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Sense of School Community for Preschool Teachers Serving At-Risk Children

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Research Findings: Challenging the development of high-quality preschool education is the instability of the preschool teacher workforce, blamed in part on workplace conditions including isolationism, perceived lack of career reward, and lack of preparation. Little attention has been given to whether a preschool's organizational climate can mitigate these challenges, despite demonstrated workplace climate effects on teachers' attitudes, commitment, and practices in kindergarten–Grade 12 teachers. This study investigated preschool teachers' perceptions of a positive workplace climate (i.e., sense of school community); predictors of these perceptions (teacher qualifications and organizational features); and relationships among teachers' sense of community, classroom teaching quality, and attitudes toward teaching in a sample of 68 preschool teachers serving at-risk 4-year-olds. Overall, teachers provided high ratings for their sense of school community, although moderate interprogram variability and moderately large to large intraprogram variability existed. Teacher qualifications and preschool affiliation did not predict teachers' sense of community, but preschool size predicted perceptions of collegial support. Perception of collegial support and program influence was significantly related to positive attitudes toward teaching; only perceptions of program influence were related to classroom quality. *Practice or Policy:* We discuss the potentially important role of work environment in bolstering the quality and stability of the preschool teacher workforce.

Ensuring the quality of preschool education is a concern at the forefront of the field of education (Barnett, 2005; Barnett, Hustedt, Robin, & Schulman, 2004; Chris-

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tina & Nicholson-Goodman, 2005), and efforts to improve the quality of preschool education are becoming imperative as public investments in these programs increase. There has been a notable rise in state-funded preschool programs and universal preschool initiatives in the past 5 years (Barnett et al., 2004). This rise is motivated by the perspective that effective preschool programs may close the academic achievement gap between at-risk, disadvantaged children and their more advantaged peers (Barnett, 2005; Barnett et al., 2004; S. L. Ramey & Ramey, 2006) and provide long-term benefits to their participants, such as increased employment, reduced delinquency, and reduced dependency on social welfare (Christina & Nicholson-Goodman, 2005; Laosa, 2005).

Accompanying this growth in preschool education is a growing concern for attracting and retaining quality preschool teachers (Barnett, 2003; Darling-Hammond, 2000; Vecchiotti, 2001). However, the challenges of doing so are numerous. Currently, a majority of preschool teachers do not have a degree beyond high school, and state higher education systems are not yet prepared to meet projected training needs for preschool teachers (Christina & Nicholson-Goodman, 2005; Vecchiotti, 2001). Preschool teachers earn about half the wage of kindergarten teachers, making it difficult to attract highly qualified staff to this segment of educational practice (Barnett, 2003). Not surprisingly, the preschool teacher workforce is highly unstable, with annual turnover rates documented at 25% to 50%; by comparison, turnover for public elementary, middle, and high school teachers is about 7% annually (Barnett, 2003). The instability of the preschool teacher workforce has been linked to a variety of conditions associated with early childhood education, such as isolationism, perceived lack of career reward, and lack of preparation (Lambert, 1994; Manlove, 1993, 1994; Townley, Thornburg, & Crompton, 1991).

The current and presiding approach toward addressing these workforce problems has focused primarily on developing postsecondary educational requirements for preschool teachers (Barnett, 2005; School Readiness Act, 2005) and providing corresponding teacher wage increases (Barnett, 2003; Darling-Hammond, 2000; Vecchiotti, 2001). Little attention has focused on the creation of workplace environments that are more rewarding and satisfying to preschool teachers, despite evidence that the preschool teaching environment provides unique and specific challenges (Clifford et al., 2005; Darling-Hammond, 2000; Desimone, Payne, Fedoravicius, Henrich, & Finn-Stevenson, 2004; Lambert, 1994; Manlove, 1993, 1994; Townley et al., 1991). Furthermore, a large literature on elementary, middle, and high school teachers indicates that the workplace climate, defined by the social and work norms of the school, significantly impacts teachers' attitudes, commitment, practices, and career development (see Battistich, Solomon, Watson, & Schaps, 1997, and Rosenholtz, 1985, for reviews). Thus, research suggests that improving the workplace climate for preschool teachers may be an important facet of efforts to develop and maintain a qualified preschool workforce and build high-quality preschool education programs.

A particular aspect of workplace climate, namely teachers' *sense of community*, has been associated with lower turnover, lower chronic absenteeism, more informal professional development, and higher quality classroom practices among elementary and high school teachers (Battistich, Solomon, Kim, Watson, & Schaps, 1995; Bird & Little, 1986; Lieberman & Miller, 1984; McLaughlin & Talbert, 2001; Newmann, Rutter, & Smith, 1989; Rosenholtz & Simpson, 1990; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Although operational definitions vary slightly across studies (Battistich et al., 1997), researchers have typically conceptualized teachers' sense of school community along two dimensions—teacher collegiality and teacher influence—and schools with practices that promote teachers' sense of community are referred to as *community-oriented schools* (Bryk & Driscoll, 1988). *Teacher collegiality* refers to the level and type of collaboration among teachers within a school, which includes sharing of educational goals, whereas *teacher influence* refers to the level and type of influence teachers have in administrative decision making (Battistich et al., 1997; Bryk & Driscoll, 1988; Roberts, Hom, & Battistich, 1995; Royal & Rossi, 1999).

SENSE OF COMMUNITY AND TEACHER ATTITUDES AND PRACTICES

Teacher Attitudes Toward Their Careers

A considerable literature on the attitudes of teachers toward their careers has shown that teachers often feel isolated, burnt out, and stressed and hold views of their profession as stagnant or flat (Bird & Little, 1986; Lieberman & Miller, 1984; Lortie, 1975; McLaughlin & Talbert, 2001). For preschool teachers specifically, ambiguity in their expected roles with children and a lack of feelings of accomplishment within the job may contribute to feelings of burnout and stress (Lambert, 1994; Lieberman & Miller, 1984; Manlove, 1993, 1994). It is important to note that both descriptive and experimental studies have shown that teachers' sense of community may counterbalance such negative attitudes toward teaching (Battistich et al., 1997; Bryk & Driscoll, 1988; Little, 1990; McLaughlin, 1992; McLaughlin & Talbert, 2001; Rosenholtz & Simpson, 1990). For example, Bryk and Driscoll's study of 357 high schools found teachers' sense of community significantly affected staff morale above and beyond the influence of school size, school affluence, and pupil demographics. Findings from this and other studies show that teachers with a sense of school community exhibit career affirmation, a sense of professional growth, and feelings of reward in teaching (McLaughlin & Talbert, 2001; Rosenholtz, 1985; Rosenholtz & Simpson, 1990).

