

**PROMOTING EMOTIONAL SUPPORT IN
HEAD START CLASSROOMS
THROUGH TEACHER PEER COACHING**

by

Stacy R. Johnson

A dissertation submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Psychology

Summer 2014

© 2014 Stacy R. Johnson
All Rights Reserved

UMI Number: 3642319

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3642319

Published by ProQuest LLC (2014). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

**PROMOTING EMOTIONAL SUPPORT IN
HEAD START CLASSROOMS
THROUGH TEACHER PEER COACHING**

by

Stacy R. Johnson

Approved: _____
Gregory A. Miller, Ph.D.
Chair of the Department of Psychology

Approved: _____
George H. Watson, Ph.D.
Dean of the College of Arts and Sciences

Approved: _____
James G. Richards, Ph.D.
Vice Provost for Graduate and Professional Education

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as a dissertation for the degree of Doctor of Philosophy.

Signed:

Carroll E. Izard, Ph.D.
Professor in charge of dissertation

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as a dissertation for the degree of Doctor of Philosophy.

Signed:

Roger Kobak, Ph.D.
Member of dissertation committee

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as a dissertation for the degree of Doctor of Philosophy.

Signed:

Samuel L. Gaertner, Ph.D.
Member of dissertation committee

I certify that I have read this dissertation and that in my opinion it meets the academic and professional standard required by the University as a dissertation for the degree of Doctor of Philosophy.

Signed:

Christine M. Ohannessian, Ph.D.
Member of dissertation committee

ACKNOWLEDGMENTS

I would like to thank my advisor, Carroll Izard, for his guidance throughout this project. I am also grateful for the help and advice of the staff and graduate student members of the Human Emotions Lab, Fran Haskins, Adina Seidenfeld, Kristy Sheffler, Aundrea Wilkins, and Sarahfaye Heckler. I would like to also thank Roger Kobak for his invaluable help as a member of my dissertation committee. I am very appreciative of the undergraduate research assistants who collected the data. I also appreciate the significant amount of help received from the collaborating Head Start district, especially Debbie Simons and Leah Kelman, as well as the dedication of the teachers that participated in this project. Last, but not least, I am sincerely thankful of my husband, my parents, and my family for their unconditional encouragement, love, and support.

TABLE OF CONTENTS

LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRACT	ix

Chapter

1	INTRODUCTION	1
	Importance of Classroom Emotional Support	2
	Interventions that Target Classroom Emotional Support	4
	The Peer Coaching Model	7
	The Colleague Observation and Coaching Program	9
	Current Study.....	10
	Study Aim 1	10
	Study Aim 2.....	11
2	METHOD	12
	Participants	12
	Study Design	13
	The Colleague Observation and Coaching Program	15
	Workshop component.....	16
	Peer coaching component.....	16
	School component	17
	Control Group.....	17
	Measures	18
	Classroom Assessment Scoring System	18
	Teacher Interpersonal Self-Efficacy Scale	19
	Early Childhood Job Satisfaction Survey	19
	Student-Teacher Relationship Scale.....	20
	Modernity Scale.....	21
	Center for Epidemiologic Studies-Depression Scale	21

	Demographic questionnaire.....	22
	Acceptability and feedback questionnaire.....	22
	Protocol.....	22
	Overview of Analyses	23
3	RESULTS.....	25
	Baseline Descriptive Data and Correlations.....	25
	Descriptive Analyses of Outcome Variables.....	26
	Intervention Effects on Outcome Variables	27
	Feasibility and Acceptability of Intervention	27
4	DISCUSSION.....	34
	REFERENCES	40
Appendix		
A	STUDY MEASURES	47
	TISES	47
	ECJSS	49
	Ideas about Children.....	51
	STRS.....	52
	CES-D.....	54
	Demographic Information	55
	Classroom Assessment Scoring System.....	57
B	HUMAN SUBJECTS APPROVAL.....	58

LIST OF TABLES

Table 1	Demographic Characteristics by Intervention and Control Schools	13
Table 2	Paired T-Test Differences on CLASS Outcomes for Peer Coaching and Control Groups	29
Table 3	Means and Standard Deviations of Teacher-Reported Variables.....	30
Table 4	Correlations Among All Outcome Variables at Pre and Post Intervention.....	31
Table 5	Repeated Measures General Linear Model of Treatment Effects on Classroom Climate	32
Table 6	Teachers' Ratings of Acceptability and Usefulness of the Peer Coaching Intervention	32

LIST OF FIGURES

Figure 1	The proposed mediation model.	11
Figure 2	Timeline of study.....	14
Figure 3	The three components of the peer coaching intervention.....	15
Figure 4	Treatment effect on the repeated observations before and after the peer coaching intervention for the CLASS domain of classroom organization and the comprising dimensions of productivity and instructional learning formats.....	33

ABSTRACT

The emotional environment in preschool classrooms is an important context contributing to children's development, especially for children from economically disadvantaged families who often demonstrate deficits in social and emotional functioning. The current study describes the development of the Colleague Observation and Coaching (COACH) program, a peer coaching intervention, and evaluates the program's effectiveness for improving classroom climate by assigning teachers in 24 Head Start classrooms to either the COACH program or to a control condition. Teachers in the intervention condition received a training workshop on strategies for peer coaching and for enhancing classroom emotional support. They also participated in peer observation and coaching sessions. The effect of the intervention on classroom environment and teacher perceptions was explored. Teachers who received the intervention demonstrated significant increases in classroom observations of both emotional support and classroom organization. The peer coaching model addresses the need for cost-effective and sustainable models of professional development that are designed to improve the environment in preschool classrooms.

Chapter 1

INTRODUCTION

Programs that seek to enhance the classroom environment represent an important avenue for promoting children's development and compensating for various risks associated with poverty. The children from economically disadvantaged families that are served by Head Start may be particularly influenced by supportive classroom environments (Burchinal, Vandergrift, Pianta, & Mashburn, 2010; Hamre & Pianta, 2005). Emotional support or teacher's warmth, sensitivity, and responsiveness (Hamre & Pianta, 2007) is one component of the classroom environment that promotes children's social and emotional adaptation (Pianta & Hamre, 2009a; Pianta & Stuhlman, 2004). However, there is a dearth of effective and sustainable programs that focus specifically on enhancing the emotional environment of the classroom (Brown, Jones, LaRusso, & Aber, 2010; Hamre et al., 2012). Peer coaching provides a sustainable, cost-effective approach to promoting a healthy classroom environment through fostering a collaborative teaching community and encouraging observation and reflection about best practices in the classroom.

This study described the COACH program, a peer coaching intervention targeting classroom climate, and evaluated the program's effectiveness for improving classroom emotional support. More specifically, COACH was designed to increase teacher's coaching, observation, and self-reflection skills and apply them to promote emotional support in the classroom. The effectiveness of the intervention was

evaluated by observing change in emotional support before and after the intervention. In addition, other putative benefits of the peer coaching intervention were explored.

Importance of Classroom Emotional Support

The classroom environment is a particularly important context, as children spend a significant portion of time interacting with teachers and peers in the school setting. The growing interest in improving the quality of classroom environments is evident in new policies regarding professional development for teachers and monitoring program effectiveness (Tout et al., 2010). The Improving Head Start for School Readiness Act (2007) mandates all Head Start school districts to assess classroom quality. This legislation was supported by research linking teacher-child interactions with positive child outcomes and later achievement (Hamre et al., 2012; Pianta, Paro, Payne, Cox, & Bradley, 2002; Pianta & Stuhlman, 2004), especially for children in high-risk communities (Burchinal et al., 2010; Hamre & Pianta, 2005; Rimm-Kaufman et al., 2002).

The development of the Classroom Assessment Scoring System (CLASS) framework (Pianta, La Paro, & Hamre, 2006) has allowed for the objective evaluation of specific, observable classroom processes and consequently has created measureable targets for intervention. The CLASS framework has revealed three broad domains of classroom interactions between teachers and students: emotional support, classroom organization, and instructional support. Although instructional and organizational aspects of the classroom are frequently investigated, research has shown that the classroom emotional environment contributes uniquely to children's adaptive development (Brown et al., 2010). Classroom emotional support is measured by ratings of positive and negative climate, teacher sensitivity to student needs, and

teacher regard for student perspectives. Overall, emotional support is an indicator of positive teacher-child relationships and child-centered teaching practices. The importance of emotional support for children's subsequent development is based on both attachment theory and self-determination theory (Pianta et al., 2006). According to attachment theory, predictable, stable, and consistent environments allow children to become more self-reliant and encourage children to take risks. Self-determination theory suggests that children are most motivated to learn when adults support their need to feel competent and autonomous.

Emotionally supportive classrooms may move children toward a positive trajectory for social development (Curby, Rimm-Kaufman, & Ponitz, 2009; Peisner-Feinberg et al., 2001) and may be especially important for children at a greater risk for maladaptive outcomes, such as children attending Head Start preschools. Classrooms with higher levels of emotional support have been associated with children's social competence (Mashburn et al., 2008), reductions in problem behaviors (Mashburn et al., 2008), academic achievement (Hamre & Pianta, 2005), and positive teacher-child relationships (Hamre & Pianta, 2005). Children from economically disadvantaged families are exposed to a number of risks, such as neighborhood violence, marital discord, punitive parenting, and less social support (Evans, 2004) and are rated as exhibiting more behavior problems (Qi & Kaiser, 2003). Preschool children from low-income and risky families appear to benefit more from high quality classrooms than do children from middle income families (Burchinal et al., 2010; Hamre & Pianta, 2005; Rimm-Kaufman et al., 2002). For example, Head Start children of depressed caregivers showed declines in prosocial behavior in classrooms low in emotional

support, but showed positive rates of change when in emotionally supportive classrooms (Johnson, Seidenfeld, Izard, & Kobak, 2013).

National studies of preschool classrooms report that emotional support is typically observed to be in the high end of the mid range, as defined by CLASS (Hamre & Pianta, 2007). Unfortunately, emotional support is rated to be even lower in schools servicing disadvantaged children (LoCasale-Crouch et al., 2007; Pianta et al., 2005). However, threshold analyses have revealed significant gains in children's social competence and reductions in problem behavior when emotional support is rated in the high range (Burchinal et al., 2010). Currently, efforts to improve emotional support in the classroom are largely limited. Therefore, research to strengthen and evaluate professional development programs is needed to help promote emotional support and healthier classroom environments.

Interventions that Target Classroom Emotional Support

The contributions of emotionally supportive classrooms to children's adaptation highlight the need for intervention programs designed to enhance emotional support in preschool classrooms. A common approach to intervention has centered on developing curriculums that target children's social and emotional skills (Izard et al., 2008; Shure, 1992; Webster-Stratton, Reid, & Hammond, 2001). Some of these programs have indirectly led to improvements in classroom quality. For instance, the Head Start REDI (Research-based Developmentally Informed) Program, the 4Rs (Reading, Writing, Respect, and Resolution) Program, and the Chicago School Readiness Program have all been associated with some gains in classroom instructional and emotional support (Brown et al., 2010; Domitrovich et al., 2009; Raver et al., 2008).

