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Child-rearing in the Home and in the Classroom: Linking Daycare Teachers’ Parenting Beliefs and Classroom Practices
by
Caryn E. Moulton, B.A.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfillment of
the requirements for the degree of

Master of Arts

Department of Psychology

Carleton University
Ottawa, Ontario
June 8th, 1998
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Child-rearing in the Home and the Classroom: Linking Daycare Teachers' Parenting Beliefs with Classroom Practices

Submitted by

Caryn E. Moulton

in partial fulfillment of the
requirements for
the degree of Master of Arts

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Carleton University
June 1998
Abstract

The goal of this thesis was to examine associations between daycare teachers’ parental beliefs and classroom practices. Two studies were conducted. In the pilot study, a new observational taxonomy, the Teaching Practices Observation Scale (TPOS) was created to provide an observational tool to assess early childhood teaching practices. A consistent pattern of results was observed in the inter-relations among behavioural codes.

In the second study, the parental goals, attributions, and practices of 29 daycare workers (who were also parents) were assessed. Results indicated that no significant associations were found between parenting goals and teaching practices or parental attributions and teaching practices. However, trends were found between child rearing practices and classroom practices. These results indicate authoritative and authoritarian child rearing practices may be associated with authoritative and authoritarian classroom practices, respectively.
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Child rearing in the Home and in the Classroom: Linking Daycare Teachers’ Parenting Beliefs with Classroom Practices

In today’s society, more and more mothers are becoming involved in careers outside of the family home. This can be attributed to changing personal (i.e., self fulfillment) and financial (i.e., necessity of two incomes) needs. With both parents working, an increasing number of children are being cared for by non-family members (Pence, 1985; Statistics Canada, 1993). Many of these children attend group daycare and educationally based early childhood program centers, staffed by instructors who are educated in early childhood development. Although the family has often been referred to as the child’s primary agent of socialization (Grusec & Lytton, 1988), the early childhood educator (ECE) is playing an increasing role in the child socialization process. Results from previous studies have indicated that daycare teachers have an important influence on many aspects of children’s development, including cognitive, social, creative, and emotional development (Harvey, Prather, White, Alter, & Hoffmeister, 1966; Phyfe-Perkins, 1981; Prescott, Jones, & Kritchevsky, 1967; Prescott & Jones, 1969; Hestenes, Kontos, & Bryan, 1993).

The overall goal of the present study was to investigate internal factors that may motivate ECE’s behaviours. Very little is known about what factors may effect ECE’s behaviours towards children. In the past, research findings have indicated that socioeconomic levels, ethnicity, and education may influence the way in which a teacher behaves in the classroom (Grusec & Lytton, 1988; Ispa, 1995; Rosenthal,
1991). Teachers’ belief systems may also play an influential role in determining classroom behaviours (Charlesworth, Hart, Burts, & Hernandez, 1990; Woolfolk, Rosoff, & Hoy, 1990). Researchers have found that teachers’ beliefs about children’s cognitive development, appropriate play materials, and appropriate instructional styles are associated with their behaviours within the classroom (e.g., Hatch & Freeman, 1988). Almost nothing is known, however, about how instructors’ beliefs about children in general may affect their behaviours toward children in the classroom: that is, how instructors’ beliefs about child rearing, discipline, and socialization may impact upon teaching behaviours. Hence, the goal of this thesis was to examine how ECE’s beliefs about child rearing (i.e., parenting beliefs) were associated with their teaching behaviours within the classroom during free play.

For the purposes of the present study, the terms teacher, ECE, daycare worker, and instructor were used interchangeably. Although teachers and ECE workers may have different instructional roles, these differences were not relevant to the present study. Teacher behaviours during free play were examined, without a focus on instructional techniques. Since this study involves the evaluation of instructors’ interactional behaviours during free play time, the differences between a teacher’s instructional role in a classroom and an ECE’s instructional role in a daycare were not of particular significance.

In the past, researchers have examined how parents’ beliefs about child rearing are related to parental behaviours. The results from these past studies
indicate that parental belief systems may influence the way in which parents behave towards their children and may be a reliable predictor of child outcomes (e.g., Luster, Rhoades, & Haas, 1989; Radziszewska, Richardson, Dent, & Flay; 1996; Boyes & Allen, 1993). Thus, parental child rearing beliefs may act as determinants of parental discipline, the quality of the parent-child relationship, and ultimately, how the child behaves.

There is also empirical evidence to support the idea that teaching beliefs may also be consistent predictors of teaching behaviours. Although much research exposure has been devoted to teaching beliefs and their impact upon teaching practices, the association between teachers’ parental beliefs and teaching practices remain unexplained. In the following pages, the literature pertaining to teaching beliefs and their possible impact upon teaching practices and child outcomes is reviewed. The link between teachers’ parental beliefs and teaching practices will also be reviewed. Results from previous research suggest that there is congruency between the way in which a parent behaves towards her own children and towards other children, indicating that parental beliefs may govern not only parenting behaviours, but also influence behaviours during interactions with other children. Thus, teachers’ parental beliefs may not only influence their parenting behaviours, but also their behaviours within the classroom. In this regard, the central aim of this thesis was to examine the associations between parental beliefs and teaching practices. As such, two studies were undertaken. In the first study, an observational
taxonomy was developed for observing teacher-child interactions during indoor free play. In the second study, this taxonomy was employed to explore the relations between the teachers' parental beliefs and their classroom practices, and in particular, the teachers' parental beliefs and their associations with positive teaching practices.

**Teaching Beliefs**

Most daycare workers have received an Early Childhood Education diploma from a community college. ECE program curriculums in community colleges typically include courses pertaining to the stages and processes of child development (i.e., cognitive, social, and emotional abilities of young children), practical child care techniques (e.g., children's songs, diapering, dressing), effective disciplinary styles, and positive interactive patterns. Therefore, most ECE's have similar training backgrounds, and in this regard might be expected to act similarly in their teaching styles. However, this is not always the case; teaching styles vary with instructors. Other factors, besides formal training, are clearly influencing teaching practices.

**Belief Systems.** Teachers' beliefs about children and the educational environment seem to influence teaching styles and behaviours (e.g., Kagan & Smith, 1988; Spidell, 1989). Moreover, Berliner (1987) reported that formal training and results from educational research were not necessarily the most influential in determining teaching practices; rather, teachers most often relied on their own beliefs and experiences. If new information was absorbed from other sources, it was usually filtered through the personal belief systems, and then adapted to fit teachers' own
schemata and constructs (Berliner, 1987; Carter & Doyle, 1989). These results are not surprising, as Bandura (1986) has suggested that individual beliefs are the best indicators of the decisions individuals will make throughout their lives.

Although belief systems seem to play an executive role in motivations of teaching behaviours, it is only recently that researchers have shown interest in this area. Nespor (1987) contended that even with all the evidence indicating the importance of beliefs in an individual's functioning, "little attention has been accorded to the structure and function of teacher beliefs about their roles, their students, or the schools they work in" (pp. 317).

Teachers' beliefs are relatively stable and resistant to change (Brousseau, Book, & Bryers, 1988; Herrmann & Duffy, 1989) and are associated with a congruent style of teaching (Everston & Weade, 1989; Martin, 1989). Teachers' beliefs are static and represent eternal truths that remain unchanged in a teacher's mind, regardless of the situation (Nespor, 1987). Ernest (1989) emphasized the importance of considering the impact of teacher belief systems on teaching behaviours, when studying teaching styles and practices. The following review of the teaching belief system literature provides empirical support for the link between teacher beliefs and teacher practices.

Kagan (1992) defined teaching beliefs as a form of personal knowledge with implicit assumptions about children, learning, and the classroom. In the past, most researchers have concentrated on two main areas of teacher beliefs; sense of self-
efficacy and content-specific beliefs. Self-efficacy refers to a teacher’s generalized expectancy concerning the ability to influence students, or the ability of the teacher to perform certain professional tasks. Content specific beliefs refer to a teachers’ orientation or attitude about specific academic content. For example, a teacher’s judgments about instructional activities, nature of learning, or educational goals (Kagan, 1992).

Woolfolk, Rosoff, and Hoy (1990) examined how teachers’ sense of efficacy was related to teachers’ classroom management approaches. Teachers completed the Teacher Efficacy Scale (Gibson & Dembo, 1984), and the Pupil Control Ideology Form (Willower, Eidell, & Hoy, 1967). Results indicated that a positive relation existed between teachers’ sense of efficacy, and how well teachers were able to manage the classroom and student behaviour. The more efficacious the teacher, the less custodial (i.e., restrictive) the pupil control ideology was; confidence in one’s ability and the belief that one has a positive effect was related to more humanistic approaches to classroom control.

Ellmore and Ellet (1988) examined the association between teachers’ general philosophical beliefs and their classroom practices. Teachers completed the Brown’s Experimental Scales (Brown, 1968) including the Personal Beliefs Inventory and the Teacher Practices Inventory. The Personal Beliefs scale consists of forty general philosophical statements taken from the writings of John Dewey, and the Teacher Practices Inventory consists of forty statements about teaching practices related to the
Beliefs Inventory. Results indicated that teachers’ personal philosophical beliefs were congruent with their tendencies to act (e.g., teachers who held philosophical beliefs such as “nothing is absolute” were more likely to allow students to move freely around the room). As such, it seemed as though teaching practices reflected personal philosophical beliefs.

Charlesworth et al. (1990) investigated teachers’ beliefs about children’s learning styles. The researchers examined the relation between teachers’ beliefs about developmentally appropriate practices, and the teachers’ actual practice within the classroom. Developmentally appropriate practices were defined as those that fit young children’s stages of development relative to age, individual stages of development, and family and cultural background. Teachers’ beliefs in areas such as curriculum goals, teaching strategies, cognitive development, physical development, and motivation were assessed through questionnaires. Teachers were then observed and their developmentally appropriate practices assessed. Results indicated that teachers’ developmentally appropriate beliefs were moderately associated with developmentally appropriate practices. An even stronger association was found between developmentally inappropriate beliefs and developmentally inappropriate practices. For example, teachers who believed that young children learned best through work and ditto sheets, were very likely to engage in this type of inappropriate instruction.
Kagan and Smith (1988) also found an association between teachers’ educational beliefs about children and their teaching practices. Specifically, they examined the association between teachers’ cognitive styles and their tendency to promote child-centered versus teacher-structured approaches in kindergarten. Kindergarten teachers completed a self-report questionnaire that assessed cognitive style, teaching ideology, classroom behaviour, and occupational stress. Observers then recorded the frequencies of two kinds of teacher behaviours; verbal interactions and location of teacher in relation to the children. Results indicated that certain teaching beliefs were associated with certain styles of teaching and teaching behaviours. Specifically, teachers who had more child-centered beliefs, as compared to teachers with more teacher-structured approaches, used little criticism and worked and communicated more with small groups of children (rather than the entire class).

Although the above studies provide empirical support linking teaching beliefs and practices, the focus of this research has been primarily on the set of beliefs that teachers have towards school, education, and children as “students”. The results from these studies support the generalization that certain teaching beliefs seem to predict certain types of teaching behaviour. However, no information was collected pertaining to teacher’s beliefs about children in general, or specific to child rearing practices.

As one of the goals in the present study was to examine what type of teaching beliefs were associated with positive teaching practices, it was important to find an
instrument that would assess an early childhood educator’s positive and negative
teaching behaviours. However, assessing the quality of teachers classroom practices
proved to be a complex task. Although many instruments have been developed to
assess teaching practices, few have been designed to assess the unique characteristics
of the early childhood educator. As such, the goal of the following pilot study was to
develop a taxonomy that would focus on teaching practices and interactions with
young children.
Pilot Study: Development and Validation of the Teaching Practice Observation Scale (TPOS)

Although there are many factors that influence children's social and academic development in the classroom, it seems clear that the teacher plays a central role. Results from previous studies have consistently indicated that teaching practices are associated with child outcomes (e.g., Reichenberg-Hackett, 1962; Phyfe-Perkins, 1981; McDaniel, 1977; Bredekamp, 1986). Thus, it is not surprising that many researchers have developed measures devised to assess teaching practices and to identify positive teaching characteristics.

There are many teaching practices that appear to promote positive child development. However, the effectiveness of teaching behaviours depends upon a number of child mediating variables, such as SES, gender, age, and grade level. For example, an effective high school teacher may be one who is fair, knows her material well, is accessible to students, and cares about their progress and academic careers. These same behaviours would not seem to apply to children in a kindergarten class. Rather, characteristics such as warmth, encouragement of social skills, responsiveness, and flexibility may facilitate young children's development more effectively. The goal of this pilot project was to develop an instrument to assess early childhood teacher-child interactions.
Positive Teaching Behaviours

Teaching practices may impact upon young children’s lives in profound ways, and thus it is important to recognize what factors influence teaching behaviours that are associated with positive child outcomes. For example, teacher warmth (e.g., Currie, 1988; Katz, 1970), interest and involvement (e.g., Phyfe-Perkins, 1981), and individual interaction patterns (e.g., Hyson, Hirsh-Pasek, & Rescorla, 1990) have been positively associated with children’s attentiveness, task involvement, and language comprehension. It is important to understand not only the relations between teachers’ beliefs and classroom practices, but also between teaching beliefs and positive teaching practices. As such, research pertaining to the various teaching characteristics that have been associated with positive student growth and development are briefly reviewed below.

Many researchers agree that teaching behaviours can have a profound positive influence on child behavioural outcomes. The characteristics of adult/teacher-child interactions are a major determinant of good quality early childhood programs (Howes & Ruebenstien, 1985; McCartney, Scarr, Phillip, Grajek, & Schwarz, 1982). For example, the Association for Childhood Education International (ACEI, 1979) found high correlations between teachers’ interest and involvement with children and the children’s attentiveness, involvement, and interest in school.
The process of social and intellectual learning for younger children is different compared to older children’s learning styles (Elkind, 1981). In this regard, it has been argued that early childhood education should be concerned with goals that are not only cognitively-oriented, but emotionally-oriented as well (Elkind, 1981). As such, children may benefit from teachers that not only focus on the cognitive aspects of teaching, but also on the emotional development of the child. The ACEI (1979) strongly recommends that teachers in early childhood classrooms be knowledgeable in child development, regularly assess the interest, needs, and skill levels of the children, listen thoughtfully and expand on children’s ideas, promote positive self image by helping children be successful, and utilize a variety of instructional methods (i.e., individual, small group, large group) when interacting with the children. This approach places more emphasis on the “whole” development of the child, as opposed to an exclusive focus on cognitive growth. Children in early childhood settings need to learn cognitive, social, and interpersonal skills in environments that are emotionally positive (Reichenberg-Hackett, 1956; Ryans, 1960). Emotionally positive environments provide ideal learning conditions and promote excellence in all areas of development.

Although there are many teacher characteristics that are related to positive child growth, many researchers agree that there are a few primary characteristics. These include: (1) how a teacher manages her time while interacting with children (i.e., quantity and quality of relationship; ACEI, 1979; NAEYC, 1986; Wolfe &
Engel, 1978); (2) how the teacher manages the children’s behaviours (McDaniel, 1977; Reichenberg-Hackett, 1962); and (3) the type of emotional atmosphere that the teacher creates within the classroom (Bredekamp, 1986; Gunnison & Ladd, 1978).

**Assessing Teaching Behaviours.** There are many instruments that have been designed to assess teaching behaviours within the classroom. However, most have been developed for use with older school age children. As such, these measures typically focus on instructional styles, fairness of homework assignments, and accessibility to students (e.g., Peterson, Fennema, Carpenter, & Loef, 1989; Smith & Neale, 1989; Stein, Baxter, & Leinhardt, 1988). Only a few teacher evaluations have been developed for use in early childhood classrooms. Most of these, however, typically focus on the quality of the programs within the schools, and/or the environment of the school.

For example, Harms and Clifford (1980) developed the Early Childhood Environment Rating Scale (ECER) to assess preschoolers’ environments. Variables assessed by this scale included how well equipped the daycare was with furnishings, how the room was arranged, how much physical space the daycare had for the children, and what types of activities were available for the children.

Burts, Hart, Charlesworth, & Kirk (1990) developed the Teaching Practice Instrument (TPI), based on guidelines put forth by the NAEYC (1986). This checklist assessed behaviours such as curriculum goals, teaching strategies, integrated curriculum, guidance of social-emotional development, and motivation.
These scales provide important information concerning the availability of physical space, the use of various learning materials, the implementation of activities, and the utilization of some teaching strategies. However, they were not designed to provide detailed assessments of the quality of teacher-child interactions, teachers’ behaviour-management skills, and the emotional climate of the classroom. Thus, the Teaching Practices Observation Scale (TPOS) was created to provide a singular observational tool for the assessment of these specific constructs.

The TPOS was developed as an observational tool designed to assess early childhood teaching behaviours during free play. Three main dimensions were incorporated into the design: time management, behaviour management, and classroom climate. Various individual behaviours were included within each of these three dimensions. These individual behaviours were drawn from previous instruments and/or were consistently found to be major determinants of positive child development and student growth in previous studies (i.e., Harvey et al., 1966; Hatch & Freeman, 1988; Hyson, Hirsch-Pasek, & Rescorla, 1990; & Stallings, 1975). For example, some behaviours under the emotional climate dimension (i.e., noise quality, warmth) were borrowed from the Classroom Practice Inventory (Hyson et al., 1990), and some items from the staff-child interaction dimension were drawn from Bredekamp’s (1986) scale (e.g., frequency of interaction, acceptance of feelings).

Time Management. Time-management denotes the quality and frequency of teacher-child interactive behaviours. The quality of the relationship that exists
between teacher and child has proven to be an important child-related influence. The type of teacher-child interactions often influences the quality of the teacher-child relationship. For example, a teacher who spends most of her time engaged in individual interactions is more likely to develop strong and genuine relationships with the children. Such teachers are likely to be child-centered, emphasizing the importance of relationships and values, and criticizing very little.

Based on results from previous studies, researchers have suggested that to improve the quality of the teacher-child relationship, teachers should also employ a number of different instructional methods, including small and large group interaction (ACEI, 1979). As previously stated, the ACEI advocated early childhood teachers to listen thoughtfully to each child, regularly assess each child’s needs, interests, and skill levels, and to encourage positive self image in each child by helping them be successful in a variety of activities. These behaviours are believed to promote positive growth in children. This approach requires the teacher to spend a predominant amount of time involved in one-on-one or small-group contact, which allows each child to receive some degree of individual attention.

**Behaviour Management.** Behaviour-management refers to the various methods teachers employ to maintain control and order in the classroom. This includes both positive reinforcement, as well as responses to children’s transgressions and misbehaviours. McDaniel (1977) argued that teachers’ ability to manage a classroom has an important influence on children’s development. The way in which
a teacher disciplines and maintains order in her classroom can have an important impact upon children's social and learning experiences. McDaniel suggested that although order in the classroom is necessary to maintain an optimum learning environment, repression (i.e., restrictive control through the use of authoritarian techniques) is not. Rather, effective behaviour-management should include respect for the child's feelings and needs, clear limits that are strictly and consistently enforced, flexibility, and positive guidance (e.g., redirection and positive reinforcement). This style of discipline will encourage children's autonomy and social abilities.

Generally, teachers are 'successful' if they encourage independence, plan a variety of activities, are involved with the children, use criticism and negative commands infrequently, and maintain high verbal interactions with the children. These teaching behaviours have been positively associated with children's task involvement, language comprehension, social participation, spontaneity, creativity, sympathy, and independence, and negatively associated with child hostility and domative types of behaviours (see Phyfe-Perkins, 1981 for a review).