The link between school community and teachers' attitudes toward teaching appears due, at least in part, to the ways in which teachers are acknowledged and re-

warded within their schools. Community-oriented schools recognize teachers who engage energetically in the process of teaching, rather than base teacher prestige on student performance. In these schools, there are numerous and varied opportunities for teachers to feel successful and worthy even when working with challenging student populations (Lieberman & Miller, 1984; McLaughlin & Talbert, 2001; Rosenholtz & Simpson, 1990). To illustrate, McLaughlin and Talbert's research on public high schools demonstrated how community-oriented schools as compared to traditional bureaucratic schools buffer teachers from career frustration. This study examined teachers' attitudes toward teaching in schools undergoing rapid student body diversification as a result of redistricting. In the traditional bureaucratic schools, teachers measured the prestige of their jobs by earning the right to teach advanced students and advanced classes. With student diversification, teachers reported a diminished sense of career satisfaction from having to teach a lower tracked student body; many discussed plans to leave the school or field of teaching. Conversely, in community-oriented schools, teachers experiencing the same student demographic changes were apt to view changes in teaching conditions as a professional challenge, seeing these as opportunities for professional growth.

The challenges facing teachers in this example parallel those that preschool teachers face daily as they work to prepare a racially, ethnically, and socially diverse group of children for school entry in a political climate that increasingly scrutinizes the performance and value of early education (Clifford et al., 2005; Peisner-Feinberg & Burchinal, 1997; C. T. Ramey & Ramey, 2004; Saluja, Early, & Clifford, 2002; School Readiness Act, 2005). A recent study of state-run preschools showed that 53% of children came from families at or below 150% of the federal poverty guideline, 44% were African American or Latino, 16% were limited English proficient, and 6% had an individualized education program (Clifford et al., 2005). Thus, preschool teachers specifically may benefit from working in a school climate that rewards the process of teaching, looks to develop children's unique strengths, and acknowledges teachers' efforts in the classroom—all hallmarks of community-oriented schools. And school community may provide preschool teachers a potentially important safeguard against teacher stress, burnout, and even exit from the workforce.

Teacher Practices

A particularly important finding in the literature on teachers' sense of community is that teachers who are part of community-oriented schools exhibit higher quality teaching practices, defined by increased sensitivity to individual student levels, encouragement of each child's growth, promotion of peer-to-peer cooperation and learning, and establishment of warm relationships with students (Battistich & Solomon, 1995; Battistich et al., 1995, 1997; Gamoran, Secada, & Marrett, 2000; Goddard, Hoy, & Hoy, 2000; Lee & Smith, 1982; Wehlage et al., 1989). These

teacher behaviors have consistently been shown to impact students' social and academic growth (Battistich & Solomon, 1995; La Paro & Pianta, 2000; Pianta, 1999; Wehlage et al., 1989).

From a theoretical perspective, the two dimensions of school community (i.e., teacher collegiality and teacher influence) are believed to serve as direct mechanisms for fostering improved teaching practices, particularly concerning sensitivity and responsiveness to students. Two mechanisms are described in the extant literature. First, the shared collaborative relationships among teachers and administrators within community-oriented schools are believed to lead to high levels of informal professional collaboration that teachers then draw upon to meet the individual needs of different students (Bird & Little, 1985, 1986; Bryk & Driscoll, 1988; Cohen, 1981; Little, 1982, 1990; McLaughlin & Talbert, 2001; Rosenholtz, 1985). To illustrate, Bryk and Driscoll's study of high school teachers showed positive correlations among teachers' sense of community and the frequency with which teachers requested help ($r = .39$), cooperated ($r = .53$), and planned collaboratively with fellow teachers ($r = .45$). Additional research has suggested that teachers in community-oriented schools talk frequently with colleagues about specific teaching practices and observe within one another's classrooms, making teaching a collective endeavor (Bird & Little, 1986; Cohen, 1981; Little, 1982, 1990; McLaughlin & Talbert, 2001; Rosenholtz, 1985) and thereby increasing teachers' abilities to reach a variety of students using a range of teaching methods.

A school climate promoting an informal network of teacher support may be especially important to preschool teachers, given evidence that the challenging contexts of preschool classrooms, with their diverse and often disadvantaged students, have the least prepared and educated teacher workforce (Clifford et al., 2005; Darling-Hammond, 2000; Saluja et al., 2002). Furthermore, a study of the benefits and challenges of housing preschool programs within elementary schools found teacher collaboration to be a significant benefit to the preschool teachers (Desimone et al., 2004). This study showed that preschool teachers valued the informal collaboration that emerged from having kindergarten teachers easily available and felt it aided their preparation of children for the transition to kindergarten (Desimone et al., 2004). Evidence thus suggests a workplace climate that appreciates that teacher collaboration may be a critical component of a high-quality preschool setting.

Second, teachers' increased influence in decision making within community-oriented schools may also provide a mechanism for improving teaching practices, as this may promote their sense of responsibility toward student learning (Bird & Little, 1986; Goddard et al., 2000; McLaughlin, 1992; Wehlage et al., 1989). This, in turn, can indirectly affect student achievement (Abbott-Shim, Lambert, & McCarty, 2000; Firestone, 1987; Firestone & Rosenblum, 1988; Goddard et al., 2000; Lee & Smith, 1982; Wehlage et al., 1989). Data collected from studies of teachers at the elementary and high school levels have suggested that teachers

who are part of community-oriented schools see themselves as champions of students' learning (Bird & Little, 1986; Goddard et al., 2000; Lee, Dedrick, & Smith, 1991; Lee & Smith, 1982; Wehlage et al., 1989) and are more willing to extend support to students and accentuate students' success, as compared to teachers in traditional school cultures (Battistich & Solomon, 1995; Wehlage et al., 1989). Wehlage's study of 14 high schools exemplified this point, finding that teachers in community-oriented schools would often go beyond their given role to engage difficult students in extracurricular activities (e.g., mentoring programs, spelling teams), provide tutoring time for troubled teens with significant school absences, and adapt curricular requirements to better meet student needs and interests. A workplace climate that encourages teachers' responsibility for children's growth, even beyond the classroom, is directly applicable to the promotion of quality in the preschool setting. High-quality programs often contain a parent education or home component (Barnett, 1995), and many preschools are finding themselves involved in children's lives outside of the classroom in the form of parental education and/or provision of social services (Clifford et al., 2005). Thus, community orientation addresses an important facet of quality teacher practices relevant to the promotion of high-quality preschool programs.

SUMMARY AND STUDY AIMS

Studies of elementary, middle, and high school teachers have shown teachers' sense of school community to be a potentially powerful facet of the workplace climate that provides benefit to both teachers and students. Teachers' sense of community facilitates positive attitudes toward teaching and more commitment to, and satisfaction in, the job. The network of support and sense of responsibility for student learning associated with community-oriented schools also influence teachers' use of higher quality teaching practices, characterized by increased sensitivity and responsiveness to students. Given current interests in improving the quality of preschool education for the nation's preschoolers and increasing both the size and stability of the preschool teaching workforce, studies that improve experts' understanding of contextual factors that may influence both are timely and warranted. Presently, researchers know very little about the workplace climate of preschool programs, including teachers' sense of community, and how this may relate to teachers' attitudes about their careers and the quality of their instruction. To contribute to this literature, this study addressed three questions. The first question asked: To what extent do preschool teachers perceive a positive sense of school community? To address this question, we provide a descriptive analysis of 68 preschool teachers' sense of school community across two dimensions: teacher collegiality and teacher influence. Given evidence of the many challenges inherent to teaching in the preschool workplace (Manlove, 1993, 1994; Townley et al., 1991),

the notoriously low wages of preschool teachers (Barnett, 2003; Darling-Hammond, 2000), and the high rate of preschool teacher turnover (Barnett, 2003), we hypothesized that preschool teachers would rate their sense of community as low to moderate.