Another approach to improving classroom quality has been directed toward the professional development of teachers. Professional development programs have been supported by the new and more objective measures that assess classroom climate and teacher-child interactions (Brown et al., 2010; Pianta et al., 2006). There is little evidence that the effectiveness of these programs is moderated by teacher characteristics (i.e., teaching experience, qualifications) or that teacher characteristics predict classroom quality (Mashburn et al., 2008; Pianta et al., 2005). However, there have been modest links between classroom quality and teachers' depressive symptoms (Hamre & Pianta, 2004; Pianta et al., 2005). These findings suggest that classroom quality and specifically emotional support may be products of specific teachers' skills that can be enhanced through professional development (Brown et al., 2010; Hamre et al., 2012; Raver et al., 2008).

The use of professional development to improve classroom climate has relied extensively on didactic workshop training and surprisingly few programs have targeted positive teacher-child interactions and the emotional environment (Hamre et al., 2012). These more common forms of professional development have generally not proved effective in promoting teacher-child interactions (Hamre et al., 2012). Instead, programs that use multiple components that combine workshops with in-service training, consultation, and individualized feedback have produced more promising and sustainable improvements in the classroom environment (Hamre et al., 2012; Pianta, Mashburn, Downer, Hamre, & Justice, 2008). However, there have been a limited number of studies that examine the effects of these programs in randomized study designs with operationalized classroom climate outcomes. Furthermore, programs have been less successful in promoting emotional support as compared to other

classroom climate domains, such as instructional support (Brown et al., 2010; Hamre et al., 2012; Pianta et al., 2008).

Identifying the mechanism(s) by which professional development might promote emotional support will allow professional development programs to become more effective. Pianta and colleagues (2008) have suggested that programs designed to improve teachers' interactions with their students should provide teachers with the opportunities to observe effective interactions and to receive feedback and support regarding their own interactions with students. This approach is supported by social learning theory that emphasizes the importance of an individuals' ability to learn through observing others, confidence in carrying out a behavior, and ability to reflect on and analyze experiences (Bandura, 1986, 1997; Perry, Baranowski, & Parcel, 1990). Other programs have focused directly on teacher's personal beliefs, knowledge, and skills related to effective interactions as potential targets for improving classroom climate (Hamre et al., 2012). Teacher-child interactions may be particularly influenced by teachers' beliefs regarding expectations of children and teachers' beliefs regarding their personal role in children's development and in the learning process (Hamre et al., 2012; Pajares, 1992).

There are a number of challenges to implementing successful professional development for improving classroom climate, especially in Head Start preschools. These schools cater exclusively to the economically disadvantaged populations that are the most in need of emotionally supportive classrooms. Furthermore, children in such populations are exposed to multiple risks that make managing classrooms more challenging. In addition, Head Start preschools must approach professional development with greater attention to the limited time and resources available for

training. Furthermore, while outside consultants are often used (Pianta et al., 2008), they are not only costly but may be perceived negatively by teachers. The role of external mentors may be unclear to teachers, and teachers often view these mentors as externally mandated, which undermines the formation of a trusting relationship (Rust, Ely, Krasnow, & Miller, 2001).

The Peer Coaching Model

Models of professional development are shifting toward greater use of coaching and mentoring components due to recognition of the need for more practice-based views of teacher education. More traditional forms of professional development have been found to be ineffective, in part, because they tend to view the teacher as a passive learner (Pianta et al., 2008). Instead, newer models of professional development based on social learning theory, such as mentoring and coaching, are more closely integrated into the classroom and are more likely to engage teachers in sustainable practices. These models view the teacher as an active participant in training that is embedded in the environment that is targeted for change (Peterson, Valk, Baker, Brugger, & Hightower, 2010). Yet, surprisingly few professional development programs have taken advantage of the powerful tool of peer coaching and observation, which has been used successfully for training preservice teachers (Anderson, Barksdale, & Hite, 2005; Kurtts & Levin, 2000; Lu, 2010; Rauch & Whittaker, 1999). Mentoring and consultation typically involve external supports and they are increasingly relying on technological tools such as uploading videos, accessing video exemplars, and electronic mail feedback. Teachers' comfort and familiarity with these tools are highly variable and fidelity to these programs have likewise been inconsistent (Downer, Locasale-Crouch, Hamre, & Pianta, 2009). Peer

observation and coaching, however, is an easily accessible strategy that strongly maps on to concepts outlined by social learning theory, taking advantage of the important learning processes of observation, feedback, and reflection.

Peer coaching is a process by which teachers work together to learn from and with each other (Kurtts & Levin, 2000; Rhodes & Beneicke, 2002). Peer coaching not only addresses teaching skills and teacher-child interactions, but also provides teachers with social and emotional support from their colleagues. This support is especially important for newer teachers who are likely to experience stress and low satisfaction in the work environment (Peterson et al., 2010). A unique advantage of peer coaching is that it removes the evaluative and judgmental relationship that may characterize external consultants. Instead peer coaching fosters a collaborative, trusting, and supportive relationship with peers helping each other overcome feelings of professional isolation (Hargreaves & Dawe, 1990; Kurtts & Levin, 2000; Rhodes & Beneicke, 2002; Slater & Simmons, 2001).

The structure of peer coaching typically encompasses teachers observing one another and providing feedback in order to promote reflection and collegiality. The goal of peer coaching is to help teachers reflect on their actions as well as to receive suggestions for improvement. One such model is the Praise-Question-Polish feedback technique, which outlines four types of feedback: praise, clarifying questions, eliciting questions, and leading questions (Gottesman, 2000; Kurtts & Levin, 2000). This technique not only allows for direct comments from the peer coach, but it also promotes reflection and self-evaluation by the teacher. Interestingly, research suggests that self-evaluation alone may be an effective tool for increasing desired teaching behavior (Sutherland & Wehby, 2001).

The Colleague Observation and Coaching Program

The Colleague Observation and Coaching (COACH) program was designed to address the limitations of workshop formats and integrate more recent advances from programs that utilize consultation and coaching. The COACH program targets improved teacher-child interactions by incorporating peer observation, coaching, and reflection components in the model. Research has revealed that newer active learning models can be effective at producing changes in the classroom climate. These models benefit from being implemented in the actual classroom promoting improved transfer of skills and knowledge to the classroom setting. However, the peer observation and coaching component is a relatively underutilized technique that is not only cost-effective but also provides teachers with new learning opportunities that are not available with consultation models. The COACH program was designed to combine peer observation with coaching in order to create a collaborative system that allowed teachers to support one another and to model and imitate successful classroom practices.

The effectiveness of the COACH program on improving classroom environments relies on measurable goals based on the CLASS observational system. The three CLASS domains of emotional support, classroom organization, and instructional support are observable and capture social processes that are clearly linked to improving students' social, emotional, and academic competencies. Therefore, they all easily lend themselves to be observed and imitated by colleagues, as well as to being developed through feedback, coaching, and problem solving. While all three domains may be bolstered by peer coaching and observation, the focus of the current study is to use the COACH program to promote one specific domain—emotional support. Emotional support involves numerous observable teaching strategies and

reflects the emotion climate of the classroom and the relationship among teachers and students. By providing teachers with background specifically about emotional support and the relevant detectable behavioral indicators, peer observation and coaching can be targeted and enhanced. The CLASS observation system can then be utilized to detect measureable changes in the classroom quality due to the COACH program.

Current Study

The primary aim of the study was to evaluate the efficacy of COACH, a peer coaching program that was designed to increase teachers' coaching, observation, and self-reflection skills and apply them to promote emotional support in Head Start classrooms. Effects of the peer coaching program on the other domains of the classroom environment were also evaluated. Classrooms were randomly assigned to the intervention or to a control condition and classroom climate was observed both before and immediately after the program ended. A secondary aim was to examine how the COACH program influenced teacher perceptions of themselves and their classrooms as a putative mechanism of change in the classroom environment. The mediation model in Figure 1 posits that teachers' ratings of self-efficacy, their working environment, teacher-child relationships, and child-rearing beliefs may all account for the effects of the peer coaching and observation on the level of classroom emotional support.

Study Aim 1

The first objective was to examine the effects of a peer coaching intervention on the level of observed emotional support in the Head Start classrooms. It was

hypothesized that classrooms receiving the peer coaching intervention would have higher post intervention levels of emotional support than control classrooms.

Study Aim 2

A secondary goal was to test teachers' perceptions as putative mechanisms of change. It was hypothesized that teachers in the COACH condition would report gains in self-efficacy, satisfaction with colleagues, progressive teaching beliefs, and student-teacher relationships. These perceptions would then act as mediators of the intervention-induced growth in emotional support.

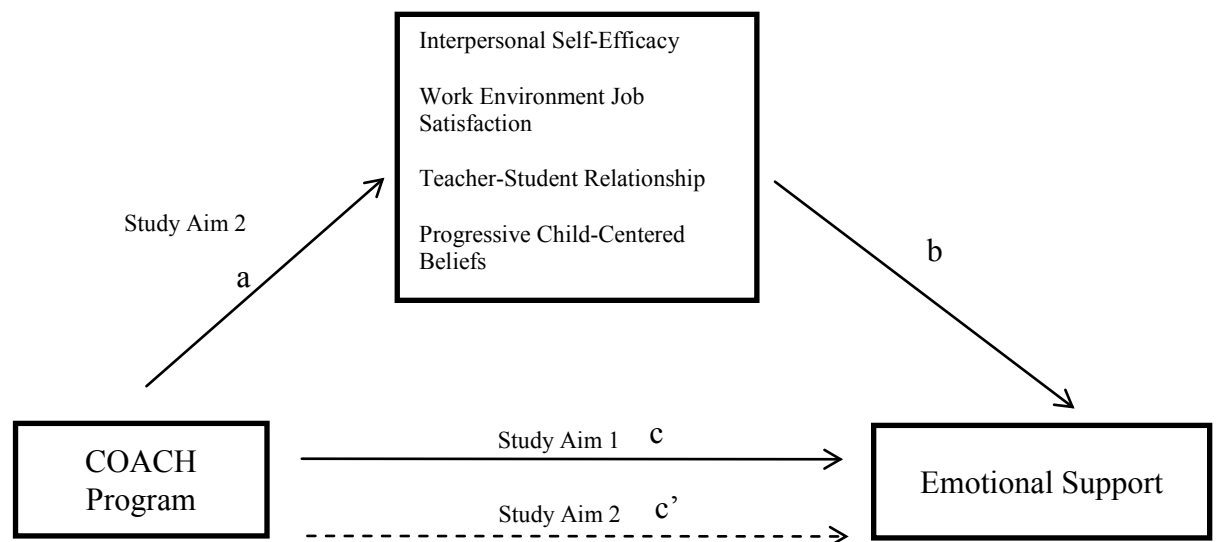


Figure 1 The proposed mediation model.

