TRANSITION TO KINDERGARTEN: EXPLORING CONCEPTS OF WORRY, TRANSITION ACTIVITIES, AND PARENT EFFICACY

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DEDICATION

I dedicate my dissertation work to my family and friends. Special gratitude is owed to my mom, who was a fierce model of stepping out in courage, and to my dad, who embodies relentless persistence.

I also dedicate this dissertation to my best friend and husband, Preston Turley, for taking the reins of family life throughout the entire process. You have been my soft place to land, my gentle encourager, and my constant reminder of who directs my footsteps.

"Spirit lead me where my trust is without borders
Let me walk upon the waters
Wherever You would call me
Take me deeper than my feet could ever wander
And my faith will be made stronger
In the presence of my Savior"

- Words and Music by Matt Crocker, Joel Houston & Salomon Lightelm

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ABSTRACT

Kindergarten entry is a significant – and fairly common – transition experienced by young children and their families. Put simply, it is often a drastic new experience for young children including new behavioral, social, and emotional demands and it remains difficult for many children (Cowan & Heming, 2005; Jiang, Justice, Purtell, Lin, & Logan, 2021; Latham, 2018). This adjustment is important because how well children adjust to their new academic context has implications for short- and long-term academic and social successes (e.g., Ahtola et al., 2011; Berger et al., 2017; Williams et al., 2020). While adults often act on behalf of young children to design and engage in transition supports during this time, with intentions to ease the transition, what remains largely unexamined is how children perceive their experience and how that may work in conjunction with adults' efforts. This study seeks to further explore children's worries, how worries are associated with outcomes, and how parent efficacy is associated with Kindergarten outcomes. This study utilized electronic surveys with a sample of 85 Missouri parents of current and previous-year Kindergartners.

CHAPTER 1: LITERATURE REVIEW

Kindergarten marks a significant – and fairly common – transition in young children's lives. Children entering Kindergarten will face new social, cognitive, behavioral, and environmental demands in their new educational setting. How children navigate the transition into Kindergarten has been shown to have both short- and long-term implications for school success (Ahtola et al., 2011; Burchinal et al., 2020; Duncan et al., 2007). In an effort to support children through this transition, adults often act on behalf of children, deciding on transition supports and activities, but it may be these supports work in conjunction with children's beliefs to determine the (in)effectiveness of transitional supports.

Children have unique worries about what it means to begin Kindergarten (Booth et al., 2019; Dennis & Kelemen, 2009; Di Santo & Berman, 2012) and whether or not those worries are addressed by transition supports may determine how easy or difficult the transition to Kindergarten is. If true, then parent, caregiver, and teacher transition activities that align well with child worries and anxieties prior to and during the transition are likely to best support and nurture positive academic, behavioral, and social adjustment. The alignment between adult transition activities and worries/anxieties salient to children and the effectiveness of this alignment is examined in the current study. Confidence parents and caregivers feel in their ability to support children during the transition to Kindergarten is also examined in this study because it is the parents and caregivers who typically make the choice to create or engage in the transition activities. This sense of adult efficacy is argued to relate to child adjustment because it is believed that those who feel more confident in the activities and the importance of the activities to

improve children's transition success are likely going to commitment more time, energy, effort, and positivity toward the transition activities.

Child Worry

Theoretical Basis

The predominant theoretical approach that positions adult transition practices as influential to children's Kindergarten transition is Rimm-Kaufman and Pianta's (2000) Ecological and Dynamic Model of Transition framework, which is an expansion of Bronfenbrenner's Ecological Framework (Bronfenbrenner, 2005; Bronfenbrenner & Morris, 1998)). Both theoretical frameworks place children at the center of the Kindergarten experience. However, what researchers often examine are what parents and teachers do to transition children without considering children's experiences or perceptions and how that may interact with the supports being provided. Cited more than 900 times, Rimm-Kaufman and Pianta's (2000) framework is dominant in the transition to Kindergarten literature and warrants careful examination of how it is being utilized to frame research design, methodology, and interpretations of research findings in this literature.

The Ecological and Dynamic Model of Transition includes the reciprocal interactions between children, characteristics of their home (SES, parental education, etc.), and relationships between and among influential adults, such as teachers and parents, similarly to Bronfrenbrenner's model (Bronfenbrenner & Morris, 1998; Rimm-Kaufman & Pianta, 2000). What Rimm-Kaufman and Pianta (2000) highlight as a distinct feature of the expanded model, specific to the transition to Kindergarten, are the relationships that exist between children and adults and how these relationships change

across time to support the development of children as they transition into Kindergarten. More specifically, Rimm-Kaufman and Pianta (2000) state that parent and teacher relationships "characterized by frequent contact, agreed-on goals, and a focus on supporting children and development of skills" are key to a successful Kindergarten transition.

When applying this theoretical lens to children's transition to Kindergarten, much of the research is adult-focused in viewing only what teachers and parents do on behalf of children as important to children's outcomes. Children's experiences and perceptions of both the transition and the transition practices tend to be omitted in much of the research. While much of the research relies on a framework that positions children at the center, researchers tend to emphasize teacher and parent influences on Kindergarten transition outcomes. Omitting children's perspectives from study design suggests a certain level of passivity of children's adjustment to Kindergarten. This approach has increased teacher and parent understanding of Kindergarten transition activities and has suggested that transition activities work to promote a successful transition for some children. I propose to continue advancing this line of inquiry, how the theoretical framework is applied in research should be considered especially as it relates to children and the inclusion of children's perspectives. This may help researchers further understand why or how transition activities are more successful than others and potentially more successful for certain groups of children.

Referring back to Bronfenbrenner's framework, the person is at the center of the model and the proximal processes are of central importance to how children develop (Bronfenbrenner, 2005; Bronfenbrenner & Morris, 1998). This means inclusion of child

characteristics is needed to advance this area of inquiry. Recognizing children as active agents in the construction of their transition experience, research should include children's worries and how worries work in conjunction with transition practices to predict outcomes. Further, study methodology should be designed to incorporate information directly from children about experiences and interpretations of those experiences. Including children's worries and asking children directly what concerns they have about going into Kindergarten may explain how or why some adult-initiated transition practices work better than others and how or why nearly half of children struggle with the adjustment to Kindergarten (Jiang et al., 2021).

Asking Children Directly

Examining young children's perceptions about their transition into Kindergarten is a relatively new topic in research literature. Adult perspectives are more commonly – more easily -- sought for research. Seeking children's perspectives about the Kindergarten transition specifically seems to originate from outside of the United States, from places such as Australia (Dockett & Perry, 2004; Harrison & Murray, 2015), Nordic countries (Booth et al., 2019; Einarsdottir et al., 2009), and China (Wong, 2015).

There are developmental and theoretical justifications for including children as direct informants in research (Clark et al., 2003; Dockett & Perry, 2007; Fabian & Dunlop, 2007). Young children are used as direct informants in numerous areas of child development research -- ranging from awareness of private speech (Manfra & Winsler, 2006) to perceptions of memory capabilities (Geurten & Willems, 2016) to perceptions of academic competence (Ruzek et al., 2020). Young children have been asked directly about their ideas, feelings, and perceptions on a variety of topics and results demonstrate

children as young as three and four years old are valid and reliable sources of their own experiences (Booth et al., 2019; Dennis & Kelemen, 2009; Manfra & Winsler, 2006, 2006; Ruzek et al., 2020; Wong, 2015).

Developmentally, children as young as three years old have the capacity to engage in self-reflection and other tasks requiring metacognition (Flavell, 1979; Geurten & Willems, 2016). Even more specific to the topic of Kindergarten transition activities, research with preschoolers has demonstrated young children's ability to accurately distinguish between effective and ineffective emotional regulation strategies, suggesting the emerging skill of connection between emotion and behavior (Dennis & Kelemen, 2009). This has direct implications for the topic of this study, such that children may also be able to identify areas of worry or concern related to beginning Kindergarten.

Others studies have compared reports between children and adults to validate children's responses and determine children to have accurate perceptions of their own emotions (Dennis & Kelemen, 2009), academic competence (Evans & Hulak, 2020), self-regulation (Booth et al., 2019), and even Kindergarten adjustment specifically (Ramey et al., 1998). Findings such as these, coupled with the developmental capacity of young children, support the validity of children as direct informants about both external experiences and internal thoughts, feelings, and perceptions. Just as previous studies have utilized both parents and children as participants, this study will include that same methodology.

Children's Worries

When including children as direct informants in studies related to children's Kindergarten experience, researchers either include preschoolers, Kindergartners, or

follow children from preschool to Kindergarten. Asking current Kindergartners about their recent transition experiences is one approach (Booth et al., 2019; Harrison & Murray, 2015; Loizou, 2011; Margetts, 2008; O'Farrelly et al., 2020; Salmi & Kumpulainen, 2019). Studies with current Kindergartners elicit responses by either asking children to reflect on their preschool experience and compare it with Kindergarten (or their first year of primary school, depending on the country), or asking current Kindergartners what they think a new Kindergartner needs to know (e.g., Margetts, 2005). Kindergartners' responses reveal what is salient as they have typically very recently transitioned into Kindergarten. Their responses can primarily be categorized as social and academic concerns.