Ginnot (1972) also reinforced the importance of democratic behaviour-management within the classroom. He argued that the most effective way to modify and manage behaviour is by respecting and accepting a child's feelings, and setting firm boundaries with consistent rules. This type of behavioural-management is more likely to preserve children's self esteem and less likely to breed contempt and
resistance from the children. Additionally, teachers who repeatedly punish may encourage children to engage in passive types of behaviours within the classroom, including lack of assertiveness and social withdrawal (Schmidt, 1983).

**Classroom Atmosphere.** Classroom atmosphere refers to the overall emotional climate that is prevalent in a school setting. It can be construed as the positive ‘energy’ coming from the teacher. A teacher’s personality and beliefs about child development will greatly impact upon the classroom atmosphere (McDaniel, 1977; Reichenberg-Hackett, 1986). A teacher who remains focused on individual development and individual abilities is likely to be more in tune to young children’s needs and to meet those needs more efficiently. A teacher who genuinely enjoys being with children is likely to be lively and enthusiastic and to create fun and stimulating environments. Teachers create positive environments by being flexible, showing interest in the children by participating in their activities, being aware of their progress, and encouraging spontaneity and creativity (Yardley, 1971). Displaying patience and positive affect will also contribute to an emotionally positive environment.

Warmth has also been associated with positive emotional environments (Katz, 1970; Yardley, 1971). Researchers have found that a child’s perception of warmth is critical in adult-child relationships (Rohner, 1988). Children who perceive lack of warmth are at risk for hostility, dependence, negative self-esteem, emotional instability, and a negative world view. Erickson, Sroufe, and Egeland (1988) found
that preschoolers between the ages of 4 1/2 - 5 years who had weak affective ties to their parents were dependent, noncompliant, lacked confidence, and had poor social interactive skills. The average child forms attachment relationships with approximately ten adults during childhood (Bolton, 1988) and it is likely that some of these would be with early childhood educators. Some children attending daycare centers may develop primary and secondary attachments to ECE workers. Thus, it is reasonable to assume that the amount of warmth and other such characteristics a teacher displays would be critical to young children’s development as well.

Educating children in these positive environments promotes increased self-esteem (Soar & Soar, 1976) and improved cognitive performance (Oyemade & Chargois, 1977).

**Assessment Procedures.** Researchers have employed a variety of methodologies in the assessment of teacher behaviours and teaching styles, including interviews, self report questionnaires, and student ratings (e.g., Hatch & Freeman, 1988; Myoba, 1994; Smith, 1990). Although interviews and self-report questionnaires can provide information pertaining to how teachers think they behave, they may not always provide an accurate indication of actual behaviour. Alternatively, some student evaluations have been designed for use with young children. These evaluations typically consist of cartoon drawings (e.g., Summers, 1991), where children are instructed to choose the drawing that best describes their
teachers. However, given the detailed nature of the teaching behaviours described above, the use of child ratings was clearly not warranted.

Hence, an observational method was considered to be the most useful and appropriate for assessing teaching behaviours for the current study. Advantages of direct observations are that the observer is simply a recorder, and judgments of whether a behaviour is desirable, are unnecessary. Additionally, observers can be trained to code very specific behaviours (Soar & Soar, 1978).

The purpose of this pilot study was to develop an observational taxonomy, the Teaching Practices Observations Scale (TPOS), to assess teaching behaviours in the early childhood classroom. The TPOS was designed to measure a range of conceptually important teaching behaviours, within the three broad dimensions of time-management, behaviour management, and classroom-climate.

Of primary interest in the present study was the teacher’s interactive patterns during free play. In an early childhood setting such as a daycare, interactions between teacher and child occur most frequently during free play. Moreover, the unstructured nature of the free play setting yields a greater variability in teacher behavioural styles.

The breadth of constructs and behaviours that were incorporated into the TPOS warranted the utilization of a multi-method approach. Thus, various observational methodologicals were employed in the design of the TPOS. For example, observations of time management behaviours were conducted using a time
sampling format; behaviour management behaviours were coded using an event
sampling format; and classroom-atmosphere was assessed using a rating scale format.

Method

Subjects

Seven teachers (holding a teaching certificate) and six early childhood
educators (holding an Early Childhood Diploma) participated in this study (N = 13).
Instructors were participating in a larger research project conducted by a local school
board evaluating the relation between instructor ‘training’ and children outcomes in
junior kindergarten (four-year-old children) classes (Coplan, 1997). The participants
were instructing junior kindergarten classes in ten public schools in a medium-sized
Ontario city. Schools were selected with student populations that were representative
of a wide range of socioeconomic levels and ethnic composition. All of the
instructors were female. The number of students in the classroom varied from 15 to
25 (M = 19.43, SD = 6.24).

Materials and Procedure

Two trained researchers observed the teachers during free play on at least 2
different occasions over a total period of about 2 hours. Teacher-child interactions
were coded using a variety of procedures.

Time Management. Time Management behaviours were assessed using a time
sampling format, with a 30-second time interval (yielding approximately 144 codes
per subject). A mutually exclusive coding scheme was employed, whereby a
teacher received a code for the predominant behaviour displayed in each 30 second time interval. When the teacher was in direct contact with the children, interaction with individual children or groups of less than five children, small group interaction was coded, while large group interaction involved contact and interaction with groups of five or more children. When the teacher was observed not to be in direct contact with the children, on-task behaviour was coded; if the teacher was involved with program activities, but not the children themselves (i.e., setting up paint) or if the teacher was monitoring the children; and off-task behaviour was coded when the teacher was completely removed from the children, involved in activities that were not program related (i.e., reading mail).

Behaviour Management. Behaviour Management behaviours were assessed using an event sampling format, again employing 30-second time intervals. Event sampling is used most often with less common or less frequent behaviours (e.g., Stallings, 1975). Behaviours were coded if they occurred at least once during each 30-second time period, and several different codes could be recorded during the same coding interval. Praise (encouragement) was coded when the teacher addressed a child’s behaviour in a positive way. Addressing personality and behaviour was coded when the teacher addressed a transgression. If the teacher made criticism to the child’s internal characteristics or personality (i.e., you are a bully) she was coded as addressing the child’s personality. If the teacher instead addressed the child’s
behaviour (i.e., you need to stop hitting) the teacher was coded as addressing the child’s behaviour. Instances of hostile affect (e.g., harsh tones of voice, threats) and behaviour (e.g., rough handling, harsh physical restraint of the child) were coded as hostility. Activity participation was coded when teachers were directly involved in the children’s activities, at the children’s level to work and play. Instances of accepting a child’s feelings were coded when a teacher either validated or acknowledged how a child was feeling. Finally, encouraging perspective taking was coded when the teacher made an attempt to teach the children to see things from another’s point of view.

Classroom Climate. The emotional climate of the classroom was assessed using behavioural rating scales. Behaviours were rated on a three point Likert scale, every 15 minutes. Averages were subsequently obtained for each of the behaviours across 15-minute intervals. Specifically, ratings of patience pertained to teachers’ displays of calmness, tone of voice, and articulate speech. Warmth and responsiveness were coded as a function of the teachers’ attentiveness and compassion in response to children’s needs. Rating of positive affect related to teachers’ displays of affection and positive mood. Teachers received ratings of interest and involvement in conjunction with how they interacted with children and asked them questions about their progress at school and personal lives. Ratings of independence concerned how teachers allowed children time to work things out for themselves, such as a difficult puzzle or conflict with peers. Time division related to
the teachers' tendency to move around the room and engage with all of the children for an equal amount of time. A complete list of the behavioural codes for the TPOS is presented in Table 1. A more detailed description and coding manual is provided in Appendix 1.

Inter-observer reliability. Reliability data was collected for a pair of observers after three weeks of training at three different practice schools. A total of 72 minutes (or 144 codes) of observations, of three teachers (in classrooms not participating in the study) was collected. The overall Cohen’s Kappa, for a complete variable matrix, was calculated at $K = .80$. Broken down by segments, the reliability for the time-sampled codes was $K = .81$, (with individual behavioural codes ranging from .72 to .86); $K = .76$ for event sampled codes (individual behavioural codes ranging from .65 to .87); and $K = .83$ for the rating scale codes (individual codes ranging from .77 to .89). Individual Kappas are shown in Table 2.

Results

To begin with, the raw frequency scores for the time- and event-sampling codes were proportionalized by dividing by the total number of 30-second episodes recorded. Means and standard deviations for the proportionalized variables are displayed in Table 3. Because of their infrequent occurrence, two variables were dropped from future analyses. These included addresses personality and addresses behaviour.
### Table 1

**Teacher Practices Observation Scale Codes**

**Time Management**
- small-group
- large-group
- on-task
- off-task

**Behaviour Management**
- praise
- accepts feelings
- addresses personality
- addresses behaviour
- hostility
- activity participation
- encourages perspective taking

**Classroom Climate**
- warmth
- patience
- interest/involvement
- positive affect
- time division
<table>
<thead>
<tr>
<th>Behaviours</th>
<th>Kappa's</th>
</tr>
</thead>
<tbody>
<tr>
<td>small group</td>
<td>.86</td>
</tr>
<tr>
<td>large group</td>
<td>.86</td>
</tr>
<tr>
<td>on-task</td>
<td>.78</td>
</tr>
<tr>
<td>off-task</td>
<td>.72</td>
</tr>
<tr>
<td>praise</td>
<td>.72</td>
</tr>
<tr>
<td>addresses personality</td>
<td>.78</td>
</tr>
<tr>
<td>addresses behaviour</td>
<td>.73</td>
</tr>
<tr>
<td>hostility</td>
<td>.76</td>
</tr>
<tr>
<td>activity participation</td>
<td>.65</td>
</tr>
<tr>
<td>accepts feelings</td>
<td>.80</td>
</tr>
<tr>
<td>encourages perspective taking</td>
<td>.87</td>
</tr>
<tr>
<td>warmth</td>
<td>.81</td>
</tr>
<tr>
<td>interest</td>
<td>.85</td>
</tr>
<tr>
<td>encourages independence</td>
<td>.59</td>
</tr>
<tr>
<td>patient</td>
<td>.77</td>
</tr>
<tr>
<td>positive affect</td>
<td>.89</td>
</tr>
<tr>
<td>time division</td>
<td>.88</td>
</tr>
</tbody>
</table>
Relations within dimensions. The first set of analyses concerned the associations between the behavioural codes within each of the behaviour-management and classroom climate dimensions (the computation of correlation coefficients between the various time-sampled codes was not appropriate because of the mutually exclusive nature of the coding scheme—which artificially inflates the negative relations between variables). To begin with, a series of correlations was computed between the various behaviour management codes. As can be seen in Table 4, the overall pattern of results indicated that within the behaviour-management dimension, the ‘positive’ behavioural-management techniques (i.e., praise, accepts feelings, activity participation, and encourages perspective taking) were generally inter-correlated with each other. For example, accepts-feelings was positively and significantly correlated with activity participation ($r = .71$, $p < .01$), and encourages perspective taking ($r = .74$, $p < .01$). Hostility was negatively correlated with these positive management behaviours, as expected, although none of these correlations reached significance.

An analysis of the internal consistency of the averaged classroom-climate rating scale scores indicated strong inter-correlations among five of the variables. These included warmth, patience, positive affect, interest/involvement, and time
Table 3

Means and standard deviations for proportionalized TPOS variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>small group</td>
<td>.45</td>
<td>.13</td>
</tr>
<tr>
<td>large group</td>
<td>.08</td>
<td>.05</td>
</tr>
<tr>
<td>on task</td>
<td>.41</td>
<td>.11</td>
</tr>
<tr>
<td>off task</td>
<td>.08</td>
<td>.08</td>
</tr>
<tr>
<td><strong>Behaviour Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>praise</td>
<td>.17</td>
<td>.04</td>
</tr>
<tr>
<td>accepts feelings</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>hostility</td>
<td>.01</td>
<td>.02</td>
</tr>
<tr>
<td>activity participation</td>
<td>.20</td>
<td>.10</td>
</tr>
<tr>
<td>encourages perspective taking</td>
<td>.01</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Classroom Climate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>warmth</td>
<td>2.23</td>
<td>.37</td>
</tr>
<tr>
<td>patience</td>
<td>2.34</td>
<td>.52</td>
</tr>
<tr>
<td>interest/involvement</td>
<td>2.07</td>
<td>.54</td>
</tr>
<tr>
<td>positive affect</td>
<td>1.86</td>
<td>.62</td>
</tr>
<tr>
<td>time division</td>
<td>2.07</td>
<td>.55</td>
</tr>
</tbody>
</table>
### Table 4

**Intercorrelations between behavioural management behaviours**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>praise</td>
<td></td>
<td>.24</td>
<td>-.42</td>
<td>.35</td>
<td>.18</td>
</tr>
<tr>
<td>accepts feelings</td>
<td></td>
<td></td>
<td>-.24</td>
<td>.71**</td>
<td>.74**</td>
</tr>
<tr>
<td>hostility</td>
<td></td>
<td></td>
<td></td>
<td>.13</td>
<td>.22</td>
</tr>
<tr>
<td>activity participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.67*</td>
</tr>
<tr>
<td>encourages perspective taking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significance levels: *p < .05, **p < .01*
division (Cronbach alpha = .85). The other variable, encourages independence which also had a low reliability coefficient, was dropped from the classroom climate dimension. (It was decided to transfer this behaviour to the behaviour-management dimension, for the next study).

**Relations across dimensions.** The next set of analyses explored the associations between behaviours across the three dimensions. Results from correlations computed between the time-management and the behaviour-management variables are displayed in Table 5. The overall pattern of results was consistent with the expected associations between interactive styles and behaviour management techniques. For example, small-group interaction was positively correlated with activity participation ($r = .60, p < .05$), while off task behaviours were negatively correlated with encouraging perspective taking ($r = -.59, p < .05$).

The last set of analyses involved the relations between classroom climate and the time- and behaviour-management variables. Results from correlational analyses are displayed in Table 6. Again, the overall pattern of results indicated that positive classroom atmosphere was associated with time-management and behaviour management techniques. For example, a positive classroom climate was significantly and positively associated with the frequency of small-group interaction with children ($r = .56, p < .05$), praise ($r = .63, p < .05$), and accepting a child's feelings ($r = .66, p < .05$), and negatively correlated with the display of off-task behaviours ($r = -.62, p < .05$).
Table 5

Correlations between time-management and behaviour management behaviours

<table>
<thead>
<tr>
<th></th>
<th>small-group</th>
<th>large-group</th>
<th>on-task</th>
<th>off-task</th>
</tr>
</thead>
<tbody>
<tr>
<td>praise</td>
<td>.24</td>
<td>.29</td>
<td>-.09</td>
<td>-.49+</td>
</tr>
<tr>
<td>activity participation</td>
<td>.60*</td>
<td>.22</td>
<td>-.33</td>
<td>-.81**</td>
</tr>
<tr>
<td>hostility</td>
<td>.30</td>
<td>-.20</td>
<td>-.11</td>
<td>-.25</td>
</tr>
<tr>
<td>accepts feelings</td>
<td>.35</td>
<td>.25</td>
<td>-.27</td>
<td>-.47</td>
</tr>
<tr>
<td>encourages perspective</td>
<td>.45</td>
<td>.01</td>
<td>-.17</td>
<td>-.59*</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01  
+p < .10
### Table 6

**Correlations between classroom atmosphere and time and behaviour management variables**

<table>
<thead>
<tr>
<th>variable</th>
<th>classroom climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>small-group</td>
<td>.56*</td>
</tr>
<tr>
<td>large-group</td>
<td>.05</td>
</tr>
<tr>
<td>on-task</td>
<td>-.31</td>
</tr>
<tr>
<td>off-task</td>
<td>-.62*</td>
</tr>
<tr>
<td>praise</td>
<td>.63*</td>
</tr>
<tr>
<td>accepts feelings</td>
<td>.66*</td>
</tr>
<tr>
<td>activity participation</td>
<td>.52</td>
</tr>
<tr>
<td>encourages perspective taking</td>
<td>.61*</td>
</tr>
<tr>
<td>hostility</td>
<td>-.20</td>
</tr>
</tbody>
</table>

* p < .05
Discussion

The goal of this pilot study was to develop and provide some preliminary psychometric validation of the Teaching Practices Observation Scale (TPOS), an observational taxonomy for the assessment of teacher-child interactions during free play. Although the establishment of construct validity is a difficult task for any observational coding scheme, the results from the present study represent the first step in establishing the TPOS as a potentially useful tool in the assessment of teaching styles in the early childhood classroom. Overall, results from correlations computed both within and across dimensions indicated consistent and expected associations among most of the various behavioural codes.

Changes to the taxonomy: Based on the results of this study, a few modifications were made to the TPOS. To begin with, because of the low frequency of occurrence and inconsistent pattern of intercorrelations, addresses personality and addresses behaviour were dropped from the scale. In other studies, it may be possible to redefine addressing behaviour, so that it measures the degree of restrictiveness the teacher displays in the classroom. Although other behaviours were also occurring in low frequency, their inclusion was deemed more important on a conceptual basis. For example, although hostility was occurring very infrequently, it is the most direct measure of negative teaching styles on the TPOS. As well, accepts feelings occurred very infrequently. However, recent literature suggests that validating and acknowledging a child's feelings, is a display of warmth and positive communication.
(Faber & Maslish, 1980). It was also correlating highly with the other variables on the scale. Therefore, these two low frequency occurring behaviours were kept as part of the scale, with their properties re-evaluated in study 2.

Another modification was made to the scale by transferring encourages independence from the rating scale to the behaviour management dimension. The correlations between encouraging independence and the other rating scale items were not significant, nor showing any type of trends. Although teaching children how to think and act independently is important, it was not a correlate of emotional climate within the classroom. Encouragement of autonomy can also be seen as a way in which teachers control the children and their classrooms, and thus, it was transferred into the behaviour-management dimension, where it would be used as a measure of teacher restrictiveness.

**Interrelations among behaviours.** The interrelations among most of the observational codes suggested clear patterns of teachers' behavioural conduct in the classroom. These patterns appeared to be somewhat pervasive, evident across different aspects of teacher-child interactions. For example, teachers who most frequently interacted with children in small groups were also more likely to engage in positive behavioural management techniques such as activity participation, and to establish a positive emotional climate in the classroom. On the other hand, teachers who spent a comparatively high frequency of time off-task, were less likely to use
positive behavioural management techniques such as encouraging perspective taking, and had lower ratings of classroom-climate.

These findings are in keeping with the notion that teachers are consistent in their teaching behaviours (Katz, 1970). In this regard, it seems that teaching styles involve specific patterns or clusters of behaviours that co-occur. A similar conceptualization of behavioural patterns can be seen in the parenting literature. For example, parenting styles have been defined as constellations of different behavioural characteristics that when presented together, form a specific type of parenting pattern (e.g., Baumrind, 1971). It is possible that the classic parenting typologies (authoritative, authoritarian, permissive) first described by Baumrind (1971) may ‘translate’ in some way into the classroom.

For example, speculating from the inter-correlations among behavioural codes observed in the present study, there is evidence to suggest that some teachers engage in an ‘authoritative’ teaching-style. This is characterized by a focus on individual and small-group interactions, direct activity participation with the children, efforts to validate and encourage children’s expressions of feelings and perspective-taking abilities, along with the establishment of a positive emotional climate through the expression of warmth, positive affect, and a genuine interest in the children’s well-being. In contrast, an ‘authoritarian’ teaching style seems to be characterized by negative emotional climate in the classroom, established by the teachers display of
hostile affect and behaviours, together with a lack of praise and the denial of children's feelings.