Chapter 2

METHOD

Participants

Twenty-four classrooms in four Head Start preschools participated in the study. Preschools were randomly assigned to treatment and control conditions. Table 1 presents the teacher and classroom demographic information for the intervention and control groups. Teachers ranged in age from 25 years to 68 years ($M = 43.13$; $SD = 12.81$). Teacher-reported race and ethnicity indicated that 71% were African American, 12% were Hispanic/Latino, and 17% were Non-Hispanic White. Teachers indicated that 42% had an Associate's Degree, 50% had a Bachelor's Degree, and 8% had a Master's Degree or higher. Teachers reported having 0 to 35 years ($M = 15.75$; $SD = 10.11$) of teaching experience overall and 0 to 28 years ($M = 7.40$; $SD = 9.63$) teaching experience in the particular Head Start district. The number of children on the classroom rosters ranged from 13 to 20 ($M = 17.54$; $SD = 2.17$).

Table 1 Demographic Characteristics by Intervention and Control Schools

	Intervention (<i>n</i> = 12 teachers/classrooms)				Control (<i>n</i> = 12 teachers/classrooms)			
	<i>n</i>	%	<i>M</i>	<i>SD</i>	<i>n</i>	%	<i>M</i>	<i>SD</i>
Teacher Age (years)			47.67	14.46			38.58	9.44
Teacher Race/Ethnicity								
Non-Hispanic White	1	8.3			2	25		
Hispanic/Latino	1	8.3			3	16.7		
African American	10	83.3			7	58.3		
Teacher Education								
Associate's Degree or Less	5	41.7			5	41.7		
Bachelor's Degree	6	50			5	41.7		
Master's Degree or Higher	1	8.3			2	16.7		
Teaching Experience								
Years at Head Start			7.62	11.13			7.17	8.37
Years Overall			16.5	11.77			15	8.60
Depressive Symptomatology			5.33	6.04			7.58	8.10
Class Size			17.08	2.35			18	1.95

Note. Ranges: teacher age = 25-68; years teaching at Head Start: 0-28; years teaching overall: 0-35; depressive symptomatology (CES-D) = 0-31; class size = 13-20.

Study Design

The collaborative nature of the intervention at the school level prevented the random assignment of individual teachers to treatment conditions. Instead, the study utilized a cluster-randomized design, which constrained the random assignment of individual teachers to treatment conditions. Two Head Start schools (12 classrooms)

were randomly assigned to treatment (COACH program), and the other two schools (12 classrooms) were randomized to a control condition.

Figure 2 depicts the timeline of the study. Baseline observational and teacher report data were collected during a two week period in late September and early October 2012, approximately one to two weeks after the beginning of the Head Start school year. This delay allowed children time to acclimate to the Head Start program and teachers to become acquainted with the children in their classroom. Prior to the intervention, teachers completed rating forms about themselves and trained research assistants conducted classroom climate observations (see Appendix for all rating forms and the observation form). Midpoint data collection included only the teacher rating forms. Post-intervention data were collected in early December and included the same teacher rating forms and classroom observations.

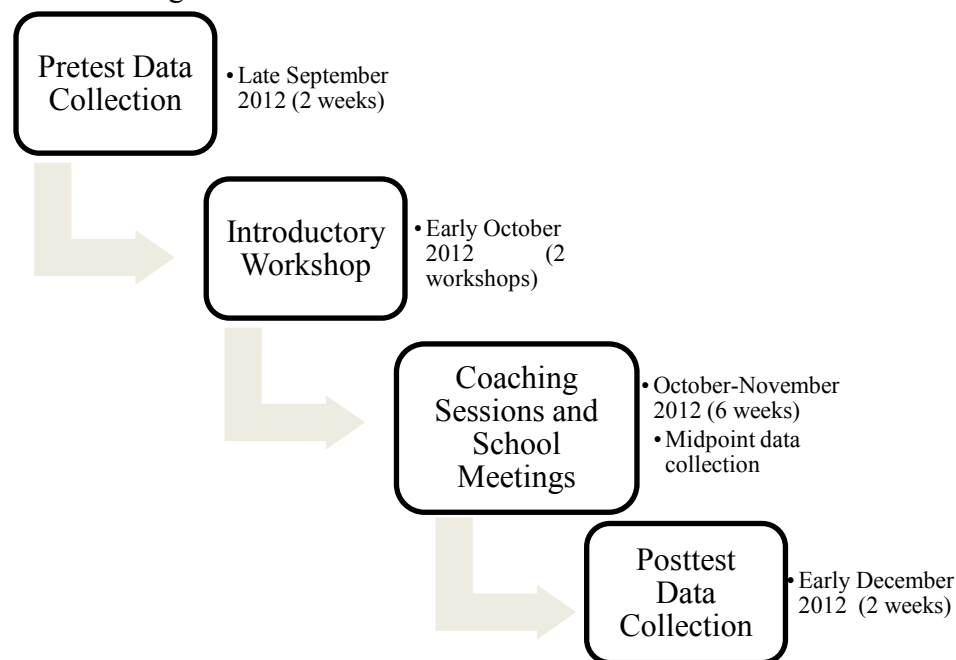


Figure 2 Timeline of study.

The Colleague Observation and Coaching Program

The COACH program was designed to increase teachers' abilities to observe and coach one another and eventually enact emotionally supportive behaviors in the classroom, as defined by the Classroom Assessment Scoring System (Pianta et al., 2006). The COACH program is comprised of three components implemented over the course of seven weeks: an introduction and training workshop, peer coaching sessions, and school meetings (see Figure 3 for an overview of the intervention).

Workshop

- Two 1.5 hour workshop sessions
- Provide an overview of the peer coaching intervention
- Introduce concept of emotional support and its dimensions
- Review strategies that enhance emotional support
- Discuss and practice methods for observing, coaching and reflecting

Peer Observation and Coaching

- 6 weeks divided into three 2-week periods
 - 1st period: climate
 - 2nd period: sensitivity
 - 3rd period: individuality
- 45 minutes peer coaching sessions
 - 20 minute observation
 - 5 minutes to complete feedback form (coach) and self-reflection form (recipient)
 - 10 minutes for feedback session using praise-question-polish technique
 - 10 minutes of implementing recommendations

School Meetings

- Review strategies that promote the target dimension and their importance
- Encourage teachers to share positive observations of other teachers
- Reflect on the process of coaching
- Review target for next coaching period

Figure 3 The three components of the peer coaching intervention.

Workshop component

Teachers assigned to the intervention participated in a training workshop. At the start of the intervention, all teachers attended two 1.5-hour training sessions led by the principal investigator. The goals of the workshop were to provide teachers with a general overview of the COACH program, introduce the concept of emotional support, review strategies that enhance emotional support, and learn and practice the role of observing and coaching another teacher and reflecting on one's own use of the strategies. Videos depicting preschool classrooms, role-plays and reconstructed role-plays, and reflection exercises were used during the training workshop.

Peer coaching component

The peer coaching component of the intervention required all teachers to both act as a coach and be the recipient of coaching in relation to the three target dimensions of emotional support reviewed at the workshop (climate, teacher sensitivity, and regard for student perspectives). The peer coaching component was divided into three two-week periods, with each period focusing on a specific dimension of emotional support. A schedule was created so that all teachers had the opportunity to coach and receive coaching within each period. Therefore, all teachers in the intervention acted as coach on three occasions and as recipients of coaching on three occasions. Furthermore, the pairings of teachers constantly rotated in order to foster a more supportive and collaborative school atmosphere.

Teachers were instructed that each peer coaching session should last approximately 45 minutes. Sessions were designed to start with a 20-minute observation focused on the dimension of interest for that period (climate, teacher sensitivity, or regard for student perspectives). After the observation, five minutes

were allotted for the coaching recipient to complete a reflection worksheet while the coach prepared the feedback worksheet. The coach and recipient were instructed to then meet for ten minutes to discuss the observation, with the coach employing the feedback principles of the praise-question-polish technique. This technique ensured that coaches were offering positive feedback to help with problem solving and encouraged the recipient to engage in self-reflection. This feedback period allowed the coach to help the recipient reflect on both the strategies that the recipient did employ as well as the ones that could be improved or utilized. The final ten minutes of the coaching session allowed the recipient the opportunity to immediately implement the recommendations provided by the coach.

School component

The final component of the intervention included three school meetings with all teachers and the school principal, one at the conclusion of each two-week period. The meetings included discussion of the target dimension of emotional support and offered teachers an opportunity to provide specific examples of strategies they either observed or used themselves. The meetings were also a time for teachers to discuss the coaching process and ways to improve their own coaching abilities. The primary investigator attended these meetings in order to provide assistance and monitor adherence to the intervention.

Control Group

The two schools assigned to the control condition conducted teaching as usual, completing teacher questionnaires and classroom observations. Teachers in all schools continued to be monitored by the education specialist, school principal, and a mentor

teacher. These individuals ensured that all teachers were creating and following lesson plans, as well as observed general classroom practice and individualized instruction. As a precondition, for the randomization of schools, the peer coaching program was offered to all of the schools in the current Head Start district at the conclusion of the study.

Measures

Classroom Assessment Scoring System

Emotional support was rated with the Classroom Assessment Scoring System (CLASS; Pianta et al., 2006) by raters who were blind to treatment condition. Undergraduate research assistants were trained to at least 80% levels of agreement in the CLASS system using a standardized manual that provides extensive descriptions of codes. At baseline and post-intervention observations, coders observed each classroom for four 20-minute cycles over a 2-hour period at the start of the day. Observers used a set of ten 7-point rating scales (1 and 2 reflect low; 3, 4, and 5 reflect mid; and 6 and 7 reflect high) in three domains: Emotional Support, Classroom Organization, and Instructional Support. To prevent drift between the two data collection periods, observers were again required to reach 80% agreement. In order to monitor inter-rater reliability, two raters co-assessed 46% of the classrooms at regular intervals throughout the data collection process at both time points. The intraclass correlations for the current study were .93 and .94 at the two respective time points, suggesting a high degree of reliability among observers. The alphas in the current study for the three domains at both time points ranged from .85 to .92.

The three factors of CLASS have been shown to correlate highly with other measures of classroom quality, including the Early Childhood Environment Rating Scale-Revised (Harms, Clifford, & Cryer, 1998). They predict subsequent teacher-child interactions and children's social, emotional, and academic development (Brown et al., 2010; Pianta et al., 2006). Furthermore, CLASS has been shown to be sensitive to change produced by interventions that target improving the classroom environment (Brown et al., 2010; Hamre et al., 2012; Pianta et al., 2008).

