

RESEARCH

Brief



The Temperament Task Orientation Cluster among Preschool Educators

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BACKGROUND

In today's schools, success all too often is measured by test scores. Early childhood research literature, however, points to a more inclusive definition of school success that involves positive adjustment to the school environment. Early adjustment is considered a priority for future school success by many researchers who propose that most learning and behavior patterns are established by the third grade (Pianta & Steinberg, 1992). Empirical demonstrations found that early acculturation to school results in positive long-term social-emotional, academic, and behavioral competencies; whereas poor adaptation often leads to negative long-term outcomes (Entwisle & Hayduk, 1988; Kazdin, 1987; Ladd, Kochenderfer, & Coleman, 1996). Entwisle and Hayduk purported that children who transition easily to the school setting tend to be better prepared emotionally to learn. This readiness gives them a positive foundation upon which to build.

In sum, children's feelings and attitudes, whether positive or negative, about themselves and school has long-term consequences (Keogh, 1986). Although most children have minimal problems adjusting to the demands of school, for some children adjustment to the behavioral, social-emotional, academic or developmental milieu of group care can be difficult. Rimm-Kaufman, Pianta, and Cox (2000) provide specific information from their national survey on kindergarten teachers' practices, concerns, and barriers to successful transitions of young children into kindergarten. Teachers reported that 48% of children in their classrooms had moderate to severe problems in adjusting to school, and 16% of this group was considered to have severe problems transitioning to kindergarten. There can be countless causes for why some children experience poor adjustment to school and others have a positive early school adjustment experience. Kindergarten is the focus for many researchers investigating school adjustment; however, increasingly more children begin school at the preschool level (Carnegie, 1994; Fabian, 2000). Many reports estimate that 40% of all 3-year-olds and 66% of all 4-year-olds in the United States receive some level of preschool services (Barnett & Hustedt, 2003; Magnuson, Meyers, & Ruhm, 2004). Moving from home to school entails physical changes as well as variations in cultural environments that children may not have experienced prior to attending preschool. For example, the classroom culture may require conformity to educator expectations, regulation of behavior, attending, and keeping quiet during certain activities, which can create disequilibrium in young children (Perry & Weinstein, 1998).

For many children, they have not had experiences to prepare them for this environment (i.e., responding to direction from an adult who is not a family member, participating in a group). Adding a disability to the transition process compounds the barriers to positive school adjustment. The concept of transition for young children with special needs is complex and involves a number of constructs. Rous, Hallam, Harbin, McCormick, and Jung (2007) developed a conceptual framework which includes multiple variables and systems that interact to influence the transition process. This conceptual framework also includes the community influence on the transition of a young child with special needs and the skills needed for children to succeed in

having a positive adjustment to school (Figures 1 & 2; Rous, Harbin, & McCormick, 2006). (Note: A complete description of the transition conceptual framework can be found on the NECTC website in the paper titled: *The transition of young children with disabilities: A conceptual framework*). These skills include the ability of children to adapt, engage, and develop in school environments that are supported by appropriate preparation for the environment, as well as the interactions between the child and provider once the child enters the new environment.

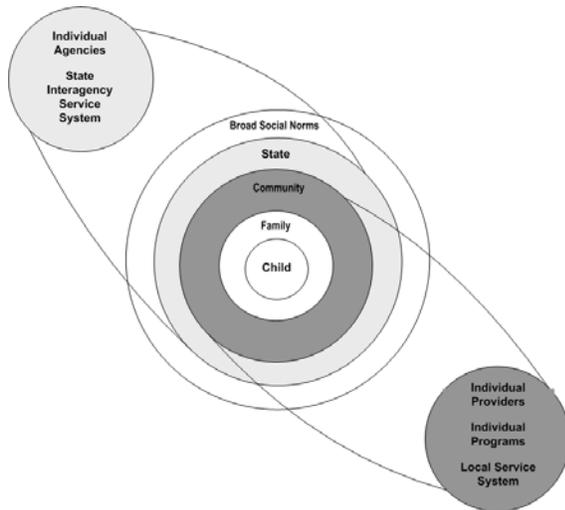


Figure 1
Community Influence on Transition

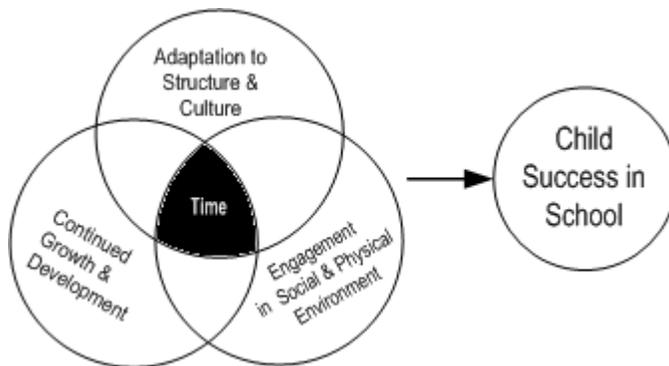


Figure 2
Skills Influenced by Transition that are Associated with Child School Adjustment

