Child Care Work Environments: the Relationship with Learning Environments

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This is an Author's Accepted Manuscript of an article published in

Lower, J. K. & Cassidy, D. J. (2007). Child care work environments: The relationship with learning environments. *Journal of Research in Childhood Education,* 22(2), 189-204. doi:10.1080/02568540709594621

as published in the *Journal of Research in Childhood Education* 2007 [copyright Taylor & Francis], available online at: http://www.tandfonline.com/10.1080/02568540709594621.

Abstract:

The study explores the relationship between child care program administration, organizational climate, and global quality. The recently developed Program Administration Scale (PAS; Talan & Bloom, 2004) was utilized in the study. Both program administration and organizational climate were found to be positively correlated with preschool classroom global quality. There was also a significant relationship between organizational climate and a language/interaction factor of the ECERS-R. The level of education of the director was related to higher quality administrative practices and not-for-profit centers scored significantly better than for-profit centers did on the PAS. Additionally, a statistically significant relationship between the PAS and the Parents and Staff Subscale of the ITERS-R and ECERS-R was found.

Keywords: Education | Early Childhood | Child Care | Teachers | Work Environment

Article:

The child care industry has historically struggled with poor working conditions--no breaks, unpaid overtime, lack of benefits, low salaries, low status, and an academically unprepared workforce (Modigliani, 1986). Today, the child care industry continues to struggle with somewhat similar issues of high turnover rates, inequitable compensation, a range in academic preparation, and little attention to the work environment. Whitebook, Sakai, Gerber, and Howes (2001) describe the child care workforce as "alarmingly unstable" (p. v), with 82 percent of child care teachers in 1994 and 76 percent of child care teachers in 1996 no longer retained in 2000. The Center for the Child Care Workforce (2004) estimated the average hourly wage for child care teachers to be $8.37, near the poverty level. Further, between 1999 and 2000 the national turnover rate was estimated at 30 percent (Whitebook et al., 2001). When addressing recruitment and retention of qualified child care teachers, the Center for the Child Care Workforce highlights the need to focus on the work environment, in addition to wages and benefits. Because the child care work environment has not been the focus in quality enhancement initiatives, there is uncertainty as to its long-term implications for the workforce and quality of care. In addition, without immediate attention placed on the child care work environment, poor professional

standards for the child care workforce and poor working conditions may continue to be barriers to an already fragmented profession.

The current study explores the relationship between child care teacher work environments--both the program administration and organizational climate--and classroom global quality. The study empirically addresses several unique questions that focus on teacher work environments and the quality of classrooms and interactions with children. That is, this study describes a dynamic relationship among leadership and management practices of the program administration, teachers' perceptions of their work captured in organizational climate, and how that relates to the classroom practices experienced by children. Understanding the relationship between the work environment (program administration and organizational climate) and child care global quality has important implications, for it provides a foundation for improving global quality by focusing on the needs of teachers to do their jobs the best they can.

Program Administration, Organizational Climate, and Global Quality

Global quality is intended to capture a holistic view of child care quality. Therefore, it seems important to include child care administrative practices when representing global quality. Many states have recognized teacher qualifications as critical to child care quality by including education as a criterion for enhanced licensing requirements. However, when examining child care global quality, indicators of administrative practices are often given little attention, compared to such child-related factors as materials, activities, health and safety, and teacher-child interactions. Yet, the Early Childhood Environment Rating Scale-Revised (ECERS-R; Harms, Clifford, & Cryer, 1998), a commonly used measure of global quality, contains questions that assess administrative practices within the "Parents and Staff subscale. The Parents and Staff subscale of the ECERS-R includes the following items: provisions for parents, provisions for personal needs of staff, provisions for professional needs of staff, staff interaction and cooperation, supervision and evaluation of staff, and opportunities for professional growth. It is important to note that although some studies include the Parents and Staff subscale (or equivalent subscale, Adult Needs, in the original version) in the final global quality scores (see Farran & Son-Yarbrough, 2001; Hubbs-Tait et al., 2002; La Paro, Sexton, & Snyder, 1998; Phillips, Howes, & Whitebook, 1991; Scarr, Eisenberg, & Deater-Deckard, 1994), many studies omit it when calculating the overall average score (see Bryant, Maxwell, & Burchinal, 1999; de Kruif, McWilliam, Ridley, & Wakely, 2000; Scarr, Phillips, McCartney, & Abbott-Shim, 1993).

The program administrative indicators of the ECERS have been excluded from studies for a variety of reasons. For example, Scarr et al. (1993) describe the ECERS as assessing "developmental appropriateness of care, including teacher-child interactions, health and safety provisions, qualities of physical environment, appropriateness of play materials, and daily activities" (p. 185), yet they leave out adult needs in this description. Bryant, Maxwell, and Burchinal (1999) justify excluding the adult needs (and the special needs) items by suggesting the inclusion of only the "child-related items" (p. 456). This particular study examined the effects

of Smart Start, a community initiative and intervention to improve child care quality, and reported improved quality over the two-year testing period. However, excluding the needs of staff in this report may have been inappropriate in measuring the impact of Smart Start, because many Smart Start initiatives address such issues as wages and other working conditions.