Teacher Interpersonal Self-Efficacy Scale

The Teacher Interpersonal Self-Efficacy Scale (TISES; Brouwers & Tomic, 2001) assessed three domains of teachers' perceived self-efficacy including self-efficacy in classroom management (14 items), in eliciting support from colleagues (5 items), and in eliciting support from principals (5 items). The possible answer choices for each item are on a 6-point Likert scale ranging from *strongly agree* to *strongly disagree*. The TISES was developed based on self-efficacy theory and targets the interpersonal domain (Brouwers & Tomic, 2001). Brouwers and Tomic (2001) demonstrated adequate factorial validity and internal reliabilities (all alphas exceeded .90) for the three subscales. Brouwers, Evers, and Tomic (2001) revealed that self-efficacy in eliciting support predicted teacher's level of emotional exhaustion or burnout. The alphas in the current study for the three domains at all of the time points ranged from .90 to .98.

Early Childhood Job Satisfaction Survey

The Early Childhood Job Satisfaction Survey (ECJSS; Bloom, 1989) evaluated teachers' level of job satisfaction from various sources in the school environment. The

ECJSS is comprised of 50 items that assess satisfaction from five sources: co-worker relations, supervisor relations, the nature of the work itself, working conditions, and pay and promotional opportunities. Teachers were prompted to think about how they feel regarding different aspects of their job. The possible answer choices for each item are rated on a 5-point Likert scale ranging from *strongly agree* to *strongly disagree*. Only the 30 items from the subscales of co-worker relations, supervisor relations, and the nature of the work itself were used in the current study. The ECJSS has been shown to have adequate internal consistency and factorial validity as well as convergent validity with other job satisfaction measures and predictive validity of motivation for professional development (Bloom, 1989; Wagner & French, 2010). The alphas in the current study for the three domains at all of the time points ranged from .65 to .95.

Student-Teacher Relationship Scale

The Student-Teacher Relationship Scale (STRS; Pianta, 2001) is a 28-item self-report instrument that uses a 5-point Likert rating scale to assess a teacher's perception of his/her relationship with a student, specifically in terms of the three dimensions of conflict, closeness, and dependency, which comprise overall relationship quality. The directions and the wording of the items of the STRS were modified in the current study so that teachers completed the STRS as a reflection of his/her current relationship with most students in the classroom as opposed to his/her relationship with an individual student. Furthermore, the Likert scale was converted from agreement to frequency (*never* to *always*) to make the scale more sensitive to changes over the course of the intervention. The STRS has been shown to relate to a variety of social and academic outcomes (Birch & Ladd, 1997, 1998; Kesner, 2000;

Pianta, 2001). The alphas in the current study for total score at all of the time points ranged from .76 to .84.

Modernity Scale

The Modernity Scale (Schaefer & Edgerton, 1985) is a 16-item self-report questionnaire measure of traditional, authoritarian beliefs and progressive, democratic beliefs towards child-rearing that uses a 5-point Likert rating scale ranging from *strongly agree* to *strongly disagree*. Traditional attitudes reflect an emphasis on obedience and respecting authority, while progressive attitudes reflect open-mindedness, respect of others' opinions, and place an emphasis on the future. The Modernity Scale has been shown to have good internal and test-retest reliability (Schaefer & Edgerton, 1985) and it has been used in numerous large-scale studies of early childcare education (Pianta et al., 2005). The Modernity Scale has revealed that classrooms with teachers who hold more adult-centered beliefs are rated as lower in quality (La Paro et al., 2009). The alphas in the current study for the total belief score at all of the time points ranged from .82 to .84.

Center for Epidemiologic Studies-Depression Scale

The Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff, 1977) is a 20-item questionnaire that assesses levels of depressive symptomatology. The teachers were instructed to use the past week as the reference time frame for answering the questionnaire. The possible answer choices for each item reflected the frequency of the respective symptoms, ranging from *rarely or none of the time (less than 1 day)* to *most or all of the time (5-7 days)*. The CES-D had been widely used to assess depressive symptomatology in diverse populations, including Head Start

teachers (Pianta et al., 2005; Schonfeld, 1992) and has been shown to be a potential predictor of classroom climate (Hamre & Pianta, 2004). Any teachers that perceived themselves to be experiencing clinically significant levels of depressive symptomatology were offered local treatment resources. The alphas in the current study for the total score at all of the time points ranged from .78 to .87.

Demographic questionnaire

All classroom teachers completed a questionnaire concerning their background, teaching experience, education level, and features of the classroom. Questions include age, gender, race, ethnicity, primary language, education level, years teaching both overall and at the current Head Start school, and number of children on classroom roster.

Acceptability and feedback questionnaire

All teachers assigned to the peer coaching intervention completed a questionnaire after each coaching session in which they were the recipient and at the conclusion of the intervention. They reported on the acceptability and usefulness of the peer coaching program on a Likert scale of 1-5, as well as provided comments and suggestions for improvement. Questions on the final questionnaire were related to all three components of the intervention.

Protocol

Data collection occurred at three time points. The first assessment began at the end of September and included classroom observations and teacher questionnaires (TISES, ECJSS, STRS, Modernity Scale, CES-D, and demographic questionnaire). These teacher questionnaires were repeated again at the mid-point of the intervention.

The third and final assessment included classroom observations and a third assessment of teacher perceptions via questionnaires. In addition, all teachers in the peer coaching program completed an acceptability and feedback questionnaire. Teachers in both conditions were compensated \$10 for completing questionnaires at each time point. Teachers participating in the peer coaching program were also compensated \$15 for attendance at each of the two workshops.

Overview of Analyses

The primary focus of the study was to evaluate the efficacy of the COACH intervention in improving classroom emotional support. Descriptive paired samples pre-post t-tests were performed on all three domains of the classroom environment and their comprising dimensions separately for classrooms in the COACH and control conditions. Cohen's *d* effect sizes were also calculated for all classroom environment dimensions to estimate the relative size of significant pre to post changes in classroom environments. Repeated measures general linear modeling was then used to evaluate whether treatment condition moderated changes in classroom climate.

The secondary aim was examined by comparing teachers' perceptions of self-efficacy, satisfaction with interpersonal school climate, the student-teacher relationship, and progressive teaching beliefs before and after the intervention. Descriptive paired samples pre-post t-tests were performed on all teacher perception separately for classrooms in the COACH and control conditions and Cohen's *d* effect sizes were also calculated. A two-level model (observations within teachers) using Hierarchical Linear Modeling then estimated whether treatment had a differential effect on both the intercept (at all three time points) and growth trajectories of teachers' perceptions over the course of the study. In all repeated measure and HLM

analyses, demographic covariates were only included if they significantly correlated with the outcome of interest. All teachers' classrooms underwent both classroom observations. One teacher did not complete the STRS and CES-D at the midpoint assessment due to lack of time.

Chapter 3

RESULTS

Baseline Descriptive Data and Correlations

Table 1 presents descriptive statistics for demographic variables. There were no significant treatment differences on any teacher or classroom demographic variables. Means and standard deviations for the classroom climate dimensions for each group are presented in Table 2. There were no baseline treatment differences in classroom climate as assessed by CLASS. CLASS observations (possible range from 1-7) of teachers' emotional support generally fell within the high end of the mid range (3.63-6.31), classroom organization within the mid range (2.75-5.92), and instructional support within the low range (1.25-3.17). Means and standard deviations for the teacher self-ratings for each group are presented in Table 3. Overall, there were no baseline differences in teacher perceptions, with one exception occurring for teachers in the peer coaching intervention who perceived themselves to have lower starting levels of self-efficacy in eliciting support from colleagues than teachers in the control condition.

Table 4 presents correlations for the outcome variables at baseline and at the end of the intervention. At the start of the school year, there were no significant correlations between the observed classroom climate and teachers' perceptions. The CLASS domains of emotional support and classroom organization were highly correlated at both observations.

Descriptive Analyses of Outcome Variables

Paired sample t-tests evaluated for significant change between baseline and ending levels of both classroom observations and teachers' perception. These were calculated separately for classrooms in the two intervention conditions (see Table 2). Cohen's *d* estimates were also calculated to approximate the effect size. Teachers in the peer coaching condition showed a significant increase in the broad domain of emotional support, and more specifically on the dimensions of positive climate and regard for student perspectives. Furthermore, there were significant improvements in the domain of classroom organization and all three of its dimensions (behavior management, productivity, and instructional learning formats) among classrooms in the peer coaching condition. For the classrooms in the control condition, there were no significant differences between pre and post classroom observations with one exception of a significant decrease in the dimension of negative climate. The Cohen's *d* effect sizes for the peer coaching condition ranged from .19 to .87. They ranged from .03-.28 in the control group excluding the large Cohen's *d* for negative climate, which was the only dimension that had a significant change for the control group.

Comparing pre and post ratings of teachers' perceptions within each condition, there were significant increases for classrooms in the COACH condition in both teachers' self-efficacy in eliciting support from principals, $t(11) = 2.75, p = .019$, and in perceptions of the student-teacher relationship, $t(11) = -2.38, p = .037$. There were no differences in teachers' perceptions before and after the intervention in the control condition.

Intervention Effects on Outcome Variables

Repeated measures analyses examined treatment condition as the between-subject factor as a moderator of change in CLASS observations of emotional support, instructional support and classroom organization. Treatment condition produced a significant effect on classroom organization (see Table 5) with classrooms in the intervention condition showing increased levels of organization compared to classrooms in the control condition. Analyses of the dimensions that composed the classroom organization domain indicated that the treatment effect on classroom organization was largely driven by changes in productivity (see Figure 4). Treatment condition did not moderate observed change in either the emotional or instructional support domains of the CLASS system.

A two-level HLM model evaluated whether treatment condition moderated either levels or rates of growth in teachers' perceptions of interpersonal self-efficacy, job satisfaction, student-teacher relationships, and traditional beliefs. The models revealed no effect of treatment condition on initial, midpoint, or post intervention levels. There was also no effect of treatment on the growth in teachers' perceptions over the course of the intervention. Due to a lack of treatment effect on teachers' perceptions, no mediation analyses were conducted.

Feasibility and Acceptability of Intervention

Teachers in the peer coaching intervention completed all assigned peer coaching sessions, resulting in all teachers observing and coaching colleagues three times in addition to being observed and receiving feedback three times. After each peer coaching session, teachers who were the recipients of coaching were asked to reflect on the coaching session and its usefulness. Teachers perceived the coaching as

helpful across all three peer coaching sessions and viewed the coaching sessions more positively as the program progressed.

All teachers in the peer coaching intervention viewed the program as acceptable (see Table 6). The workshops were rated by all teachers as very to extremely useful. Regarding coaching, the majority of teachers viewed both observing and providing feedback to other teachers as useful and 58% indicated that they felt very to extremely comfortable providing feedback to another teacher. The majority of teachers felt that the school meetings were a useful component of the program. When asked whether they would like the program to continue in their school, eight of the twelve teachers indicated yes and the remaining four selected maybe.

