PROMOTING TEACHER REFLECTION TO ENHANCE HEAD START TEACHERS' SOCIAL-EMOTIONAL PRACTICES: A PILOT INVESTIGATION

A Dissertation

by

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Submitted to the Office of Graduate and Professional Studies of
Texas A&M University
in partial fulfillments of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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May 2015

Major Subject: School Psychology

ABSTRACT

This dissertation investigated the development and validation of a measure of reflection-focused problem solving (RFPS) consultation model and the effects of RFPS consultation on observed classroom social-emotional practices as well as teachers' perceptions of consultation acceptability and teaching self-efficacy. According to teacher professional development literature, reflection embedded in consultation can be beneficial to teacher practices in the classroom; however, no measures of reflective consultation processes exist. This study examined psychometric properties of a measure of RFPS processes and provided preliminary evidence of the acceptability and effectiveness of RFPS consultation. Sixteen Head Start teachers (9 treatment condition and 7 control condition) received training on a social-emotional curriculum, Second Steps, and completed outcomes measures at pre and post intervention. Teachers in the treatment condition also received six sessions of RFPS consultation within a four month span. Sessions were transcribed and coded for communication and relationship skills and reflection processes. Reliability of scores on the reflection scale was minimally adequate ($\alpha = .75$) and poor on the communication and relationship $\alpha = .50$). Teachers in the treatment condition rated RFPS consultation as highly acceptable. Patterns of change from pre-treatment to post-treatment on observed classroom practices and teacher-reported self-efficacy are discussed. Limitations of the study and implications for future research are also discussed.

DEDICATION

To my parents and grandparents

ACKNOWLEDGMENTS

I would like to thank my committee chair, Dr. Jan N. Hughes, for her guidance, support, and faith in me throughout my personal and professional development experiences (i.e. graduate coursework, research endeavors). I would to extend thanks to my committee, Dr. Erin M. McTigue, for her dedication to the birth of this project as well as to Dr. Bruce Thompson and Dr. Jeffery Liew, for their guidance and support during this process. Special thanks to BVCAA Head Start, Leslie Keys and Carissa Cerda for without you this project would not have been possible.

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CHAPTER I

INTRODUCTION

An extensive body of empirical evidence demonstrates that children who begin kindergarten or first grade with poor social and emotional skills, including the ability to regulate one's emotions and behaviors, to follow rules, and to get along with teachers and peers, are at risk for poor academic, social, and behavioral outcomes throughout the elementary grades and beyond (Blair & Diamond, 2008; Fantuzzo, Bulotsky-Sheare, Fusco, & McWayne, 2005; Ladd, Birch, & Buhs, 1999; Vaughn et al., 2009). In recognition of the importance of social and emotional competencies to young children's long-term school success, an increased emphasis has been placed on promoting social and emotional competencies in the preschool and early grade school years (Bierman et al., 2008; Raver et al., 2008). Based on research demonstrating the critical role of teachers' classroom practices to young children's academic and social-emotional learning (Birch & Ladd, 1997; Hamre & Pianta 2001; Han, Catron, Weiss, & Marciel, 2005), teacher professional development programs have been developed and evaluated to enhance teaching practices beyond formal, pre-service education (for review of teacher professional development practices, see Sheridan, Edwards, Marvin, & Knocle, 2009).

As described in detail below, recent models of teacher professional development for early childhood teachers provide teachers an opportunity to reflect on their teaching practices in light of evidence-based practices and in the context of a supportive relationship with a consultant or coach. Further progress in developing effective

consultant-delivered programs to enhance early childhood teachers' effectiveness in promoting children's social and emotional skills requires measures of consultant practices associated with reflection-based consultation models. The purpose of this dissertation study was to address the need for such a measure and to provide preliminary evidence of the effectiveness of reflection-focused problem solving teacher consultation on social-emotional practices of Head Start teachers.

Before exploring results from the study, it is important to thoroughly examine the literature on teacher professional development, consultation, and reflection. The structure of the present dissertation will follow accordingly. First, I will examine the literature regarding components of traditional versus newer forms of teacher professional development and consultation and evidence of the effectiveness of new forms of teacher professional development in improving teachers' competencies in promoting children's social emotional growth. Second, I will discuss the role of reflection and choice within teacher professional development and consultation, and present the conceptual basis for a reflection-focused, problem solving consultation model. Third, the methods, results, and discussion will be presented. Finally, I will offer conclusions, limitations, and directions for future research regarding reflection-focused problem solving consultation.

CHAPTER II

LITERATURE REVIEW

Teacher Professional Development

Research studies find that neither teachers' type of degree (i.e., baccalaureate or associate degree in child development or early childhood education) nor teacher certification status predicts students' academic growth (Early et al., 2007), which indicates that effective and ineffective teachers do not differ in degree type or certification status (Boekaerts, 1997; Perry, Phillips, & Hutchison, 2006). Furthermore, new teachers report feeling poorly prepared for the role of creating an organized and positive classroom climate, managing misbehavior, and motivating students to learn (Murray, 2005). Traditional in-service professional development programs that focused on these areas are brief and have limited evidence of benefits. Factors that may explain the limited effectiveness of traditional in-service professional development include the lack of connection between the content taught and teachers' actual work environment, limited opportunity for teachers to interact with each other, and poor integration of workshop content with teachers' everyday concerns (Sandholtz, 2002). Even though the one-shot workshop format is the most common form of teacher professional development, teachers describe such workshops as boring and irrelevant, and most teachers quickly forget the majority of the information presented (Miller, 1998 as cited by Sandholtz, 2002).

Newer forms of professional development have emerged to assist early childhood teachers with implementing curricula, classroom management, and discipline strategies

that support students' social-emotional and academic learning (Cappella et al., 2012; Hamre, Pianta, Mashburn, Downer, 2012; Landry, Anthony, Swank, & Monseque-Bailey, 2009; Raver et al., 2008, 2011). An especially promising approach involves a professional, often referred to as a coach or consultant, who interacts one-on-one with the teacher to focus on specific teacher practices or skills (Denton & Hasbrouck, 2009). For the purpose of this paper, the terms coach and consultant will be used interchangeably to refer to professionals who are not in a supervisory role whose job is to enhance the professional functioning of teachers through on-going interactions that are focused on specific teacher interactions in the classroom.

A major component of successful consultation is a supportive and collaborative relationship between the teacher and the consultant. Within this relationship, the consultant communicates respect for the teacher's autonomy and professional knowledge of the presenting problem, while guiding the teacher to appropriate techniques and support (Cappella et al., 2012; Landry et al., 2009; Pianta, Mashburn, Downer, Hamre, & Justice, 2008; Raver et al., 2008). The consultant's feedback is relevant to the teacher's work setting and is often based on observations of the teacher in the classroom (Casey & McWilliam, 2011; Crothers, Hughes, & Morine, 2008; Hamre et al., 2012; Pianta et al., 2008). Additional roles and activities of consultants and coaches may include modeling effective techniques, collecting and interpreting data on classroom processes and outcomes, and sharing professional knowledge and information that is relevant to the problem.

Traditional Models of Consultation

Traditional models of consultation in school settings include behavior consultation (BC) and consultee centered consultation (CCC). Both models involve a non-hierarchical relationship in which the consultee seeks help with a work-related problem, behavior consultation, also called problem-solving consultation, involves the consultant guiding the teacher in applying principles of behavioral learning to a given classroom problem through a structured problem solving approach (Segool, Brinkman, & Carlson, 2007; Crothers, Hughes, & Morine, 2008; Kratochwill, 2008). The key goal of behavior consultation is to help teachers manage children's problems behaviors and promote adaptive child behaviors (Crothers, Hughes, & Morine, 2008). Within behavior consultation, the consultant guides the teacher in a four step problem solving process: (a) problem identification; (b) problem analysis; (c) plan implementation; and (d) evaluation. If the problem behavior is not resolved based on the plan implementation, the consultant guides the teacher through the problem solving process again to ensure the initial problem and contributing variables were correctly identified (Bergan, 1995; Crothers, Hughes, & Morine, 2008; Kratochwill, 2008; Segool, Brinkman, & Carlson, 2007).

Consultee centered consultation (CCC) is described as a non-hierarchical relationship between a resource (consultant) and a person or group (teacher) who seeks professional help with a work problem involving a third party (client; Knotek & Sandoval, 2003). The work problem is defined as topic of concern for the teacher who is responsible for the learning and development of the student. As in BC, the consultant

assists the teacher with identifying critical information about the work problem through exploration of situational, intrapersonal, interpersonal, and organization factors within the work setting. The goal of the CCC process is reframe the teacher's work problem so that the teacher's skill set is expanded and the relationship between the teacher and student is improved.

Although both CCC and BC involve guiding the teacher to a viable solution to solve a work-related problem, the two models differ in important respects. Basically, BC emphasizes the use of behavioral technology to solve classroom learning and behavior problems and follows a highly structured approach. One goal is for the teacher to learn how to apply behavioral technology to similar problems in the future (Bergan, 1995). CCC emphasizes changes in consultees' thinking about a problem situation through the interpersonal transactions between the consultant and teacher. The consultation process is less structured and more responsive to whether the "source" of the problem is a lack of teacher objectivity, knowledge, or skill (Caplan, 1970). Even though there are distinct differences between BC and CCC, both forms of consultation have been found to be effective in promoting student adjustment and learning (Reineke, Lewis-Palmer & Merrell, 2008; Sheridan, Eagle, Cowan & Mickelson, 2001; Sheridan, Glover, Kwon & Garbacz, 2009; Sheridan, Rhoo, Garbacz, Kunz, & Chumney, 2014). Additionally, both approaches have high acceptability among teachers (Easton & Erchul, 2011; Sheridan, Eagle, Cowan & Mickelson, 2001; Sheridan, Clarke, Knoche & Edwards, 2010). Teacher acceptability, which may encompass perceived effectiveness of the consultation as well as satisfaction with the consultation process, is considered

pivotal to the success of consultation (Sheridan & Steck, 1995). Essentially, if teachers deem the consultation process acceptable, they are more likely to implement suggested strategies. As Wolf (1978) stated, "If the participants don't like the treatment they may avoid it, or run away, or complain loudly . . . thus, society will be less likely to use our technology, no matter how potentially effective and efficient it might be" (p. 206). Because consultation relies on teacher acceptability, the consultant must possess good interpersonal and communication skills.

Literature on both models of consultation acknowledge that in order for teachers to apply knowledge or skills gained in consultation on their own, in the future, the teacher must experience a level of ownership of the consultation process. Therefore, the consultant is encouraged to (a) focus on concerns generated by the teacher rather than concerns someone else identifies; (b) encourage the teacher to generate interventions and explanations and avoid taking control of the problem solving process; (c) encourage the teacher to evaluate all ideas any suggestions offered by the consultant; and (d) emphasize that consultation is the teacher's choice (Harris and Cancelli, 1991). Studies show that teachers rated consultation as favorable when they reported high teaching self-efficacy, that participation in consultation was voluntary, and that the consultant understood their values and expectations (Carlson et al., 2008; DeForest & Hughes, 1992; Harris & Cancelli, 1991; Tysinger, Tysinger & Diamanduros, 2009; Wade, Welsh & Jensen, 1994).

One limitation of consultation research is the lack of objective measures for consultation processes. Self-report measures of consultation effectiveness and consultant

skills such as the Consultant Effectiveness Scale (REF) and the Behavior Intervention Rating Scale (BIRS) provide valuable feedback regarding consultees' perceptions of consultation acceptability and effectiveness (Elliott & Von Brock Treuting, 1991). However, as with all self-report measures, the results can be biased. Few consultation studies have constructed an objective measure of consultation processes. Of relevance to the current study, Hughes, Hasbrouck, Serdahl, Heidgarten, & McHaney (2001) created a coding manual (i.e., the Consultant Evaluation Rating Form; CERF) to measure consultant mastery of two types of skills: structuring skills and communication and relationship skills. Structuring skills refer to the consultant's ability to follow a problem-solving process. Communication and Relationships skills refer to the consultant's ability to establish supportive and collaborative relationships with the consultee. Hughes et al. (2001) found that CERF scores predicted attainment of the goals for consultation (i.e., changes in student behavior or learning) and level of implementation of the consultation model. The CERF did not, however, assess consultants' use of reflective practice.

Empirical Studies on Consultation/Coaching with Early Childhood Teachers

Recently, newer forms of consultation with teachers have emerged that incorporate aspects of both behavioral consultation (i.e. a structured, problem-solving process) and consultee-centered consultation (i.e., emphasis on the teacher's thinking about a problem situation and on emotional support to teachers who are coping with difficult situations). In these newer forms of teacher professional development, the consultant often takes on the role of a supportive coach.