Evidence exists that administrative practices do relate to global quality. One study by Phillips, Howes, and Whitebook (1991) found administrative practices to predict the use of developmentally appropriate activities. Using the original versions of the ITERS (1990) and ECERS (1986), Phillips et al. found the Adult Needs (Parents and Staff) subscale to predict an activities factor (materials, scheduling, and activities) of both scales. This evidence supports the use of the administrative indicators as well as the need for additional research to examine the relationship between program administration and global quality. Furthermore, Mill and Romano-White (1999) found the administrative practices to be one factor that predicts affectionate and angry behaviors of teachers working with young children. Specifically, Mill and Romano-White found a significant difference among job rewards, job concerns, and supervisor support between groups of teachers who exhibited angry behaviors compared to those who were more affectionate. In addition, Bloom and Sheerer (1992) found leadership training for teachers and directors to significantly improve classroom quality scores.

Organizational climate also has been posited to affect child care quality. Bloom (1996) found differences in organizational climate in centers of different quality. Using the Early Childhood Work Environment Survey (ECWES), she compared the organizational climate of child care centers that were accredited by the National Association for the Education of Young Children (NAEYC) with those that were not accredited. Additionally, Ekholm and Hedin (1987) found that child care organizational climate (attitudes and team-work) affect teacher interactions with children, which they described as either present- or future-focused. Centers with greater levels of teamwork were more likely to be future-focused in their interactions with children. That is, teachers who worked in facilities that exhibited more teamwork were also more likely to be active in planning activities and interacting with the children during play while being flexible to their needs. Subsequently, children in future-focused environments were more likely to be more engaged in activities. This study provides evidence that the organizational climate, affected by the philosophies of practice within the program administration at both the adult and child levels, impacts children's experiences in care.

Research Questions

The current study explored three main questions: 1) What is the relationship between program administration, as measured by the Program Administration Scale and global quality? 2) What is the relationship between organizational climate and global quality? and 3) What is the relationship between program administration, as measured by the Program Administration Scale and organizational climate? Because the Program Administration Scale is a new measure, the

authors also were interested in questions involving director education and difference in scores based on profit status.

Methods

Data and Sample

Data collection occurred in cooperation with the North Carolina Rated License Assessment Project (NCRLAP). Participants included child care directors and teachers who received assessments as a part of North Carolina's rated license, or as a part of a practice assessment that was geared towards technical assistance also conducted through NCRLAP. Participants were recruited from throughout the state (including rural, suburban, and urban areas) from February 2005 through June 2005. PAS assessments occurred within 6 months (M = 67 days; SD = 42.69) of the ECERS-R assessments. Twenty-seven of the 30 centers with PAS assessments also had ECERS-R assessments.

Among the 30 participating centers of the PAS, 245 teacher surveys measuring the organizational climate were returned, resulting in a total response rate of 43 percent. However, 12 surveys were removed from analysis because the respondent indicated that his or her position did not include working in the classroom, bringing down the sample size to 233 teachers. Additionally, only centers with greater than a 20 percent response rate by teachers were considered in the organizational climate analyses (n = 26), resulting in the removal of an additional 8 surveys from analyses. The final sample size was 225 teacher surveys, representing 26 centers with a center response rate of greater than 20 percent. Additionally, these centers were represented by at least 2 survey respondents and as many as 24 (M = 9; SD = 5) and a response rate ranging from 22 percent to 100 percent (M = .49; SD = .23). The PAS results for the remaining 4 centers in the sample are still used in analyses examining relationships with classroom global quality.

Measures

For purposes of this study, the Early Childhood Environment Rating Scale-Revised (ECERS-R; Harms, Clifford, & Cryer, 1998) was used to assess child care global quality. The Early Childhood Work Environment Survey short form (ECWES; Bloom, Sheerer, & Britz, 1998) was used to examine organizational climate. The Program Administration Scale (PAS; Talan & Bloom, 2004) was used to evaluate the program administration.

ECERS-R. The ECERS-R is a widely used measure that assesses child care global quality. The original ECERS was developed in 1980 and revised in 1998. The revised version is now used in place of the original with additional content that focuses on diversity, special needs, and current "best practices." The ECERS-R was found to have high internal consistency of .92, with a subscale internal consistency of .71 to .88 (Harms, Clifford, & Cryer, 1998). Its measurement of global quality includes both structural and process-oriented components across the scale

(Cassidy, Hestenes, Hansen et al., 2005). ECERS-R includes 43 items and 470 indicators. It has 7 subscales: space and furnishings, personal care routines, language-reasoning, activities, interaction, program structure, and parents and staff. The ECERS-R is designed as an observational measure that typically requires three to five hours of observation and a teacher interview. Based on observations, each of the items is scored from 1 (inadequate) to 7 (excellent). In addition to research, the ECERS-R is used as part of regulatory enhancement programs in 19 states, including North Carolina. The North Carolina Rated License Assessment Project maintains an inter-rater reliability of at least 85 percent within one point.