If these 'parenting styles' are being translated into the classroom, then it is possible that teachers are engaging in teaching practices that are similar to parenting behaviours. In this regard, it is also possible that teachers are being affected by their parental beliefs while engaging in interactions with the children in their care. Thus, the teachers' parenting beliefs may not only be associated with their parenting behaviours, but with their teaching behaviours as well. This supports the body of literature that suggests that parents engage in similar types of behaviours with children of their own and non-related children. Teachers who are also parents may be behaving in similar ways at work as they do at home, and thus their teaching practices may be influenced by the same factors that influence their parenting behaviours.

The results from this study provide a preliminary examination of the internal validity and reliability of the TPOS. However, these findings must be interpreted with some caution because of the relatively small sample size. Although a great deal of observational data was collected for each teacher, the sample included only 13 subjects. Computed correlation coefficients in a sample of this size may be somewhat unstable. However, a clear pattern of results was evident, with most correlations demonstrating trends in the 'right direction'. Further implications for these findings and for the use of this scale is discussed in the general discussion (see Study 2).
Experiment Two:

Teaching Beliefs, Parenting Beliefs and Teaching Practices in Daycare Settings

Teaching beliefs appear to predict teaching behaviours within the classroom (e.g., Charlesworth et al., 1990; Spidell, 1988). Similarly, researchers have found relations between parental beliefs and parental practices. In this second study, an attempt was made to merge these two bodies of literature to examine teachers' parental beliefs and their associations with classroom practices.

Typically, researchers have studied parents' child rearing styles, goals, and attributions. Parenting beliefs have been found to be consistent and reliable predictors of parental practices. It is also the case that parenting beliefs and parenting styles similarly influence maternal interactions with other children. As such, teachers' parenting beliefs may also influence their teaching practices with the children in their work environment (i.e., daycare).

Parenting Beliefs

Parenting beliefs are a set of cognitions that parents have regarding child rearing, child development, and appropriate child socialization (i.e., discipline). Parental beliefs are influenced by such factors as parental personality and temperament, socioeconomic status, broad cultural values, and personal experiences (Grusec and Lytton, 1988). All of these factors combine to contribute towards parents' personal individual beliefs. Parenting attitudes towards child rearing, child development, and discipline are manifested through parenting behaviours (e.g.,
parenting styles or practices), parenting goals (e.g., parent centered vs. child centered) and parental attributions of misbehaviours (e.g., blame child vs. blame situation).

**Parenting Styles/Practices.** Parenting styles have been extensively studied over the past few decades (e.g., Baumrind, 1971; Ellis, 1986; Kandel & Lesser, 1969; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Radziszewska et al., 1996). Although many researchers have identified a number of “types” of parenting styles (e.g., Baumrind, 1971, Lamborn et al., 1991; Maccoby & Martin, 1983), most are based on two continuous dimensions; restrictiveness-permissiveness and warmth-hostility. Of the many researchers who have studied parenting styles, the leading researcher in this area is Diana Baumrind. Baumrind suggested that parental beliefs are the driving force behind “parenting styles” (Baumrind, 1971). Parenting styles are a constellation of different behavioural characteristics that, when presented together, form a specific type of parenting pattern. Each of these typologies is based on a framework or foundation of specific beliefs about children and child rearing goals. Baumrind described three main typologies of parenting styles: authoritarian, authoritative, and permissive. These styles were based on the parents’ ability and consistency in discipline and rule enforcement.

An **authoritarian** parent values obedience as a virtue and believes in restricting the child’s autonomy. This parent favors punitive, forceful measures to gain compliance from his/her children, and places high importance on obedience and the preservation of order. The authoritarian parent believes the child should simply
accept the parent’s word for what is right, and does not believe in encouraging the child to seek independence. In contrast, an authoritative parent sets appropriate standards for conduct, values compliance with reasonable rules, but also respects the child’s autonomy and individuality (Grusec & Lytton, 1988). The authoritative parent encourages the child to seek independence. Finally, permissive parents are affirmative and accepting towards the child’s impulses and actions, regardless of inappropriate behaviour. The permissive parent believes that children can only develop optimally with little, if any, limitations (Baumrind, 1971). As a result, the child is virtually free from restraint.

Results from several research studies suggest that different child behavioural outcomes are associated with these different parenting styles. For example, Baumrind (1973) found that children who were from homes with authoritative parents showed greater social responsibility and independence than children who had either authoritarian or permissive parents. Baumrind argued that authoritative child rearing was the most positive form of parenting for children of all ages and of both sexes. Results from other studies involving adolescents have shown that authoritative parenting (i.e., consistent control and reasonable restrictions, combined with encouragement for individual action and reward for independence) is positively related to adolescents’ social responsibility, desire to achieve, high self esteem, academic grades, and mature moral reasoning (Boyes & Allen, 1993; Grusec & Lytton, 1988; Radziszewska et al., 1996).
In contrast, Baldwin (1949) found that although children from democratic or permissive homes were socially outgoing, they were also more likely to show hostility. He concluded that permissive parents did not teach their children how to conform to cultural demands, which resulted in increased aggression and hostility towards other people. Finally, Loeb, Horst, and Horton (1980) suggested that extreme restrictiveness can also lead to negative consequences in social behaviour (such as low self-esteem). Parents who were very restrictive and very controlling had children who were less independent and less socially competent than children from authoritative or permissive homes.

Most research studies that have examined parenting styles have found similar patterns of parenting as Baumrind (1971). Any disagreement on these styles have usually focused on the so-called “critical variable”. Baumrind suggests that the balance of high control with high responsiveness represents the most important style of parenting (i.e., authoritative), with too much permissiveness (i.e., critical variable) being detrimental to the child. Others (e.g., Baldwin, 1949) believe that it is too much control that is most detrimental to the child. Thus, although most researchers believe that the authoritative type of parenting is the most effective parenting style, there is some discrepancy on what style or pattern of parenting is the least effective (i.e., authoritarian or permissive).

**Criticisms of Baumrind’s Typologies.** There are some issues to consider when using Baumrind’s parenting typologies. Baumrind’s parenting typologies may
be cultural specific (i.e., white middle class mothers), and may not adequately represent parenting styles from all cultures. Most of the participants in Baumrind’s studies have been white with middle class social status. Thus, the child outcomes that have been associated with the various parenting styles, may only be applicable to white children, from middle class backgrounds. For example, the authoritative parenting styles may be the most effective for children in white, middle class homes, but may not necessarily be the most effective for children with different cultural and SES backgrounds.

Another criticism is that a lot of parents do not necessarily fit into any one type parenting (i.e., authoritative, authoritarian, and permissive). It is quite possible, and even likely, that the three different parenting styles are not exclusive nor exhaustive. There may be other types of parenting classifications, and in this regard, would not be recognized in this study, due to Baumrind’s narrow classifications.

As well, these parenting typologies represent combinations of parental control, encouragement of autonomy, and responsiveness. Grusec and Lytton (1988) argued that the constructs are sometimes defined inconsistently in different studies, and thus may lead to different outcomes. For example, if parental control is measured as a restriction on aggression to siblings or a restriction on exploration and independent behaviour, these differences may result in different outcomes. Thus, the way in which restrictiveness and responsiveness is measured, will partly determine
the outcomes of the study. In this regard, these issues must be considered when interpreting the results in this second study.

**Parenting Goals.** The process of socialization is the internalization of social norms. An important responsibility in parenting is to instill in young children these social norms and cultural values. As such, parents discipline with the goal of having children incorporate these norms into their own code of behaviour.

Parenting goals are a more specific component of parenting styles. Where parenting styles represent more global ideologies about parenting, parenting goals capture individual parenting cognitions and values. Parenting goals are the outcomes that parents have in mind or are hoping to achieve while they are engaged in interactions with their children (Dix, Ruble, Grusec, & Nixon, 1986; Hastings, 1995). As opposed to being a group of specific behaviours, parenting goals are specific cognitions that influence how a parent disciplines.

Hastings (1995) proposed that parenting goals play an executive role in controlling how parents deal with their children. Parenting goals organize parental cognitions and affective responses during child rearing interactions. Hastings argued that parenting goals directly and indirectly affect parenting behaviours; directly by influencing the behaviours that parents choose when trying to achieve the goals during interactions with their child; and indirectly by affecting other parental cognitions during parent-child interactions (e.g., attributions, evaluations, emotions).
Parenting goals have been categorized as parent-centered, child-centered or relationship-centered (Dix, 1985; Hastings, 1995). Parents who have primarily parent-centered goals are more likely to be focused and concerned with meeting their own needs, obtaining compliance from their child, and establishing authority. Such parents may raise children in highly conflictual environments (Dix, 1985). Chronic and intense conflict has been linked to child abuse, noncompliance, and aggression in children (Emery, 1982; Maccoby, 1980). Parents whose primary focus is on parent-centered goals are likely to try to dominate and control their children, which often results in angry and resentful children who have low motivation to cooperate (Dix, 1985).

Parents who have primarily child-centered goals are more likely to be concerned with teaching children values and culturally-relevant standards of behaviour (Hastings & Coplan, 1997). Child centered goals reflect the parents’ hope to instill proper social norms in the child, for the child’s sake (i.e., not for the parents’ own needs). For example, in an aggressive situation the parent may want to ensure that the child understands that hurting other people is not fair. These parents have a strong interest in promoting positive outcomes for their children. Their children receive the assistance, resources, and emotional support that healthy development requires (Dix, 1985). Child-centered goals build trust and affection between parents and children. Parents with these goals also teach their children invaluable social
skills (Fabes, Eisenberg, & Miller, 1990) such as, taking on other’s perspectives and points of view, negotiating skills, and cooperation.

Parents who have primarily relationship-centered goals are more likely to be concerned with making their children happy, cooperating, reaching fair outcomes, and maintaining family ties. Although relationship goals are important for a parent to possess, it is important that a balance is maintained between concerns for the parent-child relationship and conformity (Dix, 1985). There are situations in where it is appropriate to center concerns on compromising and familial ties, and there are situations where it is most appropriate to address the socialization needs of the child (Hastings & Coplan, in press). Too much focus on relationship-centered goals may result in too much indulgence and an overly permissive environment for the children. Children raised in these environments tend to have low social and cognitive competencies (Baumrind, 1971; Maccoby, 1980), and are generally noncompliant and aggressive (Patterson, 1982). Dix (1985) argued that effective parenting occurs when there is a balance between what children want, what children need, and what parents want and need.

**Parenting Attributions.** Parenting goals are associated with attribution styles. Attributions refer to the thought processes that people undergo in order to comprehend and explain other people’s actions (Jones & Davis, 1965). Attributions influence parental emotions and the degree of control a parent will display during
discipline. Thus, parenting goals are a determinant of how parents judge the causes of their children's behaviour (Hastings, 1995; Kuczynski, 1984).

Dix (1993) argued that attributing certain dispositions to children is very important to socialization. The inference that children are intelligent, stupid, lazy, or stubborn may greatly impact upon how an adult will react to the particular child. Results from a number of studies have indicated that children act in ways consistent with attributions that have been placed upon them (Dweck, 1975; Jensen & Moore, 1977; Grusec & Redler, 1980). For example, various attributions made by adults have contributed to greater generosity of children (Grusec & Redler, 1980), and low interest in academic studies (Parsons, Adler, & Kaczala, 1982). The way in which parents attribute responsibility for misbehaviours is important because parents directly influence children's views of who they are and how they should act. Adult's attributions about children influence a child's internalization of values and views of themselves (Dix, 1993).

Attributions are affected by a number of factors, such as parental emotions and personalities, preexisting beliefs about children, and cultural norms (Dix, 1993). How parents attribute responsibility for their children's behaviour often reflects their beliefs about child development, child rearing, and discipline. For example, parents who attribute their children's misbehaviours to an internal locus of control (i.e., blame child) are likely to use punishment when dealing with their children's transgressions (Dix, 1993; Dix, Ruble, & Zambarano, 1989). This is because parents
who see misbehaviour as intentional and controllable are likely to be angry with their children and use forceful measures to discipline. On the other hand, parents that do not feel the child is capable of intentional wrong doing, or that external influences (e.g., a new situation) may influence the child’s behaviour, are less likely to use harsh punishment to discipline and are less likely to feel angry (Dix et al., 1989).

The way a parent attributes responsibility for a child’s misbehaviour is partly determined by his/her parental goals (Dix, 1985; 1992; Hastings, 1995). For example, parents who are more focused on their own goals and are less child-centered, are more likely to blame children for misbehaviours. Therefore, they are more likely to negatively evaluate their children’s behaviours, and feel more angry and negative towards their child’s behaviours. These goals, attributions, evaluations, and feelings are associated with Baumrind’s authoritarian style of parenting (Dix, 1985; Hastings, 1995).

In contrast, parents who are more child-centered (i.e., focused on both compliance and relationship issues) in their goals are more likely to attribute cause to the external environment (e.g., a new situation) for their children's misbehaviours. Therefore, they tend to evaluate the child's misbehaviour less negatively and feel less angry. These goals, attributions, evaluations, and feelings are associated with a more authoritative style of parenting (Dix, 1985; Hastings, 1995).

Parental goals and attributions are situation specific, in that goals may vary according to the type of transgression or situation that the child is in (Hastings &
Coplan, 1997). In general, parental goals are consistent across the same types of situations and transgressions (e.g., aggression). Parental goals provide insight into the beliefs that parents have about children, child development, and socialization processes.

**Parents and Other Children.** It is well established that parenting styles, goals, and attributions are associated with parenting practices and child outcomes. However, it is not as clear as to whether or not these beliefs are also associated with teachers' behaviours in the same manner. A small body of literature does exist where researchers have examined the consistency between parenting one's own children, and interacting with other children. Results from these studies indicate that parenting beliefs are likely to influence parenting behaviours in the same way regardless of whether the parent is interacting with their own child or with an unrelated child.

For example, Dix and Lochman (1990) found that dysfunctional parents made similar attributions about their own and unrelated children, when the children's behaviours were similar. Results from other studies have shown that children's behaviours, particularly disruptive behaviour, elicits similar responses from both related and unrelated mothers. In a study conducted by Bugental, Blue, and Lewis (1990), mothers in counseling at a child abuse agency identified one of their children as relatively difficult and a second child as relatively easy. The sibling pairs were then videotaped interacting with unrelated mothers from the community. The facial gestures and vocal affect directed towards the children by unrelated mothers were
similar to those of the related mothers. The researchers suggested that when adults have similar beliefs and attributions, they respond similarly towards the children. That is, when unrelated mothers and related mothers both attributed high control to the child and low control to themselves, their behavioural responses to the sibling pairs were very similar. Thus, it seems reasonable to assume that teachers' parental beliefs about child rearing, goals, and attributions may influence their teaching practices in the same way as it influences their parenting practices.

In addition to teachers' educational and parental beliefs, there may be other factors that influence classroom practices, that are also important to consider when examining teaching practices. Some of these include cultural norms, SES, education, and training.

**Cultural Norms.** Grusec and Lytton (1988) suggested that external constraints imposed and expected in different countries contribute towards systematic differences in patterns of childrearing. However, these differences may only become visible between strongly contrasted cultures. In every culture there are specific norms and values that people hold as either positive or negative. For example, Greenglass (1972) found that immigrant Italian mothers and native born Canadian mothers reacted differently to their child's ability or inability to resist temptations. Immigrant Italian mothers, as compared to the native born Canadian mothers, were more controlling and restrictive, and used justifications less. Thus, teachers of varying cultural groups may find certain characteristics as valuable and others of little
significance (Maccoby & Martin, 1983). However, the sample selection in the present study did not necessitate the analysis of this variable.

**Socioeconomic Status.** A teacher’s socioeconomic status (SES) may also influence her behaviour within a classroom (Grusec & Lytton, 1988; Winestky, 1978). Social class sums up a cluster of stable conditions, occupations, goals, and psychological attributes (Grusec & Lytton, 1988). Different social classes may adopt different interactive styles with children because of different value systems (Grusec & Lytton, 1988). Some researchers have suggested that middle class individuals value curiosity, consideration for others, independence, and self control. In contrast, it has been argued that lower class individuals focus on obedience and compliance to authority figures, possibly because their lifestyles are very much controlled and supervised by other people. Thus, it is reasonable to assume that teachers are affected by their social class and corresponding values.

Winestky (1978) examined differences in preferred methods of teaching between parents and teachers, in terms of social class, role, and ethnicity. Teachers and parents were asked to complete the *Educational Activities Index* (Winestky, 1978) a pictorial instrument that was designed to portray the underlying values of particular cultures. Teachers and parents were asked to choose the pictures that best represented their preferred method of teaching. For example, a pair of pictures may represent a preschool situation in which authority of decisions rests with the child (self direction) and with the other representing a situation in which authority for
decisions rests with the teachers (conformity). The results from this study indicated
that teachers and parents who differed in socioeconomic levels preferred different
teaching styles. For example, those from a middle class socioeconomic level were
more likely to be child-centered and child focused, than those from a lower
socioeconomic level. Those from lower socioeconomic levels were more likely to
prefer teacher oriented and structured classrooms. However, the results also indicated
that when comparisons were made within teaching groups alone, there was very little
variability in terms of socioeconomic levels. That is, most teachers were of the same
socioeconomic status (i.e., middle class). Similarly, significant differences due to
SES levels were not expected in the present study.

Education/Training. Results from some studies have indicated that the
amount of education and or experience that a teacher has with young children may
also influence their teaching styles (Ispa, 1995; Minton et al., 1971; Zussman, 1978).
Rosenthal (1991) found that educated teachers spent more time in individual
interactions than in large group interactions, compared to less educated teachers.
Berk (1985) reported that level of education was related to a number of caregiving
behaviours; higher educated teachers engaged in more encouraging type behaviours
(e.g., responsive to child) and promoted more verbal development (e.g., repeat a
child’s sentence) than less educated teachers. Teachers with less education also used
more restrictive behaviours (e.g., belittle).
Overall, the early childhood educators in the present sample were expected to be from the same culture, belong to the same socioeconomic levels, and have received the same level of training and education. Nevertheless, the effect of these variables on both parental beliefs and teaching behaviours was explored.

Assessing Parental Characteristics

As stated, there are several possible factors that are associated with teaching practices, however, for the purpose of the present study the primary focus was on teachers’ parental beliefs. There are several measures designed to assess child rearing beliefs, parental goals, and attributions. For the present study, the following assessment tools were selected.

Parenting Styles. Parenting styles and child rearing practices were assessed using the Child Rearing Practices Report (CRPR; Block, 1965). The CRPR has been frequently employed in the literature (e.g., Roberts, Block, & Block, 1984; Davies, Zucker, Noll, & Fitzgerald, 1989). It has been used longitudinally to examine the stability of parental child-rearing attitudes across time (Roberts et al., 1984), as well as the relation between parent-reported child-rearing practices during early childhood and adolescent self esteem, intelligence, and moral reasoning (Vaughn, Block, & Block, 1988). The CRPR has also been employed cross sectionally to examine child-rearing attitudes in physically abusive families (Susman, Trickett, Iannotti, Hollenbeck, & Zahn-Waxler, 1985), families with depressed parents (Stoneman, Brody, & Burke, 1989) and young alcoholic families (Davies et al., 1989).
Investigations using the CRPR support the sensitivity of this measure to evaluate current parental socialization practices, as well as the ability of this approach to predict future adaptations of children.