TEMPERAMENT

Child-Educator Relationship and Temperaments. The school environment in which preschool children interact affects their degree of fit and their adjustment to school. Dissimilarities between children and their educational environments can involve both context and educator (adult) characteristics. Through the adult/child relationship, educators teach children to behave, interact with peers, and adapt to the school culture. These regulatory aspects of development are amenable to change at a young age. Thus, the educator/child relationship can serve either to facilitate or inhibit children in learning to expand and modify coping strategies in order to be successful in the school environment. Furthermore, a child's temperament influences this relationship. For example, Kean (1997) found that positive interactions between educators and children increased when children were rated by their teachers as having easy temperaments. On the other hand, in a study of 104 first grade children, Martin, Olejnik, and Gaddis (1994) reported that children with specific temperamental characteristics had increased problems with school performance. These behaviors included low task orientation (i.e., high activity, high distractibility, and low persis-

tence/attention span), low flexibility (i.e., negative quality of mood, low approach to new stimuli, and low adaptability), and high reactivity (i.e., low threshold to stimuli, high intensity of reaction, and negative quality of mood). These data have been supported and replicated in other studies (Carey & McDevitt, 1995; Keogh, 2003).

TASK ORIENTATION TEMPERAMENT PROFILE

A temperament profile consists of dimensions in which a person is rated along a temperament continuum. Exhibited behaviors that are high or low on a dimension often are the bases for how a person is described. Studying only a specific dimension of temperament, however, yields only limited information about a person's temperament profile. Temperament researchers have combined statistical techniques such as factor analyses and data collection methods such as observation to cluster dimensions of temperament as a means of better describing temperament profiles. For example, task orientation is a cluster that is based on specific temperamental characteristics and represents success in, or problems with, achievement and school performance. Martin and Bridger (1999) and McClelland and Morrison (2003) suggested that temperament characteristics that allow children to focus, be interested, and pay attention, are associated with higher academic scores and positive school adjustment, including adjustment in preschool. In addition, Mobley and Pullis (1991) found that educators rated young children who exhibited high task orientation abilities and low reaction to environmental stimuli as having the most positive behavioral interactions in their classroom environments. As noted by Keogh (2003, p.63), most researchers agree upon three temperament dimensions that are associated with a temperament – achievement relationship: activity, distractibility, and persistence. A child who is described as having a high task orientation temperament profile would have high persistence/attention span, low activity, and low distractibility. This cluster has been found to be positively associated with intelligence, motivation, social skills, academic performance, and working to potential (Keogh, 1994 & 2003; Martin, Olejnik & Gaddis., 1994).

The research on task orientation and its relationship to academic performance has focused primarily on children. There are few published studies on adult temperament. In fact, the majority of the temperament literature that has been published in the United States focuses on children and adolescents. There have been no published studies which investigate the task orientation of teachers. The importance of assessing educator temperament, however, is supported in research literature. Pullis (1989) and Keogh (2003, p. 139) pointed out that educators' awareness of their own temperament can help in understanding the various relationships they have with their students. These authors suggest that if educators are aware of their behavioral styles and how they interact with others, this self-understanding would allow them to identify variables that facilitate a good fit for child learning as well as variables that are barriers to optimal child outcomes.

STUDY

Child and educator temperament data were collected within the National Early Childhood Transition Center (NECTC) multi-state longitudinal research study that investigated the relationship of transition practices for children with special needs and school outcomes. The purpose of this study was to identify components of transition that influence school adjustment. The component of the study presented in this Research Brief focuses on temperament. The research question was "Are the temperament dimensions of activity, distractibility, and persistence that form a task orientation structure for children also found with an adult population of preschool educators?" Given that a task orientation temperament cluster indicates success in school for children, it was hypothesized that these same temperament dimensions would be found among educators who value school success and would be attracted to a work environment whose goal was school success and an environment that matched their temperament profile.

