught more than one classroom) responded and indicated their interest in participating in the study.

Classroom teachers sent home Parental/Guardian Consent Forms, resulting in 96% of students receiving parental/guardian permission to participate in the study. Teachers were given a $25 gift card to a local bookstore and a voucher for a class pizza party as an incentive for their participation in the study. Written student assent was obtained prior to the administration of surveys. All of those students who received parental/guardian permission to participate also agreed to participate.

In total 1,753 participants (48% female), with an average age of 10.91 years ($SD = 1.24$; range $= 9.00$ to 14.09) participated in the study. Fifteen percent of students were in fourth grade ($n = 257$), 37% were in the fifth grade ($n = 658$), 30% were in the sixth grade ($n = 524$), 6% were in seventh grade ($n = 109$), and 12% were in eighth grade ($n = 205$). Information on the race or ethnicity of participants was not collected, and participants' primary language spoken at home was used as a proxy for cultural diversity, resulting in 97% of participants reporting that their primary language spoken at home was English. Seventy-five percent of participants reported living with both a mother and a father (either biological parents or within the context of blended families that included step-parents), and 62% reported having at least one sibling.

Measures

Student Self-Reports.   In the following section, we describe the development of the SKS and the battery of other measures assessing students' own reports of classroom supportiveness, well-being indices, and academic self-beliefs.

The SKS. The SKS is a 5-item measure of school-based kindness using a 5-point Likert-type scale, from 1 (*disagree a lot*) to 5 (*agree a lot*). Items addressed students' perceptions of the frequency of kindness in their classroom and school ("Kindness happens regularly in my classroom;" "Kindness happens regularly in my school") and whether kindness was encouraged ("The adults in my school model kindness"; "My teacher is kind"; "At my school, I am encouraged to be kind"). Item development followed a two-step process. We first conducted a review of theories and research on prosocial behavior to identify salient areas reflecting kindness in schools (Aldridge & Ala'l, 2013; Roeser, Midgley, & Urdan, 1996). Because frequency and the encouragement or socialization of kindness within school settings were identified as key areas, step two involved developing individual items that assessed students' perceptions of these dimensions. The reliability of this measure for the present study is presented in the Results section.

Perceived Classroom Supportiveness.   We assessed classroom supportiveness with the 14-item subscale of the Sense of Classroom as a Community measure (Battistich, Solomon, Watson, & Schaps, 1997). On a scale ranging from 1 (*Disagree a lot*) to 5 (*Agree a lot*), we asked children

to respond to statements such as "Students in my class are willing to go out of their way to help someone" and "Students in my class help each other learn." Previous research has shown evidence for the validity and reliability for this measure (see Battistich et al., 1997). Scores are averaged to create a total score in which higher scores indicate higher levels of perceived classroom supportiveness. In the present study, internal consistency for this measure was adequate (Cronbach's alpha = .66),

Optimism.   We assessed students' dispositional optimism with the optimism subscale from the Resiliency Inventory (Noam & Goldstein, 1998; Oberle, Schonert-Reichl, & Thomson, 2010; Song, 2003). The Optimism subscale concerns the respondent's positive perspective on the world and the future (e.g., "More good things than bad things will happen to me"). Students were asked to rate each item on a 5-point Likert-type scale, ranging from 1 (*not at all like me*) to 5 (*always like m*e). Ratings are averaged with higher scores indicating higher levels of dispositional optimism. Previous research has shown support for the validity and reliability of the Optimism subscale (e.g., Song, 2003; Thomson, Schonert-Reichl, & Oberle, 2015). In the present study, Cronbach's alpha for the optimism scale was found to be satisfactory ($\alpha = .83$).

Academic Self-Beliefs.   The Academic Self-Efficacy Scale (Roeser et al., 1996) was used to assess students' beliefs that they could be successful in mastering school tasks if given sufficient time. The scale comprises six items (e.g., "Even if the school work is hard, I can learn it," "I can do even the hardest school work if I try"), rated on a 5-point Likert-type scale, ranging from 1 (*Not at all like me*) to 5 (*Always like me*). Empirical evidence supports the validity and reliability for the Academic Self-Efficacy Scale (Roeser et al., 1996). Cronbach's alpha for the six items was found to be satisfactory ($\alpha = .89$).