With the revised version of the ECERS, Cassidy, Hestenes, Hegde, Hestenes, and Mims (2005) found the ECERS-R to contain two factors (activities/materials and language/interactions) including 16 items that, when used together, could accurately predict the entire global quality score with a .92 correlation between the factors and the entire scale. The activities/materials factor included items: 3. Furnishings for relaxation and comfort, 5. Space for privacy, 15. Books and pictures, 19. Fine motor, 20. Art, 22. Blocks, 24. Dramatic play, 25. Nature/science, and 26. Math/number. The language/interactions factor included items: 17. Using language to develop reasoning skills, 18. Informal use of language, 30. General supervision of children, 31. Discipline, 32. Staff-child interactions, 33. Interactions among children, and 36. Group time. In addition to examining global quality from the entire ECERS-R scores, the current study also was interested in examining the language/interaction factor because of its process-oriented characteristics (Cassidy, Hestenes, Hansen et al., 2005).

The Early Childhood Work Environment Survey. The Early Childhood Work Environment Survey short form is an abbreviated version of the Early Childhood Work Environment Survey long form (Bloom, Sheerer, & Britz, 1998). Like the long form, the ECWES short form evaluates the organizational climate based on 10 dimensions: collegiality, professional growth, supervisor support, clarity, reward system, decision-making, goal consensus, task orientation, physical setting, and innovativeness (Bloom, Sheerer, & Britz). It consists of a total of 20 questions that can range in score from 0 to 5, 5 being the highest score. In addition, there are three open-ended questions that relate to organizational climate. In addition to the standard questions included in the ECWES short form, other demographic questions were asked.

The ECWES long form has been used in several studies as a measure of organizational climate unique to child care and has been found to contain distinct dimensions of the work environment with high internal consistency, with a Cronbach's alpha of .95 (Bloom & Sheerer, 1992). In addition, internal consistency of the subscales have been found to be of acceptable levels, ranging from .66 (decision-making) to .92 (congruence with ideal) across many studies (Bloom, 1988, 1996; Bloom & Sheerer, 1992). The ECWES survey short form includes the same dimensions as the long form, providing a snapshot of the organizational climate (Bloom, Sheerer, & Britz, 1998). The short form, due to its abbreviation, increased the likelihood of participation in the current study and is intended to provide an accurate score that represents the organizational climate.

Program Administration Scale. The Program Administration Scale (PAS; Talan & Bloom, 2004) examines child care program administration, including leadership and management practices, based on a director's report that is supported by documentation and observation. Initially, directors are interviewed for approximately two hours and their responses are confirmed through evidence of documentation. The PAS includes 25 items and 10 subscales: human resource development, personnel cost and allocation, center operations, child assessment, fiscal management, program planning and evaluation, family partnerships, marketing and public relations, technology, and staff qualifications. The PAS is modeled after the ECERS-R, with a 7-point scale, and is scored similarly, with 1 as inadequate and 7 as excellent. Like the ECERS-R, subscales of the PAS are averaged for a final score. Reliability and validity of the PAS was assessed with a sample of 67 centers representing small, medium, and large centers that were both accredited and not accredited by the National Association for the Education of Young Children (Talan & Bloom, 2004). The internal consistency using Cronbach's Alpha was .85 for the total scale. A Pearson's r found the subscales to be correlated from .09 to .63 with a mean of .33 and the item correlations ranged from .02 to .78. Among eight assessors, the interrater reliability was 90 percent within one point. Finally, moderate correlations were found between the PAS and the ECERS-R Parents and Staff Subscale (.53) and the PAS and the Professional Growth Subscale of the ECWES (.52).

Results

Descriptive Information

Center Demographics. Table 1 presents center characteristics. Sixty percent of the centers were for-profit, while 40 percent were not-for-profit programs. Table 2 describes the center populations, including licensing capacity and number of hired staff for the participating centers. Additionally, according to directors' reports, on average within the last 12 months there was 16 percent turnover among administrative staff, 23 percent turnover among teaching staff, and 8 percent turnover among support staff.