When prompted to provide feedback about the peer coaching program, teachers responded very positively. Some comments included “I think it would be a great idea to keep doing the coaching program. It is important to bring new idea [*sic*] into our classroom all the time” and “This was a great experience for new teachers, it allowed them to get great ideas they could implement into their classrooms.” Suggestions offered by the teachers included involving the teacher assistants in the program and visiting other Head Start schools in the district.

Table 2 Paired T-Test Differences on CLASS Outcomes for Peer Coaching and Control Groups

	Peer Coaching <i>M (SD) n=12</i>		95% CI of the Difference		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	Pre	Post	Lower	Upper			
Emotional Support	5.13 (0.67)	5.49 (0.63)	-.64	-.08	-2.81	.017*	.55
Positive Climate	4.81 (0.79)	5.48 (.75)	-1.10	-.24	-3.41	.006**	.87
Negative Climate	1.42 (0.57)	1.27 (0.25)	-.18	.47	1.00	.339	.34
Teacher Sensitivity	4.56 (0.78)	4.79 (0.91)	-.71	.25	-1.06	.312	.27
Regard for Student Perspectives	4.56 (0.95)	4.96 (0.95)	-.76	-.03	-2.37	.037*	.42
Classroom Organization	4.33 (0.70)	4.92 (0.80)	-1.00	-.19	-3.24	.008**	.78
Behavior Management	4.46 (0.86)	4.90 (0.77)	-.77	-.10	-2.90	.015*	.54
Productivity	4.92 (0.72)	5.52 (0.87)	-.08	-.13	-2.79	.018*	.75
Instructional Learning Formats	3.60 (0.69)	4.35 (0.91)	-1.33	-.17	-2.85	.016*	.93
Instructional Support	2.19 (0.55)	2.28 (0.40)	-.35	.17	-.76	.462	.19
Concept Development	1.94 (0.58)	2.13 (0.46)	-.55	.18	-1.13	.283	.36
Quality of Feedback	2.06 (0.61)	2.31 (0.39)	-.54	.04	-1.92	.082	.49
Language Modeling	2.58 (0.64)	2.42 (0.55)	-.19	.53	1.02	.331	.27
	Control <i>M (SD) n=12</i>		95% CI of the Difference		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	Pre	Post	Lower	Upper			
Emotional Support	5.21 (0.68)	5.38 (0.58)	-.66	.33	-.74	.474	.27
Positive Climate	5.00 (0.69)	5.10 (0.75)	-.55	.34	-.52	.614	.14
Negative Climate	1.44 (0.45)	1.08 (0.22)	.01	.70	2.28	.043*	1.02
Teacher Sensitivity	4.54 (1.02)	4.60 (0.93)	-.81	.69	-.18	.858	.06
Regard for Student Perspectives	4.75 (1.08)	4.90 (0.74)	-1.07	.78	-.35	.736	.16
Classroom Organization	4.61 (0.55)	4.54 (0.73)	-.42	.56	.31	.760	.11
Behavior Management	4.73 (0.91)	4.80 (0.78)	-.62	.50	-.25	.810	.08
Productivity	5.25 (0.51)	5.10 (0.69)	-.31	.60	.71	.492	.25
Instructional Learning Formats	3.85 (0.63)	3.73 (0.86)	-.62	.87	.37	.719	.16
Instructional Support	2.02 (0.37)	1.99 (0.48)	-.47	.52	.12	.904	.07
Concept Development	1.73 (0.39)	1.80 (0.52)	-.55	.42	-.28	.782	.15
Quality of Feedback	2.00 (0.44)	1.88 (0.41)	-.31	.56	.64	.536	.28
Language Modeling	2.33 (0.60)	2.31 (0.66)	-.69	.73	.06	.950	.03

Note. ** $p < .01$; * $p < .05$

Table 3 Means and Standard Deviations of Teacher-Reported Variables

	Scale Range	Peer Coaching <i>M (SD)</i> <i>n</i> =12			Control <i>M (SD)</i> <i>n</i> =12		
		Pre	Mid	Post	Pre	Mid	Post
Self-Efficacy in Eliciting Support from Colleagues	5-30	23.00 (4.79)	24.83 (3.76)	24.25 (6.24)	27.08 (3.50) ^a	27.17 (3.74)	27.17 (4.17)
Self-Efficacy in Eliciting Support from Principals	5-30	25.00 (3.69)	26.75 (3.60)	26.67 (3.58) ^b	25.00 (5.19)	25.67 (4.19)	26.42 (3.60)
Co-Worker Satisfaction	10-50	40.33 (7.40)	40.17 (10.21)	39.92 (11.08)	45.58 (5.40)	44.25 (7.20)	43.25 (6.33)
Supervisor Satisfaction	10-50	44.08 (5.16)	44.33 (6.10)	43.85 (5.88)	41.92 (8.97)	41.58 (7.28)	42.50 (6.88)
Student-Teacher Relationship	28- 140	107.42 (9.31)	112.25 (6.59)	111.58 (6.88) ^b	110.83 (8.65)	113.10 (10.35)	112.33 (8.41)
Traditional Beliefs	16-80	41.50 (12.05)	37.08 (8.63)	38.83 (11.04)	37.00 (9.48)	35.67 (10.69)	35.00 (8.92)

Note. ^a $p < .05$ (pretreatment difference); ^b $p < .05$ (paired T-test comparing pre and post measurements)

Table 4 Correlations Among All Outcome Variables at Pre and Post Intervention

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Em Sup (Pre)	-	.87**	.26	.50*	.42*	.11	-.14	-.01	-.04	.08	-.03	-.15	-.10	.08	-.18	.08	.07	-.10
2. Cls Org (Pre)		-	.12	.53**	.41*	.11	.00	.03	.11	.11	.17	-.07	-.05	.02	-.08	.02	.17	.02
3. Ins Sup (Pre)			-	.50*	.45*	.13	-.02	-.26	-.11	-.29	.00	-.22	-.15	-.21	-.14	-.17	.13	.23
4. EmSup (Post)				-	.86**	.51*	.03	.27	-.06	.30	.26	.03	-.22	.28	-.18	.26	.47*	.30
5. Cls Org (Post)					-	.52**	-.06	.12	-.07	.25	.27	-.04	-.15	.29	-.10	.26	.46*	.14
6. Ins Sup (Post)						-	-.10	.43*	-.00	.33	.14	.23	-.01	.32	.02	.23	.20	.48*
7. Self-Efficacy Colleagues (Pre)							-	.35	.86**	.16	.67**	-.11	.48*	.42*	.46*	.19	.64**	.09
8. Self-Efficacy Principals (Pre)								-	.37	.79**	.40	.18	.25	.76**	.26	.60**	.35	.34
9. Co-worker Satisfaction (Pre)									-	.35	.65**	.01	.71**	.49*	.72**	.35	.58**	.20
10. Supervisor Satisfaction (Pre)										-	.43*	.38	.31	.70**	.38	.77**	.38	.36
11. Student-Teacher Relationship (Pre)											-	.13	.39	.32	.35	.30	.78**	.35
12. Traditional Beliefs (Pre)												-	.29	.07	.34	.21	.14	.62**
13. Self-Efficacy Colleagues (Post)													-	.36	.91**	.30	.44*	.13
14. Self-Efficacy Principals (Post)														-	.38	.78**	.44*	.13
15. Co-worker Satisfaction (Post)															-	.41*	.41*	.26
16. Supervisor Satisfaction (Post)																-	.32	.16
17. Student-Teacher Relationship (Post)																	-	.30
18. Traditional Beliefs (Post)																		-

Note. ** $p < .01$; * $p < .05$

Table 5 Repeated Measures General Linear Model of Treatment Effects on Classroom Climate

	<i>F</i>	<i>p</i>	Partial Eta Squared
Classroom Organization	3.344	.081[†]	.132
x Treatment	5.336	.031*	.195
Behavior Management	2.862	.105	.115
x Treatment	1.610	.218	.068
Productivity	.107	.746	.005
x Treatment	5.884	.024*	.219
x Years Teaching Overall	.315	.581	.015
Instructional Learning Formats	2.121	.159	.088
x Treatment	4.157	.054 [†]	.159

Note. * $p < .05$; [†] $p < .10$.

Table 6 Teachers' Ratings of Acceptability and Usefulness of the Peer Coaching Intervention

Item	Range	<i>M (SD)</i>
Workshop usefulness	4-5	4.25 (.45)
Coaching usefulness overall	3-5	4.25 (.87)
Feedback usefulness	3-5	4.17 (.94)
Observation and coaching usefulness	2-5	3.92 (1.08)
Comfort observing and providing feedback	2-5	3.83 (1.02)
School meeting usefulness	3-5	4.00 (.60)

Note. The possible scale for all items was 1-5.

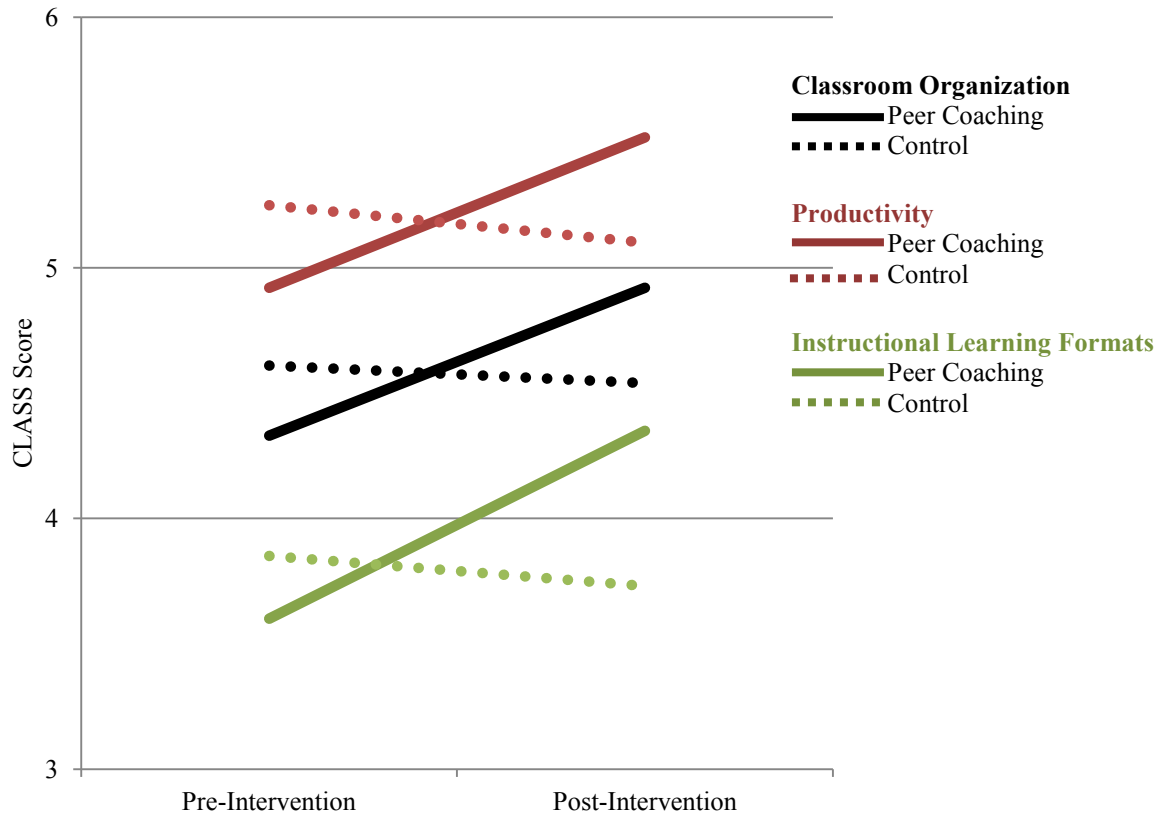


Figure 4 Treatment effect on the repeated observations before and after the peer coaching intervention for the CLASS domain of classroom organization and the comprising dimensions of productivity and instructional learning formats.