The CRPR has a large number of items designed to assess goals, values, and attitudes of parents with respect to child rearing. The CRPR provides information on four primary domains of socialization: (a) child's autonomy and independence (b) parental authority, discipline, and control strategies (c) parental goals and aspirations for their child and (d) expression of emotion in parent-child interactions. These concepts are relevant to the present study because they concern how the teacher/parent disciplines, whether she uses negative or positive affect, whether she uses positive behavioural management techniques, and whether the teacher/parent enjoys children and likes to invest time in them.

Parenting Goals and Attributions. Hastings (1995) suggested that parenting goals play a large role in parenting practices, and thus deserve individual attention. Hastings developed a scale that assesses parenting goals, as well as parental attributions, evaluations, and feelings parents may have during interactions with their children. The Child Behaviour Stories (CBS; Hastings, 1995) was designed to measure parental responses in different situations through the use of hypothetical vignettes.

Parenting goals and attributions change as a function of different situations (Grusec & Kuczynski, 1989; Hastings, 1995). For example, Kuczynski (1984) found
that parents’ goals and discipline techniques varied according to the type of transgressions their children engaged in. It has been argued that individual parents display a moderate level of consistency across contexts in their parenting behaviour (Grusec & Goodnow, 1994). A parent may not always deal with their child in a particular fashion, however, the variation in the parenting responses may not be random or unpredictable. The particulars of a given situation may impact upon the appropriateness of the parental response (Hastings & Coplan, in press). Therefore, parenting goals may vary according to the context in which the child’s behaviour occurs. It may be appropriate in certain situations for a parent to focus on instilling values, maintaining close relationships with the child, or demanding complete and immediate compliance from the child (Hastings & Coplan).

Hypothetical vignettes provide an efficient and reliable methodology for assessing parenting goals and attributions in various types of situations (Dix et al., 1986). Hypothetical vignettes are descriptions of certain situations that generally involve an action of a particular person. For example, Mills and Rubin (1990) used hypothetical vignettes to assess mothers’ reactive cognitions concerning preschoolers’ displays of aggression and social withdrawal. The vignettes described incidents where a child behaved consistently in an aggressive or socially withdrawn manner. Following the vignettes, mothers were asked to rate how they would feel if their own child had acted in this fashion, and what they thought they would do to modify this behaviour.
The use of vignettes allows researchers to assess how parents react in specific situations. The types of situations included in the CBS were relevant to the present study, including common child transgressions and behaviours (e.g., aggressive behaviour displayed towards a playmate at daycare). These situations are also likely to occur in the daycare center, thus assuring that the daycare teacher would be familiar with these types of situations in real life.

**Summary and Hypotheses.** Having established the TPOS as a measure of teacher behaviours, the goal of this study was to examine how teachers’ parental beliefs were associated with teaching practices. To accomplish this goal, a series of questionnaires designed to assess parenting styles, goals, and attributions were given to the daycare teachers. As well, teacher behaviours were observed within the daycare classroom.

It was hypothesized that overall, teachers’ parenting beliefs would influence teaching practices above and beyond other mediating variables such as culture, SES, and education (see Figure 1). Specifically, positive associations were expected between teachers’ authoritative beliefs about childrearing, the combination of high parent- and high relationship-centered goals, and external attributions and the teaching behaviours of (1) child centered teaching practices (i.e., praise, activity involvement), and (2) encouraging types of behaviours (i.e., autonomy and empathy). In contrast, negative associations were expected between these parental beliefs and hostility or negative teaching practices (see Figure 2).
Negative associations were expected between teachers’ authoritarian beliefs about child-rearing, the combination of high parent-centered and low relationship-centered goals, and internal attributions and the teaching behaviours of (1) child-centered teaching practices, and (2) encouraging types of behaviours. Positive associations were expected between these parental beliefs and the teaching behaviours of hostility or negative teaching practices (see Figure 3).

Although the area of permissive parenting has been somewhat under explored in the literature, negative associations were expected between teachers’ permissive beliefs about child-rearing and the combination of high relationship-centered and low parent-centered goals, and the encouraging types of teaching behaviours (see Figure 4).
Figure 1

Predicting Teaching Practices

- Parenting Styles
- Parenting Goals
- Parenting Attribution

Demographic Variables (e.g., SES, culture, education)

Teaching Practices
Figure 2

Predicting Authoritative Teaching Practices

- Parenting Styles (i.e., authoritative)
- Parenting Goals (i.e., high parent and relationship)
- Parenting Attributions (i.e., external blame)
- Demographic Variables (e.g., SES, education)

Authoritative Teaching Practices (e.g., warm; accepting; small group interaction)
Figure 3

Predicting Authoritarian Teaching Practices

Parenting Styles (i.e., authoritarian)

Parenting Goals (i.e., high par-cent, low rel-cent)

Parenting Attributions (i.e., internal blame)

Demographic Variables (e.g., SES, culture, education, training)

Authoritarian Teaching Practices (e.g., hostility, low warmth)
Figure 4

Predicting Permissive Teaching Styles

Parenting Styles (i.e., permissive)

Parenting Goals (i.e., high rel-cent, low par-cent)

Parenting Attributions (i.e., external blame)

Demographic Variables (e.g., culture, education)

Permissive Teaching Practices (e.g., high involvement, low encouraging types of behaviours)
Methods

Subjects

Twenty-nine early childhood educators working in 13 group daycare centers participated in this study. All of the teachers were female, ranging in age from 26 to 55 years (M\text{age} = 36.3, SD = 7.48). All of the teachers had at least one child of their own (M\text{number} = 1.6, SD = .81), ranging in age between 9 months and 27 years (M\text{age} = 7.8, SD = 7.05). The teachers were working in daycare centers in the Ottawa-Carleton region for at least 2 years, with amount of time ranging from 2 to 20 years (M\text{years} = 9.4, SD = 5.25).

Of the 29 teachers, 72% had a college diploma (Early Childhood Certificate), 21% had completed a University degree, and 7% had completed only elementary or high school. Seventy-five percent of the teachers were Caucasian. As well, 86% of the teachers were married, 7% were living in a common law relationship, and 7% were single and/or divorced. Forty-four percent of the teachers’ spouses had completed high school, 14% had completed college, 28% had obtained a University degree, and 7% had completed graduate studies.

Materials/Procedures

Recruiting. Daycare center directors were first contacted by telephone. The initial conversations briefly outlined the purpose of the study. The directors were asked if they would be willing to accept a more detailed letter in the mail, to pass on to the teachers in their center. Those that agreed had a letter sent out to them (see
Appendix 2) asking them to inform the teachers of the study and the requirements of participation. The letters stated that the study was examining teaching beliefs, and that only teachers who were also parents, were needed. The directors were contacted a few weeks later, for names of interested volunteers. Twenty nine teachers responded. Initially, only teachers with preschool children were asked to participate, however, this criterion had to be expanded to children of any age in order to obtain a large enough sample. Teachers were told of the study’s requirements (i.e., self report questionnaires, observations) before any observations took place. Once convenient times were decided upon, teachers were observed on at least 2 different occasions in their daycares, during indoor free play periods. They were then asked to fill out the questionnaires at home and return them to the daycares upon completion. The teachers were asked to choose one of their children as a “target” child (the one closest to preschool age) when completing the 2 questionnaires. There was a 100% completion rate.

**Teaching Practices.** Each teacher was observed for approximately 2 hours, with number of codes ranging from 96 to 227 ($M_{codes} = 189, SD = 25.75$) on two different occasions, during their indoor free play period. Teaching behaviours were assessed using The Teaching Practices Observation Scale (TPOS). The TPOS consists of 15 different behaviours that reflect teaching practices in areas such as interactive patterns, behaviour management, and emotional climate (see pilot study). Thirty second time intervals were used to assess Time Management (time sampling
format) and Behaviour Management (event sampling format) dimensions. The Emotional Climate (rating scale) was completed every 15 minutes of coding, resulting in approximately 7 codes for each behaviour.

**Demographics.** The daycare teachers completed a demographic questionnaire designed to provide information regarding SES, education and training history, time worked in a daycare, ethnic background, age, number of own children, and ages of their children (see Appendix 3).

**Parenting Styles.** The teachers parenting styles and child rearing practices were assessed using the Child Rearing Practices Report (CRPR. Block, 1965). The CRPR consists of a set of 91 items. The parent is asked to arrange these items/statements on a seven-point scale from “most descriptive” (7) to “least descriptive” (1), using a forced-choice Q-sort format with 13 prescribed items at each scale point. The items are phrased in the first person form and include items tapping child-rearing attitudes, values, behaviours, and goals. For example, parents are asked to rate statements such as “I often feel angry with my child” or “I believe physical punishment to be the best way of disciplining” (see Appendix 4 for complete CRPR measure and set of instructions). This forced choice procedure minimizes the potential of socially desirable responses. Detailed written instructions for self administration of the Q sort were used. The instructions provide the steps to be followed in completing the Q sort and advise the teacher/parent to focus on one
particular target child in the family when responding to the items on the questionnaire.

Evidence regarding the validity and reliability of the CRPR derived from other samples as well as "superitem" clusters for the CRPR, have been reported in previous studies (see Note 1). The reliability of the CRPR was assessed in two test-retest studies. In the first study, 90 young college students described their child-rearing philosophies at the beginning of the school year and again, 8 months later. The average correlation between these two tests were .71. In the second study, 66 Peace Corps individuals were asked to describe their child-rearing orientation using the CRPR, and again 3 years after the completion of their duties. Again, the average correlations were in the mid 60's. In assessing construct validity of the CRPR, examination on the congruency between self report responses (as indexed by the CRPR) and actual maternal behaviours was conducted. Results indicated an appreciable psychological coherence in the findings from the two data bases.

Parental Goals and Attributions. The teachers' parenting goals and attribution styles were assessed using the Child Behaviour Stories (CBS; Hastings, 1995). The CBS is a relatively new measure that consists of a collection of five hypothetical vignettes that reflect child transgressions and various behaviours. Ten statements follow each vignette requesting the parent/teacher to rate their goals and attributions (see Appendix 5 for CBS and instructions). Parenting behaviours have been measured using hypothetical vignettes in several research studies (e.g., Grusec &
Kuczynski, 1980; Rubin & Mills, 1992). Hypothetical vignettes and self report type methodologies give an accurate portrayal of parenting behaviour. Parental behaviour as recorded by an outside observer and self reported parental practices were congruent within these studies. Many research studies have assessed parental goals and attributions (e.g. Grusec & Redler, 1980; 1989; Hastings, 1995) and have found them to be reliable predictors of parental behaviours and child outcomes. The present study’s use of vignettes and parental measures are based on past (Rubin & Mills, 1992) and ongoing (Hastings & Coplan, in press; Rubin & Hastings, 1995) work at the University of Waterloo and parenting research ongoing at the University of Toronto.

For the purposes of the present study, only the situations in which the child displayed signs of aggression and non-compliance in a public place were included in the analyses of parental goals. It is these situations that are most interesting to the present study’s research question, in which teachers’ parental responses to moral transgression (aggression: the parent seeing the child taking another child’s toy and pushing that child to the ground) and a conventional transgression (defiance: a child wanting to buy something from the store and throwing a temper tantrum when told no) are associated with their responses to transgressions in the classroom.

Additionally, only parent-centered and relationship-centered goals were of interest. The teachers’ child-centered goals were evaluated with only one item, and thus it is questionable whether this would be a reliable predictor of child-centered
goals. As well, the parent and relationship-centered goals offer the two extremes on the “restrictiveness - permissiveness” and “warmth-hostility” dimension. After each vignette, teachers rated how important (from 1 “not at all” to 5 “very”) each of 5 possible parenting goals would be for them in that situation. The goals included (1) wanting the child to behave properly immediately, and (2) wanting the child to know that mother expects proper behaviour-these were averaged to form a measure of parent-centered goals; (3) wanting the child to be happy, (4) wanting both the child and mother to feel good, and (5) wanting the child to trust the mother and to know that the mother loves him/her-these were averaged to form the scores for relationship-centered goals.

**Inter-rater reliability.** Reliability data was collected for a pair of observers after 2 weeks of training. A total of 72 minutes (or 144 codes) of observations, of four teachers (in daycares not participating in the study) was collected. The overall Cohen’s Kappa, for a complete variable matrix, was calculated at $K = .77$ (see Table 7 for individual Kappa’s). Broken down by segments, the reliability for the time sampled codes was $K = .79$ (with individual behavioural codes ranging from .71 to .86); $K = .77$ for event-sampled codes (ranging from .60 to 1.00); and $K = .74$ for the rating scale behaviours (ranging from .65 to .82).

Results

Results are divided into four main sections. The first section consists of the associations among the various dimensions and behaviours on the TPOS, and the
Table 7

**Individual Kappas for the TPOS**

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>Kappas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time Management</strong></td>
<td></td>
</tr>
<tr>
<td>small group</td>
<td>.71</td>
</tr>
<tr>
<td>large group</td>
<td>.86</td>
</tr>
<tr>
<td>on-task</td>
<td>.78</td>
</tr>
<tr>
<td>off-task</td>
<td>.79</td>
</tr>
<tr>
<td><strong>Behaviour Management</strong></td>
<td></td>
</tr>
<tr>
<td>praise</td>
<td>.73</td>
</tr>
<tr>
<td>activity participation</td>
<td>.83</td>
</tr>
<tr>
<td>hostility</td>
<td>.72</td>
</tr>
<tr>
<td>accepts feelings</td>
<td>1.00</td>
</tr>
<tr>
<td>encourages perspective taking</td>
<td>.60</td>
</tr>
<tr>
<td>encourages independence</td>
<td>.71</td>
</tr>
<tr>
<td><strong>Rating Scale</strong></td>
<td></td>
</tr>
<tr>
<td>warmth</td>
<td>.82</td>
</tr>
<tr>
<td>patience</td>
<td>.65</td>
</tr>
<tr>
<td>positive affect</td>
<td>.70</td>
</tr>
<tr>
<td>interest</td>
<td>.81</td>
</tr>
<tr>
<td>time division</td>
<td>.79</td>
</tr>
</tbody>
</table>
aggregated clusters that were formed based on these intercorrelations. The second section relates to the aggregate scores that were created within the parenting measures. The third section consists of the interrelations among the various parenting variables. Finally, the fourth section describes the associations between the parenting aggregate variables and the teaching behaviour clusters.

Section 1: Teaching Practices

To begin with, the raw frequency scores for the time- and event-sampling codes of the TPOS were proportionalized by dividing by the total number of 30-second episodes recorded. Means and standard deviations for the proportionalized variables are displayed in Table 8.¹

Interrelations among teaching behaviours. To test the internal consistency of the TPOS (and in an attempt to replicate the findings of the pilot study), associations between the various behavioural codes within the behaviour-management classroom climate dimensions were examined. As can be seen in Table 9, the overall pattern of results indicated that within the behaviour management dimension, positive techniques (e.g., activity participation, praise) were positively correlated with each other. As well, negative teaching techniques (e.g., hostile) were negatively correlated with the positive techniques (e.g., activity participation).

¹ Although arcsine and square root transformations were conducted on the proportionalized data, no significant changes to the pattern of results occurred, and thus the data was left untransformed.
Table 8

Proportionalized Means for the Teaching Practices Observation Scale

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>small group</td>
<td>.45</td>
<td>.14</td>
</tr>
<tr>
<td>large group</td>
<td>.05</td>
<td>.08</td>
</tr>
<tr>
<td>on task</td>
<td>.43</td>
<td>.13</td>
</tr>
<tr>
<td>off task</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td><strong>Behaviour Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>activity participation</td>
<td>.21</td>
<td>.14</td>
</tr>
<tr>
<td>accepts feelings</td>
<td>.01</td>
<td>.02</td>
</tr>
<tr>
<td>encourages independence</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>encourages perspective</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>hostile</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>praise</td>
<td>.09</td>
<td>.07</td>
</tr>
<tr>
<td><strong>Classroom Climate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>warm</td>
<td>2.13</td>
<td>.42</td>
</tr>
<tr>
<td>interest</td>
<td>2.15</td>
<td>.52</td>
</tr>
<tr>
<td>patience</td>
<td>2.36</td>
<td>.37</td>
</tr>
<tr>
<td>positive affect</td>
<td>2.01</td>
<td>.42</td>
</tr>
<tr>
<td>time division</td>
<td>1.87</td>
<td>.52</td>
</tr>
</tbody>
</table>

Note: Rating scale items are on a 3 point scale
Within the classroom climate dimension, an analysis of the internal consistency of the averaged classroom climate rating scale scores once again indicated strong interrelations among these variables (Cronbach alpha = .85). Thus, the averaged item scores were summed to create a sub-scale representing positive classroom climate.

**Relations across dimensions.** The next set of analyses explored the associations between behaviours across the three dimensions. As was the case with the pilot study, the overall pattern of results indicated that positive teacher-child interactions were positively correlated with positive behavioural management techniques (see Table 10). As well, positive behavioural management techniques and positive teacher-child interactions were positively correlated with the classroom atmosphere (see Table 11). For example, teachers who frequently interacted in small groups were also likely to participate in the children’s activities (r = .63, p < .01) and also likely to create a positive classroom environment (r = .66, p < .01). Teachers who praised the children were also more likely to have positive classroom climates (r = .65, p < .01). Moreover, teachers who engaged in more negative interactive styles of teaching (e.g., on task) were also more likely to show signs of hostility (r = .38, p < .05) and less likely to have positive classroom atmospheres (r = -.70, p < .01).
Table 9

Inter-correlations of the Behaviour Management Behaviours

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>praise</td>
<td>--</td>
<td>.29</td>
<td>-.11</td>
<td>.09</td>
<td>.21</td>
<td>.18</td>
</tr>
<tr>
<td>activity participation</td>
<td>--</td>
<td>.04</td>
<td>.15</td>
<td>.20</td>
<td>-.28</td>
<td></td>
</tr>
<tr>
<td>encourages perspective</td>
<td>--</td>
<td>.49**</td>
<td>.61**</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>accepts feelings</td>
<td>--</td>
<td></td>
<td>.58**</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>encourages independence</td>
<td>--</td>
<td></td>
<td></td>
<td>.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hostile</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01
Table 10

Correlations between time management and behaviour management

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>praise</th>
<th>participation</th>
<th>perspective</th>
<th>feelings</th>
<th>independence</th>
<th>hostile</th>
</tr>
</thead>
<tbody>
<tr>
<td>small</td>
<td>.49</td>
<td>.63**</td>
<td>.17</td>
<td>.31</td>
<td>.35</td>
<td>-.31</td>
</tr>
<tr>
<td>large</td>
<td>-.04</td>
<td>.33</td>
<td>-.12</td>
<td>-.10</td>
<td>-.22</td>
<td>-.28</td>
</tr>
<tr>
<td>on-task</td>
<td>-.45*</td>
<td>-.77**</td>
<td>.08</td>
<td>-.19</td>
<td>-.13</td>
<td>.38*</td>
</tr>
<tr>
<td>off-task</td>
<td>.04</td>
<td>-.13</td>
<td>-.28</td>
<td>-.16</td>
<td>-.16</td>
<td>.04</td>
</tr>
</tbody>
</table>

* p < .05

** p < .01
Table 11

Correlations between classroom climate and time- and behaviour-management behaviours

<table>
<thead>
<tr>
<th></th>
<th>climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>small</td>
<td>.65**</td>
</tr>
<tr>
<td>large</td>
<td>.06</td>
</tr>
<tr>
<td>on task</td>
<td>-.68**</td>
</tr>
<tr>
<td>off task</td>
<td>-.03</td>
</tr>
<tr>
<td>praise</td>
<td>.64**</td>
</tr>
<tr>
<td>act part</td>
<td>.60**</td>
</tr>
<tr>
<td>perspective</td>
<td>.18</td>
</tr>
<tr>
<td>feelings</td>
<td>.31</td>
</tr>
<tr>
<td>independence</td>
<td>.35</td>
</tr>
<tr>
<td>hostile</td>
<td>-.29</td>
</tr>
</tbody>
</table>

* p < .05

** p < .01
To summarize, the results of the intercorrelations provided additional support for the reliability of the TPOS. As well, the internal consistency within the scale lends support to the TPOS's construct validity. The teachers tend to engage in a pattern of behaviour that is representative of positive or negative teaching styles, but not both. For example, teachers who engaged in positive interactive types of behaviours were also likely to engage in positive behavioural techniques and create positive emotional climates.