Table 1. Center Demographics

Centers (n = 30)	**Percentage**	**n**
Age Level Care		
Infant care	83%	25
Toddler care	90%	27
Preschool care	100%	30
School-age care	67%	20
Programs Offered		
Full-day program	100%	30
Part-day program	17%	5
School-day program	37%	11
Before/after-school program	63%	19

Accreditation, Auspice, and Funding Sources		
NAEYC-accredited	13%	4
For-profit	60%	18
Not-for-profit	40%	12
Head Start funding	7%	2
State pre-K funding	53%	16
Faith-based funding	23%	7

Table 2. Center Populations

	Min	**Max**	**Mean**	***SD***
Licensing capacity	20	259	139	50.53
Full-time teachers	4	36	15.50	7.70
Part-time teachers	0	22	4.10	5.30
Full-time administrative staff	1	4	2	0.72
Part-time administrative staff	0	4	0.20	0.76
Full-time support staff	0	3	0.93	0.78
Part-time support staff	0	3	0.50	0.86

Note. Full-time is considered 35 hours per week or more and part time is considered less than 35 hours per week

Teacher Demographics. Teachers from the 30 centers participating in the study were requested to complete a survey that included questions measuring organizational climate. To be eligible to participate in the survey, teachers were required to work full time (at least 30 hours per week). A strong majority of the respondents were women (96.8 percent), ranging in age from 17 to 74 (M = 35.8; SD = 12.2). Teacher racial/ethnic background and education are reported in Table 3. Teachers had a range of experience from less than 1 year to 28 years (M = 7.2; SD = 5.7) and worked at their current facility for a range of less than i year to 28 years (M = 3.3; SD = 3.9). Teacher hourly wages and benefits received are reported in Table 4.

Director Demographics. Of the 30 participating centers, 25 directors completed the survey. One hundred percent of the directors were women, ranging in age from 23 to 79 years old (M = 40.8; SD = 13.7). Director racial/ethnic background and education is reported in Table 3. Director salary and benefits received are reported in Table 5. Additionally, directors reported working from 40 to 60 hours per week (M = 43.4; SD = 5.7) and reported working at their current facility

for a range of less than i year to 18 years (M = 4.64; SD = 3.93). Years of child care administrative experience ranged from less than 1 year to 28 years (M = 8.54; SD = 6.45). Additionally, directors reported having a range of years of experience teaching young children, with some reporting less than 1 year of experience and some with as many as 20 years (M = 5.73; SD = 6.21). Sixty-four percent of the directors reported that they worked with an assistant director.

Table 3. Race and Education of Teachers and Directors

	Teachers		**Directors**	
Race/Ethnicity	**Percentage**	**n**	**Percentage**	**n**
Asian/Pacific Islander	2	4		
Black/African American	34	74	28	7
Hispanic/Latino	2	4		
Native American	3	6	4	1
White/European American	58	130	68	17
Other	1	2		
Highest Level of Education	**Percentage**	**n**	**Percentage**	**n**
High School	25	53		
Some College	40	86	17	4
2-Year College Degree	18	38	21	5
4-Year EC/CD Degree	8	18	17	4
4-Year Other Degree	6	12	29	7
Some Graduate Courses or Degree	3	7	17	4

Table 4. Teaching Staff Hourly Wage and Benefits

n = 219	**Percentage**	**n**
$5.50 - $6.99	19	40
$7.00 - $8.49	43	94
$8.50 - $9.99	21	46
$10.00 - $11.49	13	28
$11.50 - 12.99	5	10
$14.60 or higher	1	1
Fully paid health insurance	11	18
Partially paid health insurance	47	86
Fully paid dental insurance	4	7
Partially paid dental insurance	11	18

Table 5. Director Salary and Benefits

n = 25	Percentage	n
$20,000 - $23,004	5	1
$23,005 - $26,000	15	3
$26,001 - $31,179	35	7
$31,180 - $35,360	10	2
$35,361 - $40,000	20	4
$40,001 - $45,000	15	3
Fully paid health insurance	22	4
Partially paid health insurance	65	11
Fully paid dental insurance	0	0
Partially paid dental insurance	12	17

Scale Statistics

Program Administration Scale. Each of the 30 centers participated in a PAS assessment. The final subscale, Staff Qualifications, was not used in the analyses because the information was not consistently reported for all classroom teachers, which is needed to accurately complete this subscale. The internal consistency of the first nine subscales combined was acceptable ([alpha] = .88). On a Likert scale of 1 to 7, the scores were positively skewed within normal range, with a mean score of 2.87 (SD = .88) and a range of 1.14 to 5.19. A certified Program Administration Scale assessor with an inter-rater reliability of 100 percent within one point of the authors of the PAS collected this portion of the data.

Early Childhood Work Environment Survey-Short Form. The internal consistency for the ECWES measuring organizational climate perceived by the teachers was acceptable ([alpha] = .95). On a Likert scale of 1 to 5, the individual (n = 224) reports of organizational climate scores were negatively skewed within normal range with a mean of 4.03 (SD = .78) and a range of 1.69 to 5.0. Organizational climate measured at the center level (n = 26) was negatively skewed within normal range, with a mean of 3.97 (SD = .53) and a range of 2.76 to 4.86.

ECERS-R. Each center participating in the PAS also participated in at least two Environment Rating Scale assessments. A total of 55 ECERS-R assessments were conducted across 27 of the participating centers. Assessors collecting this portion of the data maintained an inter-rater reliability of at least 85 percent within one point.

