

PRESCHOOL TEACHERS' BELIEFS ABOUT
CLASSROOM PRACTICES AND HOW
PRESCHOOL STUDENTS LEARN

by

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ABSTRACT

The researcher in this study investigated how preschool teachers' beliefs about teaching practice, children, and discipline and behavior management related to the preschool teachers' level of education, type of teaching certification, years of teaching experience, and race. The method consisted of each preschool teacher completing the Teacher Belief Q-Sort (TBQ), either in an online format, or by using a paper and pencil form of the measure. The TBQ was chosen to reduce preschool teacher bias by having teachers rank order their priorities concerning their teaching practices. The data were the teachers' rank-ordered responses to the TBQ measure. The data were analyzed using Chronbach alpha statistical analysis techniques. The results indicated low internal consistency among the various types of teacher beliefs. The researcher concluded social desirability may be one reason internal consistency was low. Additionally, regional cultural differences in how preschool teachers approach behavior management could be a factor. It is possible the preschool teachers in this study held some more "progressive, enlightened" beliefs about the practice of teaching and how to treat children regarding discipline and behavior management. However, these preschool teachers may also have held traditional beliefs, which resulted in wide variability to item answers on a scale measuring these types of beliefs. Furthermore, preschool teachers may have answered some items honestly and other items in a way which makes them look favorably to funding or licensing agencies. The researcher further concluded that besides the existing data on the TBQ, additional research with the TBQ is needed to establish the measure's internal consistency, reliability, and validity.

DEDICATION

I would like to dedicate this manuscript to my faith, family, and friends, which were a support to me during the writing of this thesis. I would like to thank God for creating me and Jesus for saving me and giving me the courage, wisdom, and strength to complete this work. I would like to thank my mother, Kathryn Lutonsky, father, Roy Wesley Lutonsky, and brother, Kirk Morris Lutonsky, who inspired me to do well, reach for excellence, and never give up. To my many friends who encouraged me, cheered me on, and were examples to me to always reach for the highest levels of academic endeavor, I dedicate this thesis to you as well. As always, to the Alabama Crimson Tide, who will always be champions in my heart and spirit, this thesis was written because of your bold courage, dauntless devotion, and gallant desire to be the best that you absolutely can be, you are my eternal inspiration. Roll Tide!

LIST OF ABBREVIATIONS AND SYMBOLS

n	Number of people in a sample
a	Cronbach's index of internal consistency
B	Standardized regression coefficient
F	Fischer's F ratio: A ratio of two variances
M	Mean: the sum of a set of measurements divided by the number of measurements in the set
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
r	Pearson product-moment correlation
R^2	Coefficient of determination: Index indicating the proportion of variance in the dependent variable that can be predicted from the set of independent variables
SD	Standard deviation
$<$	Less than
$=$	Equal to

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CONTENTS

ABSTRACT	ii
DEDICATION	iii
LIST OF ABBREVIATIONS AND SYMBOLS	iv
ACKNOWLEDGMENTS	v
LIST OF TABLES	viii
INTRODUCTION	1
PURPOSE OF THE STUDY	12
METHODS	13
RESULTS AND DISCUSSION	19
REFERENCES	28
APPENDIX A: FACTORS ASSOCIATED WITH THE STUDY	31
APPENDIX B: CARDS RELATED TO FACTORS OF THE STUDY	32
APPENDIX C: IRB APPROVAL LETTER	33

LIST OF TABLES

1. Internal Consistencies19

2. Demographics21

3. Descriptive Statistics of Preschool Teachers’ Beliefs23

4. Correlations between Teacher Education, Years of Experience and
Race, and Teacher Beliefs about Self Regulations, Process of Learning,
Social Experience, Understanding Student Needs, Teacher Direction,
and Negative Views of the Child25

INTRODUCTION

Preschool teachers' beliefs about children and their beliefs about teaching practices should be at the center of efforts to identify best practices and improve education (LaParo, Siepaka, & Scott-Little, 2006; Lara-Cinisomo, Fuligni, Ritchie, Howes, & Karoly, 2008; Massetti & Bracken, 2010; Rimm-Kaufman & Sawyer, 2004; Scott-Little, Brown, Hooks, & Marshall, 2008). This is because preschool teachers' beliefs strongly influence the decisions these teachers make with children in the classroom. Thus, information about preschool teachers' beliefs has implications for implementing teaching practices and classroom management behaviors to promote student success (Backen & Fischel, 2006; Charlsworth, 2008; Hamre & Pianta, 2001; LaParo, Siepaka, & Scott-Little, 2006; Massetti & Bracken, 2010; Polat, Kaya, & Akdag, 2013; Rimm-Kaufman & Sawyer, 2004).