Literature on coaching in teacher professional development offers support for the conclusion that these strategies improve teachers' classroom practices (Stichter, Lewis, Richter, Johnson & Bradley, 2006). Teachers perceive coaching as positive avenues for collaboration, support and encouragement to change practices (Vanderburg & Stephens, 2010; Walpole, McKenna, Uribe- Zarian, Lamintina, 2010). Teachers also perceive coaching as more effective form of professional development than classroom management courses (Matsumura, Garner, Corrent, Junker, Bickel, 2010; Neuman & Wright, 2010).

Additional studies reveal that coaching results in increased student literacy and overall school success. For example, Landry et al. (2009) tested the effectiveness of classroom coaching (which the researchers referred to as mentoring), progress monitoring, and immediate feedback on school readiness in a sample of preschool children. The professional development for teachers was provided within the context of the literacy curriculum, Center for Improving the Readiness of Children for Learning and Education (CIRCLE) Preschool Early Language and Literacy. Preschoolers' school readiness was measured by literacy and language scores on the Expressive One Word Picture Vocabulary test, Developing Skills Checklist, and the Preschool Comprehensive Test of Phonological Processing. Teachers were assigned to one of five conditions: (a) control; (b) classroom mentoring with personal digital assistant (PDA)-based progress monitoring (detailed feedback); (c) PDA-based progress monitoring only; (d) classroom mentoring with paper-and-pencil progress monitoring (limited feedback); and (e) paper-and-pencil progress monitoring only. Mentoring consisted of one-on-one feedback to

teachers about their instructional planning and areas for improvement regarding instructional skills. It should be noted that children's school readiness in all treatment conditions improved more than that of children in the control condition. Specifically, the results demonstrated that children whose teachers were in the PDA conditions improved their vocabulary significantly more than children of teachers in the control and paper and pencil conditions. In terms of classroom coaching, children whose teachers received classroom coaching plus PDA progress monitoring had greater improvements in oral language than children whose teachers were assigned to all other conditions.

Within the past few years, newer studies have evaluated the impact of coaching on teachers' social emotional practices and students' social- skills, which have produced promising results. Han et al. (2005) investigated the efficacy of weekly consultation on implementation of the Reaching Educators, Children, and Parents (RECAP) program, which focuses on social skills, affect regulation and problem solving training for preschool children. Weekly consultation was comprised of discussions regarding consultants' direct observations of teachers' classroom interactions; use of problem solving process to identify new strategies, and modeling of new strategies as needed. Outcome measures included parent and teacher ratings of preschoolers' behavior using the Child Behavior Checklist (CBCL), Social Skills Rating System (SSRS) and the Caregiver-Teacher Report Form (C-TRF). Although parent ratings showed no significant treatment effects for problem behaviors and social skills in children, teacher reports showed significant treatment effects for problem behaviors and social skills, specifically in social cooperation and assertion. Overall, children whose teachers received the

RECAP program had increased pro-social behaviors relative to children in the comparison group.

In a series of studies, Pianta and colleagues investigated the effects of using the MyTeaching Partner (MTP) professional development tool on teacher-child interactions within preschool settings (Hamre et al., 2012; Pianta et al., 2008). Specifically, MTP is a web based professional development tool in which teachers have access to video examples of high quality teacher-student interactions as well as opportunities to receive consultation regarding their own teaching practices by uploading videos. In MTP consultation, the consultant reviewed the uploaded video and provided teachers with feedback about their teacher behaviors, using the Classroom Assessment Scoring System (CLASS). Additionally, the consultant and discussed video clips with teachers to provide new strategies and skills that promote academic and social-emotional growth. The MTP consultation was delivered in conjunction with the Preschool PATHS (Promoting Alternative Thinking Strategies) curriculum on social emotional development and the Language and Literacy curriculum. In the Pianta et al. (2008) study, all teachers received PATHS training for use in their classrooms and were assigned to one of two conditions either a) web access to video clips only or b) web access to video clips plus MTP consultation. The video clips involved web-based examples of high quality interactions between teachers and students. Measures of teacher child interactions included use of the Classroom Assessment Scoring System (CLASS). Student outcome measures included demographic information, and language and literacy skills measured by the Phonological Awareness Literacy Screening (PALS). All student outcomes were

analyzed at the classroom level. Results indicated that teacher-child interactions improved significantly more for teachers who received MTP consultation plus web access to video clips than for teachers who received web access to video clips only. Furthermore, teachers in high poverty classrooms benefitted more from the consultation than did teachers in low poverty classrooms. Results suggest that teacher professional development that includes both modeling of specific teacher behaviors and supportive consultation as teacher try out new behaviors can produce changes in teachers' social-emotional and literacy practices.

In the Hamre et al., 2012 study, teachers were assigned to one of three conditions: a) control condition in which teachers did not receive PATH trainings or any other form of professional development, b) PATH Low, which received PATHS training, access to MTP video clips and c) PATH High, which received PATHS training, MTP consultation, and MTP access to video clips. As in the 2008 study, MTP consultation was to provide teachers with additional feedback about their social-emotional teaching practices relevant to implementation of PATHS and to the literacy and literature curriculum. Measures of teacher child interactions included the Teacher-Child Rating Scale (TCRS) and the Student-Teacher Relationship Scale (STRS). The results indicated an overall increase in social competence for children whose teacher were in PATH Low and PATH High conditions, relative to the control condition. There were no significant differences for child problem behaviors between the three groups. Furthermore, there were no significant differences between the PATH Low and PATH High conditions on social competence or problem behaviors in children. The authors

argue that joint attention on social and academic development within MTP consultation may have diluted the strength of the consultation that focused specifically on social-emotional interactions.

In a longitudinal study, Raver, Jones, Li-Grining, Zhai, Bub and Pressler (2011) examined the effects of coaching on both academic and social-emotional outcomes in Head Start classrooms. In the Chicago School Readiness Project (CSRP) intervention, Head Start teachers received training on classroom management and effective classroom strategies. Additionally, teachers were supported by a mental health consultant (MHC) who provided child-focused and classroom-based consultation. The consultant provided support to teachers as they used newly taught techniques in their classrooms. Preschoolers' academic outcomes included letter naming, vocabulary, and early math skills. Social emotional outcomes included self-regulation skills such as effortful control, executive functioning and attention/impulsivity. The results showed that the children in the CSRP intervention made greater improvements in all academic areas as well as in executive functioning and attention/impulsivity than children in the control group. Furthermore, researchers found a mediating role of self-regulation skills on the academic skills. Specifically, children's executive functioning mediated intervention effects on all academic outcomes, whereas, attention/impulsivity mediated intervention effects only for vocabulary and letter naming. Therefore, children whose teachers received consultation achieved greater improvements of self-regulation and executive functioning skills than children in the control group, and these improvements led to enhanced academic outcomes.

Cappella et al. (2012) researched the impact of BRIDGE, a consultation model that combines MTP consultation with the Links to Learning program, on classroom and child outcomes (i.e. emotional support and organization as on CLASS, academic self-concept, problem behaviors, and child's relationships with teacher and peers). Teachers were assigned to one of two conditions: BRIDGE consultation plus access to CLASS website and videos or the CLASS website and videos only. BRIDGE consultation consisted of one-on-one feedback to teachers regarding classroom interactions and strategies for improvement that were aligned with CLASS. Outcome measures included CLASS, Behavior Rating Inventory of Executive Function (BRIEF), Behavioral Regulation Index, Student-Teacher Relationship Scale (STRS) and the Self Perception Profile for Children. Results revealed that classrooms with lower emotional support prior to intervention (Time 1) benefitted more from BRIDGE and had greater increases in emotional support at Time 2, than classes with higher levels of emotional support at Time 1. There were no significant effects for BRIDGE on classroom organization. In regards to child outcomes, there were no significant effects for BRIDGE on behavior regulation. In terms of academic self-concept, peer and teacher relationships, children whose teachers were in the BRIDGE intervention had improved academic self-concepts, increased closeness with teachers, and decreased peer victimization. Therefore, BRIDGE consultation can be associated with positive outcomes at the classroom and individual student levels.

These studies offer support for the conclusion that on-going, supportive feedback on the implementation of recommended practices through consultation is an effective

route to improving teacher social-emotional and instructional practices and children's social-emotional and academic outcomes. However, little is known about the specific consultation processes that are most strongly associated with teacher and student growth in skills. Literature on the role of reflection in teacher development, reviewed below, suggests that reflection may be a key process in effective consultation.

Conceptual Basis for Provision of Reflection and Autonomy in Consultation

Teacher Reflection and Professional Development. Educators who apply adult learning theories to teacher professional development acknowledge the key role of teacher reflection in development (Amstutz, 1999; Jaruszewicz, 2006; Kabakci, Ferhan Odabasi & Kilicer, 2010; Loyens, Magda, & Rikers, 2008; Merriam, 2001). For example, according to transformative learning theory, (Wickett, 2005), learning is described as a four step process including (a) elaboration of an existing point of view; (b) establishment of a new point of view, (c) transformation of the point of view (d) critical reflection of the generalized bias. Therefore, to be successful, the learner must use reflection to combine the new knowledge with prior knowledge and skills (Wickett, 2005). This theory suggests that "learning is the process of effecting change in a *frame of reference"* (Mezirow, 1997, p. 5), which are those cognitions, emotions and experiences the adult learner has acquired in life. Basically, transformative learning involves the adult learners' ability to use reflection as a tool for acquiring new knowledge (Wickett, 2005). The goal is to transform the current frame of reference into new ones via critical reflection.

Although adult learning theories address the need for reflection within professional development, there are relatively few studies that investigate the benefits of reflective practices on measured teacher outcomes such as changes in teaching practices or self-efficacy. Chiang (2008) researched the changes in teaching self-efficacy that occurred in participation of a teaching practicum. Thirteen teachers participated in the study and kept reflective journals throughout the practicum. Self-efficacy was assessed by the English for Foreign Language (EFL) Teacher Efficacy Scale (ETES). Through surveys, interviews and journaling, teachers reported increased self-confidence; furthermore, there were significant changes in their self-efficacy as measured by ETES at Time 1 and Time 2. Despite the positive outcome of the study; there were several limitations. First, researchers did not identify whether journaling or other components within the practicum course contributed to changes in self-efficacy. Secondly, there was no comparison group to determine if changes in self-efficacy were contributed to components of practicum or natural progression.

To address the limitations in the Chiang (2008) study, Tavil (2014) examined the effects of electronic journaling (e-journaling) in the self-efficacy of pre-service teachers. In the study, 40 pre-service teachers were enrolled in teaching practicum in which they were assigned to experiment or control group. Teachers in the experimental group were asked to submit reflective e- journals throughout the practicum. All teachers completed the ETES at pre and post intervention. The results indicated that teachers in the experiment condition reported increased self-efficacy in comparison to teachers in the control condition. Furthermore, in a semi-structured interview, teachers in the

experimental condition perceived that e-journaling was enjoyable and increased their teaching confidence.

Self Determination Theory and Professional Development. Self-determination theory (SDT; Deci & Ryan, 1985; Deci, Vallerand, Pelletier, & Ryan, 1991) is a general theory of motivation that is also relevant to the provision of teacher professional development. According to SDT, motivation drives humans toward a healthy level of development and functioning. Specifically, when people are motivated, they put forth energy and effort toward tasks in life and work. Optimal motivation occurs when three basic psychological needs are met in the learning situation (Deci & Ryan, 1985; Deci et al., 1991). These three needs are autonomy (the belief that one is the originator and regulator of his or her actions), competence (the belief that one has the skills necessary to achieve one's goals), and relatedness (belief that one is securely connected to others in one's social context). Ultimately, any context that supports autonomy, relatedness and competence increases the probability of autonomous motivation. Autonomous motivation is a state in which an individual engages in an action/ activity for the enjoyment of the process instead of extrinsic motivators (Anderson, Walker & Ralph, 2009; Ryan & Deci, 2000).

In recent years, studies have emerged which explored autonomous motivation within teacher professional development. For example, Wagner and French (2010) explored workplace factors that influence preschool teachers' motivation for professional development in the context of a science curriculum, ScienceStart. Professional development consisted of monthly collaborative workshops (i.e.

combination of lectures, discussions and hands on activities) and on-site support visits (i.e. classroom observation, modeling of new techniques). Measures in the study included interviews, the Intrinsic Motivation Inventory (IMI), and the Early Childhood Job Satisfaction Survey (ECJSS).

Results revealed two workplace factors that influence teachers' autonomous motivation: perceived support from their supervisor and the nature of the work itself. Supervisor support was defined in terms of providing feedback (i.e. quantity and quality) and encouragement of teachers' professional growth efforts (i.e. via verbal feedback, purchase of materials needed, professional development opportunities). Nature of the work itself was defined as the degree to which the teacher has control in decision making processes (i.e. policies, curriculum) at the school level as well as freedom to be creative at the classroom level. Further analysis indicated that teachers who were intrinsically motivated toward the professional development program reported high satisfaction in the workplace.