**Aggregate Variables.** Based on these results, and the results of the pilot study, various aggregate variables were created to facilitate analyses and increase the reliability of the observational scores (see Table 12 for a summary of all aggregate scores for the TPOS). Three theoretically derived and empirically substantiated aggregated “clusters” of teaching styles were devised. The first cluster was thought to represent child-centered types of behaviours and included (1) small group interaction; (2) activity participation; (3) praise; and (4) positive classroom atmosphere. The intercorrelations among these codes ranged from $r = .28$ to $r = .67$. The second group of behaviours represented encouraging types of behaviours and consisted of (1) encouraging and accepting children's feelings; (2) encouraging independence and autonomy; and (3) encouraging perspective taking and empathy. The intercorrelations among these codes ranged from $r = .45$ to $r = .58$. The third cluster of behaviours represented hostile or negative types of teaching behaviours. These included (1) hostility of any type (i.e., verbal or physical) and (2) on-task types
Table 12

Aggregate Variables for the TPOS

<table>
<thead>
<tr>
<th>Aggregate Cluster</th>
<th>Individual TPOS behaviours</th>
</tr>
</thead>
<tbody>
<tr>
<td>child-centered:</td>
<td>small group; activity participation; praise; positive classroom climate.</td>
</tr>
<tr>
<td>encouraging behaviours:</td>
<td>accepts feelings; encourages perspective taking; encourages independence.</td>
</tr>
<tr>
<td>hostile:</td>
<td>hostility; on-task</td>
</tr>
</tbody>
</table>
of behaviours (i.e., busy with activity set up but not personally involved with the
cchildren). These behaviours were positively and significantly correlated \( r = .38, p < .05 \). The aggregates were created by summing standardized scores for each cluster.

**Relations between demographic variables and the TPOS.** Certain
demographic variables have been associated with teaching behaviours in previous
studies. In the current sample, the lack of variability within certain demographic
variables indicated a rather homogenous group of teachers; thus it was not expected
that these particular demographic variables would be strongly related to the teachers’
behaviour within the classroom. Results from correlations conducted between the
demographic variables (i.e., teacher’s age, ethnic background, education, length of
time working in a daycare) and teaching behaviours are displayed in Table 13. None
of these correlations reached significance. Teacher’s age tended to negatively
correlate with child centeredness, and positively correlate with encouraging
behaviours and hostile/negative teaching behaviours. As well, the age of the teacher’s
child (i.e., target child) had a tendency to negatively correlate with child-centeredness,
and positively correlate with encouraging and hostile types of behaviours.

In summary, three aggregate scores were created within the **TPOS**, based on
intercorrelations and were used in all subsequent analyses. No significant
associations were found between the demographic variables and the **TPOS**.
Table 13

Correlations between Demographic Variables and TPOS Behaviours

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>child centered</th>
<th>encouraging</th>
<th>hostile/negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>teacher's age</td>
<td>-.19</td>
<td>.23</td>
<td>.30</td>
</tr>
<tr>
<td>age of child</td>
<td>-.12</td>
<td>.18</td>
<td>.19</td>
</tr>
<tr>
<td>teacher's educ</td>
<td>-.01</td>
<td>-.03</td>
<td>.16</td>
</tr>
<tr>
<td>time working</td>
<td>-.15</td>
<td>.15</td>
<td>.19</td>
</tr>
</tbody>
</table>
Section 2: Aggregating Variables on the Parenting Measures.

Parental Goals. Parent centered goals between the aggressive and non-compliant in a public place situations were significantly correlated ($r = .57, p < .01$). The relationship-centered goals between these two situations were also significantly correlated ($r = .79, p < .01$). Therefore, the parent-centered and relationship centered goal items within and across each of the situations were collapsed to form one summary score for each of the two parental goals.

Parental Attributions. Previous studies that have used the CBS as a measure of parental attributions have collapsed across the attribution statements to form one summary score representing external and internal attribution styles (e.g., Hastings & Coplan, in press). Hence, correlation coefficients between the attribution statements within and across each of the two situations were computed. The statements within were positively correlating (range $r = .03$ to $.63$) with each other, as were the correlations of the attribution statements across the two situations ($r = .31$, ns). Hastings and Coplan (in press) have also reported that the attribution statements on the CBS all load on the same factor. As such, a single summary score was created to represent the teachers parental attributions, such that a higher score represented an external attribution rating, and a lower score indicated an internal attribution rating.

In summary, the items on the CBS were aggregated to form 3 summary scores; a parent-centered goal score, a relationship-centered goal score, and an attribution score. These three aggregate variables were used in subsequent analyses.
Child-rearing beliefs/practices. The 91 items on the CRPR had been divided into a number of clusters in a previous study (Block, 1965) based on a factor analysis. Most of these clusters fall within the conceptual category of authoritative, authoritarian, and permissive parenting styles. For the purposes of the present study, only 12 of these clusters were used in the analyses (see Table 14). One-item clusters (e.g., Blaming, Extra Privileges) and clusters without a conceptual link to the present study including (1) Suppression of Sex, (2) Health Orientation, (3) Achievement, (4) Early Training, (5) Enjoyment of Parenting, and (6) Parental Worry, were not used in the analyses. Among the clusters that were included in the analyses, a general lack of variability was found within them. This was demonstrated by scores on some of the individual items. Most of the “authoritative” items had very high means (e.g., “I respect my child’s opinions and encourage him/her to express them” \( M = 6.55, SD = .91 \), on a 7 point scale). Most of the authoritarian items had very low means (e.g., “I believe physical punishment to be the best way of disciplining” \( M = 1.17, SD = .54 \)).

Although parenting “groups” were not created, various individual clusters were used to represent the three parenting typologies for the analyses. The first set of clusters, Authoritarian, were conceptually consistent with practices that were

\[\text{Subsequent correlation coefficients computed between these and the TPOS behaviours revealed no significant associations. Thus, these parenting clusters were not conceptually or empirically related to the TPOS behaviours.}\]
Table 14

CRPR Parenting Cluster Variables

- Authoritarian Control
- Control by Guilt
- Control by Anxiety
- Negative Affect
- Openness to Expression
- Encourages Independence
- Non-Punitve Discipline
- Rational Guidance
- Inconsistent Discipline
- Investment of Time
- Separate Parent/Child Existence
- Overprotectiveness
congruent with authoritarian parenting typology. This group included the clusters Authoritarian Control (e.g., "I do not allow my child to get angry with me"), Control by Guilt (e.g., "I believe my child should be aware of how much I sacrifice for him"), Control by Anxiety (e.g., "I control my child by warning him about the bad things that can happen to him"), and Negative Affect (e.g., "I often feel angry with my child").

The second set, Authoritative, represented practices that coincided with authoritative parenting typology. This group included the clusters Open Expression of Affect (e.g., "I feel a child should be given comfort and understanding when he is scared or upset"), Encouraging Independence (e.g., "I let my child make many decisions for himself"), Rational Guiding of Child (e.g., "I talk it over and reason with my child when he misbehaves"), and Non-Punitive Discipline (e.g., "I punish my child by taking away a privilege he otherwise would have had").

The third set, Permissive, represented practices that coincided with Baumrind's permissive parenting typology. This group included the clusters Inconsistent Parenting (e.g., "I threaten punishment more often than I give it"), Overprotectiveness (e.g., "I prefer that my child not try something if there is a chance that he will fail"), Time Investment (e.g., "I sometimes feel I am too involved with my child"), and Separate Existence of Lives (e.g., "I give up some of my own interests because of my child").
Section 3: Relations between the aggregate variables on the parenting measures

Initially, the intent was to aggregate the parenting measures to form a summary score for each of the parenting typologies. For example, a summary score for authoritarian parenting would have included teachers' scores on the authoritarian CRPR clusters, their scores on the two parenting goals (i.e., high parent centered, low relationship centered goals), and their attribution scores (i.e., internal). This summary score would then have been the unit of analyses, where it would have been used in a multiple regression to predict various teaching behaviours. Before creating this summary score, however, it was necessary to demonstrate empirical relations between the various parenting measures.

Parenting goals and styles. A series of correlations computed between parenting goals and parenting styles revealed few significant associations (see Table 15). Although some significant relations were evident, and consistent with theoretical expectations, the overall pattern of results was somewhat inconsistent. For example, as expected, parent-centered goals and the Authoritarian Control (r = .58, p < .01) cluster were positively and significantly correlated. As well, correlations between the parent centered goals and the Overprotectiveness (r = -.48, p < .05) and Rational Guidance (r = -.38, p < .05) clusters were negatively and significantly correlated.

Relationship centered goals and Control by Guilt (r = -.54, p < .01) were also negatively and significantly correlated. However, relationship-centered goals were also expected to be correlated with the CRPR clusters such as Rational Guidance and
Non-Punitive Discipline, but instead were actually showing trends in the opposite
direction ($r = -33$, $r = -.27$, ns, respectively). Other inconsistent trends were evident in
the correlations as well. As such, it was not possible to collapse across these two
measures.

**Parenting attributions and goals and styles.** A series of correlation coefficients
was also computed between parental attributions and parenting goals and styles (see
Table 16). Again, the overall pattern of results did not indicate any consistent
relations between parental attributions and goals and various parenting styles. For
example, teachers who scored higher on the attribution measure (i.e., externally
attributing causes of behaviour) were scoring lower in the Rational Guidance ($r = -
.35$, ns) cluster, and higher on parent-centered goals ($r = .33$, ns), contrary to what was
theoretically expected. Thus, based on these inconsistent associations and the
associations between the parenting goals and styles, the parenting goals, attributions,
and styles, were analyzed separately in all subsequent analyses.

**Relations between demographic variables and parenting measures.** As
previously discussed, significant correlations were not found between teachers’
demographic variables and their teaching practices. However, various demographic
variables have also been associated with parenting practices. Thus, correlation
coefficients were computed between the teachers’ demographic variables (i.e., age of
child, teachers age, teachers education) and the parenting measures (i.e., goals,
attributions, and styles). The results indicated some significant associations (see
Table 15

Correlations between Parenting Measures (CBS and CRPR)

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>parent-cent goals</th>
<th>relationship-cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>control by anxiety</td>
<td>-.25</td>
<td>.01</td>
</tr>
<tr>
<td>control by guilt</td>
<td>-.20</td>
<td>-.54**</td>
</tr>
<tr>
<td>control</td>
<td>.58**</td>
<td>.19</td>
</tr>
<tr>
<td>negative affect</td>
<td>.13</td>
<td>-.14</td>
</tr>
<tr>
<td>encourages independence</td>
<td>.27</td>
<td>-.17</td>
</tr>
<tr>
<td>openness to expression</td>
<td>-.10</td>
<td>.04</td>
</tr>
<tr>
<td>non-punitive discipline</td>
<td>.02</td>
<td>-.27</td>
</tr>
<tr>
<td>rational</td>
<td>-.38*</td>
<td>-.33</td>
</tr>
<tr>
<td>investment of time</td>
<td>.00</td>
<td>.25</td>
</tr>
<tr>
<td>separate lives</td>
<td>-.16</td>
<td>-.29</td>
</tr>
<tr>
<td>overprotective</td>
<td>-.48*</td>
<td>-.01</td>
</tr>
<tr>
<td>inconsistent discipline</td>
<td>.41*</td>
<td>.29</td>
</tr>
</tbody>
</table>

* p < .05
** p < .01
Table 16

Correlations between Parental Attributions and Parenting Styles

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>Attribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>control</td>
<td>.11</td>
</tr>
<tr>
<td>control by anxiety</td>
<td>.03</td>
</tr>
<tr>
<td>control by guilt</td>
<td>-.13</td>
</tr>
<tr>
<td>negative affect</td>
<td>-.06</td>
</tr>
<tr>
<td>encourages independence</td>
<td>.09</td>
</tr>
<tr>
<td>openness to expression</td>
<td>-.02</td>
</tr>
<tr>
<td>non-punitive discipline</td>
<td>-.01</td>
</tr>
<tr>
<td>rational guidance</td>
<td>-.35</td>
</tr>
<tr>
<td>investment of time</td>
<td>.11</td>
</tr>
<tr>
<td>overprotectiveness</td>
<td>-.08</td>
</tr>
<tr>
<td>parental separations</td>
<td>-.41*</td>
</tr>
<tr>
<td>inconsistent discipline</td>
<td>-.12</td>
</tr>
</tbody>
</table>

* p < .05
Table 17

Correlations between Teachers Demographic Variables and Parenting Measures

<table>
<thead>
<tr>
<th>Parenting Construct</th>
<th>Teachers age</th>
<th>Child's age</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control by anxiety</td>
<td>-.38*</td>
<td>-.36</td>
<td>.12</td>
</tr>
<tr>
<td>Control by guilt</td>
<td>.19</td>
<td>-.05</td>
<td>.52**</td>
</tr>
<tr>
<td>Control</td>
<td>.00</td>
<td>-.01</td>
<td>-.14</td>
</tr>
<tr>
<td>Enc. Independence</td>
<td>.13</td>
<td>.02</td>
<td>.22</td>
</tr>
<tr>
<td>Expression</td>
<td>-.52**</td>
<td>-.57**</td>
<td>-.10</td>
</tr>
<tr>
<td>Inconsistent</td>
<td>.29</td>
<td>.29</td>
<td>.00</td>
</tr>
<tr>
<td>Invest</td>
<td>-.07</td>
<td>.06</td>
<td>-.16</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>.28</td>
<td>.19</td>
<td>.04</td>
</tr>
<tr>
<td>Non punitive discipline</td>
<td>.15</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td>Parental Separation</td>
<td>-.24</td>
<td>-.18</td>
<td>-.02</td>
</tr>
<tr>
<td>Overprotectiveness</td>
<td>.14</td>
<td>.15</td>
<td>.04</td>
</tr>
<tr>
<td>Rational Guidance</td>
<td>-.15</td>
<td>-.25</td>
<td>-.06</td>
</tr>
<tr>
<td>Parental Goals</td>
<td>.11</td>
<td>.13</td>
<td>-.15</td>
</tr>
<tr>
<td>Relationship Goals</td>
<td>-.19</td>
<td>.05</td>
<td>-.35</td>
</tr>
<tr>
<td>Attributions</td>
<td>-.07</td>
<td>.08</td>
<td>-.23</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01
Table 17). Significant and negative correlations were found between the teacher's age and Control by Anxiety and Openness to Expression clusters. The child's age (i.e., target child) was significantly and negatively correlated with Openness to Expression. As well, teachers' level of education was significantly and positively correlated with Control by Guilt ($r = .52$, $p < .01$). However, upon examination of the scatterplots for these variables, there are two or three outliers that seem to be 'pulling' the data in directions that are perhaps responsible for the significant correlations. For example, most of the teachers with higher levels of education had low scores in the Control by Guilt cluster. A few teachers who had higher levels of education also had very high scores in this cluster. With the small sample size in the present study, it may be that these associations were significant because of the extreme outliers.

However, even with these significant correlations among some of the demographic variables and parenting beliefs, an overall consistent pattern of associations did not exist. Thus, given the pattern of results relating demographic variables to both the parenting and teaching variables, demographic variables were not controlled for in the analyses.³

In conclusion, three summary scores for the parenting goals and attributions were created. As well, the clusters on the CRPR (previously defined) that conceptually represented the different patterns of parenting were used in the analyses.

³Partial correlations were conducted between parent and teacher variables, controlling for teachers' age, child's age, and education. However, the overall pattern of results did not change.
Separate analyses were necessary, as the parenting aggregate scores did not show consistent patterns of associations. Finally, demographic variables did not demonstrate an consistent pattern of associations with the parenting variables, and thus, were not controlled for this the later analyses.

Section 4: Relations between teaching practices and parenting beliefs.

The following section pertains to the relations between parental beliefs and teacher practices. The associations between the various parenting measures and the teaching practice aggregates are presented below.

Parental Goals. To begin with, correlations were computed between the parental goals and teaching behaviour clusters (see Table 18). Once again, the results did not indicate a consistent pattern. For example, parent-centered goals were negatively associated with hostile types of teaching behaviours ($r = -.17$, ns) and positively correlated with child centered types of teaching behaviours ($r = .18$, ns).

However, it is worth noting that it was the combination or interaction of these goals that were of primary interest in the present study. It was expected that the combination of the parenting goals (i.e., the interaction) would yield the most significant results. It is the combination of goals that most represent the parenting typologies (Hastings, 1995). For example, high parent- and relationship-centered goals would be representative of authoritative parenting; high parent-centered and low relationship-centered goals would be more representative of authoritarian parenting; high relationship-centered and low parent-centered goals would be most
### Table 18

**Correlations between Parenting Goals and Teaching Behaviours**

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>parent-centered</th>
<th>relationship-centered</th>
</tr>
</thead>
<tbody>
<tr>
<td>child centered</td>
<td>.18</td>
<td>.23</td>
</tr>
<tr>
<td>encouraging</td>
<td>-.27</td>
<td>-.05</td>
</tr>
<tr>
<td>hostile</td>
<td>-.17</td>
<td>-.12</td>
</tr>
</tbody>
</table>
representative of permissive parenting; and finally, low parent-centered and relationship-centered goals would be most representative of neglectful parenting. Thus, $Z$ scores were obtained for each of the parental goals (i.e., parent and relationship centered) and the interaction between the two was computed as the multivariate product. To assess the effects of parental goals on teaching practices, several regression analyses were conducted, where the main effects for these variables and their interaction were entered in two separate blocks, and regressed onto the three TPOS clusters. The overall models for each of the TPOS clusters were not significant. Thus, the main effects of the parenting goals (i.e., being high or low on one or the other) were not explaining any significant variability on teaching behaviours. As well, contrary to our hypotheses, the interaction of the two parenting goals did not explain a significant proportion of variability in child-centered, encouraging, or hostile types of teaching behaviours.

In summary then, the correlations between the teachers’ parental goals and teaching behaviours were not significant, and were even in directions other than theoretically expected. Furthermore, the combination of these parenting goals (i.e., the interactions) did not explain any significant variability in the teachers’ classroom practices.\(^4\)

\(^4\)Although an alternative to multiple regressions would have been to perform median splits on the parenting goal data, subsequent analysis revealed that there were not enough teachers who fell within the “authoritarian” group (i.e., high parent centered/low relationship centered) criterion. Only 2 teachers could be classified into this group.
Parental Attributions. The next set of analyses concerned the associations between parental attributions and teaching behaviours. It was expected that teachers with higher scores on the attribution statements (i.e., attributed behaviour to the external environment) would engage in positive teaching practices, such as being more child centered, than teachers who had lower attribution scores. External attributions have been linked with more positive styles of parenting and teaching. A series of correlation coefficients were computed between the teachers’ parental attribution ratings and teaching practices. Results are displayed in Table 19. Again, the overall pattern of results were inconsistent with theoretical expectations. The correlations between attribution style and the two positive teaching styles were not significant, whereas its correlation with hostility (τ = .31, ns) demonstrated a trend in the positive direction (which is opposite than expected).