Previous studies concerning preschool and early childhood education teachers' beliefs are as follows. In a study by LaParo, Siepaka, and Scott-Little (2006), 63 pre-service and 9 teacher-mentors in a birth through kindergarten teacher preparation program completed the Teacher Belief Q-Sort (TBQ). The authors compared the preschool pre-service teachers' beliefs about discipline and behavior management, teaching practices, and beliefs about children before and after the teacher preparation program. The results the researchers found indicated no significant change in pre-service preschool teachers' beliefs before and after the program. However, the pre-service teachers did have views on discipline, behavior management, and teaching practice,

which were more similar to their teacher-mentors' views after completing the preschool teacher preparation program. In another study in which the researcher utilized the TBQ, Flannagan (2010) compared how 101 elementary pre-service teachers' beliefs about classroom management and student behavior related to their emotional intelligence (EI). The researcher used the classroom management portion of the TBQ and an EI scale. Flannagan found pre-service elementary teachers who scored higher on emotional intelligence also reported a less directive teaching style. However, correlations were low between the TBQ and EI results for the Flannagan study. Additionally, none of these studies addressed how preschool teachers' beliefs about discipline and behavior management, teaching practice, and beliefs about children related to level of education, type of teaching certification, years of teaching experience, and race.

A study which utilized Q-sort methodology was conducted by Backen and Fishcel (2006) concerning preschool classroom practices. The instrument was named the Preschool Classroom Practices (PCP) Q-sort. A sample of 66 preschool teachers and assistants took part in the study. The results indicated preschool teachers engaged more in socio-emotional developmental activities as opposed to cognitive developmental activities. In another study Q-sort study, Masetti and Bracken (2010) measured classroom practices of 54 kindergarten teachers. The results of the study indicated kindergarten teachers who stressed literacy skills also reported fewer disruptive behaviors in class. In an additional early childhood teacher study, Rimm-Kaufman and Sawyer (2004) utilized Q-sort methodology to compare teacher attitudes to a Responsive Classroom (RC) approach. Sixty-nine teachers took part in the study. The results of the study indicated early childhood teachers, grades kindergarten through third grade, who employ a responsive or student-centered teaching approach were more likely to report higher

levels of early childhood education teacher self-efficacy than teachers who used a non-responsive or teacher didactic and directive approach to teaching. However, none of these studies addressed how preschool teachers' beliefs about discipline and behavior management, teaching practice, and beliefs about children related to level of education, type of teaching certification, years of teaching experience, and race.

More previous research examined the beliefs of preschool teachers who received their professional training from teacher education programs in university colleges of education. These programs lead to certification and allow preschool teachers to teach in state-supported public school systems. Findings from these studies reveal preschool and elementary teachers' beliefs, attitudes, and priorities about children and education are closely linked to these teachers' classroom behavior and practices (File & Gullo, 2002; Guo, Piasta, Justice, & Kaderavek, 2010; Lara-Cinisomo, et al, 2008; Massetti & Bracken, 2010; Rimm-Kaufman et al., 2006; Scott-Little, et al., 2008). These findings are relevant because "Attitudes and beliefs are a subset of a group of constructs which name, define, and describe the structure and content of mental states are thought to drive a person's actions" (Richardson, 1996, p. 102). Preschool teachers make constant decisions in their classrooms, and their beliefs, attitudes, and priorities provide reasons for these decisions (Backen & Fischel, 2006; LaParo, Siepaka, & Scott-Little, 2006; Massetti & Bracken, 2010). Charlesworth, Hart, Burts, Mosley, and Fleege (1993) found preschool teachers' beliefs about classroom practices were related to their use of developmentally appropriate and inappropriate practice. In general, preschool teachers revealed they valued developmentally appropriate practice more than it was observable in their classroom. However,

when preschool teachers indicated a belief was *very* important to them, the belief was expressed in more observable behaviors within their classrooms.

Preschool teachers' beliefs about dealing with children's misbehaviors. Preschool teachers' beliefs about children have been related to the ways in which preschool teachers manage children's behaviors. Recent studies find preschool and early childhood education teachers who believe they cannot handle child discipline problems are less consistent in the way they manage children's misbehaviors than teachers who believe they are competent at handling child misbehaviors (Masseti & Bracken, 2010; Pianta, Kinzie, Justice, Pullen, Fan, & Lloyd, 2003). These studies also found preschool teachers who felt inadequate in handling children's misbehaviors were more likely to take students' problem behaviors personally than preschool teachers who felt adequate in handling children's misbehaviors. Teachers who felt inadequate as a disciplinarian also believed students in their classrooms misbehaved intentionally.