In another study on SDT and professional development, Gorozidis and Papaioannou (2014) researched teachers' intentions to participate in professional development trainings based on type of motivation (i.e. autonomous versus controlled as defined in SDT). The results indicated teachers' level of autonomous motivation predicted their choice to participate in professional development. Specifically, teachers with autonomous motivation were more likely to pursue and implement professional development opportunities and information than teachers with controlled motivation. In essence, the findings of both studies suggest that an environment for professional

development in which teachers' needs for autonomy, relatedness, and competence are met promotes teachers' autonomous motivation.

In summary, based on theories of adult learning and self-determination theory, teacher consultation models should incorporate opportunities for teachers to reflect on their practice in the context of a supportive, secure relationship that provides teachers with a sense of volition and competence.

Models of Teacher Professional Development and Reflection

According to Nelson and Salder (2013), reflection practice in teacher professional education has four components: the stimulus, the content, the process, and the outcome. The stimulus refers to the context, situation or event that is cause for reflection. Specifically, what is the initial problem or puzzling situation that is highlighted while the teacher is reflecting? The content represents a focus or theme of the teacher's reflection (i.e. is the teacher reflecting on her behaviors, the child's behaviors, or something else?). The process explores how the reflection is occurring (i.e. tools). Most teacher education literature identifies journaling, the use technical equipment such as video and websites, verbal or written self-narratives; or any combination (Isikoglu, 2007; Monet, & Etkina, 2008; Shoffner, 2009; Vloet, & van Swet, 2010) as effective reflection tools. The outcome asks what the ultimate goal for reflecting is (e.g., change teacher maladaptive thoughts about the child or create new teaching practices by changing teachers' knowledge, attitudes and beliefs).

Although Nelson and Salder (2013) provided a heuristic framework that identified and highlighted components and theoretical orientation of reflection, such

information has not resulted in the creation of a measure for reflection that can be used in research on the importance of reflection in teacher professional development. Therefore, it is imperative to develop a measure of reflection and to determine if scores on such a measure are related to changes in teacher skill or student learning.

In addition to literature on the orientation and components of reflection, there are several professional development models with embedded reflection processes. One such model is the ALACT model. The goal of the ALACT model is to promote teacher self-reflection. The ALACT model (named from the first letters of each phase) describes reflection as a 5 step process, which are (1) action, (2) looking back on the action, (3) awareness of essential aspects, (4) creating alternative methods of action, and (5) trial (Korthagen & Vasalos, 2005). The initial step, action, is usually initiated with the help of a colleague or supervisor. Embedded in the ALACT model is the onion model which describes levels of reflection to be achieved within the ALACT process. In each step of the ALACT process, the supervisor prompts for a type of reflection through concreteness. Specifically, the supervisor will ask the teachers concrete questions about situation to address what/how the teacher and student(s) thought, felt, behaved and desired. This process allows teachers to gain awareness of less rational sources of behaviors such as emotions, beliefs and values (i.e. core reflection or innermost levels of the onion model). During ALACT step 2, the teacher is prompted to achieve core reflection by addressing the following questions: What is the ideal situation? What are the limiting factors? It is implied that asking such questions will spawn internal actualization of core qualities needed by the teacher to achieve the optimal outcome.

Therefore, the sensitive nature of the ALACT model requires a safe and supportive environment to allow teachers to explore their internal beliefs, identity and missions while confronting any conflicts.

Williams and Power (2009) examined the ALACT reflection process in a case study with teacher educators. Specifically, the facilitator and the teacher educator met for three- one hour reflection sessions. After each session, both the facilitator and teacher educator wrote journal entries regarding the content and process of the session. Each entry was coded for core reflection as noted in the Korthagen and Vasalos (2005) study. Teacher educators reported that the ALACT model was helpful in achieving core reflection (i.e. critical reflection) when discussing inconsistencies with their teaching beliefs and practices.

The Educational Process Reflection (EPR) model also embeds reflection in teacher consultation (Bygdeson-Larsson, 2006). The EPR model consists of climate assessment and consultee-centered consultation (CCC). The goal of EPR is to promote a positive classroom climate through reflection on everyday practice and interactions with children in the classroom. EPR was conducted in groups of 3-6 teachers per one consultant. Each teacher discussed their classroom concerns or incidents and received prompts for recalling, discussing and reflecting on events surrounding their concerns. With the guidance of the consultant, the group of teachers worked together to identify strategies for the problem behavior. As in traditional consultation, the teacher was responsible for implementing the strategies in the classroom. In the post intervention questionnaire, teachers rated the EPR as favorable professional development tool, in

which they felt comfortable in expressing their thoughts and feelings as it related to classroom concerns. Additionally, in regards to classroom interactions, teachers reported more awareness and sensitivity to children's needs as well as a positive change in their interactions with children from pre intervention to post intervention.

Although these models provide a foundation for embedding reflection into teacher professional development, there is a lack of empirical evidence of effectiveness of the model on teacher and child outcomes. Furthermore, in both studies there were no measures of critical reflection processes that define the model or contributed to outcomes.

Models of Choice in Teacher Professional Development

The issue of teacher choice in professional development has received less attention than has reflection. However, in traditional models of consultation, teacher autonomy, in terms of the decision to participate in consultation and choice over the decision to implement certain practices recommended by the consultant is assumed (Brown, Pryzwansky, & Shulte, 1998; Crothers, Hughes, & Morine, 2008; Sheridan, & Gutkin, 2000). Indeed, in most models of school consultation, the teacher voluntarily requests the consultant's help and determines the focus of the consultation (Brown et al., 1998). Newer models of consultation, such as those previously described, aim to help teachers implement specific curricular elements. Therefore, they tend to be more directive in terms of the decision to participate in consultation and the content of consultation (e.g., implementation of the RECAP curriculum). Although it is reasonable to expect that a teacher's willingness to engage in reflection with the consultant and to

share his or her thoughts and feelings and goals would be enhanced by a sense of volition over the consultation process and recommendations emanating from it, this author knows of no research that tests this assumption. Nevertheless, the newer models of consultation, such as MTP, attempt to provide teacher choice, such as asking teachers to select the classroom video interaction to share with the consultant for feedback.

A Reflection-Focused, Problem Solving Consultation Model

The purpose of this study is to develop and evaluate a model of consultation with teachers that provides teachers opportunity to reflect on their practices in the area of social emotional learning in the context of a relationship in which they experience volition and support. This model of consultation is referred to as reflection-focused, problem solving (RFPS) consultation.

RFPS consultation combines the problem solving process of behavioral consultation and the interpersonal context of consultee-centered consultation with a focus on the teacher thinking about (i.e., reflection on) the problem and the teacher's response to it. The underlying goal of the RFPS consultation examined in this study is to assist teachers in adopting effective social-emotional practices into their professional identity. The RFPS model assumes that a teacher's motivation and ability to adopt new practices are dependent upon their belief that such practices are congruent with his or her professional identity, which is self-chosen rather than imposed. In essence, RFPS consultation aligns with reflection-focused models of teacher professional development (Bygdeson-Larsson, 2006; Kortagen & Vasalos, 2005) and with self-determination theory (SDT; Deci &Ryan, 1985). It builds on the procedures of previous models of

consultation (i.e. behavior and consultee-centered consultation) as well as draws from newer models of consultation that focus on specific teacher practices embedded in a curriculum, such as the RECAP or CIRCLE curriculum.

Within RFPS consultation, teachers are encouraged to explore new ideas and practices expected to increase their effectiveness in the classroom. Teachers are expected to have the opportunity to achieve autonomous motivation (acting with a sense of will and choice) through choosing to adopt new ideas as their own through confidence (competency) and work relationship (relatedness) building. When teachers act with a sense of autonomous motivation, they are expected to experience those actions as expressions of their authentic self. Essentially, teachers acting with a sense of autonomous motivation are expected to have flexibility, enthusiasm, and a sense of well-being and self-efficacy (Grolnick & Ryan, 1989). Self-efficacy refers to "the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Bandura, 1995, p. 2) and is considered a critical component of autonomous motivation (Assor, Kaplan, & Roth, 2002; Katz, & Assor, 2007; Roth, Assor, Kanat-Maymon, & Kaplan, 2007). Teachers who are confident of their teaching capabilities are more willing to use or implement effective, new, or innovative teaching strategies and use mastery-goal oriented approaches in the classroom (Fuchs, Fuchs, & Bishop, 1992; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). Furthermore, teachers with high self-efficacy are protected from teacher burnout (Friedman & Farber, 1992), are more accepting of consultation (DeForest & Hughes, 1992; Gutkin & Ajchenbaum,

1984), and are more strongly connected to specific theoretical orientations and practices (Jennett, Harris, & Mesibov, 2003).

Research Questions and Hypotheses. The primary purpose of this study is to pilot a measure of communication and relationship skills and reflection processes in consultation. The availability of a measure of reflection and communication and relationship skills that has demonstrated evidence of adequate inter-coder reliability and criterion-related validity is a necessary first step in research on the effectiveness of RFPS consultation. Thus, the first research question to be addressed is whether the CERF-R observational measure of communication and relationship processes and reflection processes in consultation demonstrate adequate inter-coder agreement and internal consistency? It is expected that after training in scoring the communication and relationship (C&R) items and the Reflection items of the revised Consultant Evaluation Rating Form (CERF), coders will achieve 80% agreement (exact) and 95% (within one) on the reflection and communication and relationship items. It is expected that the internal consistency of scores on the C&R items and the Reflection items will be adequate (i.e., .70 or higher).

The second research question asks if scores on the observed Communication and Reflection (C&R) and reflection scales on the CERF are significantly correlated with teachers' perceptions of the degree to which the consultation provided was collaborative, provided opportunities for reflection, and was an acceptable consultation model. It is hypothesized that the CERF reflection and C&R scale scores will be moderately to

strongly related (r = .70 or above) to scores on measures of teachers perception of collaborative and reflective consultation processes and acceptability (r=.70 or above).

The third research question asks whether RFPS consultation an acceptable form of assistance to Head Start teachers. Specifically, it is hypothesized that teachers will report high acceptability for RFPS as determined by a mean score of 4 or higher on a 5 point scale of consultation acceptability. It is expected that acceptability for teachers receiving RFPS will be as high as or higher than that of teachers in standard consultation.

The fourth research question asks if teachers receiving RFPS consultation report more improvement from pre-treatment to post-treatment on observed social-emotional practices, teacher-reported self-efficacy and importance of social-emotional learning. Based on the expectation that RFPS consultation provides an environment with collaboration, autonomy, reflection and choice, it is expected teachers who receive RFPS consultation in the context of a social-emotional curriculum [Second Steps, (Committee for Children, 2011), see below] will exhibit increased self-efficacy for implementing social emotional practices and improved classroom social-emotional practices above scores at baseline, as rated by the Classroom Assessment Scoring System (CLASS), relative to teachers who receive the social-emotional curriculum "consultation as usual" (see procedures).

In addition to answering the aforementioned research questions, this study will also provide evidence that RFPS consultation was implemented as described and show

that treatment and control conditions differed on consultation processes as determined by consultation processes scale and consultant logs.

CHAPTER III

METHODS

Study Site

This dissertation study was implemented in the Brazos Valley Community Action Agency (BVCAA) Head Start. BVCAA Head Start is based out of Bryan, TX. The city of Bryan is located in Central Texas approximately 100 miles north of Houston and 100 miles east of Austin. With a population of approximately 77,000; and bordering the city of College Station, it is the heart of Brazos County. According to the U.S Census Bureau (2014), 27% of Bryan population lives below the poverty level. Demographic breakdown of Bryan indicates that 43% of population is Caucasian, 36% is Hispanic, 18% is African American and 3% categorized as multi-racial or Native American. BVCAA Head Start serves approximately 500 children and families across six counties. BVCAA Head Start Program has a total of 7 Head Start centers, an Early Head Start (EHS) Center, and a Home base Program. Within the BVCAA Head Start program, there are 24 Head Start teachers, 9 EHS teachers and 8 Home base teachers. BVCAA support staff included health/nutrition specialist, education specialist, disabilities specialist, licensed professional counselors, and a mental health specialist who supervised two mental health interns (MHI; school psychology doctoral students). Within BVCAA Head Start, teachers requested support staff via a referral system. The author of this dissertation held the position of MHI during the course of the study. For this study, eligible participants were 24 teachers in Head Start centers. EHS and Home

based teachers were not eligible to participate due to differences in the teaching context (i.e., not classroom-based).

Local data from BVCAA Head Start revealed that in the past 5 years, less than 50% of children enrolled in the Head Start and Home based programs met the Level 3 criteria (mastery) of social development by spring check point as measured by the Creative Curriculum Developmental Continuum for Ages 3–5 (Teaching Strategies; Dodge, Colker & Heroman, 2010). In Creative Curriculum norm reference study approximately 7% of three year olds and 22 % of four years and children reached the Level 3 criteria of social development by the winter checkpoint (Lambert, 2005). Although it appears that the local data for BVCAA may align with the norm reference trajectories, administrative staff for BVCAA Head Start programs regarded their local results as less desirable. Furthermore, the BVCAA program evaluation on teacher knowledge and application of developmental milestones discovered that teachers struggled more in providing activities that promote social development in children than in all other areas of development. BVCAA Head Start acknowledged the need for implementation of an evidence-based social emotional curriculum to assist classroom teachers in this area.