The importance of social interactions, friendships, and peer interactions comes up repeatedly in Kindergartners' responses (Booth et al., 2019; Harrison & Murray, 2015; Margetts, 2005; O'Farrelly et al., 2020). In fact, peer relationships and academic skills were near-equally mentioned in response to "What do you think new children starting school need to know?" (Margetts, 2008). The aspects of the broader social world of Kindergarten that seem to be salient to new Kindergartners including knowing and understanding the rules and expectations of teachers and the larger school (Booth et al., 2019; Salmi & Kumpulainen, 2019). Additionally, Kindergartners recognize and discuss the helpfulness of adults (e.g., teachers) in navigating both the social world and the rules of school is also reported by children (Booth et al., 2019; Harrison & Murray, 2015; Margetts, 2008). Collectively, recently transitioned Kindergartners seem to hone in on the social aspects of their new environment.

This saliency of social interactions among Kindergartners' responses is evident in their reported worries, also. New Kindergartners note concern and worry related to getting into and navigating peer disagreements (Margetts, 2008), and engaging peers on the playground (Booth et al., 2019; O'Farrelly et al., 2020). Kindergarteners also express concern for the new rigidity of teachers and curriculum compared to their previous preschool experiences (Loizou, 2011; Salmi & Kumpulainen, 2019). These responses reflect the personal challenges of young children as they navigate and adjust to this new social environment.

Again, these are the responses of children who have just recently transitioned into Kindergarten and are answering questions after reflection. The detailed, varied, but thematic responses of these new Kindergartners validate the methodology and theoretical idea that children do experiencing worry related to starting Kindergarten, and some aspects of worry are seemingly common. This perspective could be important to how children are supported during their transition to Kindergarten. This is not only demonstrated in studies with current Kindergartners, but has also been achieved by researchers working directly with younger preschool-aged children preparing to make the transition into Kindergarten.

Research about the Kindergarten transition with preschoolers is frequently conducted by asking preschoolers to imagine the upcoming transition to Kindergarten (Di Santo & Berman, 2012; Eskelä-Haapanen et al., 2017; Ramey et al., 1998; Wong, 2015). Often conducted as small-group discussions while at preschool (see Eskelä-Haapanen et al., 2017; Ramey et al., 1998 for large-scale exceptions), children's reported expectations of Kindergarten are generally positive (Ramey et al., 1998), but there are also anxieties,

worries, and concerns about the upcoming change. Interestingly, preschoolers' anticipated anxieties seem to reflect similar themes of current Kindergartners' perceptions, focusing on social concerns and academic expectations.

When asked about their upcoming transition to Kindergarten, preschoolers discuss social concerns like social skills on the playground and navigating friendships (Di Santo & Berman, 2012; Dockett & Perry, 2004; Eskelä-Haapanen et al., 2017), in addition to learning the new social rules and expectations of classroom teachers (Di Santo & Berman, 2012; Dockett & Perry, 2004; Eskelä-Haapanen et al., 2017; Margetts, 2008). There is also an element of concern about the changing academic rigor in their concerns about meeting the demands of learning more difficult academic skills such as reading and math (Di Santo & Berman, 2012; Eskelä-Haapanen et al., 2017). Overall, perhaps reflecting the increasing social, emotional, and cognitive growth during this time period, both preschoolers and recently transitioned Kindergartners highlight their social anxieties related to friendships and peer interactions and rising to the demands of a more academic-focused setting of Kindergarten.

There is more to utilizing children's perceptions in the research on school transitions than just gaining understanding of their experiences. There is value to children's experiences to inform ways adults – parents and teachers – might provide more effective transition supports to children. There are a few studies that researchers asked children for this specific information. In a study with 105 Canadian children, Di Santo and Berman (2012) asked preschool children how adults might help them in their identified areas of concern and most common responses were that adults may help with homework and help teach children self-help skills. Similarly, Margetts (2005) asked

preschoolers to identify what schools might be able to do to help children who are starting school and the most common categories included peer relationships (28%), academic skills (27%), and school rules (14%). Interestingly, these child-identified areas of help-needed align with the themes of reported anxieties from preschoolers and reported struggles of current Kindergartners. Because transition practices are adult-directed, the question must be asked if adults are meeting the needs of children or if transition practices are too adult-centric in their design and implementation.

While adults are privy to the logistics of Kindergarten, children are privy to their own internal experiences and worries and this information and may have unique contributions to make to the transition experience into Kindergarten and inform adult transition practices. The notion that children have a unique contribution to make to their own transition experience is supported by studies that have identified children's and adults' perceptions of the transition experience do not always align (Cowan & Heming, 2005; Dockett & Perry, 2004; Harrison & Murray, 2015; O'Farrelly et al., 2020). For example, Dockett and Perry (2004) examined what aspects of the Kindergarten transition were salient to parents, teachers, and children and determined children tend to focus on social aspects including friendship and rules, while adults focus on the general concept of child adjustment and academic outcomes. Children's and parents' perspectives of the Kindergarten transition were also different in Cowan and Heming's (2005) study such that children reported perceived changes in their own academic and socioemotional skills, but their parents did not. Similarly, Wong (2015) identified a difference in how adults perceived children's "unhappy" experiences during the Kindergarten transition compared to how children viewed them. Wong (2015) reported about 30% of parents identified no

"unhappy" experiences for their children, when their children had indeed reported personally experiencing some "unhappy" events during their Kindergarten transition. These studies indicate children's experiences are not always accurately identified or acknowledged by parents and that children do have unique perspective to contribute.

Methodology

This child-centered body of research commonly justifies the methodological choice of children as the primary informants and include them in research, but what must be carefully considered are the methodological approaches to eliciting information from young children. There are more considerations when attempting to gather information from 4 and 5-year-olds (as opposed to older children or even adults) such as developmental differences, power differences between children and adults, cultural concepts of strangers, cultural differences in display rules. All of these examples may influence if or how children respond to prompts. Given the long history of collecting data directly from young children in other child development areas, those studying children's perspectives as they transition to Kindergarten utilize variations of a few different protocols already established as valid and reliable including direct and indirect methodologies.

There are benefits and complexities of both direct and indirect methodologies commonly used to measure children's thoughts, ideas, and feelings. The indirect methods of gathering information from children include puppets, drawings, and other props that create an "othered" person, thing, or context. It is with these "othered" things children engage in perspective taking to share their emotions, perceptions, and ideas (Booth et al., 2019; Dockett & Perry, 2005; Harrison & Murray, 2015; Murray & Harrison, 2005). For

example, Booth et al. (2019) designed a puppet named Riley Rabbit that children interacted with and discussed potentially challenging aspects school. Benefits of such puppets include avoiding mismatch issues of human characteristics such as race or gender in addition to further distancing potentially emotionally-charged topics. Another example is Harrison and Murray's (2005) pictorial measure. The pictorial measure presents various scenarios of typical school day occurrences (e.g., saying goodbye to a parent and going to the playground) with line drawn people without faces. Children are then asked how the people in the pictures might feel in each picture. These approaches further distance children from potentially stressful or embarrassing topics but in a way that allows researchers to still elicit children's perceptions, feelings, and ideas (Rogoff et al., 2018).

Another indirect method asks children to create their own drawings about school and then either an adult transcribes children's verbalizations about their drawing or they share in small groups led by a researcher (Dockett & Perry, 2005; Loizou, 2011; Salmi & Kumpulainen, 2019). For example, Dockett and Perry (2005) invited children to divide a piece of paper in half and draw their preschool on one half and their Kindergarten school on the other half and discuss similarities and differences. Authors discuss children's verbal descriptions as being unique to the visual representation created in the drawings and emphasize the importance of both (see Dockett & Perry, 2005 for drawing literature review). These qualitative, indirect methods are typically employed by researchers whose aims are to explore and listen to children's perceptions in an effort to describe them and increase adult perspective on children's experiences (Dockett & Perry, 2007). They can

provide rich, personal detail currently missing from the majority of the transition literature (as reviewed in the adult transition practices section of this paper).

Less common are ethnographic approaches (Jackson & Cartmel, 2010; Skinner et al., 1998), which consist of researchers spending a considerable amount of time alongside children in their day-to-day lives talking and interacting with children. Both of the ethnographic studies identified in this paper were conducted with very small groups of children from lower socioeconomic backgrounds. Jackson and Carmel's (2010) study with eight children report an overall dominating theme similar to the other qualitative studies reviewed earlier of social skills, and specifically, friendships. They reported that children discussed a lot about starting school with friends, making new friends, and worries about having no friends (Jackson & Cartmel, 2010).

Skinner et al.'s (1998) study was a bit different in that the research team followed 21 Head Start children for six months as children were experiencing the transition into Kindergarten. Researchers focused specifically on how children and teachers co-constructed the social environment and roles in the early months of Kindergarten (Skinner et al., 1998). The discussion was framed from the perspective of children – how they experienced the transition, how they interpreted their new social surroundings and experiences, and how their experiences seemingly influenced their internal role and assessment of their own success in the new surroundings (Skinner et al., 1998). Rich with personal experience and detail, ethnographies have the capacity to inform child development researchers perspectives and propel this growing body of literature forward. Resource-intensive, though, this methodology is most valuable to lay the foundation for

this growing body of literature, but not ideal for scaling upward or suggesting findings applicable to any other population other than the very small group followed.