Preschool teachers' beliefs about what to expect from children and how children should act in the classroom are directly related to the type of approach these teachers make in guiding children's behaviors (Lara-Cinisomo, et al, 2008; Rimm-Kaufman & Sawyer, 2004). In general, approaches can fall into one of two classes: behavior modification techniques or relational approach techniques (Rimm-Kaufman & Sawyer, 2004). Relational approach techniques are more child-centered and focus on using the child's misbehavior as an opportunity to teach or socialize the child to engage in more prosocial behaviors. In contrast, behavioral modification techniques involve rewarding prosocial student behaviors so they continue and either ignoring or punishing misbehaviors so the misbehaviors disappear (Masseti & Bracken, 2010; Rimm-Kaufman, Fan, Chiu, & You, 2006).

Discipline and behavior management are defined as how a teacher maintains the classroom environment in a way which most effectively helps students to learn (Charalambous, Panaoura, & Philippou, 2009; Charlesworth et al., 1993; Cunningham, Zibulsky, Stanovich, & Stanovich, 2009; Isikoglu, 2008; Llurda & Lasagabaster, 2010; Malmberg & Hagger, 2009; Mansfield & Volet, 2010; & Tertemiz, 2010). Preschool teachers can believe a great deal of control which is didactic and focused on the teacher's desire to control student behavior is needed in the classroom. This control is needed to influence positively student outcomes and learning (Isikoglu, 2008; Llurda & Lasagabaster, 2010; Malmberg & Hagger, 2009; Mansfield & Volet, 2011; Pianta, La Paro, Payne, Cox, & Bradley, 2002). Other preschool teachers can believe a less controlled classroom is better. Preschool teachers' beliefs about classroom management are important because how students are educated in the classroom effectively can be related to how the teacher uses classroom management to help students to learn (Charalambous, Panaoura, & Philippou, 2009; Cunningham, Zibulsky, Stanovich, & Stanovich, 2009; Isikoglu, 2008; Llurda & Lasagabaster, 2010; Malmberg & Hagger, 2009; Mansfield & Volet, 2010; & Tertemiz, 2010). Preschool teachers have different priorities in relation to classroom management. Classroom discipline can relate to either teacher direction, where the teacher is in charge of what students do as he or she directs their activities. On the other hand, there can be more student control of learning, where the preschool teacher prepares the environment and students learn through discovery as they count blocks, sort and identify letters, and engage in other learning activities (Charlesworth, et al., 1993; Charalambous, Panaoura, & Philippou, 2009; Cunningham, Zibulsky, Stanovich, & Stanovich, 2009; Isikoglu, 2008; Llurda & Lasagabaster, 2010; Malmberg & Hagger, 2009; Mansfield & Volet, 2010; & Tertemiz, 2010).

Preschool teachers' beliefs about classroom structure. Classroom structure refers to the rules, routines, and specified procedures followed by children in a classroom. These rules, routines, and procedures govern various activities in the class, such as how children should enter the classroom, how attendance is taken, and how children prepare for whole-group teacher-directed instruction. It also includes how children prepare for small-group student-led activities, partner work, independent work, and how children prepare for testing. It also includes procedures to follow for snack and lunch breaks, bathroom breaks, recess, and exiting the classroom. Preschool teachers who *strongly* value structure are more controlling and in charge of the classroom and of children's behaviors (Guo et al., 2010; Rimm-Kaufman, et al., 2006). On the other hand, preschool teachers who place a moderate to weak value on structure have been found to believe a noisy productive classroom is acceptable, and it is important to treat students with respect and kindness and to allow children the opportunity to monitor their own behavior (Rimm-Kaufman, et al., 2006).

Teaching Practices

Teaching practices refer to what the preschool teacher does in the classroom to help students learn, and these practices are related to preschool teachers' beliefs (Guo et al., 2010; Lara-Cinisomo, et al, 2008; Rimm-Kaufman, et al., 2006). These beliefs vary from thinking practices, which should be chosen by the preschool teacher, so the students learn content the preschool teacher thinks is important (teacher-centered practices), to allowing students to choose what they want to learn and how they will learn the concepts (student-centered practices). Student-centered practices also attempt to address the social-emotional needs of the students as well as the cognitive/academic needs. Beliefs regarding teacher-centered practices versus

student-centered practices are important because they determine how preschool teachers organize their classroom routines and how students experience the classroom (Brown & Rose, 2005).

Student-centered practices also improve student outcomes (Rimm-Kaufman et al., 2006).