After a thorough review of available social-emotional curricula, the Head Start policy council approved the Second Steps Early Learning program, developed by and available from the Committee for Children 2011). The Second Step Early Learning curriculum focuses on topics such as empathy, emotion management, friendship skills, problem solving, and transitioning to kindergarten. The program includes use of theme

cards, puppets, music, and other activities to teach children skills. In a number of methodologically rigorous studies, Second Step has been found to be effective in improving teachers' social-emotional practices and children's social-emotional skills (Alvarez & Ketchmark, 2009; Committee for Children, 2011; Grossman, Neckmerman, Koepsell, Liu, Asher et al., 1997; McMahon, Washburn, Felix, Yakin & Childrey, 2000; Munoz, 2002; Sprague, Walker, Golly, White, Myers et al., 2001). In most studies the level of support for teachers was minimal, typically consisting of a one or two day training session on Second Steps, with no con-going support during the implementation phase (Grossman, Neckmerman, Koepsell, Liu, Asher et al., 1997; McMahon et al., 2000). For example, in Sprague et al., (2001) study, teachers received eight hour training on Second Steps and access to technical assistance for school-wide effective behavior support (EBS). The technical assistance included assistance with problem solving and planning of EBS interventions but not with Second Steps. Therefore, the added value of a coaching/consultation component to the "stand alone" Second Step curriculum has not been established.

In this study, all BVCAA Head Start teachers received 2 days of training on the Second Step Early Learning Program by the BVCAA Head Start Education Specialist, assisted by the Mental Health Intern (MHI). As described in the Participants section, only those teachers assigned to the RFPS Consultation condition also received on-going consultation in implementation of the Second Steps curriculum. The researcher, who held the position of MHI with BVCAA Head Start, requested permission from the BVCAA Policy Council to conduct the current research, which investigates the added

value of ongoing consultation to assist teachers with implementation of Second Step skills. Because consultation with teachers was part of the MHI's role with Head Start, and because Head Start was interested in evaluating the consultation, permission was granted. The role of the BVCAA MHI includes administration and scoring of screening measures, collaborating with other support staff about referrals, conducting observations, and consulting with teachers and parents for children who exhibit behavior problems.

Timeline for Research Tasks

Table 1 outlines the research tasks completed by participants for this study.

Table 1
Research Timeline

Date	Tasks
July 2011 to November 2011	Random assignment of BVCAA Head Start Centers to condition (see Table 2).
	Teachers' received 2 day training on Second Step Early Learning Curriculum.
	Received consent forms from Head Start teachers.
	Administration of measures completed (see Table 4, pre-treatment) by November 18, 2011.
December 2011	BVCAA Holiday Break from December 16, 2011 to January 9, 2012.
January 2012 to March 2012	Consultation process commenced with 13 teachers on January 9, 2012.
	Each teacher received at least 30 minutes of consultation bi-weekly.
	The consultant met with approximately six teachers per week.

Table 1 Continued

Date	Task
January 2012 to March 2012	The consultant met with Head Start Specialists every Friday to discuss child cases and research progress. The consultant met with her research advisor weekly to discuss and review consultation practices.
April 2012 to May 2012	Consultation process ended on April 20, 2012. CLASS observation for Spring was conducted by May 11, 2012. Teachers were asked to mail-in their post treatment measures by May 18, 2012.

Participants

The study took place in BVCAA Head Start centers. A total of 24 teachers (all female) were eligible to participate in the study based on serving in the role of head teacher and consenting to participation in the study. Although all head teachers were required to participate in the consultation (if assigned to that condition) teachers were not required to participate in the research study or to audiotaping of consultation. All eligible teachers consented to research participation and audiotaping prior to random assignment. That is, teachers were not aware of whether they would be in the treatment or control condition when they provided consent. The seven Head Start centers served as the unit of randomization. Block matching and random assignment was used to select each center into treatment and control conditions. Specifically, each center was matched as closely as possible on child ethnicity with one center as an outlier (75% Hispanics). Table 2 provides the results of the matching and random assignment this each matched

pair. Due to varying differences in number of classrooms per center, the outlier center was paired with the condition with the least number of teachers. Treatment condition included thirteen teachers within three centers. The control condition included eleven teachers within four centers.

Table 2
Block Match and Random Assignment

		% of African-American	% of Hispanic	% of Caucasian
Matched Group #1	Center 1 (Treatment, 4 teachers)	52	40	8
	Center 2 (Control, 3 teachers)	55	33	11
Matched Group #2	Center 3 (T, 5 teachers)	54	29	7
	Center 4(C, 3 teachers)	46	26	26
Matched Group # 3	Center 5(T, 4 teachers)	39	46	-
	Center 6 (C, 4 teachers)	24	69	-
Unmatched	Center 7 (C, 2 teachers)	-	75	15

Eight teachers (four teachers from each condition) left BVCAA Head Start after the pre-test measure but prior to completion of post-test measures, due to resignation (n = 6) or dismissal (n = 2). Demographic variables of teachers from the treatment and control conditions are provided in Table 3. Three teachers from treatment condition completed two or more consultation sessions before terminating their employment with Head Start. Of the four teachers who attrited from the Treatment condition; one teacher was classified as African American, one teacher identified as Hispanic and two teachers reported themselves as Caucasian. Of the four teachers who attrited from the Control

condition, one teacher was classified as African American; one teacher was classified as Hispanic, one teacher identified as Caucasian and one teacher reported themselves as Asian. The average years of experience at Head Start were 2 years and 3 years for attrited teachers from Treatment and Control conditions, respectively. The highest level of education was less than a bachelor's degree for one teacher who attrited from Treatment condition and two teachers for those attrited from the Control condition. The highest level of education for two teachers in Treatment condition and three teachers Control condition was bachelor's degree plus teacher's certification.

Table 3
Demographic Variables

		Treatment Condition		Control Condition	
Variable	Category	Retained	Attritted	Retained	Attritted
Demographics	African-American	0	1	0	1
	Hispanic	0	1	3	1
	Caucasian	8	2	4	1
	Other	1	0	0	1
Years of Experience	< 4 years	6	3	5	2
	4-6 years	1	1	1	2
	> 6 years	2	0	1	0
Years at Head Start	< 4 years	6	3	4	4
	4-6 years	1	1	0	0
	> 6 years	2	0	3	0
Education Level	Associates Degree	1	2	2	1
	Bachelors of Arts	8	2	5	3

Note. On each variable n = 24 teachers.

Procedures

Teachers in both treatment and control received training in the Second Steps Early Learning curriculum. As noted in previous section, teachers received 2 days of training on Second Steps Early Learning curriculum in which the researcher assisted primary trainer. Teachers in the treatment condition also received reflective focused problem solving (RFPS) consultation. At the time of consent, teachers were informed that the goals of the study were to investigate the impact of consultation on social-emotional development in children as it related to their implementation of Second Steps. Furthermore, teachers received information on their roles and responsibilities as consultees (i.e. commitment to bi-weekly consultation sessions; implementation of strategies) and the role of the consultant (i.e. provide on-going guidance, feedback and strategies). Teachers were assured that their participation would be confidential and would not influence their standing with BVCAA Head Start or Texas A&M University. RFPS consultation was provided by the researcher, within the modified role of the BVCAA Mental Health Intern (MHI). The researcher had held the position of MHI at BVCAA for three years prior to beginning the research. The researcher's position as MHI was through a collaboration between the researcher's doctoral program in school psychology and BVCAA Head Start.

RFPS consultation sessions occurred bi-weekly for 4 months from January to April (with a total six of consultation sessions for the nine teachers in the treatment group. Specific times of consultation sessions were scheduled based on teacher availability and logistics of travelling between centers that were as much as 30 miles

apart. The 54 consultation sessions occurred during times when children were napping or engaged in activities that did not require the teacher's presence or after school and averaged 30.35 minutes (SD 9.46 minutes). Between consultation visits, the consultant arranged classroom observations for purposes of observing the teacher using the Second Step skills discussed in the consultation. These observations occurred either "in vivo" or via videotape. Consistent with the collegial, non-hierarchical relationship between the consultant and teachers, the specific classroom interactions to observe were be jointly determined by the teacher and the consultant. The consultant received weekly supervision on consultation cases with her research advisor to ensure fidelity of implementation of the consultation model. Supervision entailed listening to audiotapes of consultation session. The advisor was a licensed psychologist and licensed specialist in school psychology with considerable experience both in teaching and researching school psychological consultation.

Teachers in the control condition had access to the standard consultation provided by the MHI. Specifically, the Mental Health Intern met with teachers using the BVCAA referral process; however, only 3 out of the 7 teacher requested consultation services. The intern provided observations and recommendations to teachers for the problem specified. The interaction between the teacher and consultant was usually brief and unstructured. As an implementation check, a consultation log was kept by both consultants as a comparison between focus and recommended courses of action that occurred within the consultation setting.

Measures

Overview. Detailed breakdown of measures completed before and after intervention for treatment and control conditions can be found in Table 4. It should be noted that the consultation acceptability measure was given to both groups to determine if reflection focused problem solving (RFPS) consultation was viewed as acceptable as the standard model of consultation provided at these centers. The consultation process scales was completed by teachers in both conditions both to establish internal consistency of the measure and to determine if the two models differed in teachers' perceptions of opportunities provided within consultation for reflection on their practices.

Table 4
Assessment Measures by Condition

Treatment condition	Control condition
Measures administered pre-treatment	
Classroom Assessment Scoring System	Classroom Assessment Scoring System
Social Emotional Learning Importance Scale	Social Emotional Learning Importance Scale
Teachers' Sense of Efficacy Scale	Teachers' Sense of Efficacy Scale
Measures administered post- treatment	
All measures administered pre-treatment	All measures administered pre-treatment
Behavior Intervention Rating Scale (BIRS) Acceptability Subscale	Behavior Intervention Rating Scale (BIRS) Acceptability Subscale
Teacher Perception of Consultation Process	Teacher Perception of Consultation Process
Consultant Evaluation Rating Form-Revised	-

Communication, Relationship and Reflection Processes. Components of the Revised Consultant Evaluation Rating Form (CERF) were used to measure the consultant's communication and relationship skills (Table 5) and reflection processes (Table 6) in the context of a problem solving model of consultation. The original CERF (Hughes et al., 2001) consists of items pertaining to each step in the problem solving phases of behavior consultation, as described previously in the section on behavior consultation, in addition to and 14 communication and relationship (C&R) skills (see Table 5 for CERF C&R items) that are relevant to each problem solving phase. For the present study, only the 14 C&R items were included. Each item is rated on a 5-point scale ranging from 1 (*unsatisfactory*) to 5 (*excellent*). The scoring manual provides detailed rules for scoring and examples of consultant behaviors rated as 1, 3, and 5 or no opportunity to observe. A rating of no opportunity to observe is reserved for items that were not relevant to the consultation session (e.g., the item "consultant reflected consultee's affect" is only appropriate if the consultee expressed affect). Hughes et al. (2001) reported inter-rater reliability (α) of CERF C&R items ranging from α= .86-.91 in a study of responsive systems consultation; furthermore; CERF scores were significantly and moderately correlated with experts' global ratings of consultant effectiveness (Hughes et al., 2001).

Table 5
Consultant Evaluation Rating Form (CERF) Communication and Relationship Items

1. Maintains professional yet warm demeanor.
2. Uses precise and appropriate language; avoids jargon.
3. Reflects and validates affect.
4. Allows consultees to "tell their story" without unnecessary interruption or excessive questioning.
5. Uses open-ended and closed-ended questioning appropriately to obtain needed information.
6. Accurately and appropriately paraphrases content.
7. Shares or presents accurate information.
8. Encourages consultees to view the problem in a new light.
9. Acknowledges and accepts consultees' efforts.

The inclusion of communication and relationship items is based on the assumption that the teacher's perception of the consultant as accepting and supportive and trustworthy is a precondition for teacher sharing his/her thoughts, beliefs, and feelings and provides a secure base for the teacher to do the sometimes challenging work of introspection and self-critique.

For the present study, the CERF was revised to include items assessing the consultant's use of reflection-prompting statements (see Table 6). The reflection items are based on the assumption that the opportunity to reflect on one's practices in light of one's goals and principles of effective instruction enhance one's ability to apply principles in everyday teaching, stated differently, when teachers perceive that their actions are consistent with their core values and goals as well as their skills, are appropriate to the context, and are self-chosen, they are likely to implement those actions

in a more effective, flexible, and consistent manner. Additionally, reflection is expected to help teachers process their affective reactions to teaching encounters, leading to increased flexibility and professional functioning.