The internal consistency of the ECERS-R was acceptable ([alpha] = .83). Including all seven subscales, the ECERS-R scores were negatively skewed within the normal range, with ECERS-R scores ranging from 3.90 to 6.00 (M = 5.06; SD = .54). The ECERS-R scores on average were at the "good" level. Generally, there were at least two classroom assessments within each center; therefore, a benefit of looking at relationships at the classroom-level was that it potentially allowed for greater power within analyses. Table 6 provides a summary of findings addressing each of the research questions.

Table 6. Pearson Correlations

	ECERS-R	ECERS-R Language/ Interaction Factor	ECERS-R Parents and Staff Subscale	ITERS-R and ECERS-R Parents and Staff Subscale	Program Administration Scale	Organizational Climate (ECWES)
Program Administration Scale	*n* = 55	*n* = 55	*n* = 55	*n* = 89		*n* = 26
	0.291**	ns	0.223*	0.287***	0.331*	
Organizational Climate (ECWES)	*n* = 45	*n* = 45	*n* = 45	*n* = 89	*n* = 26	
	0.301**	0.412***	ns	ns	0.331*	

**p< or =.10*
***p< or =.05*
****p< or =.01*

Organizational Climate and Global Quality. A significant positive correlation existed between organizational climate and classroom global quality, r (44) = .301, p =. 045. Using the Language/Interaction factor found by Cassidy, Hestenes, Hegde, Hestenes, and Mims (2005), a Pearson r correlation also revealed a significant moderate positive relationship between center organizational climate and the language/interaction factor, r (44) = .412, p = .005.

Program Administration and Global Quality. Program administration, as measured by the PAS, was significantly related to classroom global quality. A Pearson r correlation revealed a statistically significant moderate correlation between PAS scores and ECERS-R classroom scores, r (54) = .291, p = .031.

PAS and Parents and Staff Subscale. Because the Parents and Staff Subscale of the ECERS-R appears to contain indicators measuring leadership and management practices, the relationship between the PAS and the Parents and Staff Subscale captured in the ECERS-R was examined. A statistical trend was found between these measures, r (54) = .223,p = .10. In order to increase the power of this analysis, available Infant/Toddler Environment Rating Scale-Revised (ITERS-R; Harms, Cryer, & Clifford, 2003) scores were combined with the ECERS-R scores. Thirty-four ITERS-R assessments from the participating centers were included in analyses. The Parents and Staff subscale of the ITERS-R and ECERS-R contain the same questions, with the exception of one additional question in the ITERS-R. Therefore, the scores of the Parent and Staff subscales over the two measures were combined. By combining the scores from the ITERS-R and ECERS-R classrooms, statistical power was increased. ITERS and ECERS scores have been combined for analysis in several other studies, due to the strong correlations between the two scales (see

Cassidy, Buell, Pugh-Hoese, & Russell, 1995; Scarr, Eisenberg, & Deater-Deckard, 1994). A Pearson r correlation revealed a statistically significant positive correlation between the PAS and the Parents and Staff Subscale of the ITERS-R and ECERS-R classrooms, r (88) = .287, p = .006.

Organizational Climate and Program Administration. A Pearson r correlation revealed a statistical trend between the program administration score, as measured by the PAS and the organizational climate, r (25) = .331, p = .098. It is important to note that the sample size for this analysis was small (n = 26), and therefore it is possible that this finding would be statistically significant with a larger sample size and greater power.

Additional Analyses

Director Experience and Education. Because the PAS is set up as a rubric for improving administrative practices over time, it was of interest to see if director experience or education was related to PAS scores. Director years of experience and education was attained from the director surveys that were returned (n = 25). A Pearson r correlation revealed that years of child care administrative experience were not correlated with PAS scores, r (23) = .096, p = .66.

An independent samples t-test revealed that directors with at least some college courses or a 2-year college degree scored significantly lower (M = 2.49; SD = .80) on the PAS than did directors with at least a 4-year degree (M = 3.24; SD = .79), t (22) = -2.22,p = .037. Additionally, an independent samples t-test indicated that directors with the North Carolina Administration III Credential scored significantly better (M = 3.5; SD = .74) compared to directors with no or a lower level Administration Credential (M = 2.48; SD = .70), t (21) = -3.419, p = .003.

Director Report versus Document Verification. Because it is recommended procedure when implementing the PAS to first interview directors and then to verify their responses with supporting documentation, it was of interest to see if the scores based on directors' stated practices aligned with the scores assigned following the document verification, a key element to a valid assessment. A paired sample t-test revealed that the mean score of directors' stated practices (M = 3.25, SD = 1.04) was significantly different than the mean PAS score following document verification (M = 2.87, SD = .88), t (29) = -6.73,p = .00. That is, the directors claim to implement practices that would score significantly higher on the PAS than the scores assigned by a trained assessor based on supporting documentation.