Preschool teachers have limited time in their classrooms, therefore they prioritize some teaching practices over others. When a preschool teacher decides how he or she will teach students, the teacher can be either student-directed or teacher-directed (Guo et al., 2010; Rimm-Kaufman et al., 2006). Teacher-directed instruction is when preschool teachers decide what students learn about and provide direct instruction with little input from students. Preschool teachers also can be directive in their teaching practices and believe teacher direction leads to student achievement, and are more inclined to utilize a directive approach (Schockley, 2011; Wilson & Corbett, 2011). Student-directed instruction, on the other hand, is when teachers believe instruction should center directly on student needs. Student-directed instruction is usually performed by preschool teachers who value working as a team with students to facilitate learning (Rimm-Kaufman, et al., 2006). Preschool teachers who practice student-directed instruction allow students some choice in what they learn. Teaching practices which support instruction, such as feedback, encouragement, and discussion, improve students' achievement by appreciable measures (Guo et al., 2010; Rimm-Kaufman et al., 2006). These practices are more characteristic of student-centered instruction as compared to teacher-directed instruction, which lacks feedback, encouragement, and discussion (Guo et al., 2010; Rimm-Kaufman, et al, 2006,). Practices focus on social interactions in the classroom to help students to feel accepted (Guo et al., 2010). Teaching social skills have also led to improved social competence, less delinquency, and improved academic performance (Polat, Kaya, & Akdag, 2013).

Beliefs about Children

Preschool teachers' beliefs about children can be defined as beliefs regarding how students learn (Guo et al., 2010; Rimm-Kaufman, et al, 2006). Preschool teachers can think students can construct meaning from experiential learning, or these teachers can believe students need to be taught by direct didactic instruction (Guo et al., 2010). Preschool teachers' beliefs about children are related to teacher-student interactions in the classroom (Guo et al., 2010; Rimm-Kaufman, et al, 2006). Teachers who believe children construct meaning from experiential learning also believe students are active participants in the instructional process, which students find fun. In contrast, preschool teachers who believe students learn best by direct didactic instruction from a teacher also believe preschool teachers should do all the work of teaching and students are passive recipients of what is taught, which is a process students find tedious and boring (Guo et al., 2010; Rimm-Kaufman et al, 2006).

Influences on preschool teachers' beliefs. Several studies have examined factors which influence the beliefs preschool teachers hold regarding how to handle child misbehaviors, discipline and structure, how children learn, and teaching practices. These factors include type of preschool teacher training, years of experience, type of school environment where employed, race, and professional development received (Guo et al., 2010; Lara-Cinisomo, et al, 2008). Findings from previous studies indicate early childhood school teachers' beliefs about practice are shaped by the pre-service or in-service training they receive (Guo et al., 2010; Lara-Cinisomo, et al, 2008), their years of experience working with children in the classroom, and the type of school environment (student-centered vs. student-centered) (Rimm-Kaufman & Sawyer, 2004). Research on preschool teachers' training yields mixed results. Studies regarding race

indicated teachers from African-American ethnicity preferred a more directive style of teaching (Brown, 2004; Hawley & Nieto, 2010; Roberts, 2009; Shockley, 2011). One study found student teaching experience did not change preschool teacher beliefs about children, discipline, or teaching practices (LaParo, Siepaka, & Scott-Little, 2006). However, another study found early childhood teachers with more education and training in teaching had more positive beliefs about children and were student-centered in their beliefs about how children best learn and the kinds of teaching practices which promote student learning (Rimm-Kaufman et al, 2006). In contrast, less formal education and training in teaching was related to believing children learn best from direct didactic instruction from a teacher who implements teacher-centered practices and is a strict disciplinarian with a very rigid classroom structure (Malmberg & Hagger, 2009). Similarly, Tertemiz (2010) found elementary teachers with more training were more student-centered in their approach to practice than teachers with less training. One study, however, found pre-service teachers had more positive beliefs about children and about teaching practices than in-service teachers (Llurda & Lasagabaster, 2010).

Regarding years of experience, one study found the years of experience led to beliefs about the importance of providing a classroom environment which motivates students to learn (Mansfield & Volet, 2010), but another study found teachers' beliefs about teaching reading were not influenced by years of teaching experience (Cunningham, Zibulsky, Stanovich, & Stanovich, 2009).

Regarding race, preschool teachers have different beliefs about how children learn and their teaching practices. Some African-American and Hispanic preschool teachers utilize more

directive practices, which reflect an authoritative style of teaching (Brown, 2004; Hawley & Nieto, 2010; Roberts, 2009; Shockley, 2011). An authoritative preschool teacher may utilize a teacher-centered approach. Preschool teachers who are African-American can also be more authoritative, direct, and explicit in their instruction. This type of teaching is teacher-controlled, with clear expectations on what students are required to do to learn (Hawley & Nieto, 2010). Because this type of directive teaching style is also authoritative, high expectations for student achievement and teacher control are matched with warmth and support from the preschool teacher for the students' learning (Roberts, 2009). Learning needs and teaching styles of African-American, Hispanic, Asian, and American Indian preschool students and teachers are linked to their home environments and cultural heritage as well (Hawley & Nieto, 2010). Multicultural studies indicate which African-American teachers and students prefer a more directive style of teaching (Brown, 2004; Hawley & Nieto, 2010; Roberts, 2009). This style of teaching is not necessarily authoritarian in nature, but authoritative. Warmth and caring are a part, then, of the authoritative and appropriate insistence of African-American and Hispanic preschool teachers on preschool student success.