The focus of this study is the C&R and reflection components of the CERF-R. Therefore, consultation sessions were coded and analyzed for C&R and reflection items (see appendix A for coding manual).

Table 6
Reflection Items for CERF-R

1. The consultant prompts teacher analysis of the situation or problem by asking the teacher to state her goals (e.g., "What did you want to achieve/happen?)
2. The consultant prompts teacher analysis of the situation by asking the teacher to state facilitators or obstacles to achieving the stated goal (e.g., What kept that from happening?)
3. The consultant prompts teacher reflection by asking the teacher to state her thoughts (e.g., what were you thinking? What were you feeling?)
4. The consultant prompts teacher reflection by asking the teacher to focus on the child's thoughts, feelings, and intentions: (e.g., what was the child thinking/feeling? What do you think the child wanted to happen?)
5. The consultant prompts the teacher to attend to cues in the situation that may have contributed to the child's behavior or the teacher's response (e.g., what might have triggered the child's response? What might have made it hard for you to connect in a positive way with the child today?).
6. The consultant prompts the teacher to identify core qualities needed to address the situation in the future. (e.g., What strategies could be used to achieve the desired outcome?)

Teacher Perception of Consultation Process. The *Teacher Perception of Consultation Collaborative and Reflection Process Scale* (TPCRP) scale was developed by the researcher to assess teachers' perceptions of opportunities provided in the consultation for the teacher to reflect on her classroom interactions in light of her goals, beliefs, and emotions as well as the child's perspective and situational facilitators and constraints, including the teacher's knowledge and skills. The scale includes 13 items (Table 7) rated on a Likert- type scale ranging from 1 (*strongly disagree*) to 5 *strongly agree*). For this study, the internal consistency of scores on for TPCRP was .99.

Table 7
Teacher Perception of Consultation Collaborative and Reflection Process Scale

1. The consultant encouraged me to think about my teaching in new ways.
2. The consultant helped me to see children's problems in new ways.
3. As a result of the consultation, I have a better idea of why certain teacher practices are effective.
4. The consultant really understood what was important to me.
5. I believe the consultant understands my goals and teaching beliefs.
6. As a result of the consultation, I am more aware of myself as a teacher.
7. As a result of consultation, I am more aware of my goals as a teacher.
8. The consultant prompted me to share how I thought and felt about my teaching and about children's behaviors
9. Rather than tell me what to do, the consultant helped me think through the situation in light of my goals.
10. The consultant helped me adapt Second Step principles and strategies to my individual classroom situation.
11. The consultant did not "take over" the problem solving.
12. The consultant respected my knowledge and skills.
13. The consultant was interested in my ideas for solving problems.

Behavior Intervention Rating Scale-Acceptability. This 5-item scale assesses teachers' ratings of the acceptability of the consultation delivered. The items are rated on a five point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The 5 items were adapted from the acceptability factor of the Behavior Intervention Rating Scale (BIRS; Elliott & Von Brock Treuting, 1991). These items are a)the consultation model provided was an acceptable way for the consultant to help with this problem; b) most teachers would find the consultation model appropriate for problems similar to this one ; c) I would suggest the use of this consultation model to other teachers; d) I would be willing to use this consultation model again; and e) This consultation model would be appropriate for a variety of children. In the Hughes et al., 2001 study, the internal consistency reliability (α) was 0.92 for teacher consultees. For this study, the internal consistency reliability (α) was 0.99.

Social-Emotional Practices in the Classroom. The Classroom Assessment Scoring System (CLASS; Pianta, La Paro, Hamre, 2008) was used to measure classroom climate with respect to teacher practices and interactions. CLASS is an observational tool that organizes teacher-student interactions into 10 dimensions within three broad domains which are emotional support, classroom organization and instructional support. A description of each domain and the corresponding dimension is provided in Table 8. Each dimension is scored on a 7-point scale that indicates low, medium or high levels.

All BVCAA Head Start Center-based classrooms were observed twice a year by BVCAA staff that was trained according to CLASS standards from the publishers of the CLASS. The researcher was not involved in CLASS observations. The CLASS training

involves a two day workshop, during which observers are trained to objectively observe a classroom on the CLASS dimensions through the use of video clips and group discussion. Once training is complete, observers must complete reliability testing to become a CLASS certified observer. This testing includes observation and coding of 5 videotaped classrooms. The observer must achieve a combined reliability score of .80 of the master code for all videos. Typical CLASS observation cycles occur within 20 minute time frames.

For this study, each classroom was observed for 2 hours within the same day for a total of 4 observation cycles. All observation cycles occurred in October/November for pretest and in April/ May for posttest. The estimated criterion validity for CLASS ranges from .45-.63 for the Early Childhood Environment Rating Scale-Revised Edition (ECERS-R; Pianta et al., 2008). Estimated reliability for trained observers is reported as 87% (Pianta et al., 2008). For this study 3 observers trained to establish inter-rater reliability through the use of cross observation. Specifically, after their third CLASS observation, each observer observed and coded at least 1 classroom of another observer at the same time on the same day. This ensured that all observers met the reliability criteria to be certified as CLASS observers. The average inter-rater reliability for the pairs of CLASS observers in this study was 90%.

Table 8
CLASS Dimensions

Domain/ Dimensions		Descriptions
Emotional Support	Positive Climate	Emotional connection and respect demonstrated between teachers and students
	Negative Climate	Expressed negativity such as anger, aggression demonstrated by teachers or students
	Teacher Sensitivity	Awareness of academic and emotional concerns of students
	Regard for student perspectives	Interactions with student place emphasis on students' interests and points of view
Classroom Management	Behavior Management	How a teacher prevents, monitors or redirects student behavior
	Productivity	The teacher's organization and routine of the classroom.
	Instructional Learning Formats	The teacher's use of materials to engage students in activities.
Instructional Support	Concept Development	Use of activities to promote higher order thinking
	Quality of feedback	How teacher responds to students work to increase their learning
	Language Modeling	How teachers encourage students' language

Teachers' Perception of Social Emotional Skills. The Social Emotional Learning Scale was adapted from a dissertation study on teacher knowledge and perceptions of social and emotional learning, which measures teacher's views on social

emotional learning practices (Douglass, 2011). The original scale included 18 items. Based on an exploratory factor analysis by Douglas, with a sample of 325 elementary and pre-service teachers, three factors were extracted: perceptions of importance, preparedness, and implementation of social-emotional learning. The internal consistency reliabilities of scale scores ranged from 0.60 to 0.83. A total of eight items were selected from for the current study based on their relevance to the RFPS consultation model (see Table 9). Specifically, 4 items were selected from perceptions of importance, 2 items selected from preparedness and 2 items from implementation. Some items were re-worded to fit teachers working with preschool-age children. For example, item 3 was changed from "I feel prepared to integrate SEL in reading instruction" to "I feel prepared to integrate SEL in my early literacy instruction." The items are rated on a four point Likert scale ranging from *strongly agree* to *strongly disagree*. The internal consistency reliability of scores on the 8 items for Time 1 and Time 2 were 0.60 and 0.58, respectively. Given the low internal consistency of scores, inter-item correlations were examined to improve internal consistency; however, deleting items with low correlations did not improve internal consistency. Therefore, no further analyses were conducted with this scale.

Table 9
Social Emotional Learning Scale

1. Social emotional learning (SEL) is important.
2. SEL is as important as academic learning.
3. I feel prepared to integrate SEL in my early literacy instruction.
4. SEL contributes to early literacy achievement.
5. SEL should be integrated into daily classroom instruction.
6. I received instruction on SEL in at least one of my pre-service courses.
7. I feel teachers are responsible for teaching children about SEL.
8. I believe academic achievement is highly linked to SEL.

Teachers' Sense of Efficacy- Quick Form. The Teachers' Sense of Efficacy Scale- Quick Form (TSES-Q; Tschannen-Moran, Woolfolk-Hoy (1998, 2001) consists of 12 items that measure self-efficacy on three subscales: a) efficacy in student engagement, b) efficacy in instructional practices, and c) efficacy in classroom management (See Appendix B). The items are rated on a 9-point Likert-type scale ranging from 1 (*nothing/no influence*) to 9 (*a great deal influence*). Tschannen-Moran & Woolfolk-Hoy (2001) reported internal consistency of scores on the TSES Quick Form as 0.92. For this study, the reported internal consistency of scores on the TSES Quick Form for pretest was 0.93 and 0.94 for posttest.

Consultation Log. The consultation log was created by the researcher for each consultant to keep record of the frequency and focus of consultation sessions (see Appendix C for log).

CHAPTER IV

RESULTS

Evidence of Treatment Implementation

Before presenting results, data are presented on the implementation of the RFPS consultation and standard consultation conditions, based on the consultation logs consultants in each condition completed. Specifically, the consultation logs were compared to determine the differences in the consultation received from each group. The BVCAA MHI consultant from the control condition met with 3 of the 7 teachers in the control (i.e., standard) consultation condition. According to the log, MHI consultant completed 2 classroom observations for each of the three teachers. The MHI consultant provided teachers with basic interventions or recommendations for addressing problem behaviors of the child referred but did not follow-up with teachers after implementation. The MHI consultation differed from RFPS Consultation, in which the RFPS consultation observed teachers at least 3 times and provided bi-weekly follow-up with teachers.

Research Question 1: Inter-coder Agreement and Internal Consistency of Communication and Relationship and Reflection Scales

It was expected that coders would achieve 80% agreement (exact) and 95% (within one) on the reflection and communication and relationship scales and that the internal consistency of scores on the C&R items and the Reflection items would be adequate (i.e., .70 or higher).

Inter-coder Agreement. A total of 54 (i.e., 9 teachers X 6 sessions) audiotapes of consultation sessions were transcribed. Based on the researcher's knowledge on the progression of consultation as well as review of practice sessions, it was determined that problem identification/analysis typically occurred in sessions 1 and 2; plan implementation occurred in sessions 3 and 4; and plan evaluation occurred in sessions 5 and 6. Thus, a random sample of 3 tapes per teacher were selected to represent each phase of RFPS consultation as described above (i.e. one tape from sessions 1 or 2; one tape from sessions 3 or 4, and one tape from sessions 5 or 6), for a total of 27 tapes. Each tape was coded by two trained coders for purposes of establishing inter-coder reliability (i.e., percent agreement). The coders received 12 hours of training on the Revised Consultant Evaluation Rating Form (CERF-R) manual which included coding practice sessions, computing percent agreement and determining criterion for inter-coder reliability. Twenty-seven sessions were coded in 5 sets (5-6 audiotapes per set) in which two coders independently coded each session on the Reflection and Communication and Relationship scales (based on the CERF-R manual).

Percent agreement was computed for each set, and coders discussed differences to gain 100% consensus before moving to the next set. Overall percent agreement for coders was found to be 69.4% (exact) and 93.5% (within one scale point on a 1-5 point scale).

Reliability of C&R and Reflection Items. The internal consistency reliability of Communication and Relationship (C&R) and the Reflection items were computed for each of the 3 phases of consultation (i.e. problem identification/analysis;

implementation, and evaluation). The internal consistency for scores on the C&R Scale and the Reflection Scale for Phase 1 were .57 and .74 respectively. The internal consistencies of scores in phase 2 were .28 C&R and .70 for Reflection. In Phase 3, the internal consistency of scores was .66 and .83 for C&R and Reflection respectively. The averaged internal consistency of scores on the Communication and Relationship (C&R) Scale on the CERF across the 3 sessions were 0.50 and the internal consistency of scores on the Reflection Scale was 0.75. Descriptive statistics for the items are listed in Table 10. Given the low internal consistency of scores on C&R Scale, no additional analyses were conducted on the C&R scale.

Table 10
Descriptive Statistics of CERF-R

		M Item Score	Std. Deviation
Reflection Scale	Reflection Item 1	2.30	.92
	Reflection Item 2	2.30	1.02
	Reflection Item 3	3.19	.50
	Reflection Item 4	3.28	.91
	Reflection Item 5	2.26	1.02
	Reflection Item 6	3.78	1.24
Communication and Relationship Scale	C& R Item 1	5.00	.00
	C&R Item 2	4.63	.42
	C&R Item 3	4.57	.32
	C&R Item 4	4.48	.24
	C&R Item 5	4.81	.24
	C&R Item 6	3.79	.60
	C&R Item 7	4.48	.44
	C&R Item 8	4.10	.32
	C&R Item 9	4.44	.69

Research Question 2: Are scores on the Reflection Scale of the CERF Significantly Correlated with Scores on a Measure of Teacher Perceptions of Collaborative and Reflective Consultation Processes (i.e., the TPCRP Scale) and Teachers' Perceptions of the Acceptability of Consultation (i.e., the BIRS)?