Direct approaches typically ask children about various aspects of the Kindergarten transition in response to predetermined questions or created surveys and scales. This includes both qualitative small focus groups and quantitative surveys designed to directly ask about the topic (Di Santo & Berman, 2012; Dockett & Perry, 2004; Loizou, 2011; Ruzek et al., 2020; Valeski & Stipek, 2001). Small group sessions are typically conducted in the school setting, led by the researcher, and are intended to lesson tension and create more natural conversation among the children in an effort to elicit information about the transition (Di Santo & Berman, 2012; Dockett & Perry, 2004; Margetts, 2008). These sessions tend to be semi-structured in that they are guided by key questions and researchers intend to prompt children for more detail when necessary, but allow the conversation to be as causal as possible. These qualitative efforts provide opportunity for children to share what is salient to them in a low-stakes environment (i.e., without a teacher present to remove that power differential).

There are broader cultural influences to consider to this approach. For example, Di Santo and Berman (2012) discuss their issue navigating the IRB in Canada because research is viewed as being done *on* children as opposed to *with*, so the researchers had to be explicit in their questions including follow-up questions. During their small group sessions with preschoolers, they opened with a simpler, closed-ended question and then proceeded with a defined set of six open-ended questions about starting Kindergarten. As a result of the strict child protection procedures in place, they felt the responses from

children were minimal because the forced procedures did not always accurately respond to children's statements (Di Santo & Berman, 2012).

Structured surveys are a direct, quantitative approach to collect children's perceptions of specific aspects of the transition to school. For example, direct measures have included School Liking and Avoidance (Ladd & Price, 1987), "What I Think of School" (Ramey et al., 1998), Feelings About School (Valeski & Stipek, 2001), and most recently, an academic orientation survey (Ruzek et al., 2020). Surveys for preschool-aged children are not as common and likely because researchers either have to develop a novel survey to meet their needs or adapt an existing measure to meet the developmental needs of very young children. The surveys mentioned here have been vetted as reliable and accurate for children as young as four years old and are designed to provide children with Likert-type response options such as a series of smiley faces or gradually size-increasing circles to represent the amount of agreement with statements (Dennis & Kelemen, 2009; Ladd & Price, 1987; Ramey et al., 1998; Ruzek et al., 2020; Valeski & Stipek, 2001).

Considering the main theoretical viewpoint, surveys in this particular area of study should be carefully considered. Surveys are often adult-created, adult-scored, and adult-interpreted about very specific constructs most salient to the researchers meaning they might very well be adult-biased. This contradicts the overall sentiment of collecting children's perceptions to understand what is most salient to them. These methods do not allow for children to share personal experiences or perceptions and identify what is most important, helpful, or concerning for them. Children are simply responding to specific questions about a specific tenet of the transition process. There is one example of a large-scale qualitative study that researchers were able to ask and measure children's

perspectives. By instructing parents to ask children a prescribed set of questions and record children's answers, Eskelä-Haapanen et al. (2017) successfully gathered a sample of nearly 1,400 children about their beliefs specific to transitioning into Kindergarten.

Because researchers interested in children's viewpoints value children's perceptions, many who study this particular area, guided by social and ecological theories, utilize multiple methods to collect information (e.g., Booth et al., 2019; Dennis & Kelemen, 2009; Loizou, 2011; O'Farrelly et al., 2020; Ramey et al., 1998). There are a lot of benefits to surveys. Surveys can be quick, valid, reliable, and provide quantifiable data. This provides for associations to be mathematically tested with outcomes of interest and that translates into valuable resources. These are arguably important aspects of research in a number of ways and are a critical element to gathering information accurately, quickly, and to scaling research for larger sample sizes. Large-scale measures such as these also provide convincing data to practitioners, parents, policy-makers, and other stakeholders, which has the potential to positively influence transition practices and, ultimately, children's experiences.

Collecting data from children – just as with any human subject – can be achieved in a myriad of ways. Revisiting the primary interest, children's transition into Kindergarten and how adults support them with transition practices, helps recognize key issues currently scarce in the literature, especially to children in the United States. Given that many studies thus far have been conducted with samples outside the United States, researchers should strive to replicate these findings with American samples. Second, much of the existing literature is comprised of qualitative studies and while those studies have successfully started identifying common themes among different samples,

researchers need to begin engaging in more quantitative efforts and connecting children's worries with Kindergarten outcomes. Helping children is the burden of adults and only when developmental researchers can arguably draw connections between children's lived experiences and short- and long-term outcomes will that more convincingly influence development or modifications to current transition practices. As such, this study will be strive to replicate existing child worry findings with an American sample, create a quantitative survey that measures both parent and child perspectives of worry, and begin to examine how children's worries may be associated with Kindergarten outcomes.

Transition Activities

Transition practices are often activities or discussions that share information about the new school, introduce children and families to the classroom environment, and aim to build relationships between adults supporting children during the transition into Kindergarten, such as Kindergarten teachers and other personnel (Ahtola et al., 2011; Bérubé et al., 2018; McIntyre et al., 2007; Pianta et al., 1999). Perhaps evident even by definition, the lead of these transition practices are often the schools and/or teachers. However, other transition activity types include parent-initiated transition activities and home activities. Transition activities are generally organized by the person or entity initiating them and are typically categorized broadly as school (including teacher) and home/parent.

School Transition Practices

Kindergarten transition practices are intended to acclimate children to their new environment and to ease children's transition stress in support of short and long-term school and developmental success. The "school" transition practices most commonly

provided in the United States are district, school, or teacher-initiated activities, such as orientations and classroom visits (Cook & Coley, 2017; Early et al., 1999; Eckert et al., 2008; LoCasale-Crouch et al., 2008; Pianta et al., 1999). For example, in Cook and Coley's (2017) analysis of about 4,900 children at Kindergarten entry, the most common transition practices reported were teachers' efforts reaching out to parents (90%) and orientation-style events (84%). This is in stark contrast to only 37% reporting more individualized efforts such as inviting preschoolers to visit Kindergarten classrooms (Cook & Coley, 2017). These findings are similar to other studies' indicating that the type and frequency of transition practices reported by teachers and schools are most often orientations, flyers and letters sent home, group-focused practices (as opposed to individualized practices like home visits), phone calls, or preschool visits (Cook & Coley, 2017; Early et al., 2001; Eckert et al., 2008; Pianta et al., 1999).

Group-oriented, single event-type activities are practices that can, in a sense, reach the most children at one time and with the least strain on teachers' time and financial resources. These single-time, group-oriented activities can best be described as infrequent and small dosage activities provided by elementary schools and teachers. For example, Kindergarten orientations events are held once, often months prior to the beginning of school, and are comprised of parents – and sometimes children – coming to the school, submitting paperwork, and seeing a classroom. Transition activities such as these likely take less than an hour. Some studies report families engage in an average of just 3 to 4 transition practices each academic year (Ahtola et al., 2011, 2016; Cook & Coley, 2017) and many of these activities occur after the Kindergarten year begins (Cook

& Coley, 2017; Early et al., 1999). This is further illustration of the infrequent and group-oriented nature of school transition practices.

School-initiated transition practices are associated with positive outcomes for some children and their parents. Most commonly, studies utilize the number of transition practices as the predictor of children's academic, behavioral, and/or social-emotional outcomes (Ahtola et al., 2011; Cook & Coley, 2017; Galindo & Sheldon, 2012; LoCasale-Crouch et al., 2008; Schulting et al., 2005). Studies have reported the number of transition practices to be positively associated with children's reading and math scores (Ahtola et al., 2011; Schulting et al., 2005), display of positive emotions (Bérubé et al., 2018), engagement in prosocial behaviors (Cook & Coley, 2017), and social and self-regulation skills (LoCasale-Crouch et al., 2008).

There is also some evidence these associations may be stronger for children from economically-disadvantaged families. For example, in a large study with over 700 Head Start children, transition practices in preschool were positively associated with Kindergarten teachers' perceptions of children's social and emotional function (LoCasale-Crouch et al., 2008). In addition, the use of transition practices seemed to moderate the relation between risk factors and children's social and academic outcomes such that children who were more at-risk (i.e., low SES and low parent education) demonstrated higher social and emotional outcomes when they received more transition activities in preschool compared to lower-risk children (LoCasale-Crouch et al., 2008). Similar findings have been reported for reading and math, such that children from lower SES -- compared to higher SES -- households demonstrated higher math and reading scores when they experienced more transition activities (Schulting et al., 2005). While

schools and teachers often are positioned by families as the primary leaders of transition practices (McIntyre et al., 2007; Puccioni, 2015; Wildenger & McIntyre, 2010), parents also play a significant role in supporting children's transition to Kindergarten (Bérubé et al., 2018; Hill, 2001; Kang et al., 2017; Pianta et al., 2001; Puccioni, 2015).