Subjective Happiness.   Students' subjective happiness was assessed with the Subjective Happiness Scale, adapted for children (Holder & Klassen, 2010). This measure comprises four items that assess students' subjective happiness at a global level (i.e., "In general, I consider myself . . . .," ''Compared to most of my peers, I consider myself . . . .," etc.). Students rate each item on a scale ranging from 1 (*less happy*) to 7 (*more happy*). Ratings are averaged, with higher scores indicating greater subjective happiness. Research with adults for this measure has shown that the measure has high internal consistency (Cronbach's alpha ranged from .79 to .94) and good test–retest reliability (e.g., after 1 month, $r = .90$), as well as convergent and discriminant validity (Lyubomirsky & Lepper, 1999). Evidence for the reliability and convergent and discriminant validity of this measure has been reported for children ages 9 to 12 years (Holder & Klassen, 2010). For the present study, internal consistency, as assessed via Cronbach's alpha, was found to be satisfactory ($\alpha = .81$).

Social Goal Pursuit.   Social goal pursuit was operationalized in the present study with two subscales from the Social Goals scale (see Wentzel, 1993)—prosocial goals and social responsibility goals—that assess prosocial outcomes that students try to accomplish in the classroom. The prosocial goals subscale comprises seven items that ask students about efforts to share and help peers with problems (e.g., "How often do you try to share what you've learned with your classmates?"). The social responsibility goals subscale asks students to indicate the degree to which they follow classroom rules and keep social commitments (e.g., "How often do you try to do what your teacher asks you to do?"). Students rate their responses on a scale that ranges from 1 (*never*) to 5 (*always*). Scores were averaged for each subscale to form a total score for each subscale, with higher scores indicating higher levels of each subscale. Previous research has shown support for the validity and reliability of both the prosocial goals and the social responsibility subscales (see Wentzel, 1993; Wentzel et al., 2007). In the present study, internal consistency was found to be adequate for each subscale (prosocial goals, $\alpha = .79$; social responsibility goals, $\alpha = .73$).

Life Satisfaction.   Life satisfaction was assessed using the Satisfaction With Life Scale for Children (SWLS-C; Gadermann, Schonert-Reichl, & Zumbo, 2010), an adaptation of the Satisfaction With Life Scale (Diener, 1985), which is a five-item instrument that assesses global life satisfaction. The five items tap the degree to which students feel satisfied with their lives (e.g., "In most ways, my life is close to the way I want it to be," "So far, I have gotten the important things I want in life"). Validation studies of the SWLS-C indicated that the instrument was psychometrically sound and showed construct validity in samples of fourth to seventh graders (Gadermann et al., 2010; Gadermann, Guhn, & Zumbo, 2011). Students rated the five items on a 5-point Likert-type scale, ranging from 1 (*Disagree a lot*) to 5 (*Agree a lot*). Ratings were then averaged, with higher scores indicating greater life satisfaction. Cronbach's alpha in this sample was satisfactory ($\alpha = .86$).

Teacher Reports.   Teacher reports of students' empathy, general social skills, and peer acceptance were obtained from the Teacher's Ratings of Social Behavior scale (Eisenberg et al., 2003). Eisenberg and colleagues (2003) have reported empirical evidence supporting the validity and reliability of these three subscales.

Empathy.   Empathy in the classroom was assessed via teacher ratings on the six-item empathy subscale. Using the same Likert-type scale as described earlier, teachers rated students on items such as "This child gets upset when he/she sees another child get hurt" and "This child usually feels sorry for a child who is being teased." In the present study, Cronbach's alpha was .93.

General Social Skills.   Teachers' ratings of students' social skills were assessed using the four-item subscale, comprising items such as "This child often gets into trouble because of the things he/she does" and "Compared to other children this child's age, this child has very good social skills." Response options for these items range from 1 (*Never*) to 5 (*Always*). In the present study, Cronbach's alpha for the general social skills subscale was .86.

Peer Acceptance.   Acceptance by peers in the classroom was assessed via teacher ratings on the three-item peer acceptance subscale. On a scale from 1 (*Never*) to 5 (*Always*), teachers rated their students on the items "This child finds it hard to make friends," "This child has a lot of friends," and "This child is popular with others at his or her age." Scores are then averaged, with higher scores indicating greater peer acceptance. Internal consistency for the Peer Acceptance Scale was satisfactory in this study ($\alpha = .94$).