Chapter 4

DISCUSSION

Classroom climate plays a significant role in children's academic, social, and emotional development (Pianta & Hamre, 2009a; Pianta & Stuhlman, 2004), particularly for children exposed to stressful environments (Burchinal et al., 2010; Hamre & Pianta, 2005; Johnson et al., 2013). Peer observation and coaching, while underutilized, offer a promising avenue to further professional development for teachers and to improve classroom climate. It inherently creates a collaborative framework that encourages teachers to observe, reflect, and problem solve with the goal of enhancing teaching practices as well as the classroom environment. The findings yield initial support for the effectiveness of the Colleague Observation and Coaching (COACH) program, an intervention designed to teach observation and coaching skills to teachers in Head Start classrooms. Pre and post ratings of classroom climate using the CLASS observation system showed that teachers assigned to the COACH program had significant improvements in both the emotional support and organization domains of their classroom environments. In fact, treatment condition significantly interacted with the repeated observations of classroom organization, revealing treatment-induced gains for teachers in the COACH condition. When examining the three dimensions that comprise classroom organization, gains were most notable in productivity and instructional learning formats. COACH, therefore, surprisingly led to improvements in classroom quality that extended beyond the intended target of emotional support.

Although the COACH program was designed to educate teachers about the importance of emotional support and ways to strengthen it, intervention effects were not evident in the classroom emotional support domain. However, within the COACH treatment group, there was a significant pre-post increase in the overall domain of emotional support and specifically within the positive climate and regard for student perspectives dimensions of the emotional support domain. These findings may have been more robust in a study that used a larger sample size and was not as vulnerable to Type II errors. It is also possible that a longer and more sustained intervention would have contributed to a significant moderating effect of the intervention on the emotional support domain given the within-group pre-post gains after the brief intervention.

The treatment-induced improvements in classroom organization suggest that COACH is an effective means of professional development to target the classroom environment. Since the gains extended beyond emotional support, it is likely that the instructional content of the workshops specifically focused on emotional support was not the primary agent of change. This supports previous literature on the ineffectiveness of passive learning processes such as attending inservice workshops (Peterson et al., 2010; Pianta et al., 2008). Instead, the important component may actually be the process of peer coaching and observing fellow teachers. Classroom organization is a domain characterized by a teacher's ability to organize and manage students' behavior, time, and attention and to provide engaging learning tasks in a well-managed environment (Hamre & Pianta, 2007). The current peer coaching program led to gains in productivity, which reflects routines and provision of activities, and gains in instructional learning formats, which reflects strategies that

maximize students' interest (such as creative materials and teacher involvement) (Pianta et al., 2006). Both of these dimensions include highly visible activities and strategies that could be readily apparent to a peer observer.

There was only one significant pre-post change in classroom climate among classrooms in the control condition. The teachers assigned to the control condition showed a significant decline in the dimension of negative climate. However, there were no other improvements in any of the other dimensions of emotional support, classroom organization, or instructional support in the control condition. The lack of change in the majority of the dimensions of the classroom climate in the control condition supports previous research suggesting that classroom climate is relatively stable without intervention (Pianta & Hamre, 2009b). Comparing this stability to the pre-post change in several dimensions in the classrooms receiving the COACH program highlights its effectiveness in promoting teachers to incorporate new strategies to manage classrooms and increase warm and individualized interactions with their students.

Participating in the COACH program had less impact on teachers' self-rated perceptions of various aspects of their teaching and the preschool environment. While there were no intervention effects on teachers' perceptions, teachers who participated in peer coaching perceived significant within-group pre-post change in having greater self-efficacy in eliciting support from principals. The inclusion of the principals in the school meetings as supportive members of the program with no evaluative role may allow teachers to feel more comfortable sharing their peer coaching experiences and consequently empower them to seek support from principals. Furthermore, teachers in the program perceived significant pre-post improvements in their relationship with the

students in their classrooms. The peer coaching program addresses student-teacher relationships in all three components of the program, with the workshops educating teachers about the importance of this relationship and with the coaching and school meetings focused on the immediate impact of teachers' actions on their relationship with students. The limited effects of the program on other measured perceptions may be due to the relatively high starting levels of teachers' interpersonal job satisfaction and self-efficacy in eliciting support from colleagues. Furthermore, the peer coaching program was limited to two months and beliefs and perceptions are often less amenable to change, especially in a short period.

The use of peer observation as a method to train preservice or student teachers has been shown to be highly effective (Anderson et al., 2005; Rauch & Whittaker, 1999). The opportunity for teachers to observe their peers capitalizes on learning processes that have been extensively documented by social learning theory (Bandura, 1986). Preservice teachers have noted that the opportunity to observe more experienced teachers facilitated self-reflection and confidence in their ability to effectively address their own teaching challenges (Anderson et al., 2005). Other qualitative studies indicated that preservice teachers viewed observation as a valuable experience that encouraged them to reflect on how they would address particular situations they observed and make comparisons about teaching style (Rauch & Whittaker, 1999). Unfortunately, peer observation and coaching are used less frequently after preservice training. The current study revealed that peer coaching can generalize and have beneficial effects for teachers of varying levels of experience.

Many of the current professional development programs are time-intensive, require significant external support, and are costly. The COACH program offers an

alternative that is feasible, acceptable, cost-effective, self-sustaining, and that creates a collaborative learning environment. Importantly, all teachers assigned to the COACH program participated in the workshops and school meetings, and successfully completed the peer coaching sessions suggesting a high degree of feasibility. Furthermore, teachers rated the program as acceptable and indicated that they would like it to continue and even expand to include additional staff and schools. However, some teachers did express discomfort with observing and providing feedback to other teachers. The current peer coaching program had teachers rotating among classrooms as opposed to establishing consistent peer coaching pairs. While comfort and trust are important for successful professional development, it seems that teachers are benefiting most from the process of observation as opposed to direct instruction. Therefore, the variability of coaching pairs may be important. Means to improve comfort level within this framework could be explored, perhaps by increasing the number of peer coaching sessions in order to promote familiarity and contentment.

Several limitations of the study suggest avenues for future research. The COACH program was conducted in two Head Start schools with two other schools serving as a control. This limited sample reduces generalizability and reduces the statistical power to detect intervention effects. It is also likely that extending the intervention beyond seven weeks would increase program effects on both observed classroom climate and teachers' perceptions. The lack of follow-up observations does not allow for the evaluation of the enduring effects of the COACH program on classroom climate. The current study also lacked a system to accurately measure teachers' fidelity to the peer coaching program and the quality of their observations, feedback, and self-reflection. Teachers' comfort level and competency with

conducting observations and coaching sessions is likely to vary and may differentiate classrooms' levels of improvements in classroom climate. As a pilot-level study, the peer coaching program has been demonstrated to be feasible and effective; however it would be worthwhile to assess the level of fidelity and teacher competence and their effect on the classroom quality using a more robust model with more classrooms over a longer period of time.

Future studies may seek to systematically differentiate the effects of the didactic content of the workshops from the peer coaching component of the COACH program. Since the effects of the current intervention extended beyond emotional support to the domain of classroom organization, it would be worthwhile to evaluate the domains of the classroom environment that teachers view as most salient when observing other teachers. Understanding the unique effects of the various components of the COACH program would allow for further development and targeted refinement of the program. There is a continuing need for professional development programs that enhance the classroom environment and that are practical and cost-effective. The findings supporting the effectiveness of the COACH program in improving classroom organization begins to address this need and future research should help to further develop the peer coaching model, especially for teachers and schools working with high need children from economically disadvantaged families.

REFERENCES

- Anderson, N. A., Barksdale, M. A., & Hite, C. E. (2005). Preservice teachers' observations of cooperating teachers and peers while participating in an early field experience. *Teacher Education Quarterly*, 32(4), 97.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Birch, S. H., & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35(1), 61-79. doi: 10.1016/s0022-4405(96)00029-5
- Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher-child relationship. *Developmental Psychology*, 34(5), 934-946. doi: 10.1037/0012-1649.34.5.934
- Bloom, P. J. (1989). *Measuring work attitudes in the early childhood setting: Technical manual for the Early Childhood Job Satisfaction Survey and Early Childhood Work Environment Survey*. Brandon, VT: Psychology Press.
- Brouwers, A., Evers, W. J. G., & Tomic, W. (2001). Self-efficacy in eliciting social support and burnout among secondary-school teachers. *Journal of Applied Social Psychology*, 31(7), 1474-1491. doi: 10.1111/j.1559-1816.2001.tb02683.x
- Brouwers, A., & Tomic, W. (2001). The factorial validity of scores on the Teacher Interpersonal Self-Efficacy Scale. *Educational and Psychological Measurement*, 61(3), 433-445. doi: 10.1177/00131640121971301
- Brown, J. L., Jones, S. M., LaRusso, M. D., & Aber, J. L. (2010). Improving classroom quality: Teacher influences and experimental impacts of the 4Rs program. *Journal of Educational Psychology*, 102(1), 153-167. doi: 10.1037/a0018160

- Burchinal, M., Vandergrift, N., Pianta, R., & Mashburn, A. (2010). Threshold analysis of association between child care quality and child outcomes for low-income children in pre-kindergarten programs. *Early Childhood Research Quarterly*, 25(2), 166-176. doi: 10.1016/j.ecresq.2009.10.004
- Curby, T. W., Rimm-Kaufman, S. E., & Ponitz, C. C. (2009). Teacher-child interactions and children's achievement trajectories across kindergarten and first grade. *Journal of Educational Psychology*, 101(4), 912. doi: 10.1037/a0016647
- Domitrovich, C. E., Gest, S. D., Gill, S., Bierman, K. L., Welsh, J. A., & Jones, D. (2009). Fostering high-quality teaching with an enriched curriculum and professional development support: The Head Start REDI Program. *American Educational Research Journal*, 46(2), 567-597. doi: 10.3102/0002831208328089
- Downer, J. T., Locasale-Crouch, J., Hamre, B., & Pianta, R. (2009). Teacher characteristics associated with responsiveness and exposure to consultation and online professional development resources. *Early Education & Development*, 20(3), 431-455. doi: 10.1080/10409280802688626
- Evans, G. W. (2004). The environment of childhood poverty. *American Psychologist*, 59(2), 77-92. doi: 10.1037/0003-066x.59.2.77
- Gottesman, B. (2000). *Peer Coaching for Educators* (2 ed.). Lanham, Maryland: The Scarecrow Press, Inc.
- Hamre, B. K., & Pianta, R. (2004). Self-reported depression in nonfamilial caregivers: prevalence and associations with caregiver behavior in child-care settings. *Early Childhood Research Quarterly*, 19(2), 297-318. doi: 10.1016/j.ecresq.2004.04.006
- Hamre, B. K., & Pianta, R. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? *Child Development*, 76(5), 949-967. doi: 10.1111/j.1467-8624.2005.00889.x
- Hamre, B. K., & Pianta, R. (2007). Learning opportunities in preschool and early elementary classrooms. In R. C. Pianta, M. J. Cox, & K. Snow (Eds.), *School readiness and the transition to school* (pp. 49-84). Baltimore, MD: Brookes.