Parent Transition Supports

Parents are positioned with a unique opportunity to begin engaging in transition activities long before the first Kindergarten event is offered from the receiving school. Deciding on preschool, preschool type, and enrollment duration may contribute to additional transition activities and influence children's Kindergarten adjustment (Atteberry et al., 2019; Bassok et al., 2016; Phillips et al., 2016). Parents also decide how to respond to information provided from the elementary school and whether or not to engage in transition activities provided. Further, parents may initiate their own activities to prepare children for Kindergarten – having conversations about Kindergarten, arranging for visits to the playground, and providing materials and activities in the home that mimic Kindergarten-related activities. Parent activities that support Kindergarten transition include intentional activities to socialize children to Kindergarten and also academic-related activities in the home environment (Barnett & Taylor, 2009; Kang et al., 2017).

Parent-initiated transition activities. Parent-initiated transition activities include activities parents engage in with intention to support children's transition. This includes talking to children about Kindergarten and the upcoming transition (Kang et al., 2017). Other examples of parent-initiated social transition activities include discussing new teachers, adults, and other children they will meet, talking about how to make new

friends or interact on the playground, and introducing new routines (Barnett & Taylor, 2009). These socially-focused conversations may provide children time to reflect, imagine, and ask questions as they form ideas and expectations about their upcoming Kindergarten experience. These conversations tend to be guided by parents' intention of easing transition stress and worry for children (Malsch et al., 2011). Parent-initiated transition activities have been shown to be positively associated with children's academic and social outcomes in Kindergarten (Burchinal et al., 2020; Napoli & Purpura, 2018).

Home activities. Home activities associated with Kindergarten transition include things such as completing puzzles, singing songs, reading books, playing sports, teaching or talking about nature, creating art projects, and building things together with their children (Barnett & Taylor, 2009; Puccioni, 2015). These academic activities provide children opportunities to practice Kindergarten-type activities, build academic skills such as early literacy and early math, and build cognitive skills such as planning and self-regulation. These activities are often guided by parents' intention to support children's academic skill readiness for the Kindergarten classroom (Miller, 2014).

Specifically, children of parents who engage in more home activities like puzzles, reading, and singing, transition to Kindergarten with better academic skills like pre-literacy and early math skills (Burchinal et al., 2020; Fantuzzo et al., 2013; Kleemans et al., 2012; Napoli & Purpura, 2018; Puccioni, 2015; Yeo et al., 2014). Other family activities like story-telling and consistent family routines demonstrate cross-domain associations with positive academic, behavioral, and socio-emotional outcomes (Ferretti & Bub, 2017).

Importance of Kindergarten Transition

The literature examining transition supports for children suggests what adults typically do to support children's transition into Kindergarten is not working for all children – regardless of risk factors – and there remains a significant portion of children who are not transitioning or adjusting well to Kindergarten (Cowan & Heming, 2005; Jiang, Justice, Purtell, Lin, & Logan, 2021; Latham, 2018). Most recently, Jiang et al.'s (2021) large-scale study reported that Kindergarten teachers indicated 70% of their new Kindergartners struggled with *at* least one academic or behavioral skill. Further, 30% of Kindergartners struggled with all areas of expected academic, social, and behavioral skills at the transition to Kindergarten (Jiang et al., 2021).

The transition experience of children has been studied as it relates to Kindergarten academic and social outcomes. Children who transition well into Kindergarten demonstrate greater academic growth in both math and literacy throughout the Kindergarten year (Ahtola et al., 2011; Brock et al., 2019). Children who transition well also demonstrate more positive emotions and report liking school more during their Kindergarten year (Berger et al., 2017; Ladd et al., 2000). Transitioning well and establishing early academic, behavioral, and social skills are so important because these early skills are predictive of academic engagement and long-term reading and math achievement well beyond the Kindergarten year (Ladd et al., 2000; Ladd & Price, 1987).

Transitions Supporting Early Skill and Later Outcomes

Further illustrative of the importance of children's successful transitions and establishing early skills are the long-term implications of early academic and social skills. For example, early academic and social skills observed in Kindergarten are predictive of long-term academic achievement – largely reading and math skills (Duncan et al., 2007),

and also long-term positive classroom behaviors (Belsky & MacKinnon, 1994). Indeed, most recently Burchinal et al. (2020) studied a group of nearly 1,300 young children from Kindergarten through Grade 4. Their results provided evidence that early skills beget later skills across at least the first four years of formal schooling.

Similarly, children who struggle with the Kindergarten transition are identified as children who struggle academically, socially, and behaviorally (Jiang et al., 2021; Rimm-Kaufman et al., 2000). These early struggles are also associated with long-term issues such as more school absences, a higher likelihood to be retained in early elementary, continued struggles with reading and math skills, a higher likelihood of special education placement, and lower graduation rates (Pears & Peterson, 2018; Williams et al., 2020). These studies suggest children's transition success and transition difficulties are important contributors to the trajectory established early in children's academic setting, as has been previously argued (Belsky & MackKinnon, 1994; Burchinal et al., 2020; Pianta & Walsh, 1996). Given the long-term associations between early experiences and later experiences, it seems an effective strategy for improving long-term success in school may be to provide effective Kindergarten transition supports in hopes of improving early experiences for all children.

Transition practices are examined in the literature as predictors of, or in association with, children's academic, behavioral, and social-emotional outcomes in Kindergarten (Ahtola et al., 2011; Cook & Coley, 2017; Galindo & Sheldon, 2012; LoCasale-Crouch et al., 2008; Schulting et al., 2005). Given the significance of these early behavioral, academic, and social skills for both short- and long-term school success, it is important to understand factors related to the Kindergarten transition, such as

Kindergarten transition activities provided by schools and parents. As such, the present study focuses on indicators of children's early school adjustment – academic, social, and behavioral outcomes – as they relate to children's worry and transition activities.

Parent Efficacy

In addition to direct impacts on children, there is some evidence to suggest transition activities' positive impact on children's Kindergarten adjustment and academic trajectories are at least partially explained by the impact those efforts have on parents (Bérubé et al., 2018; Cook & Coley, 2017; Galindo & Sheldon, 2012). Parents' own sense of readiness and engagement in school events are reported to either mediate or at least partially mediate the relation between school transition practices and child outcomes (Bérubé et al., 2018; Cook & Coley, 2017; Galindo & Sheldon, 2012). For example, Bérubé et al. (2018) reported that the number of school-initiated transition activities were positively associated with parents' own sense of readiness for Kindergarten and that sense of readiness was positively associated with children's display of positive emotions at the beginning of the Kindergarten school year (Bérubé et al., 2018).

Similarly, studies have reported schools' transition efforts, including parent outreach (e.g., PTA opportunities, school events, programs, etc.), to be positively associated with children's academic outcomes, and that parental involvement mediated the relation between school transition activities and academic gains (Galindo & Sheldon, 2012; Schulting et al., 2005). These findings suggest what schools and teachers do at Kindergarten transition may provide parents with confidence or skills to better support children in their transition and it is this sense of parent efficacy and their own, independent efforts that warrant further exploration.

Current Study

This study is guided by three research questions.

(1) What are children's worries or anxieties related to beginning in-person Kindergarten, and how are those worries addressed by existing transition activities? Related, a secondary question is which transition activities are most often employed and how effective do parents perceive those activities to be at addressing identified areas of concern. I expect children's concerns and anxieties related to Kindergarten are more specific and detailed than the transition practices most often employed by adults (e.g., Kindergarten orientations, open house events, etc.).

(2) How are children's worries related to Kindergarten adjustment? I hypothesize greater child worry will be related to greater adjustment difficulties.

(3) How does parents' efficacy relate to children's Kindergarten adjustment? I hypothesize parents' efficacy may moderate the relationship between children's worry and adjustment such that parental efficacy may mitigate the effects of worry on outcomes.

CHAPTER 2: METHODOLOGY

This mixed-methods study was comprised of two parts, including in-depth, semi-structured interviews with Kindergartners to address part of the first research question (*What are children's worries or anxieties related to beginning Kindergarten?*) while also informing survey development used in the second study. Study 2 was a non-experimental, associative design used to examined associations among child worries, adjustment outcomes, and parent efficacy. It is important to note both studies were conducted during the COVID-19 global pandemic that created an unavoidable, unique circumstance for recruiting families. Additionally, the circumstances warranted asking unique questions specific to the experience of starting school in the midst of a global pandemic. The timing of these studies will be further addressed in the Discussion section to provide context for conclusions and for positioning the findings not just to the experience of the pandemic, but also post-pandemic.

Study One

Recruitment and Participants

For Study 1, local, targeted participants were recruited via social media. Recruitment advertisements were posted on my personal page, on my friends' pages, and in specific parent group pages to increase efficient recruitment of a local sample. Given the outreach methods realistic under pandemic restrictions, all communication with potential participant pool was virtual, interviews were conducted via Zoom, and surveys were completed electronically. This approach likely limited the diversity of my sample. Potential bias and sample diversity concerns will be addressed in the Discussion section

and discussed in relation to previous studies that include broader cultural and SES diversity.

Twenty-six parents volunteered to participate in Study 1. Of those, four indicated it was not their children's first time in Kindergarten. Three other parents indicated they did not intend to send their children to in-person school. Being a first-time Kindergartener and attending in-seat Kindergarten were inclusion criteria in an effort to interview children whose experiences most closely resembled typical transition to Kindergarten experiences. Thus, these seven parents did not meet study criteria. The remaining 19 parents completed the parent survey and scheduled virtual child interviews.