Bivariate correlation analysis was conducted to determine the correlation between the scores on CERF-R Reflection Scale and scores on both the TPCRP and the BIRS. There was no significant correlation between scores on CERF-R Reflection Scale and the scores on TPCRP (r=.30). Nor was there a significant correlation between scores on CERF-R Reflection Scale and the scores on BIRS (r=.28). It should be noted that the correlations between the scores of the CERF-R Reflection with the scores on BIRS-Acceptability and TPCRP are in the moderate range. With a larger sample size, one would expect the association would be statistically significant.

Research Question 3: Is RFPS an acceptable form of assistance to HS teachers?

Hypothesis. We expected teachers receiving RFPS consultation would report that RFPS it was an acceptable form of professional development and that ratings of acceptability would be as high or higher than those of teachers in the control condition.

BIRS Acceptability Rating Scale. Given the small sample size, tests of significance were not appropriate to calculate difference among treatment and control conditions; therefore, the means and standard deviations are presented for each group separately. Scores between teachers in the treatment condition (M= 4.77; SD= .40) and

teachers in control condition (M= 4.80; SD=.35) were similar. Both groups receiving consultation rated it as highly acceptable.

Research Question 4: Do Teachers Receiving RFPS Consultation Report More Improvement from Time 1 to Time 2 on Observed Social-Emotional Practices and Teacher-Reported Self-efficacy Than Teachers in the Control Condition?

It was hypothesized that teachers who received RFPS consultation relative to teachers assigned to standard consultation condition, would exhibit (a) improved classroom social-emotional practices above scores at baseline, as rated by the Classroom Assessment Scoring System (CLASS) and (b) increased self-efficacy for implementing social emotional practices.

Tables 11 and 12 present descriptive statistics for each outcome at pretest and posttest for each condition and for the combined sample to compare scores for treatment and control groups on the outcome variables. Scores on each outcome at pretest and posttest were transformed to *z* scores, based on the total sample. Figures 1-4 present graphical representation of *z* scores between treatment and control on outcomes variables. The following descriptive rubric was applied for descriptive information of *z* scores: *z* scores within 1 standard deviation of change were classified as minimal; z scores within 1 to 2 SD of change were classified as moderate change and *z* scores of 2 SD or more were considered a large change.

Social-Emotional Practices in the Classroom. Table 11 provides the means and standard deviations for CLASS Domain at Time 1 and Time 2.

Table 11
Mean (M_x) and Standard Deviation (SD) of CLASS Domains

		Emotional Support		Classroom Organization		Instructional Support	
		Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Total	M_x	5.28	5.78	4.83	5.20	2.00	2.16
Sample	SD	1.54	.83	1.51	0.91	0.83	.83
Treatment	M_x	5.47	5.41	5.00	4.81	2.30	2.19
Condition	SD	.59	.81	.58	.71	.72	.89
Control	M_x	5.03	6.25	4.62	5.71	1.62	2.14
Condition	SD	2.32	.65	2.27	.95	.87	.83

Figures 1-3 provide graphical representation of CLASS Domain *z* scores by treatment group (z scores were calculated using descriptive of total sample). Figure 1 suggest that a majority of teachers in both conditions showed minimal changes from Time 1 to Time 2 on the Emotional Support. Four teachers showed moderate changes. Specifically, teachers #5, # 7 and # 9 in the treatment condition displayed a moderate decline whereas teacher #11 (control) showed a moderate increase. Two teachers had large changes on emotional support. Specifically, Teacher #2 in the treatment condition showed a large decline and Teacher # 12 in the control condition showed a large improvement. For Classroom Organization (Figure 2), a majority of teachers showed minimal changes from Time 1 to Time 2. Only two teachers' z scores were categorized as moderate change. Teacher # 3 (treatment) showed a moderate decline. Again, teacher #2 (treatment) declined. Additionally, teacher #12 (control) had a large improvement.

Figure 3 indicates that teachers from both condition showed a somewhat more mixed pattern of change from Time 1 to Time 2 on the instructional support domain than on the other two CLASS scales. In the Treatment condition, teacher #2 again showed a moderate decline. In the Control condition, teacher #12 again showed an improvement; however, it was moderate.

Figure 1 CLASS Emotional Support z Scores

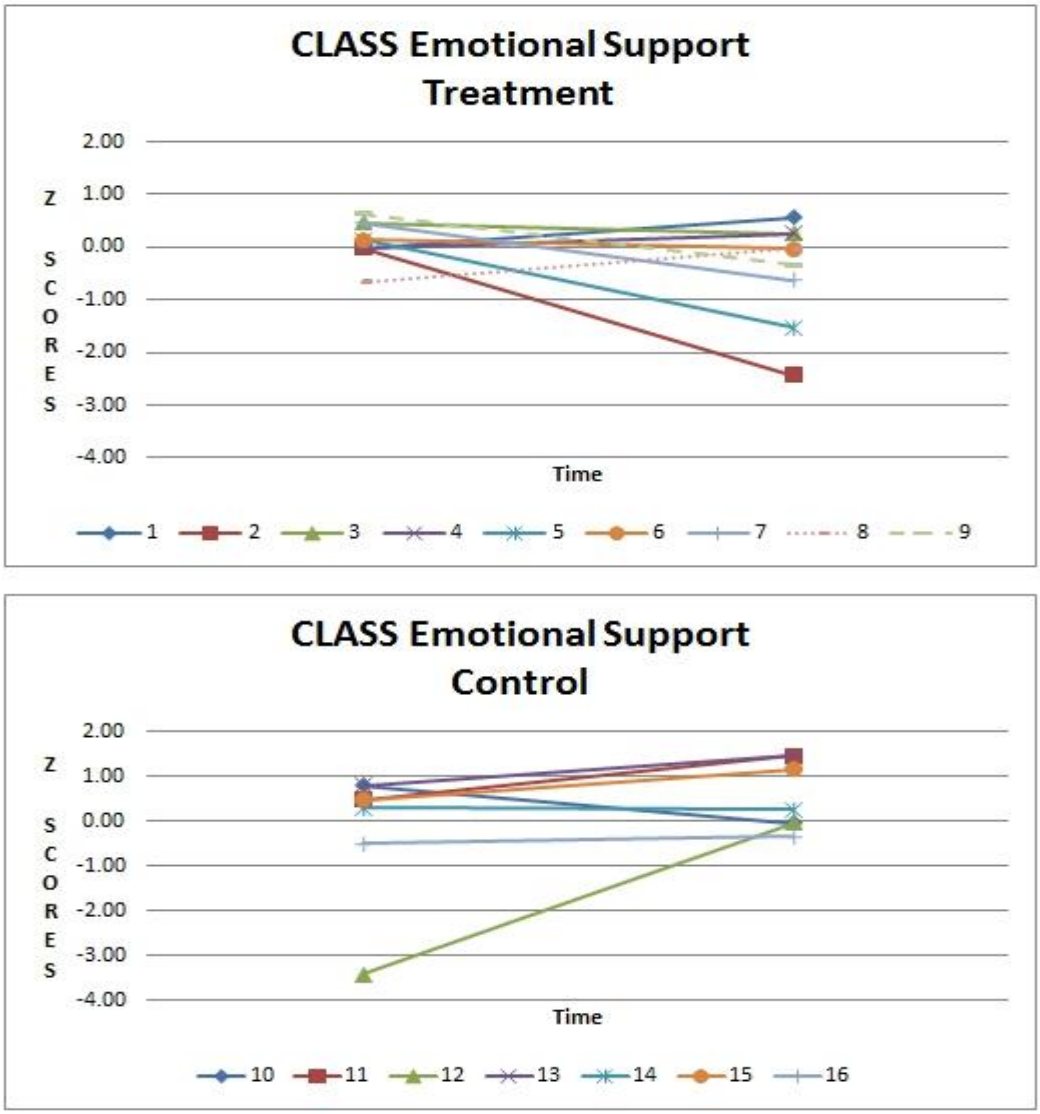
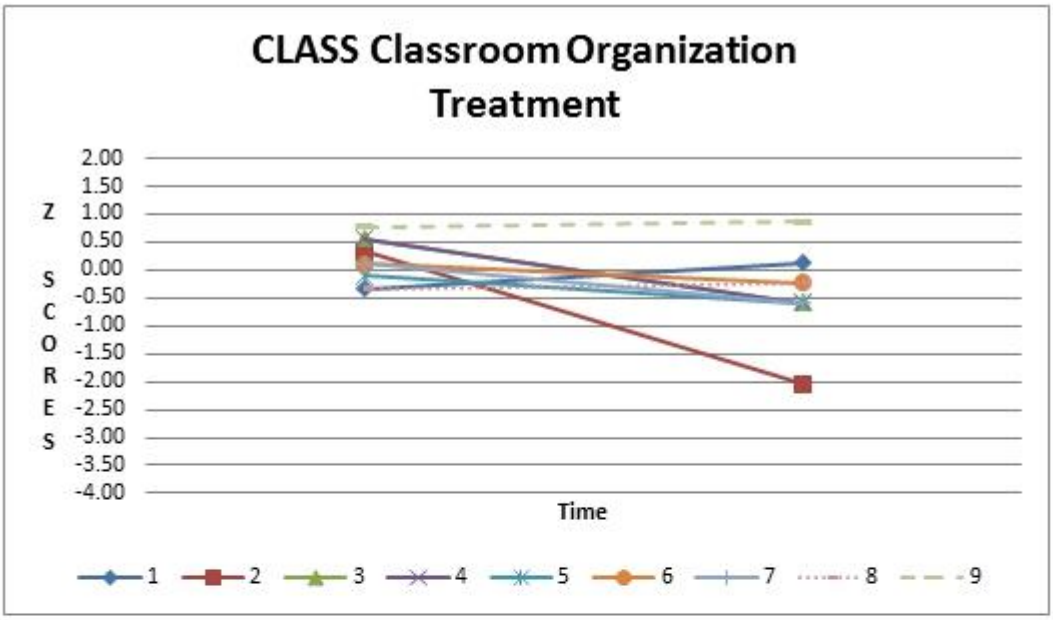