- Hamre, B. K., Pianta, R., Burchinal, M., Field, S., LoCasale-Crouch, J., Downer, J. T., . . . Scott-Little, C. (2012). A course on effective teacher-child interactions: Effects on teacher beliefs, knowledge, and observed practice *American Educational Research Journal*, 49(1), 88-123. doi: 10.3102/0002831211434596
- Hargreaves, A., & Dawe, R. (1990). Paths of professional development: Contrived collegiality, collaborative culture, and the case of peer coaching. *Teaching and Teacher Education*, 6(3), 227-241. doi: 10.1016/0742-051x(90)90015-w
- Harms, T., Clifford, R. M., & Cryer, D. (1998). *The early childhood environment rating scale* (Rev. ed.). New York: Teachers College Press.
- Improving Head Start for School Readiness Act. (2007). Pub. L. No. 110-134, 121, 1363 Stat.
- Izard, C. E., King, K. A., Trentacosta, C. J., Morgan, J. K., Laurenceau, J.-P., Krauthamer-Ewing, E. S., & Finlon, K. J. (2008). Accelerating the development of emotion competence in Head Start children: Effects on adaptive and maladaptive behavior. *Development and Psychopathology*, 20, 369-397. doi: 10.1017/S0954579408000175
- Johnson, S. R., Seidenfeld, A. M., Izard, C. E., & Kobak, R. (2013). Can classroom emotional support enhance prosocial development among children with depressed caregivers? *Early Childhood Research Quarterly*, 28(2), 282-290. doi: <http://dx.doi.org/10.1016/j.ecresq.2012.07.003>
- Kesner, J. E. (2000). Teacher characteristics and the quality of child-teacher relationships. *Journal of School Psychology*, 38(2), 133-149. doi: 10.1016/s0022-4405(99)00043-6
- Kurtts, S. A., & Levin, B. B. (2000). Using peer coaching with preservice teachers to develop reflective practice and collegial support. *Teaching Education*, 11(3), 297-310. doi: 10.1080/713698980
- La Paro, K. M., Hamre, B. K., Locasale-Crouch, J., Pianta, R. C., Bryant, D., Early, D., . . . Burchinal, M. (2009). Quality in kindergarten classrooms: Observational evidence for the need to increase children's learning opportunities in early education classrooms. *Early Education & Development*, 20(4), 657-692. doi: 10.1080/10409280802541965

- LoCasale-Crouch, J., Konold, T., Pianta, R., Howes, C., Burchinal, M., Bryant, D., . . . Barbarin, O. (2007). Observed classroom quality profiles in state-funded pre-kindergarten programs and associations with teacher, program, and classroom characteristics. *Early Childhood Research Quarterly*, 22(1), 3-17. doi: 10.1016/j.ecresq.2006.05.001
- Lu, H.-L. (2010). Research on peer coaching in preservice teacher education – A review of literature. *Teaching and Teacher Education*, 26(4), 748-753. doi: <http://dx.doi.org/10.1016/j.tate.2009.10.015>
- Mashburn, A. J., Pianta, R., Hamre, B. K., Downer, J. T., Barbarin, O. A., Bryant, D., . . . Howes, C. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development*, 79(3), 732-749. doi: 10.1111/j.1467-8624.2008.01154.x
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332. doi: 10.3102/00346543062003307
- Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., & Yazejian, N. (2001). The relation of preschool child-care quality to children's cognitive and social developmental trajectories through second grade. *Child Development*, 72(5), 1534-1553. doi: 10.1111/1467-8624.00364
- Perry, C., Baranowski, T., & Parcel, G. (1990). How individuals, environments, and health behavior interact: Social learning theory. In K. Glanz, F. Lewis, & B. Rimer (Eds.), *Health behavior and health education* (pp. 168–186). San Francisco, CA: Jossey-Bass.
- Peterson, S. M., Valk, C., Baker, A. C., Brugger, L., & Hightower, A. D. (2010). "We're not just interested in the work": Social and emotional aspects of early educator mentoring relationships. *Mentoring & Tutoring: Partnership in Learning*, 18(2), 155-175. doi: 10.1080/13611261003678895
- Pianta, R. (2001). *Student-teacher relationship scale: Professional manual*. Lutz, FL: Psychological Assessment Resources, Inc.
- Pianta, R., & Hamre, B. K. (2009a). Classroom processes and positive youth development: Conceptualizing, measuring, and improving the capacity of interactions between teachers and students. *New Directions for Youth Development*, 2009(121), 33-46. doi: 10.1002/yd.295

- Pianta, R., & Hamre, B. K. (2009b). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher*, 38(2), 109. doi: 10.3102/0013189X09332374
- Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions? *Applied Developmental Science*, 9(3), 144-159. doi: 10.1207/s1532480xads0903_2
- Pianta, R., La Paro, K. M., & Hamre, B. K. (2006). *CLASS: Classroom assessment scoring system: Manual. Preschool Version*. Charlottesville, VA: University of Virginia.
- Pianta, R., Mashburn, A., Downer, J., Hamre, B. K., & Justice, L. (2008). Effects of web-mediated professional development resources on teacher-child interactions in pre-kindergarten classrooms. *Early Childhood Research Quarterly*, 23(4), 431-451. doi: 10.1016/j.ecresq.2008.02.001
- Pianta, R., Paro, K. M. I., Payne, C., Cox, M. J., & Bradley, R. (2002). The relation of kindergarten classroom environment to teacher, family, and school characteristics and child outcomes. *The Elementary School Journal*, 102(3), 225-238. Retrieved from <http://www.jstor.org/stable/1002217>
- Pianta, R., & Stuhlman, M. W. (2004). Teacher-child relationships and children's success in the first years of school. *School Psychology Review*, 33, 444-458. Retrieved from http://go.galegroup.com/ps/i.do?id=GALE%7CA124000614&v=2.1&u=udel_main&it=r&p=AONE&sw=w
- Qi, C. H., & Kaiser, A. P. (2003). Behavior problems of preschool children from low-income families: Review of the literature. *Topics in Early Childhood Special Education*, 23(4), 188-216. doi: 10.1177/02711214030230040201
- Radloff, L. S. (1977). The Center for Epidemiologic Studies Depression Scale (CES-D) Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385-401. doi: 10.1177/014662167700100306
- Rauch, K., & Whittaker, C. R. (1999). Observation and feedback during student teaching: Learning from peers. *Action in Teacher Education*, 21(3), 67-78. doi: 10.1080/01626620.1999.10462971

- Raver, C. C., Jones, S. M., Li-Grining, C. P., Metzger, M., Champion, K. M., & Sardin, L. (2008). Improving preschool classroom processes: Preliminary findings from a randomized trial implemented in Head Start settings. *Early Childhood Research Quarterly*, 23(1), 10-26. doi: 10.1016/j.ecresq.2007.09.001
- Rhodes, C., & Beneicke, S. (2002). Coaching, mentoring and peer-networking: challenges for the management of teacher professional development in schools. *Journal of In-Service Education*, 28(2), 297-310. doi: 10.1080/13674580200200184
- Rimm-Kaufman, S. E., Early, D. M., Cox, M. J., Saluja, G., Pianta, R., Bradley, R. H., & Payne, C. (2002). Early behavioral attributes and teachers' sensitivity as predictors of competent behavior in the kindergarten classroom. *Journal of Applied Developmental Psychology*, 23, 451-470. doi: 10.1016/S0193-3973(02)00128-4
- Rust, F., Ely, M., Krasnow, M. H., & Miller, L. M. P. (2001). Professional development of change agents: Swimming with and against the currents. In F. Rust, & H. Freidus (Eds.), *Guiding school change: The role and work of change agents* (pp. 16-36). New York: Teachers College Press.
- Schaefer, E. S., & Edgerton, M. (1985). Parent and child correlates of parental modernity. In I. E. Sigel (Ed.), *Parental belief systems* (pp. 287-318). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Schonfeld, I. S. (1992). A longitudinal study of occupational stressors and depressive symptoms in first-year female teachers. *Teaching and Teacher Education*, 8(2), 151-158. doi: 10.1016/0742-051x(92)90005-n
- Shure, M. B. (1992). *I can problem solve: An interpersonal cognitive problem-solving program*. Champaign IL: Research Press.
- Slater, C. L., & Simmons, D. L. (2001). The design and implementation of a peer coaching program. *American Secondary Education*, 29(3), 67-76. Retrieved from <http://www.jstor.org/stable/41064432>
- Sutherland, K. S., & Wehby, J. H. (2001). The effect of self-evaluation on teaching behavior in classrooms for students with emotional and behavioral disorders. *The Journal of Special Education*, 35(3), 161-171. doi: 10.1177/002246690103500306

- Tout, K., Starr, R., Soli, M., Moodie, S., Kirby, G., & Boller, K. (2010). *Compendium of quality rating systems and evaluations*. Washington, DC: U.S. Administration for Children and Families, Office of Planning, Research and Evaluation.
- Wagner, B. D., & French, L. (2010). Motivation, work satisfaction, and teacher change among early childhood teachers. *Journal of Research in Childhood Education, 24*(2), 152-171. doi: 10.1080/02568541003635268
- Webster-Stratton, C., Reid, M. J., & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology, 30*(3), 283-302. doi: 10.1037/0022-006X.66.5.715

Appendix A

STUDY MEASURES

TISES

Interactions with students, colleagues, and principals may change from one week to the next. Please think about your interactions during **the past week**. Select the answer that indicates how strongly you agree or disagree with the following statements for **the past week**.