All 19 participants were first-time Kindergarteners in the Fall of 2020 from the mid-Missouri area. Because of the structure of school during the COVID-19 global pandemic, I specifically recruited first-time Kindergarten families who attended, or planned to attend, in-person school at some point, as this most closely resembled the "typical" school experience under non-pandemic circumstances. Of the 19 children interviewed, 70% were female, 94% were White, 6% were Multiracial, and 53% were first born. Additional demographic information of the Study 1 sample can be found in Table 1.

Procedure and Measures

Demographics

The parent survey (see Appendix) consisted of common demographic information including relationship to child, parent and child race and ethnicity, parent age, parent occupation, parent education, family income, and family structure. Child demographics

included number of siblings, birth order, primary and secondary languages, and preschool experience.

Transition Practices

Transition practice questions included the number of specific school-initiated transition activities and were adapted from LoCasale-Crouch et al. (2008) and Pianta et al. (1999). This adapted tool was piloted in Study 1 before changes were made and it was used in Study 2. Parents were asked to indicate which transition activities they had already engaged and planned to participate in from a list used by other researchers who study transition activities Because of the COVID-19 pandemic, I anticipated some children at the time of data collection might have already attended school in-person while others were preparing to begin in-person for the first time and wanted to capture both perspectives. Additionally, given the COVID-19 pandemic likely impacted the offering of otherwise typically held transition activities by the school, parents were also asked about virtual offerings that may have not been explored in previous studies. Parents also reported on the number of parent-initiated transition activities they created for their children. See Appendix for full list of items included.

Child Interview

After parents completed a short survey through Qualtrics (an online survey application), which included demographic information and transition activity information, they were prompted to schedule a short 15- to 20-minute online interview for their children. Online interviews were conducted using Zoom, a video communication application. During the interview, parents were asked to sit with their children to assist

with technology and to be available to provide support during this potentially novel situation.

The procedure for Study 1 interviews with children was adapted from existing studies reviewed in the Introduction. In order to replicate findings, but with American samples, I wanted to design methodology to include elements of existing studies. Since I would be interviewing current Kindergartners and I wanted to ask them direct questions, I designed an interview that included very similar questions used by Di Santo and Berman (2012) in their Canadian study. However, since their study was with groups and this study is with individuals, I needed to also incorporate ways to build rapport in a short time span. I decided to include elements of "othered" distancing as used in previous studies (Booth et al., 2019; Dockett & Perry, 2005; Harrison & Murray, 2015; Murray & Harrison, 2005) by incorporating a portion of a book about a turtle starting Kindergarten.

In the interview, I began by introducing myself and a book called "Franklin Goes to School." As an introductory section of the interview, the interview topic, and with the intention of building rapport, I read three pages of "Franklin Goes to School." During these first few pages, the turtle character expresses general worry about going to Kindergarten. I stopped reading before the book names specific worries so as not to influence children's responses. Next, I asked my first question (all questions are listed below), a closed-answer question, to engage children in the interview process. I then asked a series of open-ended questions using simple prompts to get more information if necessary (e.g., *What else can you tell me about that?*). The semi-structured nature of the interview allowed me to respond to children and ask questions in any order based on how children responded to the previous question more naturally – an approach Di Santo and

Berman (2012) were unable to do because of Canadian IRB restrictions. After I asked all the questions, I concluded the interview by finishing the last couple pages of the Franklin book, which is an encouraging, happy conclusion about Kindergarten being a positive experience. The interview process and questions were as follows:

1. Introduce myself as someone who wants to learn more about children who are in Kindergarten and what they think going to their schools will be like.
2. Read excerpt from Franklin book.
3. *Do you know what Kindergarten is?* (Closed question to begin)
4. *What do you think going to your new school for Kindergarten will be like?*
5. *Franklin (character from the book) was nervous, a little worried, about being ready to go to his school for Kindergarten. What about going to Kindergarten makes you nervous or worried?*
6. *What do you think you need to know before you go to Kindergarten?*
7. *What do you think your teacher will be like?*
8. *What do you think the other children will be like?*
9. *How can your teacher help you feel ready to go to school for Kindergarten?*
10. *How can your parents help you feel ready to go to school for Kindergarten?*
11. *What are you excited about or what makes you happy about going to school for Kindergarten?*

Assent and Protocol

Parents provided consent prior to completing the parent survey and signing children up for interviews. Prior to starting interviews, I outlined assent by introducing myself, explaining what would happen during the interview and asking if children would

like to be in the study. They were informed that they were allowed to skip any questions and stop at any time. As such, when children seemed disinterested or hesitant to answer, I offered to skip the question and allowed children to choose how to proceed.

Study Two

Recruitment and Participants

Study 2 recruitment occurred via social media platforms similar to recruitment for Study 1, seeking Missouri parents of children who were current Kindergartners or previous-year Kindergartners (i.e., currently starting first grade). A combination of convenience and snowball sampling techniques were utilized to recruit eligible families via social media. IRB-approved recruitment visuals and messaging were posted on my personal social media platforms, shared and forwarded by others, and also posted in parent-specific social media groups in an effort to recruit from various cities and areas across the state (Kansas City, Saint Louis, Springfield, Branson, "Central Missouri," and "rural Missouri"). Additionally, teachers and after-school program professionals who requested to share the recruitment information with their classes, schools, and programs did so.

Participants

A total of 114 people initially volunteered to launch the survey via the anonymous link in the recruitment materials. Twenty-five percent of those volunteers did not provide any responses or were ineligible after answering inclusion criteria questions, which included having a current or previous-year Kindergartener who attended in-seat Kindergarten at some point. The 85 parents who continued with the survey are considered the final sample for analysis in this study. However, not all participants answered

questions in all proportions of the survey. The point participants exited the survey corresponded to new sections in the survey, which has some implications for addressing parts of the hypotheses. Due to early survey exit, demographic information was collected from only 45 of the 85 parents and can be found in Table 2.

Missing Data. Because of the recruitment methods utilized (convenience and snowballing) via online survey, I examined patterns of survey exiting for the 85 participants. A summary of the number of participants who made it to primary completion points (based on independent measures in the survey) are displayed in Table 3. As shown, there seemed to be a gradual exit from the survey. A gradual exiting of the survey appeared across the first 30% of the total survey with about 10% of participants exiting after similar sections of questions. An additional 20% exited during and after the section asking about child worries, parent efficacy, and transition helpfulness related to worries.

School transitions, parent-initiated transitions, home activities, and parent efficacy mean scores between completion groups were compared with ANOVA to identify potentially meaningful reasons for early survey exit. Groups were defined by the point that they exited the survey. Significant mean differences were observed for school transition activities and indicated parents who exited the survey after answering the questions about parent-initiated transition activities (n = 9) engaged in sAignificantly less school transition activities compared to all other groups. This is shown in Figure 1. No other ANOVAs revealed significant differences in transition activity types or parent efficacy. Implications of this specific group exiting the survey early will be addressed in the Discussion section.

Otherwise, the overall gradual pattern of survey exiting suggests the survey length most likely attributed to most participants' choice to exit early. Given the length of survey was beyond the recommended 20 minutes (Revilla & Ochoa, 2017) and incentives were not offered (Conn, Mo, & Sellers, 2019), this pattern of exiting is not uncommon. Implications and considerations of exiting for external validity will be addressed in the Results and Discussion sections. Missing data in each area of analyses were handled via SPSS with listwise deletion.

Procedure and Measures

Child Worry

Child worry items were selected based on the extensive review of the literature in addition to adding specific academic and social items that emerged as salient in Study 1 interviews. Both parent and child items included questions about physically navigating school, learning new rules, managing own behavior, learning new things, making friends, expressing needs, being separated from parent/caregiver, managing self-help skills, learning new routines, and being ready for Kindergarten. Parent report used a slider scale ranging from 0 to100 in response to ten items. mean score was calculated for overall parent report of child worry using all items.

The child report items of Kindergarten worry were included at the end of the survey. The purpose of the child-report was to measure children's worries across salient topics that emerged from Study 1 interviews, in addition to prevalent themes reported in existing literature. Child-report worry scale was presented differently than the adult-report version to make it more developmentally appropriate. As done in other Kindergarten studies, parents were asked to read the script to children (Eskelä-Haapanen

et al., 2017). Children were asked to report on how "big" or "small" a worry was prior to beginning Kindergarten and to respond by selecting from a series of size-increasing circles, as shown in Figure 2. There were instructions about how to use the circles and two training questions ("*Let's try one together. What if you feel very worried about something - it's a big worry? Which circle might you choose?* and "*What if you do NOT feel very worried about something - it's just a small worry? Which circle might you choose?*"). Training questions provided immediate feedback and reminded children of the "rule" to choose a circle that corresponded with the size of their specific worry. The circles were treated as a 5-point scale, with higher scores ascribed to larger circles, reflecting more worry *(range = 1 to 5).* This format provided children with a visual depiction of amounts of worry rather than solely relying on children to grasp the abstract concept of relative size of worry.