Procedure

After the university ethics board and school district approval were received, an electronic flyer describing the study and requirements for participation was e-mailed to all fourth- through eighth-grade teachers throughout the district, asking for participants. Data were collected in late winter/early spring of the school year. Once classrooms were identified, the principal investigator visited each class and, in age-appropriate language, provided an overview of the study. Students were told that the aim of the study was to better understand kindness from students' viewpoints. The SKS was part of a larger series of measures administered, and students completed the measures during one 45-minute class period. Given some of the questions asked students about their perceptions of teachers and school life in general, teachers were not present during data collection, and the principal investigator and his trained research assistants administered all measures. Students were told that their participation was voluntary, that their responses would be kept confidential, and that there were no consequences for not participating. To reduce biases due to students' variable reading proficiencies, each questionnaire item was read aloud, and students were encouraged to ask questions as needed.

Table 1
Factor Loadings of the Items of the School Kindness Scale

Item	Factor 1
The adults in my school model kindness.	.69
Kindness happens regularly in my classroom.	.66
Kindness happens regularly in my school.	.62
My teacher is kind.	.67
At my school, I am encouraged to be kind.	.55

RESULTS

We conducted an exploratory factor analysis (EFA), reliability testing, and scale analysis to examine the psychometric properties of the SKS. We also examined the associations of the SKS with other self- and teacher-report measures to examine evidence of construct validity.

Exploratory Factor Analysis

We examined the factor structure of the SKS using EFA. The EFA was performed in MPlus (version 6; Muthén & Muthén, 2010) on the polychoric correlation matrices to accommodate the Likert-type data, with the mean and variance adjusted weighted-least squares estimation method. The first eigenvalue in our data was 2.57; the second eigenvalue was 0.85, indicating unidimensionality. The unidimensional model also showed adequate fit, with a root mean square error of approximation of 0.07 (cf. Vandenberg & Lance, 2000). The factor loadings of the items are provided in Table 1. All items showed high loadings (> .50) on the factor, ranging between .55 and .69.

Reliability

As the results of the EFA indicated unidimensionality of the SKS, Cronbach's alpha was calculated based on the five items. Cronbach's alpha was $\alpha = .71$, which is adequate (Nunnally & Bernstein, 1994).

Scale Statistics

To examine whether respondents exhibited variability when reporting on the SKS, we examined the range, mean, and standard deviation (*SD*) for the scale (the scale scores were averaged so that the possible range was 1 to 5). The minimum and maximum values indicate that the full range of the scale was used (for the averaged scale, the minimum was 1 and the maximum was 5). Although most students agreed with the statements (the mean was 4.0, with an *SD* of .66), some students disagreed with all items. The skewness of the scale was –1.0, and the kurtosis was 1.2. These results indicate that there was satisfactory variability in the scores of the SKS. Descriptive statistics for the SKS and all other measures are shown in Table 2.

Gender and Grade Differences

To examine whether students' perceptions of kindness differed by gender and grade level, a 2 (gender) × 5 (grade) univariate analysis of variance was performed. The results of this analysis revealed a significant main effect for gender, $F(1, 1724) = 11.61$, $p = .001$; a significant main effect for grade, $F(4, 1724) = 35.52$, $p = .000$; and a nonsignificant Gender X Grade interaction, $F(4, 1724) = 1.17$ (nonsignificant). With regard to gender, girls ($M = 4.09$, $SD = .63$) reported

Table 2
Descriptive Statistics for the Study Measures

Variable Name	*M*	*SD*	Skew	Kurtosis	*N*	Min. to Max.
Self-reported variables						
School kindness	4.03	.66	−1.02	1.17	1749	1.00–5.00
General self-concept	4.06	.61	−1.03	1.64	1750	1.00–5.00
School self-concept	3.56	.73	−.45	−.02	1750	1.00–5.00
Optimism	3.65	.61	−.75	.45	1741	1.00–4.89
Academic self-efficacy	3.86	.75	−.91	.600	1746	1.00–5.00
Happiness	5.31	1.23	−.93	.61	1739	1.00–7.00
Prosocial goals	4.00	.59	−.81	1.00	1752	1.00–5.00
Social responsibility goals	4.26	.55	−1.08	1.87	1750	1.00–5.00
Life satisfaction	4.15	.83	−1.36	1.63	1753	1.00–5.00
Teacher-reported variables						
Empathy	3.15	.71	−.72	.04	1746	1.00–4.00
Social skills	3.30	.78	−1.10	.39	1713	1.00–4.00
Peer acceptance	2.99	.91	−.55	−.71	1745	1.00–4.00

Note. Min. = minimum; max. = maximum. Descriptive statistics are based on the average scale scores.