Our second question asked: To what extent do static organizational features (i.e., program affiliation and number of preschool classrooms in the building) and teacher characteristics (i.e., teacher education and teacher experience) predict preschool teachers' sense of community? We hypothesized that size and affiliation of the preschool program would be associated with preschool teachers' sense of community. Furthermore, we hypothesized that preschool teacher characteristics may also be associated with teachers' sense of community, but that teacher characteristic effects would be relatively smaller than organizational effects, given that sense of community is thought of as an organizational, rather than individual, property (Bryk & Driscoll, 1988). Research has indicated that static school features, such as school size and affiliation (e.g., public or private), affect teachers' sense of community by helping or hindering staff's engagement in collaborative practices (Bryk & Driscoll, 1988; Lee & Loeb, 2000; Royal & Rossi, 1996). Thus, we expected that the affiliation of the preschool program (e.g., Head Start, state pre-kindergarten) would relate to teachers' sense of community, such that the regulations and structures of different programs may influence the extent to which teachers have opportunities to collaborate with others and engage in shared decision making. Similarly, we expected that having access to fellow preschool teachers within a building would relate to teachers' sense of community, recognizing that some preschool teachers are located in buildings with few or no colleagues, whereas others have several or many colleagues. Additionally, research has indicated that some individual characteristics of teachers—such as teaching tenure, race, and gender—relate to their sense of community, although the mechanisms by which these foster (or detract from) sense of community are unknown (Royal, DeAngelis, & Rossi, 1996; Royal & Rossi, 1996). In this study, we expected preschool teachers' level of education and years of experience to relate to their sense of community.

Our third question asked: To what extent does preschool teachers' sense of community relate to their attitudes toward their careers and their instructional quality within the classroom? We hypothesized that teachers' sense of community would have a significant and positive relationship with classroom quality and positive attitudes about their careers. As we have noted, previous studies have shown a positive link between teachers' sense of community and their attitudes about teaching and the use of high-quality teaching practices in the classroom, the latter characterized by increased sensitivity and responsiveness to pupils. Given the instability of the teacher workforce and the current emphasis on establishing high-quality preschool programs, it is timely to consider whether these relationships observed within other segments of the teacher workforce (e.g., among elementary teachers) are also observed among preschool teachers. With this question, we examined the

relationship among teachers' self-reported sense of school community, their self-reported attitudes toward teaching, and observational data of the quality of teachers' interactions with children in their classrooms.

METHOD

Participants

A total of 68 preschool teachers participated in this study as part of their involvement in two larger studies of preschool instructional practices. All of the teachers worked in classrooms serving economically disadvantaged children (identified by household income or participation in needs-based programs), and the majority of classrooms enrolled primarily 4-year-old children (50% or more per classroom). The teachers were primarily female (97%), and 85% ($n = 58$) were non-Hispanic White; the remaining were African American ($n = 10$). Teaching experience ranged from less than 1 year to 28 years ($M = 8.9$ years, $SD = 6.8$), with the majority of teachers ($n = 55$, 73%) having 5 or more years of experience. In terms of education, all had at least a high school degree, and the majority ($n = 59$, 87%) had a degree beyond a high school diploma: 10% ($n = 7$) held an associate's degree (AA or AS), 44% ($n = 30$) held a bachelor's degree, 31% ($n = 21$) had a master's degree, and 1% ($n = 1$) had a specialist degree (i.e., 1 year or more beyond a master's degree).

The classrooms were located in three states in rural/suburban ($n = 55$, 81%) and urban ($n = 13$, 19%) locales and included 49 different sites (i.e., buildings). Classrooms were affiliated with a variety of program types (see Table 1), including Head Start ($n = 37$, 56%), early childhood special education (ECSE; $n = 16$, 25%), and state and/or federally funded (Title I) programs ($n = 15$, 20%). Within each program type, classrooms were associated with different local organizations. The

TABLE 1
Teacher Characteristics and Preschool Size by Program Affiliation

<i>Program Affiliation</i>	<i>Years of Teaching Experience, M (Range)</i>	<i>Teachers With a Bachelor's Degree or Higher, %</i>	<i>Number of Buildings</i>	<i>Number of Classrooms per Building, M (Range)</i>
Head Start (37 teachers)	7.7 (0–20)	62	25	2.8 (1–7)
Early childhood special education (16 teachers)	10.8 (1–27)	100	13	1.9 (1–5)
State/Title I (15 teachers)	9.8 (0–28)	53	11	2.5 (1–4)

classrooms affiliated with Head Start were part of five different chapters, ranging in size from 2 to 16 classrooms per chapter. The ECSE classrooms were affiliated with three separate school districts, ranging in size from 3 to 10 classrooms per district. The state and/or federally funded classrooms were likewise affiliated with three different school districts and ranged in size from three to nine classrooms per district. To provide an illustration of these program characteristics, Table 1 identifies the number of buildings within each program, as well as the average number of classrooms per building.

Procedures

At the start of the academic year, teachers completed a packet of questionnaires either in a formal orientation session or on their own at their homes or schools. Of relevance to this study were three questionnaires completed by each teacher: (a) a demographic questionnaire, (b) the Teacher's Sense of the School as Community questionnaire (Battistich et al., 1997), and (c) the Attitude Toward Teaching as a Career questionnaire compiled by Rimm-Kaufman and Sawyer (2004) from Evans and Johnson's (1990) job stress scales and the Public School Teacher Questionnaire: Schools and Staffing Survey (National Center for Education Statistics, 1999). Questionnaires were completed independently and returned to the research teams in person or through the mail.

For each teacher, a formal classroom observation was conducted by trained observers in September or October of the academic year. Classrooms were continuously videotaped for approximately 45 min during a morning period comprising large group instruction, small group instruction, and/or center time.

Measures

Demographic questionnaire. The demographic questionnaire gathered information on each teacher's age, ethnicity, teaching experience, education and certification, and teacher inservices/trainings completed in the past year.

Teacher sense of community. The Teacher's Sense of the School as Community questionnaire (Battistich et al., 1997) examined two aspects of teachers' sense of community: (a) staff collegiality resulting from shared educational goals and supportive relationships, and (b) teachers' influence over school norms and administrative decision making. Teachers were provided 13 statements (e.g., "In this school, there is a feeling that everyone is working toward common goals"; "Teachers are supportive of one another"; "Teachers are involved in making decisions that affect them") and, for each, indicated whether they strongly disagreed, disagreed, neither agreed nor disagreed, agreed, or strongly agreed with each item. Items were scored using a Likert-type scale (1 = *strongly disagree*, 5 = *strongly*

agree), and all items were averaged to calculate a Global Sense of Community score.