Figure 2 CLASS Classroom Organization z Scores



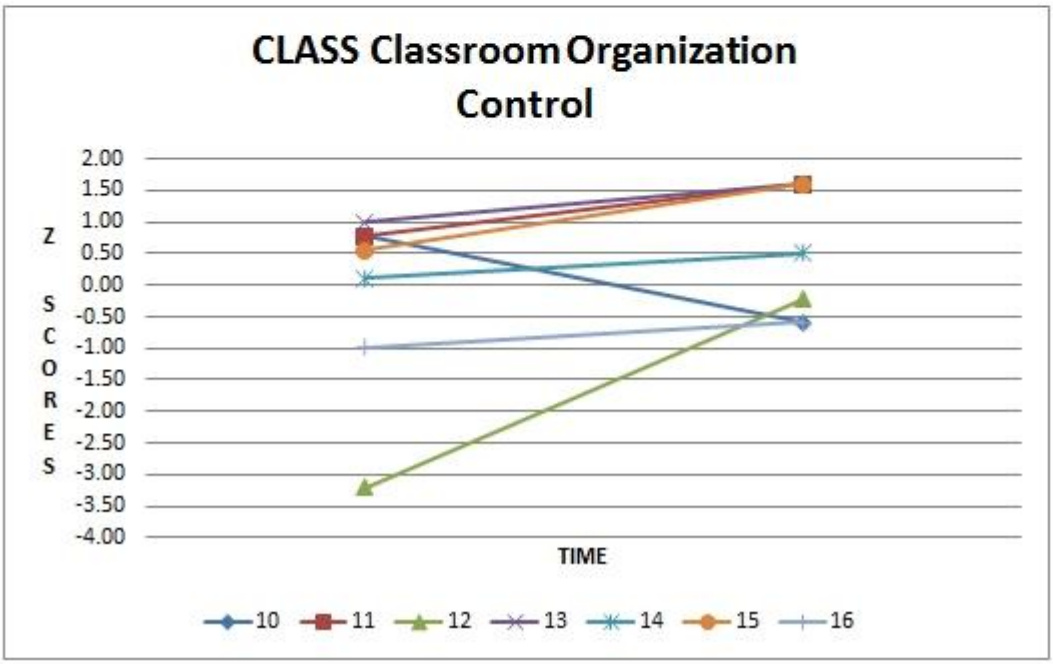
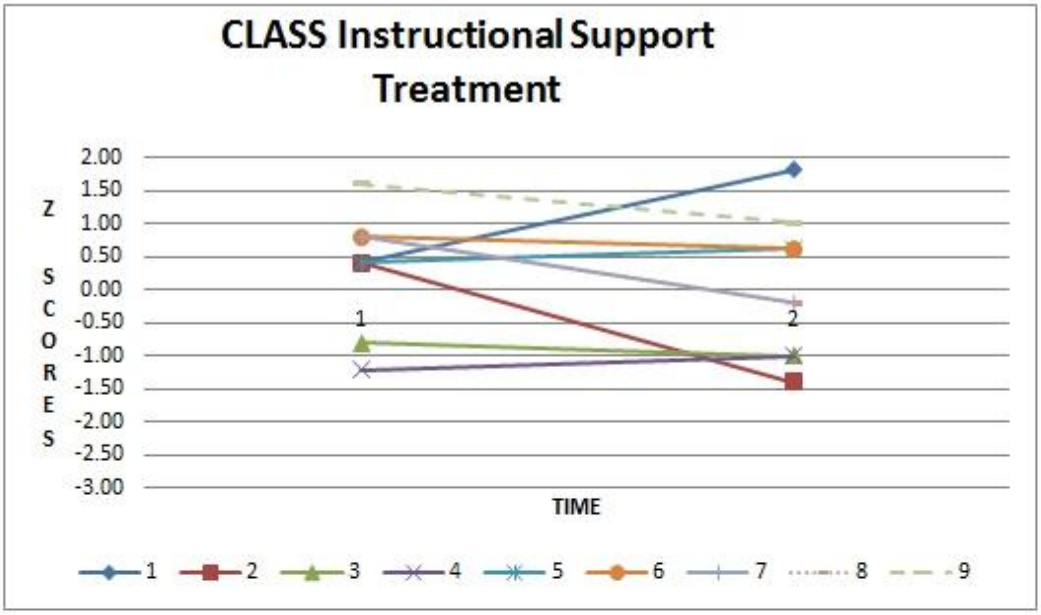
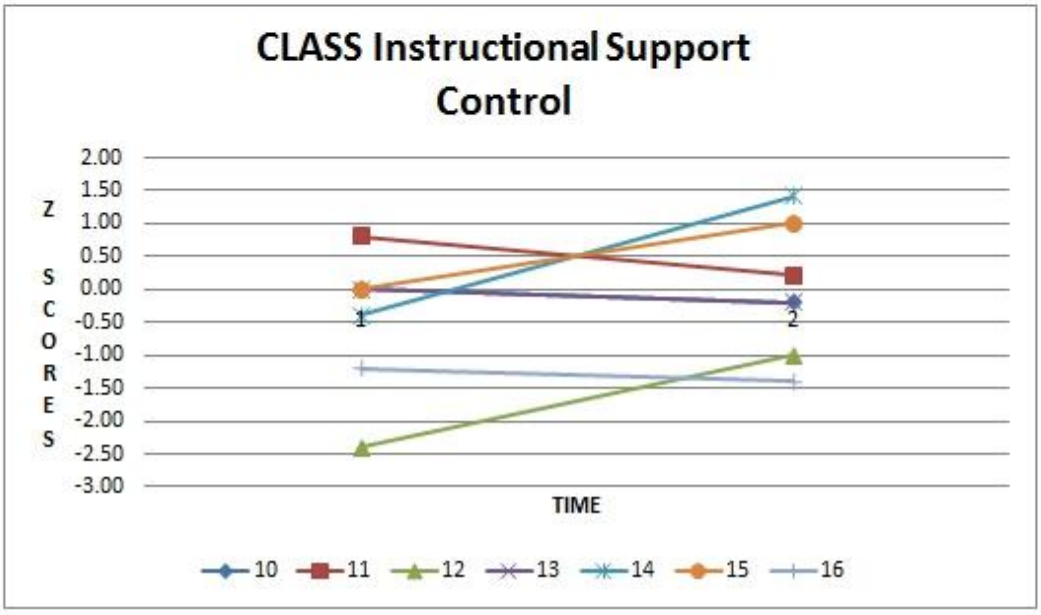


Figure 3 Class Instructional Support z Scores





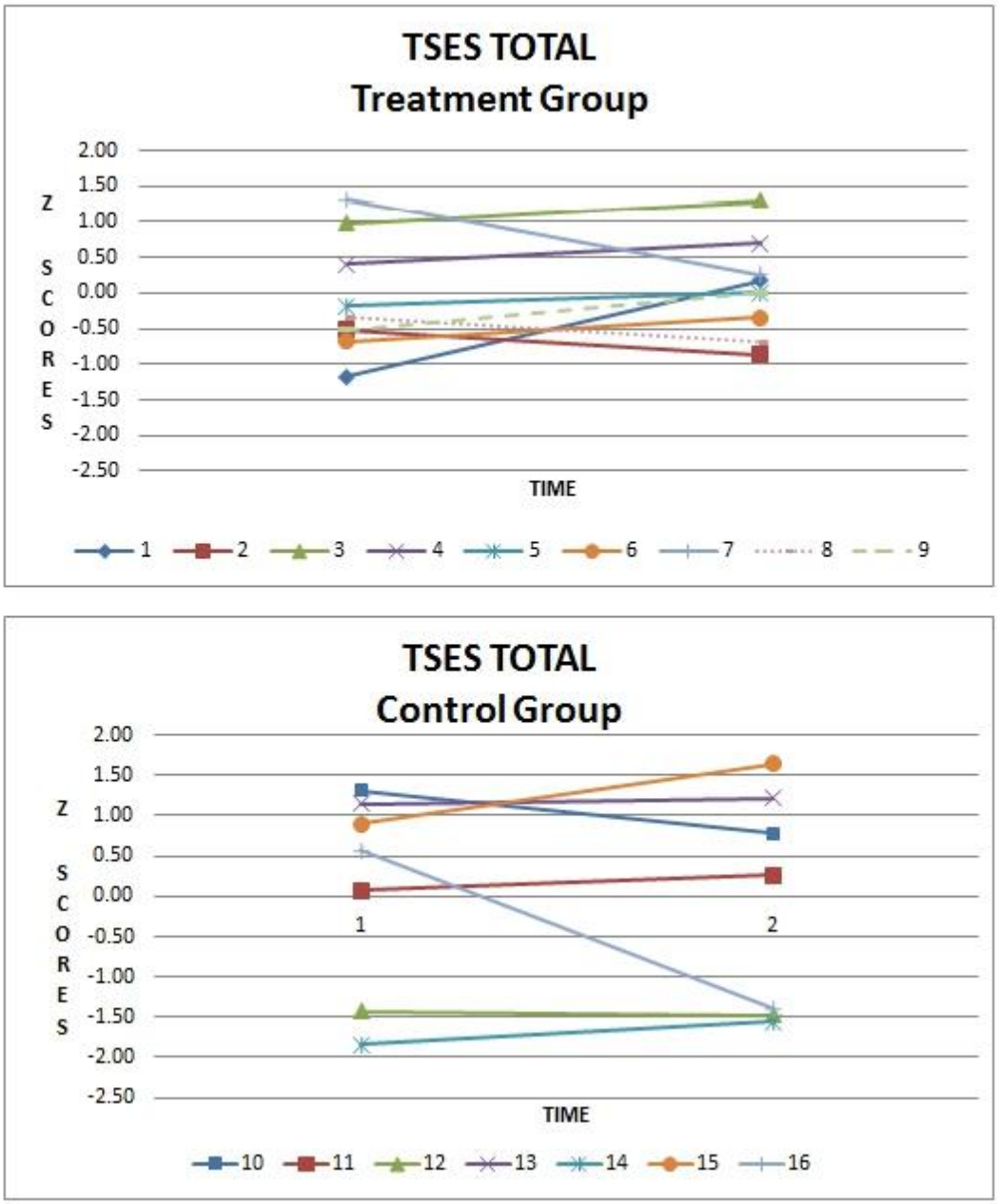
Teacher's Sense of Self Efficacy. Table 12 provides the sample means and standard deviation used to calculate *z* scores on each domain of the Teacher's Sense of

Efficacy Scale (TSES). Figures 4 provide graphical representation of TSES Domain *z* scores by treatment group. Figure 4 suggest that a majority of teachers in both conditions showed minimal from Time 1 to Time 2 on the TSES Total. However, four teachers showed moderate change. Specifically, teacher # 1 (treatment) and teacher # 15 (control) showed moderate increases from Time 1 to Time 2; whereas teacher #7 (treatment) and teacher # 16 (Control) displayed moderate to large decline.

Table 12
Mean (Mx) and Standard Deviation (SD) of TSES TOTAL

		Time 1	Time 2
Total Sample	M_x	88.19	89.00
	SD	12.03	11.54
Treatment	M_x	87.22	89.67
Condition	SD	9.82	7.73
Control	M_x	89.43	88.14
Condition	SD	15.17	15.86

Figure 4 TSES Total z Scores



CHAPTER V

CONCLUSIONS

The present study provides preliminary data regarding the psychometric properties of an observational measure of consultant provision of opportunities for teacher reflection in a reflection-focused problem solving (RFPS) model of consultation and to provide and preliminary evidence of the acceptability and effectiveness of RFPS consultation. RFPS was provided within the context of a social emotional curriculum, Second Steps. Unlike other consultation models, RFPS consultation was designed specifically to provide teachers with the opportunity to reflect on their teaching practices and build upon their autonomous motivation. Unfortunately, a high attrition rate for teachers in both conditions reduced the sample size considerably. Consequently, statistical comparisons across the treatment and control group were not appropriate and only descriptive data were analyzed for questions concerning the effectiveness of RPPS consultation, relative to standard consultation.

Reliability of RFPS Consultation

Although items on both the Communication and Relationship (C&R) Scale and the Reflection Scale of the Consultant Evaluation Rating Form (CERF-R) demonstrated adequate inter-coder agreement (based on scores within 1 point on a 5 point scale), items on the C&R Scale did not yield acceptable internal consistency (mean alpha =.50 across the three sessions); consequently, further analysis of the C&R scale was not appropriate. Internal consistency for reflection (.75) was minimally acceptable.

The low internal consistency for C&R items, relative to that reported in Hughes et al., (2001; α= .95), is difficult to explain. One possible explanation is that the consultation in the Hughes et al. study followed a more structured problem solving approach with elementary school teachers, and the consultants in that study had taken a 45-hour course specifically in a problem-solving model of consultation. In that course, they had more opportunities to observe the C&R skills and to practice consultation and to receive feedback on their C&R skills. In contrast, the consultant in the current study had taken a 45 hour course on a consultation model but did not receive training in that course on the specific C&R items on the CERF. Her training on these items consisted of a 3 hour overview of the CERF coding manual which included problem solving and C&R items. Additional training hours were devoted to defining and establishing the new reflection items. Thus, consultants in Hughes et al, (2001) may have more consistently employed the C&R skills than did the consultant in the present study.

Validity of RFPS Reflection Process Scale

Contrary to expectations, scores on the Reflection scale of the CERF were not significantly correlated with scores on the teacher perception of consultation collaborative and reflection processes (TPCRP) or with scores on the on the teacher-report measure of acceptability (i.e., the Behavior Intervention Rating Scale, BIRS). These correlations, however, are in the moderate range and provide preliminary evidence of the validity of the CERF-R Reflection. Replication with a larger sample size in future studies is needed. Although teachers' scores on TPCRP did not correlate with CERF Reflection scores, overall teachers perceived that consultation was collaborative and

reflective. Specifically, teachers perceived that the consultant prompted for thoughts and feelings, provided reframing of problems and contributed to their professional self-awareness. These findings provided support that reflection processes did occur within the RFPS Consultation. The failure to find a significant correlation may be due to consistency in the degree to which the consultation provided opportunities for the consultant to promote reflection across different teachers.

Teachers in both conditions reported similarly high acceptability of the consultation. One possible explanation for the similarity in acceptability ratings could be that teachers in the control condition had a choice in initiation of standard consultation process (i.e. referral based), whereas teachers in the RFPS consultation condition did not have a choice to participate in consultation or not; they only had choice in the content of consultation. Thus, one interpretation of the finding of similar acceptability may be that the RFPS consultation, when required, is still viewed as highly acceptable.

Changes in Teacher Outcomes

Teacher Report of Importance of Social Emotional Learning. Due to the lack of internal consistency of scores for the teacher report of importance of Social Emotional Learning Scale, it was not possible to evaluate the effect of RFPS consultation on changes in teachers' attitudes toward social emotional learning. It is not clear why this measure had poor internal consistency, as it had demonstrated adequate internal consistency in a prior dissertation (Douglas, 2011). Possible explanations include the much smaller sample in the current study, relative to the Douglas study as well as differences in characteristics of the teachers in the two studies; the Douglas study

involved elementary school teachers whereas the current study involved Head Start teachers. Also, the current study used an abbreviated version of the measure used by Douglas.

Classroom Practices. Although a majority of teachers displayed minimal to moderate changes from pre-test to post-test in their CLASS Domain scores, three teachers repeatedly showed moderate to large increases or decreases in scores from Time 1 to Time 2. Specifically, in the emotional support domains, two teachers (both in the treatment condition) showed a large decrease in emotional support and one teacher (control condition) exhibited a large increase. In Classroom Organization, two teachers (one from each condition) showed a large decrease in from Time 1 to Time 2. Teacher #2 in treatment condition showed a large decline across all CLASS domains. One teacher (control condition) displayed large improvements across domains.