Profit Status. An independent samples t-test revealed that the PAS mean score for not-for-profit centers was significantly higher (M = 3.25, SD = .91) than for the for-profit centers (M = 2.61, SD = .79), t (28) = 2.04, p = .05. An analysis of variance (ANOVA) revealed that there was no difference in educational backgrounds of directors in for-profit and not-for-profit centers, F (1, 22) = 1.43, p = .245. While the PAS scores were significantly different by auspice, this did not hold true when examining center organizational climate scores. Although the center organizational climate mean score was slightly higher for not-for-profit centers (M = 4.13; SD =

.47) compared to the for-profit centers (M = 3.83; SD = .55), they were not significantly different, t (24) = 1.45, p = .16. However, when examining individual teacher perceptions of the organizational climate by auspice, an independent samples t-test revealed that teachers working in not-for-profit centers rated the organizational climate (M = 4.18; SD = .07) significantly better than teachers working in for-profit centers (M = 3.95; SD = .07), t (196) = 2.26, p = .025. Teachers working in not-for-profit centers also reported earning an average of $7.94 per hour and teachers working in for-profit centers reported earning an average of $7.51 per hour. According to an independent samples t-test, this $0.43 difference represents a statistical trend that not-for-profit teachers earned more per hour than for-profit teachers, t (217) = 1.84, p = .067. Although directors in not-for-profit centers, on average, earned $31,568 per year while for-profit center directors earned $27,554 per year, this difference was not statistically significant with the current sample size (n = 20), t (18) = 1.22, p = .24.

Discussion

The current study suggests that program administration and organizational climate are critical variables to quality early care and education. The leadership and management practices of program administration should be considered as a variable when attempting to raise quality in early childhood programs by building a competent workforce. Additionally, focusing on the organizational climate, or how teachers perceive the work environment, and on the practices of the program administration requires conceptualizing early care and education not only as a microsystem of developing children, but also as a microsystem of developing adults.

Leadership and Management Practices

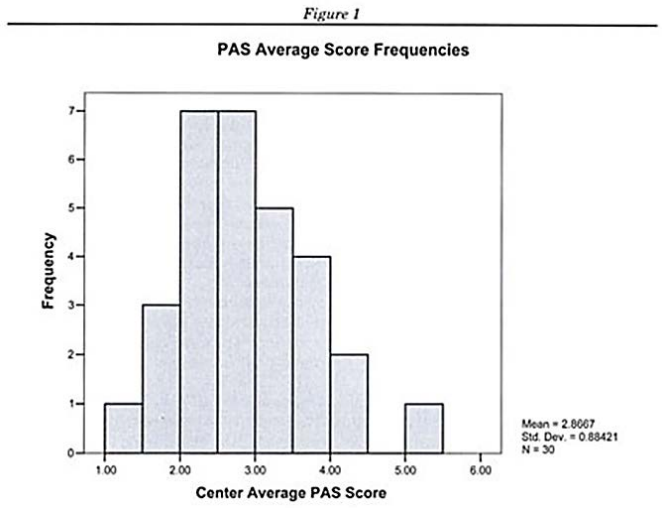
The newly developed Program Administration Scale (PAS; Talan & Bloom, 2004) identifies important competency areas for early childhood directors. The PAS measures director leadership and management by incorporating both transactional and transformational qualities of effective administrative practices. Results from the current sample further support the idea that more attention is needed on the quality of leadership and management practices in early care and education centers. That is, on a 1 to 7 Likert scale, the average PAS score in the current sample was 2.87 (SD = .88), with a range of 1.14 to 5.19. According to the PAS, on average, the quality of program administrative practices among the sample was meeting less than "minimal" standards and no centers were in the "excellent" range. This is especially surprising, since the sample represents higher quality child care in North Carolina. Additionally, the average from the current sample is lower than the average (M = 3.59) reported by Talan and Bloom (2004). However, the average scores reported by Talan and Bloom are only slightly above the "minimal" standard set by the scale. Therefore, both scores suggest needed improvement in leadership and management practices in child care centers. It is important to note that the current sample, like the sample reported by Talan and Bloom (2004), did not have prior knowledge of the content of the PAS prior to the assessments.

It also should be noted that directors have an intangible role in setting the tone for the program. In a recent study in North Carolina, director continuing education was correlated with classroom quality improvement in child care centers participating in the North Carolina Rated License Assessment Project (Hansen, Cassidy, & Mims, 2006). The vision and goal-setting role of directors provides the support system that teachers need to create quality educational settings for the children in their classrooms. Neugebauer (1999) also suggests that the director is the key to quality and that this relationship is the impetus for the numerous state, foundation, and national organizations that have instituted credentialing for administrators of child care facilities.

The development of the PAS provides the field with a reliable and comprehensive definition of excellence for leadership and management in early childhood settings. Conceptually, it contains both face and content validity. Additionally, the current study suggests that it contains discriminate validity by making distinctions between administrative practices among the centers participating in the study and parsing out distinctions between lower and higher quality practices in leadership and management. Further, the alpha coefficient ([alpha] = .88) of the scale indicates that the items contain acceptable internal consistency or reliability.