This questionnaire had not been used previously with a preschool teacher population; therefore, internal consistency was calculated for the present sample and an exploratory factor analysis was used to validate the factor structure found by Roberts, Hom, and Battistich (1995) for a sample of elementary school teachers. Consistent with Roberts et al., results showed adequate internal consistency ($\alpha = .87$) and large positive loadings on the first unrotated principal component (.41–.79) in the factor analysis. However, Roberts et al. found all 13 items of the questionnaire to sort reliably into two clusters—collegiality and shared goals (Cluster 1) and influence over school norms and decisions (Cluster 2)—whereas we found 3 items to demonstrate low communality loadings (.19–.33). The communality loadings as well as the factor loadings (ranging from .2–.5) suggested a poor fit of these items with the factors and with the other items on the scale; thus, these three questions were omitted. (The omitted items were as follows: “Most of my colleagues share my beliefs and values about what the central mission of the school should be,” “The faculty here are all into conflicting cliques,” and “Teachers take a major role in shaping the school’s norms, values, and practices.”) A subsequent exploratory factor analysis using principal factoring and oblique rotation established a two-factor structure (see Table 2) similar to that of Roberts et al.: (a) staff collegiality and shared goals (referred to hereafter as *Collegiality*), and (b) staff influence on school norms and decisions (referred to hereafter as *Influence*). These two factors accounted for 66.9% of the variance in teacher responses and were moderately correlated ($r = .33$). Internal consistency of each factor was adequate, with Collegiality demonstrating an alpha of .88 and Influence demonstrating an alpha of .87. A

TABLE 2
Factor Scores From Exploratory Factor Analysis of the Reduced Teacher’s
Sense of the School as Community Questionnaire

Item-Level Construct	Factor Loadings	
	Collegiality	Influence
1. Teachers cooperate with one another	.74	
2. Teachers work together toward common goals	.78	
3. Teachers support each other	.88	
4. Teachers share warm relationships with each other	.77	
5. Teachers consult with each other often	.54	
6. Teachers help each other above what is required	.68	
7. Teachers interact socially	.63	
11. Administration consults with teachers about decisions.		.92
12. Teachers play a part in organizational planning		.80
13. Teachers help make decisions that affect them		.76

Note: These descriptors are abridged from the actual questionnaire items.

Collegiality score and an Influence score were calculated by averaging each set of items, with a possible range of 1 to 5 for each.

Attitude toward teaching. The Attitude Toward Teaching as a Career questionnaire compiled by Rimm-Kaufman and Sawyer (2004) examined teachers' perceptions of stress, burnout, and career reward and demand. Teachers responded to 17 statements compiled from items on job satisfaction and job stress scales (Evans & Johnson, 1990) and the Public School Teacher Questionnaire: Schools and Staffing Survey (National Center for Education Statistics, 1999). For each statement, teachers rated their agreement along a 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*). Examples of items include: "I feel that I experience a lot of autonomy in my work as a teacher," "I feel that my workload as a teacher is too heavy," and "I feel a lot of uncertainty about my career as a teacher." Reliability and internal consistency were calculated for the present sample, and Cronbach's alpha (.73) was similar to that reported by Rimm-Kaufman and Sawyer ($\alpha = .65$). Items were averaged to calculate a mean Attitude Toward Teaching score, with a possible range of 1 to 5.

Classroom quality. The Classroom Assessment Scoring System—Preschool Version (CLASS; Pianta, La Paro, & Hamre, 2006) is an observational instrument assessing global classroom quality across three domains: Emotional Support, Instructional Support, and Classroom Management. The four scales composing the Emotional Support domain were included for analysis in the present study; these scales include Positive Climate, Negative Climate, Teacher Sensitivity, and Regard for Student Perspective. Each scale is rated on a 7-point Likert-type continuum (1, 2 = low levels of observed construct; 3, 4, 5 = moderate levels; 6, 7 = high levels). In addition to the individual scale ratings, an Emotional Support domain score was calculated by averaging the associated scales to result in a domain score ranging from 1 to 7. The CLASS authors (Pianta et al., 2006) presented validation of the Emotional Support composite structure from multiple studies, with factor loadings in the moderate to high range and adequate internal consistency of composites (α s = .79–.90) observed across studies.

CLASS scoring is based on observations of a range of activities and teacher–child interactions within the classroom (Pianta et al., 2006). In the present study, videotapes approximately 30 min in duration were collected in September and October of the academic year following standardized protocols based on recommendations in the CLASS manual (Pianta et al., 2006). Subsequently, scoring of the videotapes was conducted by CLASS-reliable coders who had previously attended a 2-day training workshop conducted by a certified CLASS master coder and who had passed a reliability test (i.e., achieved 90% agreement with the codes for six gold standard cases).

RESULTS

Our first aim was to describe the sense of community reported by preschool teachers. We hypothesized that preschool teachers' sense of community would fall in the low to moderate range. Descriptive data from the Teacher's Sense of the School as Community questionnaire indicated that teachers' overall perception of community (i.e., Global Sense of Community scores) were moderately positive ($M = 3.74$, $SD = 0.64$), although scores ranged from 2.0 to 4.8 to indicate some variability within the sample. Teachers' perceptions of their relationships with other teachers (i.e., Collegiality scores) were also moderately positive ($M = 3.87$, $SD = 0.68$), whereas their perception of influence within the school (i.e., Influence scores) were slightly lower and more variable ($M = 3.43$, $SD = 0.97$). Table 3 presents these descriptive statistics as well as a comparison of scores as a function of program type (i.e., Head Start, ECSE, State/Title I). Visual consideration of these data showed there to be some variability in teachers' sense of community, both across and within program types. Among programs, the largest discrepancies were apparent between Head Start teachers and those working in State/Title I programs. Specifically, the Global Sense of Community scores of teachers in Head Start ($M = 3.65$, $SD = 0.54$) were half a standard deviation lower than those of teachers in State/Title I programs ($M = 3.97$, $SD = 0.81$), consistent with a medium effect size ($d = .50$) based on bias-corrected effect size calculations (Hedges & Olkin, 1985). Similarly, differences among Collegiality scores and Influence scores indicated that Head Start teachers felt less connected to other teachers and exerted less influence over school norms and administrative decisions than did teachers in State/Title I programs, with bias-corrected effect size contrasts consistent with medium-size differences ($d = .36$ for Collegiality and $d = .50$ for Influence). Global Sense of Community scores also varied within programs, demonstrated by moder-

TABLE 3
Descriptive Findings for Preschool Teachers' Self-Reported Sense
of Community

Teacher Sample	Global Sense of Community Score	Collegiality Score	Influence Score
Total ($N = 68$)	3.74 (0.64) 2.00–4.80	3.87 (0.68) 2.00–5.00	3.43 (0.97) 1.00–5.00
Head Start ($n = 37$)	3.65 (0.54) 3.53–3.98	3.8 (0.63) 3.63–4.10	3.30 (0.89) 3.00–3.83
Early childhood special education ($n = 16$)	3.73 (0.67) 3.40–3.83	3.87 (0.67) 3.47–3.96	3.40 (0.94) 3.22–3.56
State/Title I ($n = 15$)	3.97 (0.81) 3.63–4.14	4.05 (0.80) 3.71–4.27	3.8 (1.17) 3.44–4.00

Note: Data are means (standard deviations) and ranges.

ate to large effects of local organizational affiliation (i.e., district or local Head Start chapter) for State/Title I programs (range = 3.60–4.14, $d = .80$), ECSE programs (range = 3.40–3.83, $d = .60$), and Head Start (range = 3.53–3.98, $d = .85$). Intraprogram differences in Collegiality scores were consistent with moderately large to large effect sizes within all programs. Intraprogram differences in Influence scores were close to a standard deviation in Head Start (range = 3.00–3.83, $d = .93$) but were much less pronounced in State/Title I programs (range = 3.44–4.00, $d = .35$) and ECSE programs (range = 3.22–3.56, $d = .32$).