Review of patterns from Figures 1-3 revealed similarities between Teacher 2 and 5 (both in treatment condition). Both teachers demonstrated a decreased score in emotional support domain. According to their demographic data, teachers 2 and 5 were novice teachers from the same Head Start center who experienced increased work related stress and perceived a lack of support from administration staff throughout the school year. In RFPS Consultation sessions, both teachers 2 and 5 reported having multiple children with problem behaviors as well as one child with a diagnosed disability (i.e. Autism (Teacher 2) or ADHD (Teacher 5). They expressed frustration with the lack of assistance they received from administrative staff in the Independent School District (ISD) regarding their child with special needs. Particularly, The ISD case manager

promised to provide each teacher with instructions and materials to implement within their Head Start classroom based on the child's individualized education plan. According to both teachers, three to four months had passed from the time of the Admission, Review and Dismissal meeting and the actual visit from the case manager. At the time of her visit, there were only 6-8 weeks of school remaining. In consultation session 4, Teacher 2 stated her frustration as such:

> "Yes she wants me to do a picture schedule... But when I actually stop and think about it kind of makes me angry. I'm one teacher and like there's enough other things I'm doing... I can't… this is how I feel. I feel like I can't every 2 minutes stop and do that… And it's also like really at this point in the year try to implement this... with 2 months of school left. I don't understand why I need to do a picture schedule with him when he's been here the whole year and he's fine on transitioning with our schedule."

Although both teacher 2 and teacher 5 experienced frustration and anger, their differences in outlook could be attributed to sense of support and control. Towards the end of the school year, teacher 5 reported, "we [assistant teacher and I] want to do it as we want to end really strongly… Yea they're getting older; they're getting defiant and getting independent. Instead of defy it, we want to embrace that and just end really strong [as opposed to counting down the weeks]." Based on her statement, teacher 5 displayed a sense of control and confidence in the classroom. She noted that instead of counting down the days to the last day of school and "getting through it," she and her assistance wanted to enjoy the last days of school and use their students' independence as strength. Teacher 2 displayed contrasting beliefs on her teaching practices. In the final consultation session with Teacher 2, she shared, "get[ting] some feedback on

what's going, what I'm thinking... that's been very helpful… As far as recommendations I don't want to say resolved but helped me make some progress in that situation." It should be noted that Teacher 2 exhibited a decrease in scores from Time 1 to Time 2 on classroom management and instructional support domains as well. Therefore, it can be inferred that Teacher 2 experienced high levels of stress and frustration in which RFPS Consultation may have reduced classroom concerns; however, it did not eradicate classroom stressors. The changes in teachers 2, 5 are consistent with outcomes from a study by Li Grining and colleagues. These researchers found that teachers experiencing high amount of psychosocial stressors have lower scores on behavior management as observed by the CLASS (Li Grining, Raver, Champion, Sardin, Metzger & Jones, 2010). Teachers with low levels of job support (i.e. resources) and less job control experience higher levels of work related stress (Green, Malsch, Kothari, Busse and Brennan, 2012; Li Grining, Raver, Champion, Sardin, Metzger & Jones, 2010). Additionally, teachers experiencing higher levels of work related stress also exhibit decrease confidence in classroom management and control.

In the control condition, teacher #12 showed moderate to large improvements from Time 1 to Time 2 across all CLASS Domains. According to referral log, Teacher # 12 (a more experienced teacher) initiated standard consultation via referral system and had concerns regarding a particular child who cried excessively. As noted previously, mental consultant conducted 2 classroom observations and provided recommendations. These positive changes in teacher # 12 could be attributed to findings regarding referral decisions, level of control and self-efficacy. Teachers who request consultation services

are generally confident in their teaching skills (i.e. self-efficacy), are actively involved in the problem solving process and have sense of perceived control for problem situation in comparison to teachers who request referral services for specialists only (Gutkin & Ajchenbaum, 1984; Hughes, Barker, Kemenoff and Hart, 1993). In addition to teacher # 12, teacher # 1 (treatment) and # 14 (control), also showed large improvements from Time 1 to Time 2 on the instructional support domain. It should be noted that in both classrooms, teachers were preparing students for transition into ISD preschool or kindergarten; which required them to ensure students met ISD academic requirements. Although ISD requirements could denote more stress for teachers, in completing such requirements, these teachers taught beyond Head Start requirements to increase student learning, especially related to pre-literacy skills.

In summary, the variation in patterns of change may be due in large part to circumstances unrelated to the consultation received. With larger samples, future researchers may examine the potential moderating role of teacher stress, level of problem behavior in the classroom, and other variables that may affect teacher behavior in the classroom (Cappella, et al., 2012; Heller et al., 2012; Mashburn et al., 2008; Raver et al., 2011).

Self-Efficacy. Challenges to teacher professional development involve activating and maintaining changes in efficacy beliefs among teachers (Ross 1992). According to Figure 4 for Teacher's Sense of Efficacy Scale (TSES) domains, a majority of teachers exhibited minimal changes in their overall self-efficacy from Time 1 to Time 2. Teacher #7 (treatment) and teacher # 16 (control) showed a moderate decrease in overall teaching

self-efficacy. Possible explanations for these changes could be stress and lack of support. For example, teacher # 7 exhibited a moderate decrease in TSES which could be attributed to the death of her father towards the end of the school year. According to consultation sessions, her father encouraged her to complete student teaching and pursue a position within early childhood. Therefore, in addition to dealing with personal loss and bereavement, his death may have resulted in the decrease in emotional support and classroom organization domains as noted by the CLASS as well.

Teacher # 1 (treatment) displayed moderate improvements from Time 1 to Time 2. Interestingly, teacher 1 was a 2nd year teacher for Head Start, and had verbalized her professional growth from year 1 to year 2 as well as from the beginning of school year to the middle/ end of the school year. Per a consultation session, teacher # 1 replied to question regarding implementation of an intervention.

> "I felt like we were much more organized. I felt like I could actually look around the classroom and I could say I saw [name of child] in the home center. [It is] awesome because I usually I don't know what they learned today and going home with that feeling it's awful. . It sucks that it kind of took us this long but I'm glad we finally got there. "

Although a majority of teachers were categorized in minimal level based on descriptive criteria, it appears as if novice teachers (i.e. 3 years or less experience) showed greater changes than more experienced teachers. This finding is consistent with studies reporting larger changes in self-efficacy for less experienced teachers (Hoy & Woolfolk, 1993).

Limitations

Findings from the current study need to be interpreted in the context of multiple methodological limitations. Perhaps the largest limitation of the study is the small sample size, which prevented the use of inferential statistics. A second limitation is the limited training in the CERF, which may have contributed to the somewhat low internal consistency, especially for the C&R items. Additionally, the consultant in the present study had more limited training in the specific C&R items measured in this study, relative to consultants in the one published study utilizing the CERF C&R scale (Hughes et al., 2001). Thus, the consultant may have used these skills with less consistency than consultants in Hughes et al., (2001) study. The low internal consistency for the C&R scale prevented the analysis of the role of these skills on teachers' perceptions of the consultation process and its acceptability. Furthermore, the consultant's training in RFPS consultation may have been insufficient in length and intensity. For example, the consultant did not have the opportunity to receive feedback on the CERF-R based on multiple consultation sessions across multiple teachers, prior to beginning consultation. This shortcoming may have limited the consultant's effectiveness, especially at the beginning of the study.

Future Implications and Research

This study provides a foundation for future studies on reflection-focused problem solving (RFPS) consultation. Scores on the CERF Reflection scale demonstrated adequate inter-coder agreement and internal consistency. Additionally, RFPS consultation was found to be highly acceptability to teachers. Future studies on RFPS

consultation should address limitations from this study. Specifically, consultants should receive more intensive training in RFPS consultation, including a requirement to meet criterion performance on the CERF-R prior to beginning consultation. With a larger sample, studies should investigate potential moderating effects of treatment outcomes.

Based on the author's experience with the teachers in the treatment group and the qualitative analysis of outcomes of the CERF-R and self-efficacy, it is recommended that future studies investigate role of teacher variables such as years of experience as well as potential center-level (or school level) variables on the efficacy of RFPS consultation. Additionally, the current study suggests that teacher stress and perceived lack of administrative support may reduce teachers' ability to benefit from consultation. Both teacher stress and center-level administrative support may moderate the effects of RFPS consultation. Multi-level designs that account for center-level factors are needed to gain a better understanding of which aspects of the context in which consultation is provided are related to consultation outcomes. This study also presents the issue of whether a minimum level of administrative support or stability is necessary for an individual-focused intervention such as RFPS consultation to be effective.

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APPENDIX A

EXAMPLES OF CODING MANUAL FROM CERF

R.6 CONSULTANT PROMPTS THE TEACHER TO IDENTIFY CORE SKILLS OR TOOLS NEEDED TO ADDRESS THE SITUATION.

Critical Reflection of practices requires understanding and acknowledging skills needed to achieve desired situational outcome. Teachers are encouraged to recall knowledge and skills from previous work/ educational experiences that may apply to the current situation or to identify skills or knowledge that she needs to acquire to respond more effectively.

Excellent (5): Consultant prompts teacher to think about the knowledge and skills needed to change the situation to desired outcome based on their experiences and available resources. Consultant uses information from relevant observations and previous consultation sessions to guide teachers thought processes on necessary skills. Consultant connects core skills to the goals of the teacher. Most or all appropriate opportunities for identification of core skills are met.

Satisfactory (3): Consultant asks teacher to think about the knowledge and skills needed to change the situation to desired outcome based on their experiences and available resources. Consultant uses information from relevant observations and previous consultation sessions to guide teachers thought processes on necessary skills. However, consultant does not connect core skills to long term and short goals of the teacher. Some appropriate opportunities are met and some opportunities are missed.

Weak (1): No opportunities are met. Consultant fails to ask about core skills in a situation.

C&R. 4 CONSULTANT ALLOWS CONSULTEE(S) TO "TELL THEIR STORY" WITHOUT UNNECESSARY INTERRUPTION OR EXCESSIVE QUESTIONS.

The focus of this item is on assessing to what extent the consultant allows the consultee(s) to relate their concerns and perceptions of the problem in their OWN STYLE (i.e., language, sequence, pace, etc.). Repeated interruptions or excessive questions that break the flow of what the consultee(s) are saying may result in a DECREASED UNDERSTANDING of the presented concerns from the consultee(s') point of view. Further, such interruptions may result in LESS INFORMATION being offered by the consultee(s) beyond what is asked for and thus creates a less-

than-collaborative relationship from which to approach problem-solving. It is not the intent of this item to imply that offering no directive comments is the optimum. In fact, at times consultee(s) may NEED INTERRUPTING or direction especially when ideas are being repeated without progress towards problem formulation and/or the content of what is being said is leading the interview away from its purpose.

EXCELLENT: NO interruptions are observed, or any interruption(s) that do occur are judged to be WARRANTED in terms of moving the session forward, maintaining a balance between consultee(s) or bringing the interview back on track.

SATISFACTORY: USE AND NONUSE of interruption(s) are judged appropriate and do not seriously jeopardize gathering data, establishing rapport, and/or collaboration.

WEAK: SEVERAL interruptions are observed and are judged to be UNWARRANTED and jeopardize rapport, data collection and/or collaboration. OR, interruptions were NECESSARY but were UNUSED.

APPENDIX B

TEACHERS' SENSE OF EFFICACY SCALE- SHORT FORM BY TSCHANNEN-MORAN & WOOLFOLK-HOY, 2001

Please answer each question according to the following rating scale:

1(*nothing*) to 3 (*very little*) to 5 (*some influence*) to 7 (*quite a bit*) to 9 (*a great deal*)

1. How much can you do to control disruptive behavior in the classroom?	1	2	3	4	5	6	7	8	9
2. How much can you do to motivate students who show low interest in school work?	1	2	3	4	5	6	7	8	9
3. How much can you do to get students to believe they can do well in schoolwork?	1	2	3	4	5	6	7	8	9
4. How much can you do to help your students' value learning?	1	2	3	4	5	6	7	8	9
5. To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
6. How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	7	8	9
7. How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
8. How well can you establish a classroom management system with each group of students?	1	2	3	4	5	6	7	8	9
9. How much can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
10. To what extent can you provide an alternative explanation or example when students are confused?	1	2	3	4	5	6	7	8	9
11. How much can you assist families in helping their children do well in school?	1	2	3	4	5	6	7	8	9
12. How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9

APPENDIX C

CONSULTATION LOG

Date	Time	Teacher Code	Consultation Focus			Consultation Content					Recommended Approach to Problem
			WC	C	T	CP	LP	SP	LS	OP	

Focus: WC=whole classroom; C=child problem; T= teacher functioning
Content: CP= conduct problem; learning problem; social problem; learning skills , OP= other problem