The type of school environment should have a strong influence on preschool teachers' beliefs and practices. One study found preschool teachers at schools which were student-centered were also more likely to report positive attitudes toward teaching as a profession (Rimm-Kaufman, Fan, Chiu, & You, 2006). Preschool teachers from teacher-directed programs had negative attitudes about students' abilities to learn. Preschool teachers who were in student-centered schools also believed disciplinary and teaching practice priorities could be aligned with a student-centered approach (Rimm-Kaufman & Sawyer, 2004).

Measurement Issues and Rationale for Study. Most previous research studies reviewed used different teacher belief measures, which may account for some of the mixed findings. In addition, the Teacher Belief Scale (TBS) used by Burts, Charlesworth, Fleege, Ickes, Durland, & Hart (1990), measures teacher self-efficacy rather than teachers' beliefs. Another problem with the measures used in previous research is they do not effectively isolate preschool teachers' beliefs about teaching practice, children, and discipline and behavior management (Rimm-Kaufman, Storm, Sawyer, Pianta, & La Paro, 2006). It is important to isolate beliefs about teaching practice, children, and discipline and behavior to examine systematically the factors associated with them. Only a few studies have used the Teacher Belief Questionnaire (TBQ) for preschool teachers (Flanagan, 2010; LaParo, Siepaka, & Scott-Little, 2006; Rimm-Kaufman et al., 2006), and none of the studies have examined how years of teaching experience, race, or educational attainment influence preschool teachers' priorities about their teaching beliefs as measured by the TBQ.

PURPOSE OF THE STUDY

The purpose of this study is to identify factors which are related to preschool teachers' beliefs about teaching practice, children, and discipline and behavior. In particular, this study will examine type of preschool teacher training, years of teaching experience and type of school environment as they are related to preschool teachers' beliefs about teaching practice, children, and discipline and behavior. This is important because these teacher beliefs determine the actual practices preschool teachers implement in their classrooms.

The research question which guided this study is as follows:

1. Do preschool teachers' beliefs about teaching practice, children, and discipline and behavior management relate to preschool teachers' level of education, type of teaching certification, years of teaching experience, and race?

METHODS

Participants

Fifty-nine preschool teachers participated in the study from over 400 preschool teachers who teach in preschools in the central and western regions of Alabama. These counties were chosen because the researcher had access to the surrounding counties where she lived, and had the ability to gain permission to distribute emails to preschool teachers in these areas inviting them to participate in the study. Administrators from twelve school districts granted the researcher permission to email preschool teachers to invite them to participate in the study. In addition, other preschool programs within this twelve county range, such as licensed programs, private licensed programs, nonprofit licensed programs, and license exempt programs, were chosen for study. Access to preschool teacher email lists and authorization to recruit participants were given by administrators and personnel associated with each of the preschools as well to the researcher. The researcher contacted 24 public preschools, and 21 private preschools. The researcher received permission from 12 public preschools and 10 private preschools to contact preschool teachers.

Each survey was completed using either an online or paper and pencil procedure. Originally, the researcher had intended for the survey to be completed online. However, administrators from each of the preschools contacted the researcher and related many preschool

teachers did not understand or want to complete the online procedure. Therefore, the researcher returned to the preschools where the administrators requested a paper and pencil procedure. The researcher provided paper and pencil versions of the instrument to the administrators, who then gave the surveys to the participants.

Electronic email procedure. A recruitment email directed preschool teachers to visit a website if he or she agreed to participate in the study. If the preschool teacher agreed to participate after reading the IRB Informed Consent, he or she clicked on the link to the survey. The click on the link to the instrument served as the signature for the survey. The following language was present on each recruiting email: “If you are willing to volunteer for this research, please electronically sign by clicking on the following button.” Each preschool teacher was given a link to an informational handout about the study and an online survey. Each answer to survey items was collected and entered into an Excel database. The researcher then downloaded the data collected from the data repository site. Survey answers could not be traced to those who completed them.

Paper and pencil procedure. The administrators at each preschool distributed the survey to preschool teachers if participants chose to complete the paper and pencil version of the instrument. If a preschool teacher agreed to be a participant, the preschool teacher was given the Description of the Study, an informed consent form, and the survey. Each answer to survey items was collected and entered into an Excel database. Survey answers could not be traced to those who completed them.

Data collected. The researcher received 29 surveys from online sources and 30 from paper and pencil surveys. There were 262 emails sent to preschool teachers, with 29 responses for an 11% response rate. There were 189 paper and pencil surveys given to preschool teachers with 30 of them returned for a 16% response rate.

Measures

The survey administered to preschool teachers included two questionnaires: The Demographic Questionnaire and the Teacher Belief Questionnaire.