Parenting Styles. Next, the associations between parenting styles and teaching behaviours were examined. Here it was expected that teachers who engaged in certain types of parenting, would also demonstrate similar behaviours in the classroom. For example, teachers who were scoring higher on the authoritative clusters (e.g., rational guidance) were expected to engage in more child centered behaviours and less hostile types of behaviours.

To assess the associations between parenting styles and teaching behaviours, a series of correlational coefficients were conducted on the CRPR clusters and the TPOS clusters (see Table 20). Some of the correlation coefficients indicate trends in
### Table 19

**Correlations between Attribution ratings and teaching behaviours**

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Attributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>child-centered</td>
<td>.05</td>
</tr>
<tr>
<td>encouraging</td>
<td>-.02</td>
</tr>
<tr>
<td>hostility</td>
<td>.31</td>
</tr>
</tbody>
</table>
Table 20

Correlations between Parenting Styles and TPOS

<table>
<thead>
<tr>
<th>Behaviours</th>
<th>child centered</th>
<th>encouraging</th>
<th>host/neg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>control guilt</td>
<td>-.17</td>
<td>-.05</td>
<td>.31</td>
</tr>
<tr>
<td>control anxiety</td>
<td>-.11</td>
<td>-.15</td>
<td>.03</td>
</tr>
<tr>
<td>control</td>
<td>.06</td>
<td>-.05</td>
<td>-.08</td>
</tr>
<tr>
<td>negative affect</td>
<td>-.25</td>
<td>.14</td>
<td>.10</td>
</tr>
<tr>
<td>enc. independence</td>
<td>-.25</td>
<td>-.25</td>
<td>.24</td>
</tr>
<tr>
<td>expression</td>
<td>-.17</td>
<td>-.38*</td>
<td>.05</td>
</tr>
<tr>
<td>non punitive</td>
<td>.33</td>
<td>-.32</td>
<td>-.25</td>
</tr>
<tr>
<td>rational guidance</td>
<td>-.04</td>
<td>-.19</td>
<td>-.13</td>
</tr>
<tr>
<td>investment of time</td>
<td>.16</td>
<td>-.11</td>
<td>-.13</td>
</tr>
<tr>
<td>overprotective</td>
<td>.02</td>
<td>.46*</td>
<td>.14</td>
</tr>
<tr>
<td>separate lives</td>
<td>-.15</td>
<td>.14</td>
<td>-.05</td>
</tr>
<tr>
<td>inconsistent discipline</td>
<td>-.05</td>
<td>-.18</td>
<td>-.06</td>
</tr>
</tbody>
</table>

* p < .05
the expected directions. For example, Non-Punitive Discipline was positively correlating with child-centered types of behaviours ($r = .33$, ns). As well, Control by Guilt was positively correlating with hostile and negative types of teaching behaviours ($r = .31$, ns).

However, similar to the previous findings, the correlations indicated an inconsistent pattern of results. For example, the cluster Openness to Expression was significantly and negatively correlated with encouraging types of teaching behaviours ($r = -.37$, $p < .05$). This cluster represents an authoritative type of parenting, in which parents validate and acknowledge children’s feelings, and give comfort when needed. Thus, it was expected that this type of parent would also engage in teaching behaviours such as accepting feelings and encouraging independence.

As well, Overprotectiveness was significantly and positively related to encouraging types of teaching styles ($r = .46$, $p < .05$), which is somewhat contradictory. A parent who is overprotective and smothering, is probably not likely to encourage independence in their children.

As mentioned previously, the CRPR had very low variability. Performing median splits on data with low variability is advantageous as it allows the data to be examined relative to its specific sample. For example, in the present study, most teachers were scoring high on the authoritative items and low on the authoritarian items. Dividing the sample by its median forces the sample to be separated into a high and low group, regardless of its variability. Differences can then be examined between these two groups on various teaching behaviours.
Independent sample t-tests were conducted to assess the differences between the two groups (high vs. low) on the three clusters of teaching practices (see Appendix 6 for all means and standard deviations). Although the differences between the two groups were not significant on most of the teaching practices, the overall pattern of results indicated that some parental beliefs may be associated with different teaching practices. For example, teachers in the high Non-Punitive Discipline group, were observed to engage in higher amounts of encouraging types of teaching behaviours ($\bar{M} = .30$, $SD = 1.16$) than teachers in the low group ($\bar{M} = -.32$, $SD = .69$; $t (27) = 1.76$, $p = .09$).

Teachers in the high Encourages Independence group were observed to engage in higher amounts of child centeredness ($\bar{M} = .36$ $SD = 1.07$), compared to teachers in the low group ($\bar{M} = -.32$, $SD = .88$; $t (26) = 1.86$, $p = .07$). As well, teachers in the high Encourages Independence group were observed to be engaging in higher amounts of encouraging types of teaching practices ($\bar{M} = .42$, $SD = 1.32$) than those in the low group ($\bar{M} = -.33$, $SD = .46$; $t (26) = 2.04$, $p = .05$). Finally, teachers who scored in the high Negative Affect group were also observed to be engaging in higher amounts of hostile/negative teaching practices ($\bar{M} = .29$, $SD = 1.18$) compared to those teachers in the low group ($\bar{M} = -.66$, $SD = .68$; $t (16) = 2.01$, $p = .06$).
General Discussion

The overall goal of this thesis was to examine the association between teachers’ parental beliefs and their classroom practices. In this regard, two studies were conducted: (1) the development of the TPOS (a much needed tool for assessing early childhood educators’ practices) and (2) an exploration of the association between teachers’ parental beliefs and their classroom practices. The results in both of the studies provided support for the TPOS as a reliable assessment tool to be used with early childhood educators. However, only sporadic support was found linking teachers parental beliefs with teaching practices. In this regard, this discussion will focus on four main issues; (1) the TPOS’s ability to assess early childhood teaching practices within the classroom; (2) the measures of parenting used in this study; (3) the interaction between the teachers’ parental beliefs and their teaching practices; and (4) possible caveats and recommendations for future research studies.

The results of this Masters thesis could have important implications for those concerned with early childhood development. Understanding the role that parental beliefs play in teaching behaviours will provide parents, daycare supervisors, and community college personnel with additional information about caregivers. Results from previous studies have stressed the importance of congruency between the home and school/daycare environments. For example, Winetsky (1978) suggested that children face a true dilemma when exposed to one set of behavioural expectations at home and a
different set of expectations at school. Uncertainty of ‘expected’ behaviours in various contexts may produce conflict for the child. Thus, with a few specific questions, parents may be able to choose the caregiver that is most congruent with their style of parenting, and thus most appropriate for their child.

As well, this thesis provides more information about what motivates a teacher’s behaviour inside the classroom and when interacting with the children. If changes to these behaviours are necessary, then it may be the teachers’ beliefs that need to be addressed and, if possible, modified.

The Teaching Practices Observation Scale.

Early childhood educators have an important impact on the children in their care (ACEI, 1979; McCartney et al., 1982). More and more children are being placed in non-parental care, and often are attending group daycare facilities. Although parents remain the child’s main source of socialization, the daycare teacher is becoming increasingly important in a child’s life. It is no wonder then, why so many instruments have been designed to assess various characteristics of the young child’s daycare environment. However, most of these instruments have focused primarily on issues such as play material, resources, physical space, adult-child ratio, and teachers’ educational goals. Less attention has been paid to teacher-child interactions, and/or teaching behaviours. Results from previous literature has emphasized the importance of characteristics such as the quality of teacher-child interactions (e.g., ACEI, 1979), the way in which a teacher maintains order (McDaniel, 1977) and the quality of the emotional climate in the
classroom (Oyemade & Chargois, 1977). As such, the first study of this thesis was to develop a measuring device that could be used to assess these types of teaching styles and behaviours.

Results from both the first and second study have established the TPOS as a potentially useful tool in the assessment of teaching styles in the early childhood classroom. The overall pattern of results from correlations computed both within and across dimensions indicated consistent and expected relations between the variables. For example, teachers who frequently interacted with small groups of children were also more likely to engage in positive behavioural management techniques such as praise and activity participation, and were also more likely to establish a positive emotional climate within the classroom. In contrast, teachers who spent a large amount of time on-task, were less likely to use positive behavioural management techniques such as praise, and had lower ratings of classroom climate.

The overall pattern of results for the TPOS indicated that teachers may be engaging in clusters of behaviours similar to that of parents. Three different clusters of behaviours emerged: child-centered, encouraging, and hostile. As previously stated, parenting styles can be defined as constellations of different behavioural characteristics that, when presented together, form a specific type of parenting pattern (Baumrind, 1971). For example, as found in the pilot study, upon examination of the intercorrelations among the various behavioural codes, there is evidence to suggest that some teachers are engaging in an “authoritative” teaching style. This is characterized by a focus on
individual or small group interactions, actively participating in the children’s activities, using praise and positive reinforcement, and establishing a positive emotional climate in the classroom through expressions of warmth, positive affect, interest in the children’s well-being, and tolerance of the children’s behaviours. As such, authoritative teaching styles may be associated with the same types of child outcomes, as the authoritative parenting style (high restrictiveness/high responsiveness). For example, results from past research suggest that authoritative parenting patterns are associated with high levels of self esteem, social competency, and independence in children (Baumrind, 1973). Thus, it may be that teachers who engage in this type of pattern of behaviour will also contribute to healthy levels of self-esteem in children and will help them be more socially competent and independent.

In contrast, authoritarian teaching styles may be associated with the same types of child outcomes as the authoritarian parenting style (high restrictiveness/low responsiveness). An ‘authoritarian’ teaching style seems to be characterized by hostile and neglectful (e.g., little interest and involvement) types of behaviours, as well as a negative emotional climate. Authoritarian parenting has been associated with lowered levels of self esteem and social competency in children (Loeb et al., 1980). Thus, teachers who engage in more authoritarian types of teaching practices, such as criticism, negativity, and hostility, may inhibit children’s self-esteem, and may contribute to lower social competence in children. Furthermore, permissive teaching may also be associated with the same types of child outcomes as permissive parenting. For example, teachers
who are more permissive in their teaching and who do not establish and enforce consistent rules, may be contributing to children’s increased levels of aggression, and lower levels of conformity and restraint (Baldwin, 1949). The associations that may exist between these specific teaching styles and child outcomes, remain unexplored in the literature, and thus are only speculatory. However, they are a potential focus for future research.

In sum, the patterns of behaviours that teachers are engaging in may be similar to those of parents, and thus may carry the same influence and outcomes of the various parenting styles. In this regard, the most ‘effective’ style of teaching would be similar to the most ‘effective’ style of parenting: authoritative. The authoritative teacher would likely engage in more child-centered types of behaviours and encourage independence and empathy in the children. As well, she would likely enforce consistent rules in a warm and friendly manner, using non-punitive discipline, rational guidance, and positive reinforcement to maintain order inside of the classroom.

**Potential Future Modifications to the TPOS.** Baumrind’s three parenting styles consist of combinations of behaviours found on two different dimensions: control-permissiveness and warmth-hostility. Authoritative parents are high in control but are also high in warmth. Authoritarian parents are high in control but low in warmth. Permissive parents are high in warmth but low in control. While the above results provide evidence of specific patterns of teaching, the TPOS could be
improved if it were to include behaviours that were representative of both of these parenting dimensions. At present, most of the TPOS behaviours assess aspects of the warmth-hostility dimension. For example, warm behaviours include warmth, praise, patience, interest, and activity participation. Hostile behaviours include on- and off-task, hostility, and negative emotional climate. It may be helpful to include some additional behaviours to better assess the degree of control/permissiveness in the classroom, particularly permissive types of behaviours. This parenting typology has been consistently underexplored in the literature, but it may also have detrimental influences on child outcomes (Baumrind, 1971). These additional behaviours could potentially include: the number of times a teacher disciplines, the reasons behind the discipline, and the ways in which the teacher disciplines. It may also be beneficial to include a self-report section for the teacher, to rate her reasons for control, the way in which she tries to maintain control, and the degree of control that she feels necessary. Thus, the TPOS could be modified so that additional behaviours tap into the three parenting styles more closely and teachers could accurately be classified in similar ways to Baumrind's parenting styles.

As well, a further examination of construct validity of the TPOS is clearly required. Although the behaviours on the scale tend to "hang together" nicely (i.e., internal consistency), the scale has not yet proven its ability to correlate with external factors. It is worth considering that this lack of external validity may be the reason for the lack of associations found between the teachers parenting beliefs and teaching
practices. It is possible that the TPOS is not assessing the types of behaviours that it was designed to measure, and thus, additional testing of the scale’s external validity is clearly needed. In future research, the external validity of the TPOS could be evaluated by relating TPOS constructs with assessments of classroom environments and conditions, teacher training, class size, and child variables (e.g., SES, ethnicity, gender).

**Parenting Measures**

Results from the current study indicated that parenting goals, attributions, and parenting styles were not highly interrelated. This was contrary to the existing parenting literature. Hastings (1995) argued that parenting goals directly and indirectly affect various parenting behaviours: directly by influencing the behaviours that parents choose when trying to achieve the goals during interactions with their child; and indirectly by affecting other parental cognitions during parent-child interactions (e.g., attributions, evaluations, emotions). Hastings also argued that parenting goals organize parental cognitions and affective responses during child rearing interactions, and may play an executive role in parenting beliefs. Thus, it was expected that the teachers’ parental goals would be related to the other parenting cognitions included in this study (i.e., attributions and child-rearing ideologies).

When correlations were computed between the parenting measures, only a few significant relations were found. For example, parents who scored higher on parent-centered goals were also likely to rate themselves as more controlling and less
rational. As well, teachers who had higher relationship-centered goals used less guilt to control their children, than parents with low relationship-centered goals. However, the overall pattern of associations was not consistent with theoretical expectations. For example, teachers who had higher relationship-centered goals also used less rational guidance and less non-punitive discipline. Due to these lack of associations, the parenting measures were not collapsed to form one summary score for each of the parenting styles. Instead, the parenting measures were analyzed separately. The overall lack of associations were most likely rooted in (1) social desirability; (2) the appropriateness of parenting measures; and (3) the nature of the sample selected.

*Social Desirability.* To begin with, teachers are educated in the stages of child development as well as appropriate and inappropriate teaching behaviours. With this extensive training, *social desirability* may be prevalent in this population, particularly with regards to “child-oriented” measures. Regardless of their true parenting beliefs, teachers may know how they are “supposed” to think, feel, and react in certain parenting situations. Support for this notion was evident in the low variability in the responses to the parenting measures, particularly the CRPR.

The CRPR was created in 1965, and some of the items on the measure are quite extreme. For example, one of the items representing authoritarian control states “I believe physical punishment is the best way to discipline.” Given the current climate of political correctness, this statement is not likely to be answered in the affirmative by teachers or child care workers. Although teachers may spank their children, they are not
likely to admit that it is the best way to discipline or to even believe that it is the "best" way. It is worth noting that a Q-sort is methodologically designed to control for social desirability, however, it does not eliminate this possibility completely.

Also, the CBS may have elicited socially desirable responses from the teachers because of the way in which some of the statements are worded. For example, one statement "I want my child to feel loved at all times" was answered most often in the affirmative. The high means on these types of items show that most teachers did in fact rate these statements very high. Because parenting goals are situational specific, parental responses in a given situation may vary depending on the particulars of the situation (Hoffman, 1970). Flexibility in parenting is a normal and important part of effective parenting (Hastings & Coplan, in press). There may be times when it would be most appropriate for a parent to focus on teaching children lessons and instilling social norms, than on developing and maintaining a close and loving relationship with the child. The situations used in this study were similar in concept, and thus both were expected to elicit more parent-centered types of goals. The expected outcome of the parent-child interaction was to have values instilled and social norms learned by the child. Hastings and Coplan (in press) suggested that relationship-centered goals in aggressive type situations may be setting the stage for tacit approval or reinforcement of aggressive behaviour. The purpose of including these situations was to examine the different ways parents dealt with these types of transgressions, and to compare the teachers on their demand for conformity and emphasis on relationships. However, most of the teachers
had higher relationship centered goals than parent-centered, in these two situations. The higher relationship-centered goals may indicate the teachers’ tendencies to respond in such a way that they think the most desirable, thus not providing a true indication of their behaviours and goals while with their children.

Other issues within the measures. Moreover, the CBS was designed to be used by parents of preschool children. Although controlling for the ages of the teachers’ children did not change the overall pattern of results, it is possible that using a measure designed for preschool children, is problematic. Some of the teachers had children as young as 9 months and others had children 22 years and older. The average age of the target child in this study was 7 years, with a low range of variability. Results from past research studies have indicated that the age of a child is associated with parenting practices and parenting goals (Grusec & Lytton, 1988). Thus, it may be that because of the low variability in the ages of the children, the age of the child was not significantly correlating with any of the teaching behaviours. However, some of the teachers with much older or much younger children may have had different responses on some of the items on the CBS (and the CRPR). With a small sample size, this may have ultimately contributed to confounding potential associations between the teachers’ parental goals and attribution, and their teaching practices.

Sample Selection. Aside from social desirability and measurement issues, there may be other reasons why so few relations were found between teachers’ parenting beliefs and behaviours. Although social desirability may have contributed to the low
variability in the sample, the low variability may also be due to the fact that there really is little variability between the teachers' parenting styles. Early childhood educators likely select their careers based on their personal attributes. It may be that people who enjoy being with children and who love to work with children choose to become early childhood educators. As such, it may be that most of these teachers actually are very good parents, thus the reason for the low variability in the sample. Teachers who are more authoritarian or permissive may not choose a career in child care. With this lack of variability, it is difficult to determine the magnitude of the association that exists between parenting beliefs and teaching behaviours.

There may have also been a selection bias in the sample. It may not be that all ECE's are good parents, but rather, only those who agreed to participate in this study. Although every effort was made to keep the teachers from knowing the full purpose of the study at the recruiting stage, they were told that part of the criterion for participation was that they must also be a parent. Thus, they knew that some part of their parenting was of interest for the study. As such, it may be that only the teachers who felt they were also good parents volunteered to participate. Teachers who did not feel confident in their parenting skills may not have wanted to participate. Hence, the 29 teachers that participated in this study may not be representative of ECE's in general, and thus, the results of this study may not relate to the whole ECE population.
Relations between parenting beliefs and teaching practices.

The primary goal of this Masters thesis was to examine the associations between daycare teachers' parental beliefs and their teaching practices. It was expected that the beliefs the teachers held as parents, and the way in which they parented, would be related to the way in which they interacted with the children in their place of work. Specifically, it was expected that teachers who were more authoritative in their parenting would engage in more positive styles of teaching, such as child-centered activities. Teachers who were more authoritarian in their parenting, were expected to engage in more negative and less positive styles of teaching, such as hostility. Teachers who were more permissive in their parenting were expected to engage in less encouraging types of behaviours and more on-task/negative types of behaviours.

Generally speaking, although some significant associations were found between the teachers' parenting beliefs and teaching practices, the overall pattern of results was not consistent with what was theoretically expected. Each of the three parenting measures and their associations to the TPOS are discussed in separate sections below.