Just as with the parent-report of child worry items, before condensing items into a single scale item, I examined the items for the appropriateness of an exploratory factor analysis. After examining correlations to be fairly and high and consistent across the majority of items, I then examined Barlett's test of Sphericity ($p < .001$) and Kaiser-Meier-Olkin's Measure of Sampling Adequacy (.647), which further indicated support for factor analysis. Visual inspection of the scree plot (please see Appendix) suggested a single factor. Parallel analysis further confirmed the use of a single factor. All items of thechild report of worry demonstrated good reliability ($\alpha = .806$). A mean score was calculated for overall child-report worry score using all items. (See Appendix for test information and final factor loadings.)

Adjustment

To measure adjustment, parents were first asked to provide feedback they have received from their children's Kindergarten teachers at the beginning of the school year specific to their children's regulation and social behaviors. Because regulation and social behaviors are associated with short- and long-term academic outcomes, they are commonly used as measures of how well children transition to Kindergarten. Therefore, I adapted regulation and social adjustment items from previous transition studies (Ferriti & Bub, 2017; Kang, 2017; Puccioni, 2020). Additionally, socio-emotional items were adapted from the Preschool Kindergarten Behavior Scales - Second Edition (Merrell, 2003) and the Social Skills Rating System (Gresham & Elliott, 1990).

For each item, parents responded on a 3-point frequency scale (0 = not at all, 3 = sometimes, 5 = frequently) to indicate how frequently they received feedback from the teacher about specific socio-emotional behaviors observed in their children (e.g., "*annoys other children*"). Parents also reported how often they observed the same behaviors at home. Parents rated each item on a 3-point frequency scale. Positive items (e.g., "[my child] *Works until finished*") were reverse scored so that overall higher scores indicate greater adjustment difficulty. After seeing how high correlations between teacher and parent scores were, I suspected multicollinearity and decided to only use the parent scores since parents were the direct reporters and had first-hand observation of the items. These items were evaluated for internal consistency to determine if they might be scaled for behavioral and social adjustment. The reliability was very strong ($\alpha = .865$) for parent report of behavioral adjustment and good ($\alpha = .798$) for social adjustment items. Overall mean scores were then created for behavioral adjustment and social adjustment.

Additionally, parents were asked to rate the frequency of observed adjustment behaviors in children both leading up to and following the start of Kindergarten. This general approach is an adaptation of a previously-used, teacher-report measure of children's early school adjustment (Nathanson et al., 2009; Pianta et al., 1999). Parents were asked to rate the degree to which statements described their children (Not at all, Somewhat, and Very Much). Questions were phrased such that parents were asked if they observed a change in various behaviors (e.g., sleep, physical complaints, or school complaints). Higher scores indicated greater observation of a change in behavior, thus interpreted here as adjustment difficulty. Cronbach's alpha of adjustment leading up to Kindergarten items was acceptable ($\alpha = .723$), and adjustment after the start of Kindergarten just reached acceptable ($\alpha = .691$). Two mean scores were then created for adjustment prior to and following the start of Kindergarten, aligning with previous scoring methods (Nathanson et al., 2009). Further, the difference between both mean scores was calculated such that negative scores indicated greater adjustment difficulty following the start of school and a positive score indicated improvement in adjustment behaviors after the start of school.

Last, parents were asked to report on academic items based on teacher feedback including reading, verbal skills, math, peer relationships, and ability to follow directions. These academic ratings were adapted from previous studies (e.g., Puccioni, 2015). Parents reported on a sliding scale from 0 to 100, with 50 being average. Because reliability was shy of reaching an acceptable level ($\alpha = .687$), I decided to examine the academic outcomes both as separate academic items and collectively as an academic outcomes scale, using a mean score. When the scale did not yield a significant result, I

was able to utilize individual items and examine for specific academic associations that may have been clouded by using a scale.

Parent Efficacy

To measure parent efficacy, parents were asked to rate their confidence in supporting children in the same areas of child worries (e.g., *Please rate your confidence in supporting your child in this concern*). Items were rated on a scale of 0 to 100, with higher scores indicating greater confidence. Because this was a relatively novel measure, and I wanted to be able to summarize these data as "parent efficacy," I examined the items for the appropriateness of a factor analysis (Hair, 2009; Henson & Roberts, 2006).

I began by visually inspecting correlations. After determining there to be numerous high and consistent correlations across the majority of items, I then examined Barlett's test of Sphericity ($p < .001$) and Kaiser-Meier-Olkin's Measure of Sampling Adequacy (.670), which further indicated support for factor analysis. I proceeded to calculate a factor analysis utilizing principal axis factoring, which uses common variance, and then utilized multiple indicators to determine that, indeed, a single factor would be most appropriate (Horn, 1965; Preacher & MacCallum, 2003). Visual inspection of the scree plot suggested a single factor. Parallel analysis, further confirmed the use of a single factor by comparing eigenvalues with the 95^{th} percentile of in a simulated dataset. One item's factor loading fell just beneath what some consider low (.38), which was physically navigating the school. Given the impact of the COVID-19 pandemic reducing many parents' opportunities to tour school buildings with their children, it is likely responses to this specific question were impacted by that. Given it fell just beneath the common .40 threshold, I decided to keep it. The entire 10-item scale yielded very good

reliability (α = .864). A mean score of all items was calculated for overall parent efficacy. (See Appendix for tests and final factor loadings.)

Transition Activities

To examine transition activities, parents responded to items about school-initiated, parent-initiated, and at-home activities.

School-initiated transition activities. Parents reported if they and their children participated in school-initiated transition activities. Transition sum scores were calculated for school-initiated transition activities, as done in previous studies (e.g., Galindo & Sheldon, 2012; LoCasale-Crouch et al., 2008; Pianta et al., 1999).

Parent-initiated transition activities. Parents reported if they engaged in a list of parent-initiated transition activities (same items from Study 1 – see Table 2). Sum scores were calculated as done in previous studies (e.g., Galindo & Sheldon, 2012; LoCasale-Crouch et al., 2008; Pianta et al., 1999).

Home activities. Additionally, parents were asked to report on the frequenc that they engaged in at-home activities with the intention to prepare children for the demands/expectations of Kindergarten based on Galindo and Sheldon (2012) and Puccioni (2018). At-home activities were scored on a 5-point frequency scale from '0' for never to '5' for multiple times per day. The 13 items of the home activities scale yielded strong reliability (Cronbach's α = .873). An overall mean score was calculated and used as the overall at-home activities score.

Data Analysis Plan

The interviews from Study 1 were used to inform surveys included in Study 2 and research question one. Analysis of children's interview responses will be presented in the

Results section. The survey data collected from both parents and children as part of Study 2 is used to inform all research questions. All questions were coded with numerical scores, and text responses were also encouraged. Numerical scores were calculated for (a) child worries overall from parent and child perspective, (b) behavioral adjustment, (c) social adjustment, (d) academic adjustment (as a mean score and also as individual scores for reading, verbal, math, peers, and following direction skills), (e) adjustment difficulties, (f) parent efficacy, (g) school-initiated transition activities, (h) parent-initiated transition activities, and (i) home activities.

To analyze the relations between child worry and adjustment outcomes, I will analyze how transition supports and parent efficacy are related to the adjustment variables. Bivariate correlations will be examined to identify potential relations that may inform a more specific model. After further understanding how aspects of child worry, parent efficacy, transition supports, and child outcomes are related, I will then build a regression analysis analyzing variance in adjustment.

CHAPTER 3: RESULTS

To address the three primary research questions, this chapter will be organized by each research question. The data, analyses, and results used to address each question will be presented. In each section, preliminary analyses will first be presented, followed by primary analyses. Each section will conclude with a general summary of findings in relation to the research question.

Question 1: What are children's worries or anxieties related to beginning Kindergarten?

To address the first research question, I utilized both child interviews from Study 1 and several surveys from Study 2. I will first present interview results from Study 1. As Study 1 results informed the surveys for Study 2, I will then present the results from parent-report and child-report, separately, from Study2 and conclude with an overall summary in relation to the research question.

Study 1 Interview Results

Study 1 interview responses were transcribed verbatim. Children's responses to questions and any elaboration provided were coded line by line for themes using the principles of thematic analysis (Braun & Clarke, 2006). I approached thematic analysis in a series of steps, similar to the approach utilized by Booth et al.'s, (2019) analysis of child interviews. First, each line of children's responses was coded as positive or negative related to school. From the first round of thematic analysis, I identified both negative and positive anticipation and experience starting Kindergarten.

Of school-related lines, 52.6% were positive and 47.4% were negative. Next, I coded each line for themes specific to the interests of this study. Informed by the

literature on children's worries about starting school, I coded for academics, social and emotional skills, peer interactions, and social rules and routines, specifically (Dockett & Perry, 2004; Eskela-Haapanen et al., 2017; O'Farrelly et al., 2020; Salmi & Kumpulainen, 2019). Additional codes were noted if they emerged across more than one transcript. I then had a second coder complete the same process with all interviews. Any disagreements were discussed and final codes were agreed upon between both coders through a process of consensus. This process of coding reflects a similar qualitative analysis approach of existing studies that utilize interviews with children about starting school (e.g., Booth et al., 2019; Loizou, 2011; Margetts, 2008).