Demographic Questionnaire. The Demographic Questionnaire asked participants to indicate their age, gender, race, educational attainment, type of teaching certification, and type of school (public versus private).

Teacher Belief Questionnaire (TBQ; Rimm-Kaufman, Storm, Sawyer, Pianta, & La Paro, (2006). The TBQ uses a Q-sort method to elicit responses from preschool teachers. It has three 20-item sections measure the level of priority preschool teachers place on beliefs about discipline and behavior management, beliefs about classroom practices, and beliefs about children. For each set of items, preschool teachers sort the twenty beliefs into one of the following five response options: 0 (*lowest priority*), 1 (*low to mid priority*), 2 (*mid priority*), 3 (*higher priority*), and 4 (*highest priority*). Higher scores indicate a more strongly held belief and lower scores indicate a less strongly held belief (Appendix B).

In practice, preschool teachers' beliefs can be difficult to measure because of self-report bias (Durning & Brown, 2006; McKeown & Thomas, 1988; Mundia, 2011; Ramlo, 2008). The

TBQ allows preschool teachers to prioritize their beliefs in order to represent their views from highest to lowest, which should help to eliminate some of the self-report bias.

The first set of 20 items yields two subscales: Teacher Direction and Self-Regulation. Statements on the Teacher Direction subscale measure beliefs about preschool teacher-directed student learning. A sample item includes “Praise from me is an effective way to change students’ behaviors.” Items in the Self-Regulation subscale assess beliefs about how preschool teachers support students’ self-regulation. A sample item includes, “Self-monitoring (or self-regulation) is an important skill for students to develop.”

The second set of 20 items yields the following two subscales: Value Process and Social Experiences. Items on the Value Process subscale measures how preschool teachers value students collaboration and spontaneity. A sample item includes “Talking about current events.” Items in the Social Experiences subscale assess how preschool teachers value student social experience and choice. A sample item includes, “Welcoming each student by name to class.”

Finally, the third set of 20 items yields the following two subscales: Understanding Student Needs and Negative Motivation for Student Learning. Items on the Understanding Student Needs subscale measures beliefs about understanding student needs and individuality. A sample item includes “Students need some choice of activities within the classroom.” Items in the Negative Student Motivations for Learning subscale assess preschool teachers’ belief in students not wanting to learn. A sample item includes, “Many of the students in my class try to get away with doing as little work as possible.”

The reliability and validity statistics for the TBQ are as follows. Rimm-Kaufman, et al. (2006) reported which the TBQ indicated reliability ($r = .91$, $p < .01$), when the instrument was created. Retest reliability indicated a mean of .71, with a range in scores from .50 to .95 using Spearman correlations. This primary test sample was comprised of 101 teachers, with 24 percent of these teachers being those who taught early childhood students, or students in grades kindergarten through fourth grade. The remaining 76 percent of the teachers taught middle and high school students. There were 44 teachers in the retest sample. To measure content validity, the researchers interviewed six teachers concerning their lowest and highest priorities regarding beliefs about discipline and behavior management, classroom practices and beliefs about children. The teachers' answers used comparative language, so the researchers concluded which content validity was met.

Other researchers' who utilized the TBQ reported validity and reliability as follows. In a study by Flannagan (2010) of elementary teachers' beliefs about behavior and classroom management, the researcher used only one portion of the TBQ. She also employed an emotional intelligence (EI) measure. The results indicated internal consistency was low, with the highest correlation among the variables at .33 for Understanding Student Needs on the TBQ and Independence on the EI. There were also no significant relationships among the behavior and classroom management variables of the TBQ and years of teaching experience or level of education attained by each elementary school teacher. Flannagan (2010) also found social desirability affected correlations with the TBQ, and teachers completed the Q-sort exercise in ways which would reflect upon their teaching practices positively. LaParo, Siepaka, and Scott-Little (2006) found no significant change in beliefs about discipline and classroom management,

teaching practice and how students learn before and after the program among the pre-service preschool teachers. However, the pre-service preschool teachers did have views which were more similar to the teacher-mentors after completing the preschool teacher preparation program. From the criterion analysis, the researchers found which pre-service teachers and their advising faculty had similar beliefs regarding discipline and behavior management after the end of their coursework ($p < .01$) and for teaching practices as well ($p < .01$) (LaParo, Siepaka, & Scott-Little, 2006).

Data Analysis

The data were analyzed using descriptive statistics and correlational analysis to answer the research question which guided this study. The variables included educational attainment, years of teaching experience, and race as correlates of preschool teachers' beliefs about children's self-regulation, the process of learning, children's social experiences, understanding students' needs, preschool teacher-direction, and negative views of the child.