Parenting Goals. Parenting goals were expected to be related to the teachers' classroom practices. It was hypothesized that teachers who were higher in both parent-centered and relationship-centered goals would engage in a high amount of child-centered and encouraging types of teaching practices and a low amount of hostile or negative teaching practices. Teachers that were high on parent-centered goals and low on
relationship-centered goals, were expected to engage in more hostile teaching behaviours and less child-centered and positive teaching practices. Teachers who were high on relationship-centered goals and low on parent-centered goals were expected to engage in less encouraging types of teaching behaviours. However, the teachers’ parental goals were not associated with any type of teaching practice. Neither parent nor relationship centered goals were associated with child-centeredness, encouragement of autonomy and empathy, or negative styles of teaching. As well, the interaction of these two goals was not associated with any of the teaching behaviour clusters.

**Parenting Attributions.** The ways in which teachers attribute blame for their children’s transgressions were also not significantly related to teaching practices. Past research has found that parents who are more likely to blame the situation, to believe that their child is passing through a stage, and that the behaviour was unintentional, are also more likely to engage in authoritative styles of parenting (Dix, 1993). On the other hand, parents who are more likely to blame the child’s disposition or personality, and to believe that the child misbehaved intentionally, are more likely to use harsh punishment when disciplining their child. Thus, it was expected that teachers who had high attribution scores (i.e., external) would be more likely to engage in positive teaching behaviours than teachers who had low attribution scores (i.e., internal). However, this hypothesis was not supported.

**Parenting Practices.** The teachers’ child rearing practices, on the whole, were not consistently associated with their teaching practices. However, some trends were
prevailing in the results, suggesting the existence of a possible association between these
two dimensions. For example, teachers who used more non-punitive discipline at home.
were also likely to use encouraging behaviours (encouraging autonomy, empathy, and
accepting feelings) with children in the daycare. Teachers who encouraged independence
in their own children were also likely to use encouraging types of behaviours with the
children in the daycare, and were also likely to use more child-centered teaching practices
(i.e., small group interactions, positive atmospheres, etc.). Furthermore, teachers who
reported having more negative affect with their own children, were also engaging in
negative behaviours inside the classroom (i.e., hostility, ontask).

Although not all of the above were significant associations, these trends do
suggest that some child rearing practices may be carried over into the classroom.
Teachers who parent a particular way at home, and who have certain child rearing
ideologies, may also engage in similar ways in their classroom. This would support the
argument that belief systems have a subtle effect on parents reactions and interpretations
of events (Hastings & Coplan, in press; Martin, 1989), and in particular to this
population, on their teaching behaviours and classroom practices as well.

In summary, few significant associations were found between teachers’ parenting
goals, attributions, styles, and their teaching practices. An inconsistent pattern of
associations was evident, between parenting beliefs and teaching practices. Thus, some
may argue that an association simply does not exist between teachers’ parental beliefs
and classroom behaviours. This, however, is contrary to the existing belief literature.
Most researchers agree that beliefs are an integral force behind individuals’ actions. Education and training are not usually as salient or as influential as belief systems (Berliner, 1987). Results from previous studies that have examined the impact education has on personal belief systems, indicate that people generally sift through incoming material, to fit their existing belief schemata (Berliner, 1987; Carter & Doyle, 1989). As such, it is likely that teachers’ parental beliefs are associated with their teaching behaviours.

Belief systems are an integrated part of who we are: our thoughts, our feelings, our backgrounds, and our experiences. They are a complex and intricate entity. Hence, it is very difficult to separate beliefs from the rest of the person, without influences from other significant factors. When measuring teachers’ parenting beliefs, there are many other influences acting on these beliefs, including their training and educational beliefs and goals, school curriculum, temperament, personality, own childhood, and life experiences. These other influential factors may be intertwined with the teachers’ parental beliefs, thus making it difficult to examine the associations between the teachers’ actual parental beliefs and their classroom practices. In this regard, it is likely that an association does exist however, other confounding variables may be masking the true relations.
Caveats.

Methodological problems may have also created some confounding variables in this study. For example, some teachers were responsible for tasks that differed from centre to centre. Some teachers were responsible for changing diapers, serving snack, or leading circle during their indoor free play periods. These teachers were usually coded as on-task. Teachers who had scored high on the authoritative parenting beliefs may have been forced to engage in a lot of on-task behaviour and other less “positive” practices. With these types of responsibilities, they may not have been able to engage in authoritative behaviours such as activity participation, or show a lot of interest and involvement with the children. Thus, the association between authoritative parenting beliefs and authoritative classroom practices may have been partly masked.

As well, some teachers were observed at different times of the day. Although every effort was made to observe the teachers at the same time, this was not always possible. At different times of the day, some teachers had more or less children (although the 8:1 ration was never exceeded). For example, a teacher being observed late in the afternoon may only have 4 children in the classroom, compared to a teacher observed in the morning, with the full 8:1 ratio. Teaching styles may vary as a function of time and class size. For example, in the late afternoon, teachers may have had less patience and less interest in the children. As well, the teacher may have had ongoing interest and involvement in the children’s activities throughout the day, and therefore may be using
this time to tidy up or take it easy. Time of day and class ratio were not controlled for.

With the relatively small sample size, it may have taken only a few teachers to score high on the authoritative parenting beliefs, but who had low scores on the positive teaching characteristics to cover up possible significant associations.

Beliefs play an influential role in decisions, actions, and feelings. Thus, it is likely that a teacher's parental beliefs are associated with the way in which they interact with the young children in their care. However, in the present study only scant evidence was found in support of this. Future studies that attempt to replicate this study, may want to consider the following issues.

**Suggestions for future research.**

The lack of associations found in this study can be attributed to a number of previously discussed reasons. In an educated and homogenous sample, such as teachers, where social desirability and good parenting skills are expected, variability in parenting styles may be hard to achieve. The measures that were used in this study were likely not sensitive enough to pick up on the subtle differences that may exist between teachers. With such low variability, it was difficult to examine the actual association between beliefs and practice.

To get around this problem, specifically designed parenting measures that have been developed for use in the teacher population are needed. These measures would need to be sensitive enough to detect the subtle parenting differences that likely exist between teachers. As well, the new parenting measures would need to reflect ideologies that are
congruent with today's expectations and with ECE's training. For example, authoritarian control may be better measured with more subtle statements (i.e., "I believe children should do as they are told") as opposed to the extreme statements found on the CRPR (i.e., "I do not let my child express his/her anger at me").

Increasing the sample size may also increase the likelihood of significant associations. Although it was very difficult to get teachers who were also parents to participate in the present study, a larger sample size would have been advantageous as it increases the likelihood of finding significant associations by potentially increasing the variability in the sample.

If a larger sample is achieved, it would also be important to ensure that the teachers are caring for children of the same age, and have the same types of responsibilities from centre to centre. With different aged children, there are different responsibilities that a teacher must take on. These include diaper changing, snack, and circle time. If the teacher is engaging in these types of activities, then their on-task behaviours will be higher, and their interest and involvement will be lower. Thus, teachers who are scoring higher on the authoritative items on the parenting measures, are being observed on behaviours that would be considered more authoritarian, thus confounding the real associations that exists between parental beliefs and teaching practices.

As well, when recruiting the teachers to participate in the study, it would be beneficial for the study if the teachers were not aware that their parenting beliefs are of
interest. Because of time constraints for this Masters thesis, it was not possible to test a random selection of teachers, and then only use those that were parents in the analyses. Not informing the teachers about the interest in their parental beliefs, however, would eradicate the possibility that only “good parents” agree to participate in the study.

**Next steps.** With such few significant associations found between teachers’ parental beliefs and teaching practices, it is important that this study be replicated, and improved upon. It may be interesting and informative to also look at home caregivers, and how their parental beliefs are associated with their teaching practices. Perhaps the “going to” work, a new setting, allows teachers to somewhat “shift” gears. Home caregivers do not have this “shift”, and thus their parenting beliefs may prove to be more influential in their teaching behaviours. Collecting data on these teachers could provide a comparison group for daycare center teachers.

Another interesting possibility would be to examine teachers’ parenting practices in their own home, and then compare this with their teaching behaviours at school. Observations could be done with the teachers at home, and also in their place of work. Observing the teacher interacting with their own child, and then with the children in their classroom, would give a clearer and more objective understanding of how parenting practices are ‘translated’ into the classroom. Reliance on self report questionnaires would not be necessary, thereby eradicating the problems of social desirability. As well, the parenting measure’s ability to detect subtle parenting differences between the teachers would no longer be of concern. Comparisons could then be made between these two
groups, with similarities and differences examined. This again could also provide additional information on the congruency between home and work, and if teachers are interacting with children at work in the same ways as they interact with their own.

In the present study, although there was low variability on the parenting measures, there was high variability on the TPOS. This suggests that something, besides parenting beliefs, was influencing teaching behaviours, or that may be mediating with parenting beliefs to influence teaching behaviours. This “something” could have been the size of the class, the class environment, child characteristics (such as child temperament, personality), personality of teachers, education levels, training, experience, educational beliefs and goals, or daycare centers (e.g., profit vs. not profit care). Future studies could be designed to explore the variables that may account for these differences that exist between teaching practices. For example, a teacher’s personality is likely to be associated with her classroom behaviour. In this regard, exploring the relations between a teacher’s personality characteristics and their teaching practices as determined by the TPOS, would be an interesting and informative study.

If a longitudinal study was possible, the reciprocal influences of education/experience and teachers’ parental beliefs could be examined. To examine educational influences, an ECE candidate could be asked to complete a series of parenting questionnaires before they start the program, after they complete the program, and then a few years into their career. As well, observations of their behaviours with children could be performed at the same time. The changes in the teachers’ responses
would provide a clue as to whether education and training have an effect on beliefs, and whether the teachers’ classroom practices change over time and with experience, or remain stable. It would also provide information about the types of people who become ECE’s and whether most of them are “authoritative” parents from the onset.

In sum, changes to the TPOS, the parenting measures, the sample, and the methodology may improve this study’s ability to find an association between teachers parental beliefs and teaching practices. Although a strong body of literature supports the link between teachers’ beliefs and their classroom practices, this study was the first to examine teachers’ parental beliefs and classroom practices. Thus, it provides the first link between parenting beliefs and teaching practices. Future studies will need to provide further support by providing evidence that strengthens this association.
Reference Notes


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Appendix 1

Description of TPOS codes

I. Time-Sampled Codes (Time Management):

a. Small Group/Individual Interaction - A teacher is coded as engaging in this behaviour when interacting with one child or a group of less than 5 children for the majority of the time period.

b. Large Group - A teacher is coded as engaging in large group interaction when she is addressing the whole class or groups of children greater than 5.

c. Ontask - A teacher is coded as being on task when she is doing one of three things: (i) involved in activity set up but NOT personally interacting with children. (e.g., writing names on artwork, mixing paint); (ii) moving among the groups of children, monitoring tasks and activities (e.g., transitional); or (iii) monitoring the children from a distance (e.g., while sitting at her desk).

d. Offtask - A teacher is coded as being off task when she is not with the children at all (e.g., when she is writing at her desk, talking to other adults).

II. Event Sampled Codes (Behaviour Management):

a. Praise and Encouragement - Teacher engages in praise and encouragement when addressing child in a positive way using statements such as
“Good for you”, “Well Done”. Gives recognition for accomplishments and efforts displayed by the children

b. Activity Participation - Teacher is down on child’s level participating in activities. Playing, talking, exploring, elaborating on play and language (e.g., doing puzzles together).

c. Addresses Behaviour - Teacher addresses a child’s behaviour if upset or child is need of discipline/reprimanding. (e.g., “Hitting hurts other people”).

d. Hostility - Teacher engages in aggressive hostile behaviour. Verbal or physical aggression. (e.g., critical, harsh tone and volume of voice, grabs).

e. Accepts Feelings - Allows both positive and negative feelings to be expressed. Identifies child’s feelings, accepts them, encourages child to talk about feelings. Helps them express them through words. Makes child aware that teacher is listening (e.g., makes eye contact, nods appropriately) (e.g., “You look upset. What’s the matter?”).

f. Encourages Perspective Taking - Teacher takes time to discuss other people’s points of view. Points out how child’s actions can impact upon others (e.g., uses opportunities such as reading books (to discuss character situation and feelings and conflict/transgression between children, to illustrate how to put self in other’s shoes.

g. Encourages Independence - Allows children to express ideas. Encourages spontaneity in children. Allows children to think things out for themselves, make
their own decisions. Allows them to work their own problems out. Knows when she should intrude and when she should let it go. (e.g., teacher is aware of two children disagreeing. She leaves it for awhile keeping an eye on the situation. Will only intervene if the situation is escalating and they are not able to work it out on their own (of course, as long as this situation is not a physically aggressive one).

III. Rating Scale Codes (Classroom Atmosphere).

a. Warmth/Responsiveness - Teacher is soft, gentle, helpful, responds to children's needs quickly and efficiently. Uses appropriate affect and verbal responses with the children. (e.g., child falls down, teacher goes to child, picks her up, asks her if she is OK, and gives a hug or a word of encouragement). If teacher is cold, is not attentive to children, does not respond quickly to needs of children, and is unapproachable, teacher is low in this construct. (e.g., child falls down, teacher looks over at child, finishes what she is doing, then goes to child who is still crying, without bending down asks child is she is OK, tells child to get up and brush it off).

b. Interest and Involvement - Teacher is interested in child, and displays this outwardly by listening to child, responding to child's ideas, asking child his ideas and expanding on them. Interested in child's personal experiences, asking questions about the child's parents, out of school activities, clothes, siblings, etc. If teacher is not interested she will spend most of her time away from the children, very little one on one interaction, and very little involvement with children in activities and
discussions. She will simply do her caregiving job and will refrain from engaging in any personal contact.

c. **Patience**  Teacher displays tolerance for young children's behaviour (tantrums, aggression, crying). Teacher is able to maintain eye contact, gentle tone of voice, refrains from harsh words while speaking with the children. Teacher does not hold a grudge and remain upset with the child. If the teacher displays low patience, she will likely be intolerant of the children’s’ behaviours, and show signs of this by sighing, clenching teeth and fists, rolling eyes, interrupting child, and walking away from child while he is talking.

d. **Positive Affect**  - Teacher displays positive “aura”, she is energetic, enthusiastic, cheerful, happy, smiles, touches, holds, pats, hugs, winks. Overall she is happy to be there. If teacher has a negative affect, she will likely display little of the above behaviours, she will be cold, look bored, and fed up with being there.

e. **Time Division**  - Teacher spends time with all children. Does not limit herself to one activity or one group of children. Ensures that she moves around periodically so that she can address all children and engage all children in positive interactions with her. A teacher who does not divide her time equally among the children will likely sit at one table (e.g., craft table) and only interact with the children who come to that table. Or stand in one place and only interact with those children that seek her out. Other children only receive negative attention from her (i.e., for discipline).
Appendix 2

Caryn Moulton
Carleton University
Ottawa, Ont. K1V 9M7
August 1998

Attn: Supervisor/Director of Daycare

In regards to our recent phone conversation, I am sending out this letter outlining the details of the study I am conducting. Please pass on this information to the daycare teachers.

I am currently examining differences in teachers belief systems. Beliefs play an integral role in teachers’ actions, and thus it is important to understand the content of these beliefs.

The study requires the participants to be currently working in a daycare center, and to have at least one child of their own. The teacher will be asked to complete two questionnaires. A researcher will then visit the teacher at her place of work to conduct some general observations within the classroom.

This study is quite straightforward and easy to complete. I hope to begin collecting data as early as mid-September. I will call again in a couple of weeks to gather names of interested participants, and to discuss matters further. I thank you for your time in reading this.

Sincerely,
Appendix 3

**DEMOGRAPHIC INFORMATION**

Teacher's Name: 

Age: 

Daycare Center Name: 

Teachers education completed:  
- Elementary School  
- High School  
- College  
- University  
- Graduate School  
- Other  

Teachers ethnic group:  
- Caucasian  
- Asian  
- Black  
- Hispanic  
- Native Canadian  
- Other
Spouses Occupation: ________________________________

Spouses education completed: 
- Elementary School __________
- High School __________
- College __________
- University __________
- Graduate School __________
- Other __________

Marital Status (check one) 
- Married _______ 
- Common Law _________
- Divorced _______ 
- Single _________
- Separated _______ 
- Other _________

Length of time working in a daycare: ________________________________

Have you completed any other courses or workshops related to child development?
If yes, please specify ________________________________

Number of own children: ________________________________

Number of children in the family home at this time: ________________________________

Ages of children:  
1 __________
2 __________
3 __________
Appendix 4

Child Rearing Q sort

The following questionnaire will take you approximately 45 minutes to complete. You may wish to complete this instrument when you have some extra “quiet time”.

If you have any questions whatsoever, please contact Caryn Moulton at 520-2600 ext. 2654 or at 526-3446.

Thank you very much for your kind cooperation.

INSTRUCTIONS FOR THE Q SORT

We are interested in what is important to you as a parent, and what kinds of methods you use in raising your child. Please tell us about your parenting style by sorting through a special set of cards that contain statements about bringing up children.

I ask that you while you complete these questionnaires that you choose only ONE of your children as a “target child”. If you have more than one child, please choose the child that is closest to preschool age. Please make this child the same target child for both questionnaires. Please write down the name of the child you have chosen, as well as the child’s age and gender. Again, thank you for your time.

Target child’s Name: ___________________________

Target child’s Age: ___________________________

Target child’s Gender: _________________________
Procedure

The Cards and Envelopes

Each set or deck contains 91 cards. Each card contains a sentence having to do with child rearing. Some of these sentences will be true or descriptive of your attitudes and behavior in relation to your child. Some sentences will be untrue or undescriptive of your feelings and behavior toward this child. By sorting these cards according to the instructions below, you will be able to show how descriptive or undescriptive each of these sentences is for you.

Together with the cards you have received 7 envelopes, with the following labels:

7. These cards are most descriptive.
6. These cards are quite descriptive.
5. These cards are fairly descriptive.
4. These cards are neither descriptive nor undescriptive.
3. These cards are fairly undescriptive.
2. These cards are quite undescriptive.
1. These cards are most undescriptive.

Your task is to choose 13 cards that fit into each of these categories and to put them into their proper envelope.
How to Sort the Cards (You may wish to check off each step as completed).

__1. Mothers take the White cards and shuffle them a bit first.

Fathers take the Green cards and shuffle them a bit first.

__2. Find a large cleared surface, like a kitchen table or desk, and spread out the envelopes in a row, going from 7 to 1 (Most Descriptive to Most Undescriptive):

7  6  5  4  3  2  1

__3. Now take the shuffled deck of cards, and read each sentence carefully. Then make three piles of cards: one pile containing cards that are generally true or descriptive of you; one pile that you're not certain about, and one pile of cards that are generally not true or descriptive.

It doesn’t make any difference how many cards you put in each of the three piles at this time, since you’ll probably have to do some switching around later. But you may find it helpful if each pile contains about the same number of cards.

Now your cards and envelopes look like this:

7  6  5  4  3  2  1 - envelopes

"Descriptive" "Not Sure" "Undescriptive"

Cards   Cards   Cards   - cards

__4. Now, take the pile of descriptive cards and pick out the 13 cards that are most descriptive of your behavior with your child. Put these cards on top of envelope #7.

Don’t put them inside yet, because you might want to shift some of them later.
5. Next, from the cards that remain, pick out 13 cards that you think are quite
descriptive of your behavior and put these on top of envelope #6. (If you run out of cards
from your "descriptive" pile, you'll have to add some of the more descriptive cards from
your "Not Sure" pile).

6. Now, begin at the other end. Take the pile of "Undescriptive" cards and pick out
the 13 cards that are most undescriptive of you. Put these on top of envelope #1.