At a descriptive level, the analyses thus far showed that preschool teachers exhibited moderately high levels of self-reported sense of community, with some differences across and within programs. Across programs, Head Start teachers had lower ratings of community compared to teachers working in state- and federally funded programs, with differences consistent with medium-size effects. Within programs, local organizational effects were moderately large to large on teachers' Global Sense of Community scores and Collegiality scores. A comparison of the Head Start chapter with the lowest Collegiality rating to the chapter with the highest Collegiality rating revealed a discrepancy of almost a full standard deviation; similarly, the comparison of Collegiality scores between the lowest and highest rated state- and federally funded programs showed districts to differ by well over half a standard deviation. The discrepancy in Influence scores across Head Start chapters was also consistent with a large effect; however, Influence scores across districts differed only marginally, consistent with a small effect of district.

To further investigate specific aspects of preschool teachers' self-reported sense of community, we studied responses at an item level. Table 4 presents the means and standard deviations for each question on the sense of community questionnaire, as well as the percentage of teachers providing low ratings (i.e., a score of 1 or 2) and high ratings (i.e., a score of 4 or 5) for individual items. For the Collegiality items, data showed that the majority of teachers (70% or greater) provided high ratings to questions about teacher cooperativeness and support (e.g., Items 1, 2, 3, 5, and 6), with exceptions noted for only two of the seven items. For all of the Collegiality items, fewer than 20% of teachers provided low ratings, suggesting that relatively few preschool teachers in this sample had very negative feelings concerning the level of collegiality within their schools. By comparison, a smaller percentage of teachers provided high ratings to the three Influence items, and nearly one third of teachers provided a score of 1 or 2 to the item concerning administrative consultation on decisions. Examination of the item-level data suggested that the majority of preschool teachers (more than 70% in most cases) provided high ratings to items associated with collegiality, with a smaller proportion providing high ratings to items concerning influence and decision making.

Our second aim was to investigate whether teacher characteristics and organizational variables serve as predictors of preschool teachers' self-reported sense of community. We hypothesized that both would significantly predict teachers' sense

TABLE 4
Item-Level Descriptive Data for the Teacher's Sense of the School
as Community Questionnaire

Item	M	SD	Range	Teacher Response, %		
				Low Rating (1 or 2)	High Rating (4 or 5)	
Collegiality						
1. Teachers cooperate with one another	4.02	.92	1.0–5.0	10.3	83.8	
2. Teachers work together toward common goals	4.09	.79	2.0–5.0	5.9	85.3	
3. Teachers support each other	4.15	.83	2.0–5.0	4.4	80.8	
14. Teachers share warm relationships with each other	3.56	.97	2.0–5.0	17.6	57.4	
5. Teachers consult with each other often	3.93	.89	1.0–5.0	8.8	79.4	
6. Teachers help each other above what is required	3.69	.85	2.0–5.0	13.2	70.3	
7. Teachers interact socially	3.66	.92	1.0–5.0	11.8	63.2	
Influence						
11. Administration consults with teachers about decisions	3.10	1.19	1.0–5.0	32.4	41.2	
12. Teachers play a part in organizational planning	3.76	1.01	1.0–5.0	10.3	69.2	
13. Teachers help make decisions that affect them	3.43	1.08	1.0–5.0	16.2	51.5	

of community, but that organizational variables would explain more of the variance than teacher characteristics. Two hierarchical regression models were conducted: The first model included the Collegiality score as the dependent variable, and the second model included the Influence score as the dependent variable (see Table 5). In both models, the first block contained dummy codes for the preschool program type (i.e., Head Start, ECSE, State/Title I), the second block added the size of the preschool (i.e., the number of preschool classrooms in the building), and the third block added teacher characteristics (i.e., education level, years of preschool teaching experience). The dummy codes for program type were assigned to compare Head Start programs and ECSE programs to State/Title I programs. The variance inflation index diagnostic indicated variance inflation factor levels ranging from 1.05 to 2.15, indicating no presence of multicollinearity among the independent variables (see Pedhazur, 1997).

In the first model, which regressed organizational features and teacher characteristics on teachers' Collegiality scores, the total variance explained by all predictors was 9.7%, which was not significant, $F(5, 62) = 1.33, p = .262$. In terms of individual blocks, neither program type, $F(2, 65) = 0.46, p = .63, R^2 = .01$; nor teacher characteristics, $\Delta F(2, 62) = 0.67, p = .52, \Delta R^2 = .02$, made a significant

TABLE 5
Summary of Hierarchical Regression Analysis for Predicting Collegiality
and Influence Scores

Step and Predictor Variable	Collegiality					Influence				
	β	SEB	R^2	ΔR^2	ΔF	β	SEB	R^2	ΔR^2	ΔF
Step 1			.01	.01	0.46			.05	.05	1.83
Program affiliation Head Start	-.06	.23				-.52	.33			
Program affiliation ECSE	.12	.26				-.13	.36			
Step 2			.08	.06*	4.42*			.07	.01	0.93
Preschool size (number of classrooms)	.26*	.12				.17	.18			
Step 3			.10	.02	0.67			.11	.05	1.66
Teacher education	.00	.07				-.07	.09			
Teacher preschool experience	.01	.01				-.03 [†]	.01			

Note: ECSE = early childhood special education.

[†] $p < .10$. * $p < .05$.

unique contribution in explaining the variance in Collegiality scores. However, the size of the preschool (based on the number of preschool classrooms in the building) was a significant unique predictor, explaining 6.4% of the total variance, $\Delta F(1, 64) = 4.42, p = .04$, thus indicating that teachers felt significantly more collegial connections within programs containing a larger number of preschool classrooms. In the second model, which regressed organizational features and teacher characteristics on Influence scores, neither the organizational predictors nor the teacher characteristics significantly accounted for variance in the dependent variable. The set of organizational predictors (i.e., program type and number of preschool classrooms) accounted for 7.2% of the variance, and the contribution of teacher characteristics explained an additional 4.2% of the variance in Influence scores. Table 6 presents a summary of the regression analyses predicting teachers' perceptions of collegiality and influence.