Table 3
Means, Standard Deviations, and Sample Sizes for the School Kindness Scale by Grade

Grade	*M*	*SD*	*n*
4	4.23	.61	257
5	4.10	.62	658
6	4.02	.61	524
7	4.03	.52	109
8	3.57	.82	205

higher perceptions of kindness in school than did boys ($M = 3.96$, $SD = .68$). The means, *SDs*, and sample sizes for each grade level for the SKS are shown in Table 3. Follow-up post-hoc pairwise comparisons of means (Tukey), indicated overall that fourth-grade students had the highest mean score on the SKS and eighth graders had the lowest mean score. Fourth-grade students scored significantly higher than did sixth, seventh, and eighth graders, and fifth-, sixth-, and seventh-grade students scored significantly higher than did eighth graders ($ps < .05$). Students in fifth, sixth, and seventh grade did not differ significantly from one another in their responses to the SKS ($ps > .05$).

Associations of the SKS with Other Self- and Teacher-Report Measures

Table 4 shows the associations of the SKS with self- and teacher-report measures. With regard to the self-report measures, as hypothesized, students' scores on the SKS were positively and significantly related to classroom supportiveness, optimism, happiness, prosocial and social goals, and satisfaction with life, and these associations were of medium to large effect sizes. The correlation between school kindness and academic self-efficacy was also positive and significant; however, as expected this correlation was statistically significantly lower from the correlations with the other dimensions theoretically linked to kindness, as tested with a *t* test of the difference between dependent correlations, $t(1750) = 5.3-15.6$, $p < .01$. In addition, the SKS was positively and significantly

Table 4
Intercorrelations among Study Variables

Measure	1	2	3	4	5	6	7	8	9	10	11
Self-reported variables											
1. School kindness	-										
2. Classroom supportiveness	.63**	-									
3. Optimism	.40**	.43**	-								
4. Academic self-efficacy	.28**	.30**	.51**	-							
5. Happiness	.40**	.40**	.67**	.46**	-						
6. Prosocial goals	.43**	.40**	.44**	.47**	.45**	-					
7. Social responsibility goals	.41**	.35**	.44**	.50**	.42**	.61**	-				
8. Life satisfaction	.45**	.41**	.65**	.43**	.67**	.37**	.39**	-			
Teacher-reported behaviors											
9. Empathy	.24**	.18**	.19**	.17**	.17**	.26**	.28**	.15**	-		
10. Social skills	.26**	.20**	.26*	.24**	.21**	.26**	.40**	.25**	.67**	-	
11. Peer acceptance	.16**	.19**	.26**	.22**	.24**	.20**	.17**	.23**	.41**	.53**	-

**p < .001.

associated with teacher reports of empathy, social skills, and peer acceptance. These across rater correlations between teacher reports and the SKS were lower than all correlations between the self-report measures and the SKS, including the correlation between the SKS and the discriminant measure on academic self-efficacy. In fact, the correlation between teacher reports on peer acceptance and the SKS was statistically significantly smaller than the one between academic self-efficacy and the SKS, $t(1750) = 4.18$, $p < .01$.

In summary, the SKS was associated in expected directions with self-report measures, reflecting constructs theoretically and empirically linked with the construct of kindness in school. The correlations for the SKS were highest with those constructs reflecting positive and prosocial dimensions of the school context (e.g., classroom supportiveness; prosocial goals, social responsibility goals), as well as those measures assessing dimensions of positive well-being (e.g., optimism, happiness, life satisfaction). Moreover, correlations among the self-report measures were higher than were those between the student self-report and teacher-report measures.

DISCUSSION

The intent of this study was to examine the psychometric properties of the SKS, a scale designed to assess students' perceptions of school-situated kindness. The results suggest that the SKS is a psychometrically sound and theoretically grounded assessment tool that is suitable for administration to students across Grades 4 to 8. Our findings provide evidence that the SKS: (1) has a unidimensional factor structure; (2) has adequate internal consistency; (3) is linked to gender in theoretically expected ways (i.e., girls scoring higher than boys); (4) indicates decreasing perceptions of kindness for students from fourth to eighth grade; and (5) is associated with other self-report measures in line with previous research and theory.

Analyses of perceptions of kindness by grade revealed that fourth-grade students perceived kindness in school to a greater extent than did students in Grades 5 through 8. Further, positive perceptions of kindness were found to decrease as students increased in grades. This decrease in perceptions of kindness is in concert with other research (e.g., Caplan, 1993; Nantel-Vivier et al., 2009) noting a decline in prosocial behavior as students move from pre-adolescence to adolescence. Lawlor, Schonert-Reichl, Gadermann, and Zumbo (2014) posit that the increased

cognitive functioning accompanying the transition from fourth to eighth grade allows for increased critical reflection. This critical reflection broadens the context in which students see peers and adults; encourages students to participate in a variety of activities outside the home, thus, enlarging their experiences; and contributes to increased social comparison and competition.