Data were collected from 94 preschool educators across five states. These educators served as special education or general education preschool service providers who had an average of ten years of experience working with at least one child with special needs. These teachers served 228 children, ages three to five, who had been identified at some point in their lives

as eligible for early intervention or preschool special education. Table 1 presents the demographic aspects of the preschool educator sample.

Analyses. A factor analysis was conducted with 15 of the 54 items of the Dimensions of Temperament Scale-Revised (DOTS-R) that make up the task orientation structure: Activity Level – General, Distractibility, and Persistence. A two-factor solution was

Table 1. Educator Demographics (N=94)

AGE (median)	40.5 Years
EXPERIENCE (median)	10 Years
GENDER (%)	
Female	97.5%
RACE / ETHNICITY (%)	
African American	9%
Asian American	1.5%
European American	78.5%
Latino/a	5.5%
Multiracial	2.5%
Other	2%

found using 14 items that loaded as Activity and Distractibility/Persistence. Item to subscale reliabilities for each factor were then conducted and found to be highly reliable (.83 and .81 respectively). Reliability of the two factors (subscales) in relation to the task orientation profile (scale) also was high (.84). Finally, a correlation among the subscales and scale showed moderate to high association for both activity (.87) and distractibility/persistence (.79). These analyses indicated that educator temperament dimensions of low activity level, high persistence, and low distractibility highly correlate as the temperament cluster identified in research literature as a task orientation temperament structure. These results indicate that a task orientation temperament profile exists among this sample of preschool educators similar to the task orientation profile found among preschool children with special needs.

IMPLICATIONS

With so many preschool-age children receiving early care and education outside of the home, it is important to consider both child and adult temperament during the transition from home to center-based preschool services and from preschool to kindergarten. Child and educator temperament styles should be considered in all aspects of transition: when reaching forward to decide the best child-educator match in the new setting; when reaching back to review the facilitative and inhibitive aspects of the sending environment; and when reaching out to the transition activities to ensure that they represent a good match between the child's and adult temperaments.

As part of the transition process, families and professionals can address the issue of temperament as a way to facilitate school adjustment. Children with high task orientation temperament profiles, for example, might find that environments that allow time for children to work either alone or with others who are equally focused on a project without disruption may be a better match than environments where there are scheduled activity changes. To illustrate this, imagine a high task oriented child who is engaged in building a structure with blocks and has a particular goal in mind and s/he becomes frustrated when asked to transition to another activity prior to completion of the structure. A teacher with a similar temperament would understand this preference and would, perhaps, allow for completion. This hypothesis, however, has not been tested. Therefore, further research is needed to determine the relationship of temperament profiles between children and the adults with whom they work.

Although temperament research spans nearly 40 years with specific research on the role temperament plays in the schools beginning about 25 years ago, the institution of temperament assessment in the schools has not occurred; evidenced by the few published assessment instruments that measure temperament. With large numbers of young children entering center based care during their preschool years and the short- and long-term needs for

positive transitions and adjustment to these new settings, it is prudent to consider how children's and educator's temperaments interact in facilitating children's development. Specifically, the task orientation temperament profile found to be positively associated with school success for students in elementary, middle, and secondary schools may play an even larger role for young children who have not yet matured sufficiently to compensate for their temperamental attributes in order to resolve poor goodness of fit with adults and peers. Concurrently, there is still much to learn about the role temperament plays in preschool environments, and in particular, with preschool children with special needs. Additional research on the interaction between child and educator temperament and the inclusion of this information when planning transitions would provide evidence-based support that is currently lacking in the study of temperament.

Implications of these results can be applied on multiple levels. On the direct service level, matching educator and child temperaments would benefit both child and adult because of the bi-directional interactive relationship that plays a significant role in children's transition and ultimate success in preschool. On administrative and personnel preparation levels, embedding temperament concepts when training and recruiting educators can add depth to these processes and support successful recruitment and retention. Finally, on a research level, further investigation will help to determine how preschool educators with specific temperament profiles (i.e., high, moderate, and low task orientation) interact differentially with young children of various temperament profiles. In summary, findings from this study will assist in broadening our knowledge about the specific goodness of fit characteristics between children and their preschool environment that facilitate positive transitions when considering the educator task orientation temperament cluster as a dimension of the preschool environment.

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The National Early Childhood Transition Center is supported through a cooperative agreement, PR Award # H324V020003, through the US Department of Education, Office of Special Education Programs. However, the contents of this paper do not necessarily represent the positions or policies of the Office of Special Education or the US Department of Education, and readers should not assume endorsement by the federal government.