1	2	3	4	5	6
Strongly	Somewhat	Disagree	Agree	Somewhat	Strongly
Disagree	Disagree			Agree	Agree

1. If a student disrupts the lesson, I am able to redirect him quickly.
2. I am able to approach principals if I want to talk about problems at work.
3. I am confident that, if necessary, I can ask my colleagues for advice.
4. There are very few students that I cannot handle.
5. I can get through to most difficult students.
6. When necessary, I am able to bring up problems with principals.
7. I can always find colleagues with whom I can talk about problems at work.
8. I can take adequate measures that are necessary to keep activities running efficiently.
9. I can communicate to students that I am serious about getting appropriate behavior.
10. I am not always able to execute several activities at once.
11. I can manage my class very well.
12. I am confident that, if necessary, I can get principals to help me.
13. I can keep defiant students involved in my lessons.
14. I am always able to make my expectations clear to students.

15. I am able to respond adequately to defiant students.
16. When it is necessary, I am able to get principals to support me.
17. I can keep a few problem students from ruining an entire class.
18. If students stop working, I can put them back on track.
19. I am confident that if necessary I can ask principals for advice.
20. If I feel confronted by a problem with which my colleagues can help me, I am able to approach them about this.
21. When it is necessary, I am able to ask a colleague for assistance.
22. I know what rules are appropriate for my students.
23. I am able to approach my colleagues if I want to talk about problems at work.
24. I am able to begin the scholastic year so that students will learn to behave well.

ECJSS

Feelings about teaching along with your relations with co-workers and supervisors may change from one week to the next. Please think about the **past week** at Head Start. How much do you agree or disagree with the following statements during **the past week**?

1	2	3	4	5
Strongly Disagree	Mildly Disagree	Not Sure	Mildly Agree	Strongly Agree

Co-worker Relations

1. My co-workers cared about me.
2. I felt encouraged and supported by my colleagues.
3. My co-workers shared their personal concerns with me.
4. My colleagues were hard to get to know.
5. My co-workers were critical of my performance.
6. I felt my colleagues were competitive.
7. My co-workers were not very helpful.
8. My co-workers shared ideas and resources with me.
9. I felt I couldn't trust my co-workers.
10. My colleagues were enjoyable to work with.

Supervisor Relations

11. My supervisor respected my work.
12. My supervisor was too busy to know how I was doing.
13. I felt I was supervised too closely.
14. I as given helpful feedback about my performance.
15. My supervisor asked for my opinion.
16. My supervisor was tactful.
17. My supervisor was not very dependable.
18. I felt I was encouraged to try new ideas.

- 19. My supervisor made me feel inadequate.
- 20. My supervisor was unpredictable.

The Work Itself

- 21. My work was stimulating and challenging.
- 22. I felt I was respected by the parents of my students.
- 23. My job involved too much paperwork and recordkeeping,
- 24. My job didn't offer enough variety.
- 25. My job was not very creative.
- 26. I made an important difference in the lives of my students.
- 27. My job didn't match my training and skills.
- 28. My work gave me a sense of accomplishment.
- 29. There was too little time to do all there is to do.
- 30. I had control over most things that affected my satisfaction.

Ideas about Children

Teachers' ideas about how children learn may change over time. Please indicate how strongly you agree or disagree with the following statements to describe your **current** thinking about how children learn.

1	2	3	4	5
Strongly Disagree	Mildly Disagree	Not Sure	Mildly Agree	Strongly Agree

1. Since parents lack special training in education, they should not question the teacher's teaching methods.
2. Children should be treated the same regardless of differences among them.
3. Children should always obey the teacher.
4. Preparing for the future is more important for a child than enjoying today.
5. Children will not do the right thing unless they must.
6. Children should be allowed to disagree with their parents if they feel their own ideas are better.
7. Children should be kept busy with work and study at home and at school.
8. The major goal of education is to put basic information into the minds of the children.
9. In order to be fair, a teacher must treat all children alike.
10. The most important thing to teach children is absolute obedience to whoever is in authority.
11. Children learn best by doing things themselves rather than listening to others.
12. Children must be carefully trained early in life or their natural impulses will make them unmanageable.
13. Children have a right to their point of view and should be allowed to express it.
14. Children's learning results mainly from being presented basic information again and again.
15. Children like to teach other children.
16. The most important thing to teach children is absolute obedience to parents.

STRS

Teachers' relationships with children may change from one week to the next. Please think about your relationships with the children in your classroom **during the past week**. Indicate how much each of these statements applies to your relationship with the children in your classroom.

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Always

1. I shared an affectionate, warm relationship with most children.
2. A number of the children and I seemed to be struggling with each other.
3. If upset, most of the children would seek comfort from me.
4. Most children were uncomfortable with physical affection or touch from me.
5. Most children valued their relationship with me.
6. A number of children appeared hurt or embarrassed when I corrected them.
7. When I praised children, most of them beamed with pride.
8. A number of children reacted strongly to separation from me.
9. A number of children spontaneously shared information about themselves.
10. Many children were overly dependent on me.
11. A number of children easily became angry with me.
12. Most children tried to please me.
13. Many children felt that I treated them unfairly.
14. A number of children asked for my help when they really did not need help.
15. It was easy to be in tune with what most of the children were feeling.
16. Most children saw me as a source of punishment and criticism.
17. A number of children expressed hurt or jealousy when I spent time with other children.
18. Several children remained angry or were resistant after being disciplined.
19. When children were misbehaving, most responded well to my look or tone of voice.

20. Dealing with the children drained my energy.
21. I've noticed a number of children copying my behavior or ways of doing things.
22. When the children were in a bad mood, I knew we were in for a long and difficult day.
23. Children's feelings toward me were unpredictable or changed suddenly.
24. Despite my best efforts, I was uncomfortable with how I got along with the children.
25. A number of children whined or cried when they wanted something from me.
26. Several children were sneaky or manipulative with me.
27. Several children openly shared their feelings and experiences with me.
28. My interactions with most of the children made me feel effective and confident.

CES-D

Below is a list of the way you might have felt or behaved. Mark how often you have this way during the past week.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most of all of the time (5-7 days)
--	---	---	--

1. I was bothered by things that usually don't bother me.
2. I did not feel like eating; my appetite was poor.
3. I felt that I could not shake off the blues, even with the help from my family or friends.
4. I felt I was just as good as other people.
5. I had trouble keeping my mind on what I was doing.
6. I felt depressed.
7. I felt that everything I did was an effort.
8. I felt hopeful about the future.
9. I thought my life had been a failure.
10. I felt fearful.
11. My sleep was restless.
12. I was happy.
13. I talked less than usual.
14. I felt lonely
15. People were unfriendly.
16. I enjoyed life.
17. I had crying spells.
18. I felt sad.
19. I felt that people disliked me.
20. I could not get "going".

Demographic Information

1. What is your gender?
 - a. Female
 - b. Male
2. Check all the categories that describe your race/ethnicity:
 - a. Black/African American
 - b. Native American/Indian
 - c. White/Caucasian
 - d. Pacific Islander
 - e. Mexican American
 - f. Puerto Rican
 - g. Cuban
 - h. Other Hispanic/Spanish/Latino; *Specify:* _____
 - i. Asian
 - j. Other: *Specify:* _____
3. What is your primary language?
 - a. English
 - b. Spanish
 - c. Bilingual (English and Spanish)
 - d. Other: *Specify:* _____
4. How old are you?
5. How many years have you taught at Wilmington Head Start?
6. How many years have you been teaching overall (both at Head Start and at other schools)?
7. What is the highest level of education you have completed? (Select only one)
 - a. Eighth grade or less
 - b. Some high school but no diploma
 - c. High school diploma or equivalent
 - d. High school diploma or equivalent, plus technical training or certificate
 - e. Some college but no degree
 - f. AA, AS, two-year degree
 - g. Bachelor's degree
 - h. At least one year of course work beyond a BA
 - i. Master's degree
 - j. Educational specialist or professional diploma based on at least one year of course work beyond a Master's degree

- k. Doctoral degree (e.g., M.D., J.D., Ph.D.)
 - l. Other: *Specify*: _____
8. What was your major when you received your highest degree? (Select only one)
- a. Early childhood education
 - b. Elementary education
 - c. Special education
 - d. English as second language (ESL)
 - e. Child development
 - f. N/A (no degree)
 - g. Other: *Specify*: _____
9. How many students are currently on your classroom roster?
10. How many teachers (main and assistant) are assigned to your classroom?
11. How many students with special needs (with an active IEP) are enrolled in your class?
12. How many students are considered Limited English Proficient (LEP)?
(Children with LEP are children whose native language is other than English and whose skills in listening, speaking, reading, or writing English are such that they have difficulty understanding school instruction in English).

Classroom Assessment Scoring System

Positive Climate <i>Relationships</i> <i>Positive affect</i> <i>Positive communication</i> <i>Respect</i>	1 2 3 4 5 6 7
Negative Climate <i>Negative affect</i> <i>Punitive control</i> <i>Sarcasm/disrespect</i> <i>Severe negativity</i>	1 2 3 4 5 6 7
Teacher Sensitivity <i>Awareness</i> <i>Responsiveness</i> <i>Addresses problems</i> <i>Student comfort</i>	1 2 3 4 5 6 7
Regard for Student Perspectives <i>Flexibility and student focus</i> <i>Support for autonomy and leadership</i> <i>Student expression</i> <i>Restriction of movement</i>	1 2 3 4 5 6 7
Behavior Management <i>Clear behavior expectations</i> <i>Proactive</i> <i>Redirection of misbehavior</i> <i>Student behavior</i>	1 2 3 4 5 6 7
Productivity <i>Maximizing learning time</i> <i>Routines</i> <i>Transitions</i> <i>Preparation</i>	1 2 3 4 5 6 7
Instructional Learning Formats <i>Effective facilitation</i> <i>Variety of modalities and materials</i> <i>Student interest</i> <i>Clarity of learning objectives</i>	1 2 3 4 5 6 7
Concept Development <i>Analysis and reasoning</i> <i>Creating</i> <i>Integration</i> <i>Connections to the real world</i>	1 2 3 4 5 6 7
Quality of Feedback <i>Scaffolding</i> <i>Feedback loops</i> <i>Prompting thought processes</i> <i>Providing information</i> <i>Encouragement and affirmation</i>	1 2 3 4 5 6 7
Language Modeling <i>Frequent conversation</i> <i>Open-ended questions</i> <i>Repetition and extension</i> <i>Self- and parallel talk</i> <i>Advanced language</i>	1 2 3 4 5 6 7

Appendix B

HUMAN SUBJECTS APPROVAL



RESEARCH OFFICE

210 Hulihan Hall
University of Delaware
Newark, Delaware 19716-1551
Ph: 302/831-2136
Fax: 302/831-2828

DATE: June 4, 2012

TO: Stacy Grossman, MA
FROM: University of Delaware IRB

STUDY TITLE: [343573-1] Promoting Emotional Support in Head Start Classrooms through Peer Coaching

SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: June 4, 2012
EXPIRATION DATE: June 3, 2013
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 7

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.