RESULTS AND DISCUSSION

Overall, there was low internal consistency among the various types of teacher beliefs. Table 1 shows the internal consistency, as measured by Cronbach alpha, for each of the preschool teacher belief subscales. Cronbach alphas for the preschool teacher belief subscales were calculated for each educational level of Preschool teacher's Education. This was done to explore the possibility where preschool teachers with lower levels of education might have more variable beliefs than preschool teachers with higher levels of education. Unfortunately, for each type of preschool teacher's belief, the Cronbach alphas across all levels of preschool teachers' education were consistently low. The lack of internal consistency among the various types of Teacher Beliefs subscales calls for additional research on developing the measure.

Table 1

Internal Consistencies

	High School (n = 10)	Associate's Degree (n = 6)	Bachelor's Degree (n = 24)	Master's Degree (n = 18)
Teacher Direction	.13	.62	.09	.14
Self-Regulation	.33	.26	.09	.20
Value Process	.56	.21	.15	.69

Social Experience	.64	.29	.55	.10
Understanding Student Needs	.11	.65	.86	.86
Negative View of Student Motivation and Likeability	.53	.12	.66	.32

Demographics of the sample are presented in Table 2. Most of the participants were female (96.60%), and two participants were male (3.40%). Most participants were Caucasian (81.40%), a few were African-American (15.20%), whereas only one was Hispanic American (1.70 %), and only one was Native American (1.70%). The age of the participants ranged primarily between 19 – 29 years (31.00%), but many participants fell in the 30 – 39 age-group (24.00%) and the 40 – 49 year age-group (22.00%). Table 2 also describes participants’ educational attainment, certification, and type of school. A majority of participants had a bachelor’s degree (41.00%), followed by a master’s degree (31.00%), high school diploma (17.00%), and then an associate’s degree (11.00%). Nearly one-third of participants had no teaching certification (32.00%); 34.00 % of participants had an Early Childhood Education with a combination of certifications (i.e., certification to teach elementary school and certification to teach in early childhood programs), followed by 22.00% who had certification in Early Childhood Education programs for children aged birth to five years. Finally, on average, preschool teachers had been teaching about 11 years. Forty-nine percent were in public schools and 51.00% were in public schools.

Table 2
Descriptive Statistics

	Frequency	Percent
<hr/>		
Gender		
Male	2	3.40
Female	57	96.60
Race		
Caucasian	48	81.40
African-American	9	15.20
Hispanic American	1	1.70
Asian American	0	0.00
Native American	1	1.70
Age		
19-29	18	31.00
30-39	14	24.00
40-49	13	22.00
50-59	11	19.00
60-69	3	1.00
Education		
High School	10	17.00

Associate's Degree	6	10.00
Bachelor's Degree	24	41.00
Master's Degree	18	31.00
Certification		
No Certification	19	32.00
Early Childhood Education/Birth to Five	13	22.00
Elementary Education	07	12.00
Early Childhood Education/Combos	20	34.00
Type of School		
Public	29	49.00
Private	30	51.00

	N	Minimum	Maximum	Mean	Std. Deviation
Years of Teaching	59	0	37	11.17	9.66

Descriptive statistics of each variable are reported below. There were 59 participants, whose minimum, maximum, mean, and standard deviations are presented in Table 3.

Table 3

Descriptive Statistics of Preschool Teachers' Beliefs

	N	Minimum	Maximum	Mean	Std. Deviation
Teacher Direction	59	10.00	21.00	14.85	2.46
Self-Regulation	59	12.00	26.00	18.42	3.38
Value Process	59	15.00	37.00	26.68	4.92
Social Experience	59	18.00	41.00	31.24	4.75
Understanding Student Needs	59	19.00	35.00	26.80	3.47
Negative View of Student Motivation and Likeability	59	17.00	30.00	22.47	3.02

Results of the correlational analysis are presented in Table 4, which shows the correlations between Preschool Teacher's Education, Years of Experience and Race with Preschool Teacher's Beliefs about Self-Regulation, Process of Learning, Social Experience, Understanding Student Needs, Teacher Direction, and Negative Views of the Child. None of the correlations between the variables were statistically significant at $p < .05$. Only one relation was statistically significant at $p < .10$, which was between Race and Preschool teacher Direction.

Specifically, there was a statistical trend for African-American preschool teachers to be more likely to report higher values for Preschool teacher Direction than for Caucasian preschool teachers.

Finding no statistically significant correlations between these variables, and especially between each of the various types of preschool teacher beliefs and preschool teacher's Education Level and Preschool teacher's Years of Teaching Experience, was surprising given the findings from previous research. Closer examination of the internal consistencies for each of the subscales measuring preschool teachers' beliefs may explain why the correlations were nonsignificant. Low internal consistency on each subscale will mean each subscale has low predictive validity with other variables. This is because each respondent's answers for items on each subscale were so variable, none of the subscales covary with other variables such as Education, Years of Experience, and Race.