Unfortunately, there are few early childhood director preparation programs or educational opportunities to help directors learn the qualities associated with being an effective leader and developing a positive work environment (Bloom & Sheerer, 1992). This situation subsequently contributes to the lack of knowledge about the responsibilities associated with administration and being a leader in early childhood settings. In fact, Morgan (1997) describes the early childhood field to "have been reluctant to devise formal preparation programs for the role of director" (p. 11), further adding to the ambiguity of explicitly defining the role of director and its leadership and management responsibilities in early childhood programs.

Figure 1.



The results of this study support directors attaining at least a 4-year degree and participating in education opportunities to reach towards higher early childhood leadership and management practices, such as the North Carolina Level-III Administrative Credential, in order to improve their administrative practices and program quality. At the national level, the Good Start, Grow Smart initiative (2002) requires states to develop child care workforce qualifications (e.g., professional development plans that include education and training opportunities) that support children's learning standards. Based on the current study, focusing on the development of enhanced qualifications for directors seems equally important as developing qualifications for teachers. Subsequently, developing director preparation programs to prepare directors for their leadership role in the early care and education setting creates standards that may improve leadership and management practices within the industry. These recommendations require macro level changes, changes that are a result of societal and political views.

Parents and Staff Subscale

The current study offers support to include the Parents and Staff subscale within the ITERS-R and ECERS-R when assessing global quality. While a statistical trend was evident between the PAS and the Parents and Staff subscale of the ECERS-R, increasing the sample size and adding an additional 32 Parents and Staff subscales from the ITERS-R revealed a statistically significant relationship between the PAS and the Parents and Staff subscale. This finding supports a finding by Talan and Bloom (2004) showing a moderate correlation between the PAS and the Parents and Staff subscale. While there was a positive correlation between the PAS and the Parents and Staff subscale of the ITERS-R and ECERSR classrooms, the internal consistency of the Parents and Staff subscale of the ECERS-R ([alpha] = .411) and ITERS-R ([alpha] = .598) are low to moderate at best, which may suggest a need to revise this portion of the scales. However, it is important to note that when used in conjunction with the other indicators of the Environment Rating Scales, the Parents and Staff Subscale does not compromise the internal consistency of the entire ITERS-R and ECERS-R.

The use of the Parents and Staff subscale of the Environment Rating Scales would raise much-needed public awareness and improve standards by clearly communicating that the work environment is an integral part of global quality. Further, use of the Program Administration Scale, in addition to the Environment Rating Scales, also may bring a much-needed focus to the importance of management and leadership practices in early childhood settings. Significantly raising the standards of the child care work environment may result in a more stable workforce.

Program Administration and Organizational Climate

It is interesting to note that the PAS scores of the current study were positively skewed within the normal range, while the organizational climate scores were negatively skewed within the normal range. This disparity may be the difference between measuring subjective perceptions as organizational climate reflects and more objective ratings like the PAS scores reflect. Both types

of measurement reveal important aspects of quality in the current study. That is, both the PAS scores and the organizational climate scores were found to be independently correlated with global quality in preschool classrooms.

With both management and leadership practices in the organizational climate, as well as how those practices are perceived by staff, correlated with classroom global quality, both constructs seem important to consider in early care and education settings. The PAS provides a rubric for management and leadership practices to improve over time. However, it is likely that these changes must include the perspectives and participation of the teaching staff in shared leadership rather than making changes without staff input. This, in turn, seems necessary to positively impact the organizational climate that is also reflected in correlations with classroom global quality and language and interactions experienced by children.

Organizational Climate

The relationship between the organizational climate and the ECERS-R teacher-child language/interaction factor is compelling and further supports the contention that teachers' perceptions of their work environments are also experienced within the interactions they have with the children with whom they work. The current findings support research by Ekholm and Hedin (1987) that found teacher attitudes and center-level teamwork to benefit teachers' interactions with children in the classroom. Additionally, Bloom (1996) found organizational climate to be significantly better in programs that were NAEYC-accredited and likely to be of higher quality, compared to programs that were not accredited by NAEYC.

The organizational climate of child care work environments and its relationship with the language and interactions used in classrooms is interesting and signals a need for further research. The administrative practices and professional standards in the field that support healthy organizational climates are shared with the environment in which children are learning and developing. Child care work environments may not only be important to recruitment and retention in building a stable workforce, but also may be important when addressing child care quality from the standpoint of preparing children for school and building their sense of social responsibility. Therefore, child care work environments, and most importantly how teachers perceive their work environment, are variables that must be addressed in the pursuit to improve child care quality.