By looking at frequency of topics that emerged, I created themes. Four primary themes emerged from interviews with Kindergartners including Social (42.4%), Cognitive/Learning (34.5%), Logistics (21.9%), and Independence/Growing up (11.9%). To further determine if these were salient in general or salient specifically in regards to worry, I examined the negatively-coded lines closer. Negative comments about school are likely related to an underlying worry or anxiety. As such, negative statements were analyzed as "worry statements." Of those worry statements, 58.6% were related to Social themes, 34.5% were related to Cognitive/Learning, 6.9% were related to Logistics, and none were related to matters of Independence/Growing up. Resulting themes and proportions are presented in Table 4 along with example quotes.

Social themed statements were further categorized by the focus on the statement. As a general category (including all positive and negative statements), peers and friends were just as often the subject of these statements as were adults (e.g., teachers, paraprofessionals). However, as a worry statement, peers and friends were mentioned

three times more often than adults. As an example of children's peer-focused worry statements, one child stated, "There is one girl who is bad. Every time I try to do stuff, she laughs at me and it makes me mad." This worry statement demonstrates a social concern or worry about being made fun of by peers.

This same process was conducted with cognition/learning statements. As a general category (including all positive and negative statements), cognitive/learning statements included topics of learning that were enjoyable and sharing what they had already learned as Kindergartners rather than prior to Kindergarten thoughts or experiences. Negative lines coded as cognition/learning tended to be very specific to themselves and what they did not know rather than about other children or adults. For example, a child used a string of statements like "I need to be focused, which I'm not focused or smart." Statements like this demonstrate cognitive worry about not fulfilling the perceived learning expectations of Kindergarten.

The result of the interview analysis provided evidence that children are worried about making friends, managing peer conflict, and learning in general. Thus, social worry questions related to making friends and having someone to play with were included in the Study 2 surveys. Additionally, to capture cognition/learning worries in Study 2, questions specific about early literacy and early math learning were also included.

Study 2 Survey Results

To continue probing children's worries, descriptive data were analyzed from both parent and child-report measures collected in Study 2. As mentioned in the Method section, data were provided for different parts of the survey by different proportions of the sample. Sample information reflecting the different proportions of responders is

provided throughout this section to make it clear to the reader what proportion of the sample provided the data. This section is organized by the informant, providing information about child worries from both parent and child perspectives. A summary is provided at the end of this section that compares child worry findings from the two perspectives.

Parent report. A sub-sample of parent participants rated individual child worry items (55-75% of total sample, depending on individual item), and an overall mean parent-report score was calculated from 64 participants (75% of total survey sample). Complete descriptive results of parent reported child worry are found in Table 5. Parents rated potential child worries on a 100-point scale (50 = average). As this survey drew from current and previous Kindergartners, results are presented by academic year and an overall combined mean.

The top three parent reported child worries were related to meeting/making new friends *(M* = 50.20), navigating the building/school (*M* = 46.56), and learning new routines (*M* = 41.60). The three least concerning worry topics emerged as independence/self-help skills (*M* = 14.49), managing behavior (*M* = 18.36), and generally being ready for Kindergarten (*M* = 25.00).

Because of the different academic years reflected in the sample, I conducted an ANOVA test, examining mean differences between groups. The ANOVA results are presented in Table 6. Overall, parents whose children were first graders rated significantly more worry about learning school rules, $F_{(1,58)} = 4.79$, $p = .033$, and learning new things, $F_{(1,50)} = 9.081$, $p = .004$, compared to parents with current Kindergartners. Further highlighting the difference in experience between academic

years, a near-significant finding in overall worry was detected between groups such that parents of current first graders rated their children as being more worried about starting in-person Kindergarten, $F_{(1,62)} = 3.867$, $p = .054$ compared to parents of current Kindergartners. Due to these observed differences, children's current grade level will be included as a covariate in later regression analyses.

Child report. The same process used with parent reported worry was followed for child reported worry. Child-report questions were worded slightly different in the survey, but addressed the same constructs as parent-report questions. The sample who filled out this section was smaller than the sample who filled out the previous section, with only 38 children completing the child-report section of the survey. Child-report worry items were rated on a 5-point scale, with higher numbers indicating greater worry. Additionally, since this was a novel measure, variance of each participant's responses was calculated to judge how children were responding to the survey. Seventy-five percent of children's responses had a variance greater than 1, indicating most children did vary in how they responded to the prompts rather than selecting the same size/type of circle each time. Complete descriptive data of the items is presented in Table 7.

Overall, making friends ($M = 3.08$), being separated from parent/caregiver ($M = 3.00$), and being generally worried about starting Kindergarten ($M = 3.00$) were rated as the biggest concerns. Counting ($M = 1.79$), navigating the school/classroom ($M = 2.11$), and finding someone to ask for help ($M = 2.18$) were rated lowest. An ANOVA was conducted to examine significant differences between current Kindergartners and current first graders. ANOVA results are presented in Table 8. Overall, only one item from the child-report survey emerged as significantly different between the two groups. Children

currently in Kindergarten reported significantly more worry related to learning to read compared to current first graders, $F_{(1,36)} = 4.19$, $p = .048$. No significant difference emerged for overall mean score of worry, $F_{(1,36)} = .061$, $p = .806$ between current Kindergartners and current first graders.

Summary. Overall, the results of the Study 2 survey indicated parent report of child worry and child report of child worry were relatively distinct. Parents report children to be most worried about making friends, navigating the school/building, and learning new routines. Children report being most worried about making new friends, being separated from their parents, and being generally worried about starting in-person Kindergarten. Making new friends and other social concerns was also a dominating theme during Study 1 interviews, providing further evidence this is a primary concern of children preparing to transition to Kindergarten.

Reports of least concern, from parent perspective, included independence/self-help skills, managing behavior, and generally being ready for Kindergarten. Children's reports of worries indicated they are *least* worried about counting, navigating the school/classroom, and finding someone to ask for help. It is important to note parents report children to be most worried about navigating the school/building, while that was a least concerning topic from children's reports.

Question 1B: Do Transition Activities Address Worries?

The hypothesis related to this research question is that worries of children are more specific than the more general transition activities most often employed. To address this hypothesis, descriptive and statistical data about participation in the three different types of transition activities including school-initiated (e.g., open house, registration,

etc.), parent-initiated (e.g., contacting the teacher, arranging individual school tour, etc.), and home activities (e.g., reading, exploring nature, etc.) are provided in Tables 9 through 13. Given the historical context of these collected data, results are presented for both current Kindergarteners and current first graders to consider any differences in experience. Any significant differences between groups will be explained and controlled for in later regression analyses.

The following sections will be organized to address each transition type – school-initiated, parent-initiated, and home activities. I will provide the descriptive data, any significant differences that emerged between current Kindergartners and current first graders' participation in those activities, and also analysis of activity effectiveness.

School-Initiated Transitions

Descriptive statistics. When first examining school-initiated transition activities, there were stark differences between current Kindergarteners' and current first graders' participation. To test the significance of those differences, chi-square tests were conducted and results are in Table 9. Current Kindergartners' most common school-initiated transition activities included attending open house (72.3%), Kindergarten registration (57.4%), classroom visits (53.2%), and school-wide events (51.1%). These Are in contrast to current first graders experiencing Kindergarten registration (55.3%), virtual welcome/tour (44.7%), and personal communication from teachers (44.7%). These differences demonstrate the contextual difference experienced by the majority of children in the United States during the beginning on the COVID-19 pandemic in 2020. All across the U.S., schools and communities experiencing lockdowns, social distancing, and virtual school activities. These data may provide unique opportunity to further

examine how these specific COVID-19-related experiences (e.g., virtual schooling, various government lockdowns, etc.) impacted children's transition in a future study. For the purposes of the current study, analyses will focus on the sum score of transition activities, which was not significantly different between current and previous Kindergartners, $x^2 = 5.002$, $p = .757$.

Effectiveness. For every school-initiated transition activity that parents reported their children participated, they were asked to rate the effectiveness of that transition activity in helping their children feel ready for Kindergarten on a scale of 0 to 4. Results are presented in Table 10. Overall, open house ($M = 3.00$), classroom visits ($M = 3.03$), school-wide events ($M = 3.00$), and individual meetings with teachers ($M = 3.05$) were rated as the most effective transition activities. It is worth noting an ANOVA revealed significant differences in effectiveness ratings for open house events and personal communication between parents of current Kindergartners and parents of current first graders.

Parents also had the opportunity to respond to open-ended questions about what made school-initiated transition activities effective and to provide recommendations to improve their effectiveness. Fifty-one parents used this opportunity and provided additional information. A sample of parent responses are provided in Table 11. Summarized themes of those responses are provided in Figure 3. Parents most frequently mentioned aspects of transition activities that were most effective were navigating the school, finding the classroom and meeting the teacher. Similarly, parents who provided feedback about what might have been improved highlighted very similar things. Parents who made suggestions for improvements commonly mentioned wanting tours of the

school building and classrooms, face-to-face teacher meetings, and more personalization of experience (see Figure 3 for summary). For example, one parent said, "We only got a 10-minute visit to the school most of which parents were outside the school while their student was assessed. Being new to the school, more time seeing the building and meeting the teachers would have been helpful."

Interestingly parents who responded about what was helpful and parents who responded about what might be improved, mentioned the same things. This provides overall evidence that navigation of both the school building and the classroom and meeting the teacher are helpful and necessary to children's successful transition experiences from parents' perspectives.