7. Then pick out the 13 cards which are quite undescriptive and put them on
envelope #2. (Again, you may have to "Borrow" from your "Not Sure" pile to make the
necessary 13 cards for envelope #2).

8. You should now have 39 cards left over. These are now to be sorted into three
new piles with 13 cards in each: 13 cards that are fairly descriptive of you (to be put on
envelope #5); 13 cards that are neither descriptive or undescriptive (to be put on envelope
#4); and 13 cards that are fairly undescriptive (to be put on envelope #3).

You may find it hard, as others have, to put the same number of cards in each pile but we
must ask that you follow these directions exactly, even if you feel limited by them.

9. Now, as a last step, look over your sort to see if there are any changes you want to
make. When the cards seem to belong where you have put them, double-check to be sure
you have 13 cards in each pile. Then put each pile in the proper envelopes and tuck in the
flaps. The small envelopes go into the large envelope for return to the nursery school.
CRPR Items

1. I respect my opinions and encourage (him) (her) to express them.

2. I encourage my child always to do (his) (her) best.

3. I put the wishes of my mate before the wishes of my child.

4. I help my child when (he) (she) is being teased by friends.

5. I often feel angry with my child.

6. If my child gets into trouble, I expect (him) (her) to handle the problem mostly by (himself) (herself).

7. I punish my child by putting (him) (her) off somewhere by (herself) (himself) for a while.

8. I watch closely what my child eats and when (he) (she) eats.

9. I don't think young children of different sexes should be allowed to see each other naked.

10. I wish my spouse were more interested in our children.

11. I feel a child should be given comfort and understanding when (he) (she) is scared or upset.

12. I try to keep my child away from children of families who have different ideas or values from our own.

13. I try to stop my child from playing rough games or doing things where (he) (she) might get hurt.

14. I believe physical punishment to be the best way of disciplining.

15. I believe that a child should be seen and not heard.

16. I sometimes forget the promises I have made to my child.

17. I think it is good practice for a child to perform in front of others.
18. I express affection by hugging, kissing, and holding my child.

19. I find some of my greatest satisfactions in my child.

20. I prefer that my child not try things if there is a chance (he) (she) will fail.

21. I encourage my child to wonder and think about life.

22. I usually take into account my preferences in making plans for the family.

23. I wish my child did not have to grow up so fast.

24. I feel a child should have time to think, daydream, and even loaf sometimes.

25. I find it difficult to punish my child.

26. I let my child make many decisions for (himself) (herself).

27. I do not allow my child to say bad things about (his) (her) teachers.

28. I worry about the bad and sad things that can happen to a child as (he) (she) grows up.

29. I teach my child that in one way or another punishment will find (him) (her) when (he) (she) is bad.

30. I do not blame my child for whatever happens if others ask for trouble.

31. I do not allow my child to get angry with me.

32. I feel my child is a bit of a disappointment to me.

33. I expect a great deal of my child.

34. I am easy going and relaxed with my child.

35. I give up some of my own interests because of my child.

36. I tend to spoil my child.

37. I have never caught my child lying.
38. I talk it over and reason with my child when (he) (she) misbehaves.

39. I trust my child to behave as (he) (she) should, even when I am not with (him) (her).

40. I joke and play with my child.

41. I give my child a good many duties and family responsibilities.

42. My child and I have warm, intimate times together.

43. I have strict, well-established rules for my child.

44. I think one has to let a child take many chances as (he) (she) grows up and tries new things.

45. I encourage my child to be curious, to explore and question things.

46. I sometimes talk about supernatural forces and beings in explaining things to my child.

47. I expect my child to be grateful and appreciate all the advantages (he) (she) has.

48. I sometimes feel that I am too involved with my child.

49. I believe in toilet training a child as soon as possible.

50. I threaten punishment more often that I actually give it.

51. I believe in praising a child when (he) (she) is good and think it gets better results than punishing (him) (her) when (he) (she) is bad.

52. I make sure my child knows that I appreciate what (he) (she) tries or accomplishes.

53. I encourage my child to talk about (his) (her) troubles.

54. I believe children should not have secrets from their parents.

55. I teach my child to keep control of (his) (her) feelings at all times.

56. I try to keep my child from fighting.

57. I dread answering my child's questions about sex.
58. When I am angry with my child, I let (him) (her) know it.

59. I think a child should be encouraged to do things better than others.

60. I punish my child by taking away a privilege (he) (she) otherwise would have had.

61. I give my child extra privileges when (he) (she) behaves well.

62. I enjoy having the house full of children.

63. I believe that too much affection and tenderness can harm or weaken a child.

64. I believe that scolding and criticism makes my child improve.

65. I believe my child should be aware of how much I sacrifice for (him) (her).

66. I sometimes tease and make fun of my child.

67. I teach my child that (he) (she) is responsible for what happens to (him) (her).

68. I worry about the health of my child.

69. There is a good deal of conflict between my child and me.

70. I do not allow my child to question my decisions.

71. I feel that it is good for a child to play competitive games.

72. I like to have some time for myself, away from my child.

73. I let my child know how ashamed and disappointed I am when (he) (she) misbehaves.

74. I want my child to make a good impression on others.

75. I want my child to be independent of me.

76. I make sure I know where my child is and what (he) (she) is doing.

77. I find it interesting and educational to be with my child for long periods.

78. I think a child should be weaned from the breast or bottle as soon as possible.
79. I instruct my child not to get dirty while (he) (she) is playing.

80. I don't go out if I have to leave my child with a stranger.

81. I think jealousy and quarreling between brothers and sisters should be punished.

82. I think children must learn early not to cry.

83. I control my child by warning (him) (her) about the bad things that can happen to (him) (her).

84. I think it is best if the mother, rather than the father, is the one with the most authority over the children.

85. I don't want my child to be looked upon as different from others.

86. I don't think children should be given sexual information before they can understand everything.

87. I believe it is very important for a child to play outside and get plenty of fresh air.

88. I get pleasure from seeing my child eating well and enjoying (his) (her) food.

89. I don't allow my child to tease or play tricks on others.

90. I think it is wrong to insist that young boys and girls have different kinds of toys and play different sorts of games.

91. I believe it is unwise to let children play a lot by themselves without supervision from grown-ups.
Appendix 5

Child Behaviour Stories

Instructions:

There are five brief stories in this part of the questionnaire. Each story describes a child engaging in some type of behaviour. As you read each story, please imagine that it is your child being described. Maybe something like this has happened before, and you can remember how you felt and what you did. If nothing like what is described in a story has happened before, please imagine what it is like to be in that situation and see your child behaving that way.

After each story there are 10 questions. Each of these describes a thought you may have had if you saw your child behaving that way. With each one, there is a 5 point rating scale. After you read an item, please use the scale to rate how much you agree with that item. For example, if the item was “I would want my child to feel happy” and you think you would want your child to feel really good about the situation, you might rate that item as a 4 or 5 out of 5.

Please try to answer every question. If you’re not sure about any of the items, just take your best guess. Also, we’re interested in what you think, and what you do, so please don’t talk about the stories and questions with other people until after you have given us your answers.
**Story One**

Your child is out front of your home, playing with a few other children. You are watching them from one of your windows. They are having fun, playing a game like “tag”, and your child seems to be one of the leaders. One of the other children trips over something, and starts crying. Your child goes to the crying child, helps him/her to sit up, and sits together with the other child until he/she stops crying. Your child has done this kind of thing before.

The following six items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from 1: Not at all important, to 5: Extremely important.

1. I would want my child to behave properly, right away.
   
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<th></th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>not at all</td>
<td>a little</td>
<td>moderately</td>
<td>very</td>
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<tr>
<td>important</td>
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2. I would want my child to feel good, or to be happy.

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3. I would want my child to know that I love him/her, and he/she can love and trust me.

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<th>5</th>
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<tr>
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<td>a little</td>
<td>moderately</td>
<td>very</td>
<td>extremely</td>
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<tr>
<td>important</td>
<td>important</td>
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4. I would want my child to learn an important lesson, like the reasons why he/she should behave in certain ways.

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</table>

5. I would want my child to understand that I expect him/her to behave properly.

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</tr>
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</table>

6. I would want my child and I both to feel good about this situation.
The following three items describe reasons why you think your child may have behaved in the way described in this story. Please rate each one from 1 to 5.

7. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

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<th>1</th>
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<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>completely due to personality</td>
<td>mostly due to both personality and situation</td>
<td>equally due to both</td>
<td>mostly due to the situation</td>
<td>completely due to the situation</td>
</tr>
</tbody>
</table>

8. My child might have acted this way on purpose, or my child might not have meant to act this way.

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<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>definitely did this on purpose</td>
<td>probably did this on purpose</td>
<td>it could be either way</td>
<td>probably did not mean to do this</td>
<td>definitely did not mean to do this</td>
</tr>
</tbody>
</table>

9. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

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<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>definitely a stage that will pass</td>
<td>probably a stage that will pass</td>
<td>it could be either way</td>
<td>probably will act this way in future</td>
<td>definitely will act this way in future</td>
</tr>
</tbody>
</table>

10. For the last item for this story, please rate how much like the child in the story is your own child. Do you think your child would behave in the ways described in the story?

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<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>this is just like how my child behaves</td>
<td>my child sometimes acts this way</td>
<td>my child could act this way</td>
<td>this does not sound much like my child</td>
<td>my child never acts this way</td>
</tr>
</tbody>
</table>

Story Two
One afternoon you go to pick up your child from his/her daycare center or preschool. When you get there, your child is in the playground with some other children. One of the other children has a toy your child wants, and you see your child grab the toy and push the other child down. You have seen your child do this a few times before.

The following six items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from 1: Not at all important, to 5: Extremely important.

1. I would want my child to behave properly, right away.

   | 1 | 2 | 3 | 4 | 5 |
---|---|---|---|---|---|
not at all important | a little important | moderately important | very important | extremely important |

2. I would want my child to feel good, or to be happy.

   | 1 | 2 | 3 | 4 | 5 |
---|---|---|---|---|---|
not at all important | a little important | moderately important | very important | extremely important |

3. I would want my child to know that I love him/her, and he/she can love and trust me.

   | 1 | 2 | 3 | 4 | 5 |
---|---|---|---|---|---|
not at all important | a little important | moderately important | very important | extremely important |

4. I would want my child to learn an important lesson, like the reasons why he/she should behave in certain ways.

   | 1 | 2 | 3 | 4 | 5 |
---|---|---|---|---|---|
not at all important | a little important | moderately important | very important | extremely important |

5. I would want my child to understand that I expect him/her to behave properly.
6. I would want my child and I both to feel good about this situation.

<table>
<thead>
<tr>
<th></th>
<th>1 not at all important</th>
<th>2 a little important</th>
<th>3 moderately important</th>
<th>4 very important</th>
<th>5 extremely important</th>
</tr>
</thead>
</table>

The following three items describe reasons why you think your child may have behaved in the way described in this story. Please rate each one from 1 to 5.

7. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

<table>
<thead>
<tr>
<th></th>
<th>1 completely due to personality</th>
<th>2 mostly due to personality</th>
<th>3 equally due to both</th>
<th>4 mostly due to situation</th>
<th>5 completely due to situation</th>
</tr>
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</table>

8. My child might have acted this way on purpose, or my child might not have meant to act this way.

<table>
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<th></th>
<th>1 definitely did this on purpose</th>
<th>2 probably did this on purpose</th>
<th>3 it could be either way</th>
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<th>5 definitely did not mean to do this</th>
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9. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

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<th>2 probably a stage that will pass</th>
<th>3 it could be either way</th>
<th>4 probably will act this way in future</th>
<th>5 definitely will act this way in future</th>
</tr>
</thead>
</table>
10. For the last item for this story, please rate how much like the child in the story is your own child. Do you think your child would behave in the ways described in the story?

1 2 3 4 5
this is just my child my child this does not my child never
like how my act this way could act sound much acts this way
child behaves sometimes this way like my child

Story Three
One morning, you have dropped your child off at his/her daycare center or preschool. After you say good-bye, you decide to stay and watch the children for a little while, and find a spot where you can see your child, but he/she doesn’t know you’re watching. You see your child standing against the wall, watching some of the other children playing with a fun toy. Your child looks interested, but stays against the wall and keeps his/her chin down. You have seen your child act like this at other times.

The following six items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from 1: Not at all important, to 5: Extremely important.

1. I would want my child to behave properly, right away.

1 2 3 4 5
not at all a little moderately very extremely
important important important important important

2. I would want my child to feel good, or to be happy.

1 2 3 4 5
not at all a little moderately very extremely
important important important important important

3. I would want my child to know that I love him/her, and he/she can love and trust me.

1 2 3 4 5
4. I would want my child to learn an important lesson, like the reasons why he/she should behave in certain ways.

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<tbody>
<tr>
<td>not at all important</td>
<td>a little important</td>
<td>moderately important</td>
<td>very important</td>
<td>extremely important</td>
</tr>
</tbody>
</table>

5. I would want my child to understand that I expect him/her to behave properly.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all important</td>
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<td>moderately important</td>
<td>very important</td>
<td>extremely important</td>
</tr>
</tbody>
</table>

6. I would want my child and I both to feel good about this situation.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</tr>
</thead>
<tbody>
<tr>
<td>not at all important</td>
<td>a little important</td>
<td>moderately important</td>
<td>very important</td>
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</tr>
</tbody>
</table>

The following three items describe reasons why you think your child may have behaved in the way described in this story. Please rate each one from 1 to 5.

7. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>completely due to personality</td>
<td>mostly due to personality</td>
<td>equally due to both</td>
<td>mostly due to situation</td>
<td>completely due to situation</td>
</tr>
</tbody>
</table>

8. My child might have acted this way on purpose, or my child might not have meant to act this way.
9. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1. definitely
2. probably
3. it could be
4. probably
5. definitely
did this on
purpose
did this oneither way
did not mean
to do this
did not mean
to do this

9. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1. definitely
2. probably
3. it could be
4. probably
5. definitely
did this on
purpose
did this oneither way
did not mean
to do this
did not mean
to do this

10. For the last item for this story, please rate how much like the child in the story is your own child. Do you think your child would behave in the ways described in the story?

1. this is just
2. my child
3. my child
4. this does not
5. my child never
like how my
act this way
could act
sound much
acts this way
child behaves
sometimes
this way
like my child

Story Four
You and your child are in the local grocery store. Your child asks for a very sugary cereal. You tell him/her it’s not very good for him/her. Then, your child sees some stuffed animals and says he/she wants one. You tell him/her that he/she has toys at home, and you can’t buy another one today. Then, your child grabs a candy bar, and when you try to put it on the shelf, your child screams “I want it!” People turn and look.

The following six items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from 1: Not at all important, to 5: Extremely important.

1. I would want my child to behave properly, right away.

1. not at all
2. a little
3. moderately
4. very
5. extremely
important
important
important
important
important
2. I would want my child to feel good, or to be happy.

1  2  3  4  5
not at all a little moderately very extremely
important important important important important

3. I would want my child to know that I love him/her, and he/she can love and trust me.

1  2  3  4  5
not at all a little moderately very extremely
important important important important important

4. I would want my child to learn an important lesson, like the reasons why he/she should behave in certain ways.

1  2  3  4  5
not at all a little moderately very extremely
important important important important important

5. I would want my child to understand that I expect him/her to behave properly.

1  2  3  4  5
not at all a little moderately very extremely
important important important important important

6. I would want my child and I both to feel good about this situation.

1  2  3  4  5
not at all a little moderately very extremely
important important important important important
The following three items describe reasons why you think your child may have behaved in the way described in this story. Please rate each one from 1 to 5.

7. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
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</tr>
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<tbody>
<tr>
<td>completely due to personality</td>
<td>mostly due to personality</td>
<td>equally due to both</td>
<td>mostly due to situation</td>
<td>completely due to situation</td>
</tr>
</tbody>
</table>

8. My child might have acted this way on purpose, or my child might not have meant to act this way.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>definitely did this on purpose</td>
<td>probably did this on purpose</td>
<td>it could be either way</td>
<td>probably did not mean to do this</td>
<td>definitely did not mean to do this</td>
</tr>
</tbody>
</table>

9. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

<table>
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<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>definitely a stage that will pass</td>
<td>probably a stage that will pass</td>
<td>it could be either way</td>
<td>probably will act this way in future</td>
<td>definitely will act this way in future</td>
</tr>
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10. For the last item for this story, please rate how much like the child in the story is your own child. Do you think your child would behave in the ways described in the story?

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<th>5</th>
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</thead>
<tbody>
<tr>
<td>this is just like how my child act this way</td>
<td>my child could act</td>
<td>my child never acts this way</td>
<td>this does not sound much</td>
<td>my child never acts this way</td>
</tr>
</tbody>
</table>
Story Five
One day, you and your child are at home and you are expecting some friends to drop by soon. You look in the front room of your home, and your child’s toys are all over the floor. Your child is watching TV. You ask your child to pick up his/her toys, and your child says “Later, when this show is over.” You ask your child to pick his/her toys up now, and your child says “You’re not being fair.”

The following six items describe things that you might be concerned about, goals you might have, or things you might want to achieve in this situation. Please rate each one from 1: Not at all important, to 5: Extremely important.

1. I would want my child to behave properly, right away.

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
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2. I would want my child to feel good, or to be happy.

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<td></td>
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<td>a little important</td>
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<td>very important</td>
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3. I would want my child to know that I love him/her, and he/she can love and trust me.

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4. I would want my child to learn an important lesson, like the reasons why he/she should behave in certain ways.

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</tr>
</tbody>
</table>
5. I would want my child to understand that I expect him/her to behave properly.

1  2  3  4  5
not at all a little moderately very extremely
important important important important important

6. I would want my child and I both to feel good about this situation.

1  2  3  4  5
not at all a little moderately very extremely
important important important important important

The following three items describe reasons why you think your child may have behaved in the way described in this story. Please rate each one from 1 to 5.

7. My child might have acted this way because it was in his/her nature or personality to act this way, or it might have been due to the situation.

1  2  3  4  5
completely mostly equally due mostly completely
due to due to both due to due to personality personality to both situation situation

8. My child might have acted this way on purpose, or my child might not have meant to act this way.

1  2  3  4  5
definitely probably it could be probably definitely
did this on did this oneither way did not mean did not mean
purpose purpose way did not mean to do this to do this

9. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1  2  3  4  5
definitely probably it could be probably definitely
da stage that a stage that either way will act this will act this
will pass will pass way will act this future way in future way in future
10. For the last item for this story, please rate how much like the child in the story is your own child. Do you think your child would behave in the ways described in the story?

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</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>my child act this way sometimes</td>
<td>my child could act this way</td>
<td>this does not sound much like my child</td>
<td>my child never acts this way</td>
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<td>M high</td>
<td>M low</td>
<td>high</td>
<td>low</td>
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<td>(94)</td>
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Means and standard deviations for independent t-tests (Median Splits).
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<td>low</td>
<td>high</td>
<td>low</td>
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<td>non-punitive discipline</td>
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<td>-.33</td>
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<td></td>
<td>(1.16)</td>
<td>(.69)</td>
<td>p = .09</td>
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<td>-30</td>
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<td>.35</td>
<td>-.21</td>
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<td>(.99)</td>
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<td>.96</td>
<td></td>
<td>.17</td>
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<td>.81</td>
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<td>(.88)</td>
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<td>-.93</td>
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<tr>
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<td>(1.02)</td>
<td>(.99)</td>
<td>p = .65</td>
<td></td>
<td>(.68)</td>
<td>(1.38)</td>
<td>p = .36</td>
</tr>
</tbody>
</table>

* Teachers' Parental Beliefs