The third aim was to investigate the relationship of preschool teachers' self-reported sense of community to their attitudes toward teaching and to the quality of their teacher-child interactions within their classrooms. We hypothesized significant and positive relations among teachers' sense of community, their teaching attitudes, and their quality classroom processes. To address this aim, we calculated Pearson product-moment correlations (see Table 6) among teachers' Collegiality scores, Influence scores, teacher characteristics (i.e., teacher years of experience, teacher education), Attitude Toward Teaching scores, and the Emotional Support domain score from the CLASS observational tool. All correlations were run on a trimmed data set, in which scores that were more than 2.5 *SD* outside the mean were considered outliers and were excluded. This resulted in two cases being re-

TABLE 6
Descriptives and Intercorrelations Among Teachers' Sense of Community, Teacher Characteristics, Attitudes Toward Teaching, and Emotional Support in the Classroom

Measure	M	SD	1	2	3	4	5	6	7	8	9	10
1. Collegiality scores	3.87	0.68	—	.34**	.29*	-.04	.13	.07	-.01	-.02	.09	.13
2. Influence scores	3.43	0.97		—	.33**	-.01	-.17	.27*	.27*	.10	.20	.24†
3. Attitude toward teaching	3.31	0.48			—	-.23+	.12	-.14	.03	-.28	-.10	-.12
4. Education level ^a	7.47	1.48				—	.01	.13	.14	.13	.13	.04
5. Teaching experience	8.9	6.8					—	-.11	-.04	.03	-.09	-.19
6. Emotional Support	5.56	0.77						—	.84**	.71**	.83**	.86**
7. Positive Climate	5.57	0.84							—	.51**	.60**	.66**
8. Negative Climate (reverse)	6.31	0.84								—	.47**	.41**
9. Teacher Sensitivity	5.33	0.93									—	.61**
10. Regard for Student Perspective	5.02	1.17										—

^a1 = eighth grade, 2 = some high school, 3 = high school diploma, 4 = high school plus credit, 5 = some college, 6 = associate's degree, 7 = bachelor's degree, 8 = bachelor's plus 1 year of credit, 9 = master's degree, 10 = master's degree, 11 = specialist degree.
† $p < .10$. * $p = .05$. ** $p = .01$.

moved from analyses on the basis of standardized CLASS scores (at -2.6 and -2.71 from the mean).

As for the relationship between teachers' self-reported sense of community and their attitudes toward teaching, the correlational findings showed a positive and significant relationship between attitudes toward teaching and both Collegiality ($r = .26, p = .05$) and Influence ($r = .33, p = .01$) scores. In terms of teachers' sense of community and classroom quality, Influence scores were positively and significantly associated with classroom observations of teachers' emotional support in the classroom, based on CLASS ratings ($r = .27, p = .05$). CLASS scores did not relate to Collegiality scores ($r = .07, p = .62$), teachers' educational level ($r = .13, p = .37$), or years of teaching experience ($r = -.11, p = .44$).

To further investigate the relationship between teachers' self-reported sense of community and emotional support within their classrooms, we examined the correlations between teachers' Collegiality and Influence scores and the four specific CLASS scale ratings that together compose the Emotional Support construct (i.e., Positive Climate, Negative Climate, Teacher Sensitivity, and Regard for Student Perspective). These correlations are included in Table 6. A positive, significant relationship between teachers' Influence scores and the CLASS Positive Climate scale ($r = .27, p = .05$) indicated that teachers who felt more involved in shaping school norms and decisions had more positive, warmer relationships with their students. Additionally, a positive albeit nonsignificant linear relationship between teachers' Influence scores and the CLASS Regard for Student Perspective scale ($r = .24, p = .08$) suggested that teachers who felt they had influence at the school level were more apt to emphasize students' interests and points of view, as well as to flexibly adapt teaching and activities to individual student needs. No significant relationships were found between teachers' Collegiality scores and the individual CLASS scales, showing there to be no relationship between teachers' feelings that they had a network of supportive colleagues and their increased use of caring and responsive teaching practices in the classroom.

DISCUSSION

The purpose of this study was to examine preschool teachers' self-reported sense of community; to evaluate potential organizational and individual predictors of preschool teachers' sense of community; and to consider the relationship among preschool teachers' sense of community, job satisfaction, and classroom quality. This study was motivated by national concerns regarding the instability of the preschool teacher workforce, blamed in part on characteristics of the workplace including isolationism, perceived lack of career reward, and lack of preparation (Lambert, 1994; Manlove, 1993, 1994; Townley et al., 1991). Given that some studies have shown that sense of school community may contribute to greater job

satisfaction and improved instructional practices for other segments of the teacher workforce (e.g., Battistich & Solomon, 1995; Battistich et al., 1995, 1997; Rosenholtz, 1985), investigation of preschool teachers' sense of school community appears warranted. This study was designed to contribute to an emerging literature dedicated to both understanding and improving contextual features of the workplace environment for preschool teachers (e.g., Barnett, 2003, 2005; Darling-Hammond, 2000).

Three major findings emerged from this study. First, preschool teachers provided generally high ratings concerning their sense of school community, with global ratings averaging nearly 4 points on a 5-point scale. Among the two dimensions of sense of school community studied, teachers provided slightly higher ratings for the Collegiality dimension compared to the Influence dimension, indicating that preschool teachers, in general, feel they have more opportunities to collaborate and consult with their teaching colleagues compared to opportunities to assist in organizational planning and decision making. This was a somewhat surprising finding and contrary to our hypothesis, given that isolationism is thought to be a significant negative facet of the preschool work environment (Manlove, 1993; Townley et al., 1991). One potential explanation for teachers' high ratings of collegial support may be that their expectations for collegial interactions are lower, given the knowledge that preschool settings are often single-classroom programs. Thus, ratings reflect the nature of interactions among staff or colleagues when they occur, rather than weigh heavily the lack of opportunity for collegial interaction. The literature on elementary, middle, and high school teachers points to the fact that teachers in a school often form a social network but fail to serve as supports to one another professionally (Little, 1990; Lortie, 1975), a situation potentially highlighting the isolating nature of the teaching endeavor in these groups. Our data did not allow us to assess teachers' perceptions of collegiality with respect to their expectations for collegial support, although this could be a potentially important future consideration when measuring perceptions of community among preschool teachers.

Although preschool teachers in this sample provided generally high ratings for their sense of school community, it is also important to note that we observed moderate differences in ratings when comparing across program types and moderately large to large differences within program types. Specifically, Head Start teachers provided lower ratings for both Collegiality and Influence scores compared to teachers working in State/Title I programs, with differences consistent with medium effect sizes. The extent to which these differences may be attributed to such program features as leadership characteristics, organizational structure, and regulatory policies is an important avenue for future research. The marked intra-program variation, however, suggests that proximal influences may be more influential in establishing a community-oriented work environment than distal program-level characteristics. Our data indicate that teachers in publicly funded

programs show moderately large to large differences across districts in their perceptions of collegial support, whereas teachers in Head Start show large to very large differences across local chapters in their perceptions of collegial support and influence in the school.

The seeming importance of local, proximal influences on teachers' sense of community has significant implications for promoting a positive workplace climate in preschool settings and on preschool planning and development. States are increasingly undertaking the provision of preschool education and are being required to make decisions on the organization and administration of these programs. Although state-level regulations and decisions will likely be important in shaping these programs, findings from this study suggest that implementation conditions at individual schools may be significantly influential in developing workplace climates that foster committed teachers and quality teaching. Our data suggest the importance of developing partnerships among state-level programmatic entities and individual schools as preschool programs are formed and incorporated into existing state school systems. Investigation of how states, programs, and local sites can work together to build and boost sense of community among preschool teachers is an important avenue of future research.