Table 4 *Correlations between Teacher Education, Years of Experience and Race, and Teacher Beliefs about Self Regulations, Process of Learning, Social Experience, Understanding Student Needs, Teacher Direction, and Negative Views of the Child*

		Self- Regulation	Process of Learning	Social Experience	Understand Student Needs	Preschool teacher Direction	Negative Views of Child
Education	Pearson Correlation	.04	.06	.16	.04	-.07	.02
	Sig. (1-tailed)	.38	.32	.12	.39	.30	.44
	N	58	58	58	58	58	58
Years	Pearson Correlation	-.02	.06	.08	-.12	-.021	.09
	Sig. (1-tailed)	.45	.33	.28	.19	.44	.25
	N	59	59	59	59	59	59
Race	Pearson Correlation	.15	.12	.11	.09	-.20	.03
	Sig. (1-tailed)	.13	.18	.21	.25	.06	.42
	N	59	59	59	59	59	59

Why are preschool teachers' responses to items on each subscale so variable? Social desirability could be one reason. If preschool teachers answered some of the questions on the subscales honestly, their responses may be viewed as socially undesirable. Thus, some preschool teachers may not have answered all items honestly.

Culture may also explain the variable responses. Preschool teachers who participated in this study reside in the southern region of the United States. Many adults in this area of the country hold traditional values for how children should be treated, especially in regards to how they should be disciplined and punished. These traditional values sometimes clash with research findings on the types of adult-child interactions foster optimal child development. It is possible the preschool teachers in this study may hold some more "progressive, enlightened" beliefs about the practice of teaching and how to treat children, but they may also hold some more traditional beliefs too, which results in wide variability to item answers on a scale measuring these types of beliefs.

A third possible reason for why the Cronbach alpha for each preschool teacher belief scale was so low is because preschool teachers may have answered some items honestly and other items in a way makes them look favorably to funding or licensing agencies. Besides the existing data on the TBQ, additional research with the TBQ is needed to establish the measure's internal consistency, reliability, and validity.

There are two additional limitations to this study. First, all participants resided in the southern region of the United States. Therefore, the findings are not generalizable to preschool teachers who live in other regions where beliefs about teaching and how to treat children may be

culturally different. In addition, this study had a low response rate. Studies with larger response rates and larger samples sizes are needed to provide better population estimates for each measure.

Although this study yielded nonsignificant findings, research in the area of preschool teachers' beliefs and how they impact teaching practice is needed. Additionally, more research is needed to examine how preschool teacher training programs may change pre-service preschool teachers' beliefs about the nature of children, how to treat children, and teaching practices best foster student learning.

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APPENDIX A

FACTORS ASSOCIATED WITH THE STUDY

Factor 1: teacher direction of student learning

Factor 2: teaching with support for the student's self-regulation

Factor 3: teacher values spontaneity and collaboration

Factor 4: teacher emphasizes on social experience and student choice

Factor 5: teacher understands of student needs and individuality

Factor 6: teacher believes student does not want to learn on his or her own.

APPENDIX B

CARDS RELATED TO FACTORS OF THE STUDY

Factor 1: teacher direction of student learning (TchDir)

- Cards 2, 7, 14, 16 and 17

Factor 2: teaching with support for on student's self-regulation (SelfReg)

- Cards 1, 3, 6, 11, 12, 18 and 20

Factor 3: teacher values spontaneity and collaboration (ValProc)

- Cards 21, 24, 25, 26, 28, 29, 31, 37 and 40

Factor 4: teacher emphasizes on social experience and student choice (SocExp)

- Cards 23, 24, 27, 29, 31, 32, 35, 36 and 38

Factor 5: teacher understands of student needs and individuality (UnStuNeeds)

- Cards 42, 46, 48, 50, 55, 56, 57, 58 and 59

Factor 6: teacher believes student does not want to learn on his or her own (NegMotiveLike)

- Cards 41, 42, 46, 47, 53, 59 and 60

APPENDIX C

IRB APPROVAL LETTER

August 2, 2012

Office for Research
Institutional Review Board for the
Protection of Human Subjects

THE UNIVERSITY OF
ALABAMA
RESEARCH

Rebecca Rose Lutonsky
Department of Human Development & Family Studies
College of Human Environmental Sciences
Box 870160

Re: IRB # 12-OR-266, "Teachers' priorities regarding their beliefs about discipline and behavior management, teaching practices, and children"

Dear Ms. Lutonsky:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your application will expire on August 1, 2013. If the study continues beyond that date, you must complete the IRB Renewal Application. If you modify the application, please complete the Modification of an Approved Protocol form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Request for Study Closure form.

Should you need to submit any further correspondence regarding this application, please include the assigned IRB application number.

Good luck with your research.

Sincerely,



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