This decrease in positive perceptions of kindness as students move from fourth to eighth grade is also consistent with findings assessing changes in school climate across grades. Way and colleagues (2007) found that students' perceptions of key constructs of school climate, including teacher support, peer support, student autonomy, and the clarity and consistency of school rules, decreased over time. Cohen (2006) argues that as students progress from elementary to high school, there is increased emphasis on academic achievement and decreased emphasis and support for the development of social–emotional learning and skills.

The pattern of associations of the SKS with the other self-report measures provided some evidence of convergent and discriminant validity. Specifically, the associations of the SKS with measures of theoretically related constructs as measured via self-reports (e.g., classroom supportiveness, life satisfaction, and prosocial goals) were significantly stronger than the one with academic self-efficacy. Furthermore, the associations of the SKS with teacher reports of empathy, social skills, and peer acceptance were also positive. These correlations were lower than the ones with the other self-report measures, including the correlation between the SKS and the discriminant measure of academic self-efficacy. This is in line with previous research that has shown that correlations are lower when they are based on assessments from different raters (e.g., Duncan et al., 2008). A meta-analysis by Achenbach, McConaughy, and Howell (1987) examined the association between various informants' reports on children and adolescents' behavioral and emotional problems. The average correlation between teacher ratings and self-ratings across studies for relatively specific behaviors and emotional problems was .20. Given these previous findings, our results imply that the SKS and the teacher reports of empathy, social skills, and peer acceptance measure relatively similar constructs.

The findings identified here are encouraging for researchers wishing to assess students' perceptions of kindness in schools. Caution however must be exercised because the study was not without limitations. Although the sample size was robust and the sample itself was economically diverse, there was a lack of cultural diversity (measured with the proxy of language spoken at home) among participants. This restricts the extent to which claims may be made that the SKS is suitable for use with diverse populations. The correlational nature of the findings preclude firm conclusions that perceptions of kindness cause increases in other dimensions of well-being. Last, although students in Grades 4 through 7 were surveyed in the context of elementary schools, students in the eighth grade were in their first year of high school. Although decreases in prosocial behavior from preadolescence to adolescence are well documented (Caplan, 1993, Hay, 1994 and Nantel-Vivier et al., 2009), there are numerous and dramatic differences between the contexts of elementary and high schools, and these differences might account for eighth-grade students' lower perceptions of kindness.

Despite these limitations, this study provides initial evidence of validation for the use of the SKS, offering insights into how students perceive varied aspects of kindness within their school setting. This research is in alignment with current thinking in education and psychology that emphasizes the enhancement of positive qualities in students, notably, students' social–emotional competencies (Layous, Nelson, Oberle, Schonert-Reichl, & Lyubomirsky, 2012; Nantel-Vivier et al., 2009; Post, 2005; Seligman & Csikszentmihalyi, 2000). The SKS offers a means by which researchers and educators can access students' perceptions of kindness in school, offering a platform for classroom and school reform.

Students' perceptions of the prevalence of kindness within school is an important indicator of school climate. Certainly, the extent to which students perceive their school to be an environment

where kindness regularly occurs supports Thapa and colleagues' (2013) view of a positive school climate as indicative of an environment that promotes safety, teaching, and learning. The extent to which students perceive kindness as a commonly occurring condition at school is a reflection of their broader learning context. Thus, students' perceptions of kindness may be interpreted as an indication of the extent to which the school context promotes underlying conditions supporting student development and learning. It goes hand-in-hand that students who describe their school as a place where kindness frequently happens would likely describe the climate of their school as one that is both safe and where teaching and learning are of paramount importance. In this regard, the prevalence of kindness may be seen as the extent to which the school context buffers or protects students against maladaptive conditions detracting from personal development and learning and actively promotes conditions supporting students.

The extent to which students perceive the modeling and encouragement of kindness within their school is a reflection of the extent to which the school promotes positive relationships and works toward building a positive institutional environment (Thapa et al., 2013). School personnel who make school relationships a priority and who actively work toward creating a positive institutional environment are inclined to foster skills in students that help ensure social competence. As Wentzel and Looney (2007) argue, social competence is fostered when individual skills and social cohesion are cultivated within and among students. Given the dearth of measures available to assess kindness in school and the emphasis by school personnel on promoting students' prosocial behavior, the development of the SKS contributes in both theoretical and applied ways toward helping researchers and educators better understand students' perceptions of kindness within the school setting.

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