Reliability of Director Reports

Significant differences were found between scores on the PAS, based on directors' stated practices and those assigned by a trained assessor upon completion of document verification. This finding suggests that although directors may have good intentions of implementing a practice, without systems of accountability, these practices may go unattended. For example, Item 1. Staff Orientation, Indicator 5.1 of the PAS, requires documentation and states, "The orientation includes feedback from the supervisor during the introductory or probationary

period" (Talan & Bloom, 2004, p. 11). There were cases when directors indicated that they provided feedback to new teachers during their introductory or probationary period; however, they seldom had documentation to support this claim. It may be that directors were, in fact, providing useful verbal feedback to the new teachers. Without documentation, however, there is no benchmark created for teachers to focus on improvements and to revisit during evaluations. Additionally, feedback may be casually provided in passing or during a quick observation but, without documentation, it is indeterminable if this feedback is thorough and if it is understood by the new teacher, who may be overwhelmed with learning the logistics of working within a new environment.

From item 14, Program Evaluation, directors were asked about assessment tools used by staff and parents to evaluate the program. If tools were used (e.g., a survey), there were some cases where there was no evidence that data from the evaluations were used to develop written plans for program improvement (a requirement of indicator 5.3). A director implementing a tool for parents and staff to assess the program may believe that she is receiving feedback about the program and even perceive that her programmatic decisions are based on these evaluations, thus meeting the minimal standards for this item. However, without reflecting on these assessments with staff and creating a plan for improvement, it is questionable how influential these evaluations are. Further, while directors may have good intentions to develop a plan for improvement and may even have conceptualized one, without documentation it may go without implementation as a result of other pressing issues and hurried schedules.

For-Profit and Not-For-Profit Status

Talan and Bloom (2004) included both for-profit and not-for-profit child care centers in the sample that tested the psychometric properties of the PAS and concluded that it was applicable for both types of programs. Interestingly, in the current study, not-for-profit centers scored significantly higher than for-profit centers. The examination of individual teacher perceptions of the work environment revealed that individual scores of organizational climate were also significantly higher for teachers working in not-for-profit centers. Although it may seem that for-profit centers would be more focused on their leadership and management practices to increase revenue or, at a minimum, sustain their respective child care sites, not-for-profit centers did significantly better on the PAS. This may be due to increased levels of accountability required for federal and state funding of not-for-profit programs as well as other private donations. Additionally, not-for-profit centers seem more likely to have multiple sources of involvement, including boards and community partnerships. By contrast, for-profit centers sometimes have a central office or an owner solely involved with finances who oversees policies and procedures with little collaboration from on-site directors. It is important to note that all centers in the study had room for improvement; scores overall were low. However, in the current sample, not-for-profit centers were more likely to score better on the PAS than for-profit centers.

Similarly, in a review comparing for-profit and not-for-profit child care, Kagan (1991) concluded that staff-child ratios tended to be better and that quality of environment and expenditures were generally higher for not-for-profit programs. Additionally, the Cost, Quality and Outcomes Study (Helburn, 1995) found that the quality among for-profit centers in North Carolina to be significantly lower than among the not-for-profit centers. Kagan further contends "that the mixed sector system so deeply imbedded in our society as a permanent reality only confirms the need for spirited inquiry" (p. 100). Subsequently, although in the current study ECERS-R averages were not significantly different (based on profit-status), it is interesting to note that the program administration scores were different.

Limitations

The number of centers included in the study was small, thus impacting the power of the analyses. Recruitment procedures also created a limitation to the study. Participants volunteered either to be a practice site for the North Carolina Rated License Assessment Project or requested an assessment to be considered in the state's rated license. Because of their voluntary nature, the centers in the study are likely to represent higher quality child care.

Policy Implications

There are many important policy implications of this study. Based on the current findings, it may be premature to eliminate the Parents and Staff subscale of the Environment Rating Scales in quality enhancement initiatives and applied research. There seems to be little evidence to exclude the Parents and Staff subscale of the ECERS-R and ITERS-R. Work environment standards, such as those addressed by the questions within the Parents and Staff subscale, that are ignored fail to increase awareness of the importance of good work environments for teachers, fail to contribute to improved working conditions, and subsequently fail to sustain quality child care. Furthermore, omitting the items delivers the message that the work environments of the women teaching and caring for young children do not matter.

One way to improve standards for teacher work environments is to create supportive policies. For example, as Quality Rating Systems are developing across the United States, the use of the Program Administration Scale as a performance measure in quality enhancement initiatives and regulation should be explored. Including leadership and management practices in comprehensive center evaluations used for quality ratings is not only logical but may be necessary to achieve an accurate picture of the environment in which both children and adults develop. In order to produce accurate evaluations of program quality, Mark and Shortland (1987) recommend using multiple methods and sources when collecting information. Implementing the PAS as an additional measure of quality allows for a more comprehensive understanding of quality child care.

Conclusion and Future Research

In conclusion, a relationship between child care quality and child care work environments, including program administration and organizational climate, is supported. This study supports the idea that child care leadership and management practices and organizational climate are correlated with global quality. Further, the relatively low scores on the PAS suggest a need to focus quality enhancement initiatives and director preparation programs on improving child care work environments. Additionally, leadership and management practices and organizational climate should not be ignored in the process of improving child care quality and building a stable workforce. Therefore, teaching directors and teachers about quality work environments and professional relationships is critical when teaching them about creating optimal environments for children.

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