The second major finding was that neither teacher qualifications (i.e., education and experience) nor program type significantly predicted teachers' self-reported sense of community. However, preschool size—specifically, the number of preschool classrooms within a building—was shown to serve as a unique and significant predictor of teachers' Collegiality scores. This finding further supports the potential importance of proximal influences on teachers' sense of community and has implications for preschool organization and planning efforts. The fact that proximity to other teachers facilitates the formation of collegial relationship makes sense and is consistent with findings in the literature (Desimone et al., 2004). The finding is an important one, given that a large percentage of teachers in this study worked in buildings containing only one preschool classroom. Presumably, teachers working in such contexts have no direct access to peers aside from paraprofessionals and itinerant specialists who may serve children in their classrooms. Improving preschool teachers' access to fellow preschool teachers with whom they can collaborate on unit planning, team teaching, and problem solving seems a potentially important mechanism for increasing sense of collegiality.

The third major finding was that preschool teachers' self-reported sense of community was significantly and positively related to both job satisfaction and classroom quality. Specifically, both Collegiality and Influence scores were moderately correlated with teachers' attitudes about teaching as a career, whereas only Influence scores were moderately correlated with global ratings of teachers' emotional support within the classroom. Consistent with the literature, our findings point to the importance of empowering teachers within the school. Teachers who feel collective efficacy, or the perception that the staff as a whole is a commanding

influence on the students, also feel a sense of their agency within their classrooms (Fuller, Wood, Rapoport, & Dornbusch, 1982; Goddard et al., 2000; Kurz & Knight, 2004). In turn, this sense of influence is linked to teachers' persistence and support of students (Ashton & Webb, 1986; Rimm-Kaufman, & Sawyer, 2004). Our data suggest that empowering teachers in organizational decisions is also related to teachers' support of students in the classroom. Although our data cannot explain the mechanism at play, this finding is an important one, suggesting that building high-quality preschool classrooms may begin with building an involved and empowered staff.

Taken together, the findings presented in this study are consistent with findings obtained from studies of teachers in elementary and secondary schools that suggest the importance of teachers' sense of school community to their job attitudes and practices. We found that teachers' impressions of collegiality are less important than their impressions of influence for fostering quality teaching practices, but both were important to positive attitudes about their careers. Additionally, our findings showed considerable differences within specific program types (e.g., when comparing Head Start chapters) and moderate differences across program types (e.g., Head Start compared to State/Title I programs). The findings suggest that proximal, local influences are important to establishing a strong community-oriented work environment in preschool settings, although specific organizational and teacher characteristics important to fostering a sense of community remain unknown. These findings are potentially important for informing efforts at improving preschool education. They suggest that experts not only consider how to increase the credentials of those teaching the youngest children, but explore how to support and bolster these teachers by improving the quality of their work environment, particularly their access to colleagues teaching at the preschool level and their involvement in decision making and governance.

A number of limitations and, thus, future research directions, warrant note. First, the nature of the data in this study make it impossible to know the mechanism by which teachers' sense of community affects their attitudes toward teaching or their classroom practices. As such, this study simply draws attention to the potential importance of workplace climate in establishing a committed, quality preschool teaching workforce. The implications of these findings, however, are limited by the lack of specific knowledge as to the direction of the relationship between community and teacher attitudes and practices, as well as questions about whether these relationships are direct or indirect. Uncovering the mechanisms by which teachers' sense of community affects teachers' attitudes and practices is theoretically relevant and practically important and is an important future direction of research.

In a related vein, a lack of sensitivity of the predictors used in this study leaves unanswered questions as to which organizational characteristics are most important to establishing a sense of community in preschool. Previous research has found dynamic aspects of organizations, such as the nature and amount of interac-

tion occurring among teachers outside the classroom, to be key markers of a school's sense of community (Bryk & Driscoll, 1988). Our data did not capture these dynamic interactions or processes within local affiliations or at each individual preschool site. Hence, we lack an ability to explain variability in teachers' sense of community across sites and/or local affiliations and, thus, are limited in our ability to inform organizational intervention efforts aimed at improving the sense of community among preschool staff. Thus, research efforts designed to study programmatic, organizational, and individual characteristics that influence teachers' sense of community are important future lines of inquiry.

In closing, current efforts to increase preschool quality focus on improving teacher credentials and attracting competitive candidates through increased teacher pay, yet this study opens up new possibilities for preschool improvement efforts. Interventions aimed at empowering and connecting preschool teachers could be important tools for increasing the quality of preschool programs. Future research should work to empirically address these possibilities, exploring the multiple facets of community, their differential impact on teachers, and the organizational features that may determine a sense of community among staff. In this era of high-stakes accountability in education, high-quality preschool education is increasingly looked to as a means of preparing children for later achievement, creating increased visibility and, necessarily, scrutiny, of preschool programs and their workforce. Thus, improvement of preschool education must be broadminded and systematic, examining possibilities for improvement at multiple levels. This research suggests that community orientation is a potentially important area for improvement at the organizational level in preschool and is one deserving of further exploration.

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REFERENCES

- Abbott-Shim, M., Lambert, R., & McCarty, F. (2000). Structural model of Head Start classroom quality. *Early Childhood Research Quarterly*, 15, 115-134.

- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York: Longman.
- Barnett, S. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. *Future of Children*, 5(3), 25–50.
- Barnett, S. (2003). *Low wages = low quality: Solving the real preschool teacher crisis* (Preschool Policy Matters No. 3). New Brunswick, NJ: National Institute for Early Education Research, Rutgers University.
- Barnett, S. (2005). *Benefits of preschool education*. Retrieved October 1, 2005, from <http://nieer.org/resources/files/BarnettBenefits.ppt#1>
- Barnett, S., Hustedt, J., Robin, K., & Schulman, K. (2004). *State of preschool: 2004 state preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research, Rutgers University.
- Battistich, V., & Solomon, D. (1995, April). *Linking teacher change to student change*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Battistich, V., Solomon, D., Kim, D., Watson, M., & Schaps, E. (1995). Schools as communities, poverty level of student populations, and students' attitudes, motives, and performance: A multilevel analysis. *American Educational Research Journal*, 32, 627–658.
- Battistich, V., Solomon, D., Watson, M., & Schaps, E. (1997). Caring school communities. *Educational Psychologist*, 32, 137–151.
- Bird, T., & Little, J. (1985). *Instructional leadership in eight secondary schools* (Final report to the National Institute of Education). Boulder, CO: Center for Action Research.
- Bird, T., & Little, J. (1986). How schools organize the teaching occupation. *Elementary School Journal*, 86(Special issue), 493–511.
- Bryk, A. S., & Driscoll, M. E. (1988). *The high school as community: Contextual influences and consequences for students and teachers*. Madison: University of Wisconsin, National Center on Effective Secondary Schools.
- Christina, R., & Nicholson-Goodman, J. (2005). *Going to scale with high-quality early education: Choices and consequences in universal pre-kindergarten efforts*. Santa Monica, CA: RAND.
- Clifford, R., Barbarin, O., Chang, F., Early, D., Bryant, D., Howes, C., et al. (2005). What is pre-kindergarten? Characteristics of public pre-kindergarten programs. *Applied Developmental Science*, 9(3), 126–143.
- Cohen, E. (1981). Sociology looks at team-teaching. *Research in Sociology of Education and Socialization*, 2, 163–193.
- Darling-Hammond, L. (2000). *Solving the dilemma of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child*. New York: National Commission on Teaching and America's Future.
- Desimone, L., Payne, B., Fedoravicius, N., Henrich, C., & Finn-Stevenson, M. (2004). Comprehensive school reform: An implementation study of preschool programs in elementary schools. *Elementary School Journal*, 104, 369–389.
- Evans, V., & Johnson, D. J. (1990). The relationship of principals' leadership behavior and teachers' job satisfaction and job-related stress. *Journal of Instructional Psychology*, 17(1), 11–18.
- Firestone, W. A. (1987). *Building commitment among students and teachers: An exploratory study of ten urban high schools*. Philadelphia: Research for Better Schools.
- Firestone, W. A., & Rosenblum, S. (1988). Building commitment in urban high schools. *Educational Evaluation and Policy Analysis*, 10(4), 285–299.
- Fuller, B., Wood, K., Rapoport, T., & Dornbusch, S. (1982). The organizational context of individual efficacy. *Review of Educational Research*, 52, 7–30.
- Gamoran, A., Secada, W., & Marrett, C. (2000). The organizational context of teaching and learning. In M. T. Hallinan (Ed.), *Handbook of the sociology of education* (pp. 37–62). New York: Kluwer Academic/Plenum.
- Goddard, R., Hoy, W., & Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37, 479–507.

- Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. San Diego, CA: Academic Press.
- Kurz, T., & Knight, S. (2004). An exploration of the relationship among teacher efficacy, collective efficacy and goal consensus. *Learning Environments Research*, 7, 111–128.
- Lambert, B. (1994). Beating burnout: A multi-dimensional perspective. *AECA Resource Book Series*, 1(2), 1–21.
- Laosa, L. (2005). *Effects of preschool on educational achievement* (NIEER Working Paper). New Brunswick, NJ: National Institute for Early Education Research, Rutgers University.
- La Paro, K. M., & Pianta, R. C. (2000). Predicting children's competence in the early school years: A meta-analytic review. *Review of Educational Research*, 70, 443–484.
- Lee, V., Dedrick, R., & Smith, J. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education*, 64, 190–208.
- Lee, V., & Loeb, S. (2000). School size in Chicago elementary schools: Effects on teachers' attitudes and students' achievement. *American Educational Research Journal*, 37, 3–31.
- Lee, V., & Smith, E. (1982). Collective responsibility for learning and its effects on gains in achievement for early secondary school students. *American Journal of Education*, 104, 103–147.
- Lieberman, A., & Miller, L. (1984). *Teachers: Their world and their work*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Little, J. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal*, 19, 325–340.
- Little, J. (1990). Teachers as colleagues. In A. Lieberman (Ed.), *Schools as collaborative cultures: Creating the future now* (pp. 165–232). New York: Falmer Press.
- Lortie, D. (1975). *Schoolteacher*. Chicago: University of Chicago Press.
- Manlove, E. (1993). Multiple correlates of burnout in child care workers. *Early Childhood Research Quarterly*, 8, 499–518.
- Manlove, E. (1994). Conflict and ambiguity over work roles: The impact on child care worker burnout. *Early Education and Development*, 5, 41–55.
- McLaughlin, M. (1992). *What matters most in teachers' workplace context*. Washington, DC: Office of Educational Research and Improvement, Center for Research on the Context of Secondary School Teaching.
- McLaughlin, M., & Talbert, J. (2001). *Professional communities and the work of high school teaching*. Chicago: University of Chicago Press.
- National Center for Education Statistics. (1999). Public School Questionnaire: School and Staffing Survey 1999–2000 School Year. Washington, DC: U.S. Department of Education. Available at <http://nces.ed.gov/surveys/sass/pdf/9900/sass3a.pdf>
- Newmann, F., Rutter, R., & Smith, M. (1989). Organizational factors that affect school sense of efficacy, community, and expectations. *Sociology of Education*, 62(4), 221–238.
- Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). Toronto, Canada: Wadsworth & Thompson Learning.
- Peisner-Feinberg, E. S., & Burchinal, M. R. (1997). Relations between preschool children's child-care experiences and concurrent development: The Cost, Quality, and Outcomes Study. *Merrill-Palmer Quarterly*, 43, 451–477.
- Pianta, R. C. (1999). Enhancing relationships between children and teachers. Washington, DC: American Psychological Association.
- Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2006). Classroom Assessment Scoring System Pre-K Manual. Charlottesville, VA: University of Virginia National Center for Early Development and Learning.
- Ramey, C. T., & Ramey, S. L. (2004). Early educational interventions and intelligence: Implications for Head Start. In E. Zigler & S. J. Styfco (Eds.), *The Head Start debates* (pp. 3–18). London: Brookes.

- Ramey, S. L., & Ramey, C. T. (2006). Early educational interventions: Principles of effective and sustained benefits from targeted early education programs. In D. K. Dickinson & S. B. Neuman (Eds.), *Handbook of early literacy research* (Vol. 2, pp. 445–459). New York: Guilford Press.
- Rimm-Kaufman, S. E., & Sawyer, B. (2004). Primary-grade teachers' self efficacy beliefs, attitudes toward teaching, and discipline and teaching practice priorities in relation to the Responsive Classroom approach. *Elementary School Journal*, 104, 321–341.
- Roberts, W., Hom, A., & Battistich, V. (1995, April). *Assessing students' and teachers' sense of the school as a caring community*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Rosenholtz, S. (1985). Effective schools: Interpreting the evidence. *American Journal of Education*, 93, 352–388.
- Rosenholtz, S., & Simpson, C. (1990). Workplace conditions and the rise and fall of teachers' commitment. *Sociology of Education*, 63, 241–257.
- Royal, M., DeAngelis, K., & Rossi, R. (1996). *Teachers' sense of community: How do public and private schools compare*. Washington, DC: American Institutes for Research in the Behavioral Sciences and the National Center for Education Statistics.
- Royal, M., & Rossi, R. (1996). Individual-level correlates of sense of community: Findings from workplace and school. *Journal of Community Psychology*, 24, 395–416.
- Royal, M., & Rossi, R. (1999). Predictors of within school differences in teachers' sense of community. *Journal of Educational Research*, 92, 259–273.
- Saluja, G., Early, D., & Clifford, R. (2002). Demographic characteristics of early childhood teachers and structural elements of early care and education in the United States. *Early Childhood Research and Practice*, 4(1). Retrieved March 1, 2007, from <http://www.ecrp.uiuc.edu/v4n1/index.html>
- School Readiness Act*, H.R. 2123, 109th Cong. (2005).
- Townley, K. F., Thornburg, K. R., & Crompton, D. (1991). Burnout in teachers of young children. *Early Education and Development*, 2, 197–204.
- Vecchiotti, S. (2001). *Career development and universal pre-kindergarten: What now? What next? (Summary)* (Working Paper Series). New York: Foundation for Child Development.
- Wehlage, G., Rutter, R., Smith, G., Lesko, N., & Fernandez, R. (1989). *Reducing the risk: Schools as communities of support*. New York: Falmer Press.