Parent-Initiated Transition Activities

Descriptive statistics. Parent-initiated activity data were handled similarly. Chi-square analyses were conducted to test for significant differences between current Kindergartners and current first graders. Results are in Table 12. Only one activity, talking with children about Kindergarten, emerged as significantly different in amount between groups, $x^2 = 3.90$, $p = .05$, indicating a significantly greater proportion of parents of current first graders reported talking about Kindergarten with their children compared to parents of current Kindergartners. This difference did not change the top four most common parent-initiated activities overall. The most common activities were talking about Kindergarten with children (81.2%), working on self-regulation skills (67.1%), working on early literacy skills (65.9%), and reading books about school or Kindergarten (65.9%). Additionally, the sum score of parent-initiated activities was not significantly

different between parents of current Kindergartners and parents of current first graders, $x^2 = 14.24$, $p = .220$. Therefore, results are reported for the entire group of parents.

Effectiveness. Following indication of participation in parent-initiated transition activities, parents were asked to rate effectiveness of each activity that helped children feel ready for Kindergarten on a scale of 0 to 4. Complete results are presented in Table 13. Overall, parents reported the most effective transition activities they initiated to support children included working on self-regulation skills ($M = 2.95$), working on peer/social skills ($M = 2.92$), and working on early literacy ($M = 2.85$) and math skills ($M = 2.88$). Twenty-eight parents responded to an open-ended question to identify what made parent-initiated transition activities effective. A sample of parent responses are provided in Table 14. Summarized themes of those responses are provided in Figure 4. Prominent themes of effectiveness included helping children become familiar with expectations of Kindergarten and helping children become equipped with skills – both academic and behavior regulation skills. Parents were not asked to reflect negatively on what they might have done differently or better regarding their efforts to prepare children for Kindergarten. This was done intentionally to avoid causing negative feelings about parents' own efforts.

In sum, the more common parent-initiated activities of talking about Kindergarten and working on self-regulation and early academic skills were also rated as most effective things that helped children feel ready for Kindergarten.

Home Activities

Descriptive statistics. Parents were asked to rate the frequency that they engaged in a list of home activities with children leading up to Kindergarten (ranging from never

to multiple times a day). Full descriptive statistics are provided in Table 15. An ANOVA was conducted between current Kindergartners and current first graders for all home activities and revealed no significant differences with the exception of reading books, $F_{(1,69)} = 3.02$, $p = .02$, indicating parents of current first graders reported reading more frequently with their children. Overall mean scores revealed no significant differences between current Kindergartners and current first graders, $F_{(1,69)} = .139$, $p = .710$.

The most frequently engaged in activities across the entire sample included reading books ($M = 2.87$), singing songs ($M = 2.48$), and telling stories ($M = 2.33$). The home activities parents reported engaging in least often included playing musical instruments ($M = .83$), and doing science-related activities ($M = .76$), and playing games ($M = 1.30$).

Effectiveness. To analyze effectiveness of home activities, bivariate correlations were calculated between home activity overall mean score and child worry mean scores– as reported by both parent and child. The Pearson correlation was not significant for parent-report of child worry and home activities ($r = .018$, $p = .886$), but home activity mean score was significantly associated with child report of worry (*Th*) suggesting some evidence that more frequent home activities were associated with lesser child-reported worry.

In sum, home activities most commonly engaged in were literacy-related: reading books, telling stories, and singing songs. Effectiveness of home activities were examined via bivariate correlations with child worry and indicate more frequent home activities to be associated with less worry from children's perspectives.

Overall Worries and Transition Activities Summary

The most common child concerns from the parent report included (1) making friends, (2) navigating the school, and (3) learning new routines. The most common child-reported concerns included (1) making friends, (2) being separated from their parents, and (3) having general anxiety about being ready for Kindergarten. Interesting results include the differences and similarities between what parents perceived as worrisome for their children and what children reported. For example, while parents indicated navigating the school to be one of the most concerning worries for children, this item was near the bottom of children's report of worry. Additionally, children reported general worry about starting school much higher compared to parents. Potential explanations for why this emerged and the methodological and theoretical implications will be addressed in the Discussion.

In terms of what transition activities occurred most often and the effectiveness of such activities, I will summarize that by transition type here.

School-initiated transition activities. Parents reported their children most often participating in open house events, Kindergarten registration, and classroom visits. These findings replicate previous findings, adding further evidence that the most common school-initiated transition activities are group-oriented, low-dosage type events (Cook & Coley, 2017; Early et al., 1999; Eckert et al., 2008; LoCasale-Crouch et al., 2008; Pianta et al., 1999). In regards to which school-initiated activities were most effective, parents rated individual teacher meetings, classroom visits, open house, and school-wide events similarly effective. When asked what made events effective base on parent perspective, the most common reasons parents provided included the opportunities to navigate the school, locate the classroom, and meet the teacher. Parents who reported wanting

improvements to their experiences identified the same elements, further illustrating the common components of school-initiated transition activities that parents perceive as most effective for alleviating children's worries.

Parent-initiated activities. The most common parent-initiated transition activities included talking with children about Kindergarten, working on self-regulation, reading books about school, and working on early literacy skills. Parent-initiated activities rated as most effective included working on behavioral, social, and academic skills, reflecting what previous researchers have also identified as parents' focus of transition efforts (Barnett & Taylor, 2009; Kang et al., 2017; Malsch et al., 2011; Miller, 2014). In open-ended responses about what made parent-initiated activities particularly effective, the common themes of parent responses included helping children become familiar with Kindergarten expectations and equipping children with early academic and behavioral regulation skills helped children transition.

At-home activities. The most common at-home activities included reading, singing songs, and telling stories – pre-literacy-type activities. Effectiveness was examined differently, as these types of activities are not often engaged in with the explicit intention of supporting Kindergarten transition. As such, at-home activities were analyzed using bivariate correlations with child worry outcomes to examine effectiveness. Pearson correlations revealed more frequent at-home activities were significantly related to lower child worries, as reported by children.

Collectively, these results provide some indication that currently employed transition activities are addressing some aspects of child worry, they are effective at helping the transition process, per parent report. However, what remains largely

unaddressed are the social concerns that emerged as so prominent in the interviews and then again from both parent and child report of worry. While this is a prominent area of concern, none of the most commonly reported transition activities seem to be designed to address such issues. Additionally, results between children and parent report seem to reflect differing perspectives. Implications will be considered in the Discussion.

Research Question 2: How are children's worries related to Kindergarten adjustment?

In order to address the second research question, I will first present preliminary analyses. Next, I will present multiple regression analyses constructed from significant bivariate correlations. Regression analyses will be conducted and explained separately based on parent and child report.

Preliminary Analyses

Bivariate correlations were first calculated among both parent and child report of child worry and key outcome variables including behavioral adjustment, socio-emotional adjustment, general adjustment, and academic adjustment. Given the previous indication that academic adjustment variables demonstrated a level of reliability just barely acceptable, as discussed in the Methods section, individual academic outcome variables were also included in the correlation analyses (reading, verbal skills, math, peer relationships, and ability to follow directions). The correlation matrix of all of these variables can be found in Table 16.

Two outcomes emerged as significantly correlated with overall worry. Additionally, two outcomes approached significance. Adjustment was positively correlated with parent report of child worry, $r(47) = .523$, $p < .001$, indicating adjustment

difficulty was correlated with greater child worry as reported by parents. Additionally, adjustment approached significance with child-report of worry, $r(38) = .311$, $p = .057$. This relationship may be underpowered since only 38 children completed the child survey section.

While significant correlations were not observed between worry or general academic mean outcomes, math was specifically negatively associated with child report of worry, $r(38) = -.325$, $p = .047$, and approached significance with parent-report of worry, $r(46) = -.287$, $p = .053$. This means greater worry, as reported by parents, was associated with lower math achievement early in Kindergarten. This relationship may very well be observed for child report of worry with more power, also.

Building from correlation results, linear regression analyses were conducted to examine if child worry was associated with adjustment and math outcomes from child and parent perspectives. First, boxplots were examined to identify outliers. One outlier was identified, but given the relatively small sample size, remained in analyses after confirming data accuracy. Further, multiple regression assumptions were checked with both visual and statistical procedures (Lewis-Beck & Lewis-Beck, 2016; Hahs-Vaughn & Lomax, 2020). Despite relatively small sample size, each of the following models passed visual and statistical inspection for assumptions. Assumption information is included in the Appendix. Demographic covariates were included in all models (child sex, income, parent education, and preschool experience) to examine if worry remained a significant predictor of adjustment and math. Results are presented in Table 17.

Adjustment and worry

Parent report of worry. The overall model analyzing adjustment with parent-report of worry and controlling for related covariates resulted in a significant model, $F_{(5,39)} = 2.48$, p = .048, with an $R^2 = .24$. Child worry as an individual predictor remained a significant predictor of adjustment, $t = 2.18$, $p = .035$.

Child-report of worry. The overall model analyzing adjustment's association with child report of worry and controlling for related covariates was not significant, $F_{(5,30)} = 1.38$, p = .26, with an $R^2 = .05$, nor was child worry individually associated with adjustment, $t = .775$, $p = .444$.

Math and worry

Parent report of worry. The overall model analyzing math's association with parent report of worry and controlling for related covariates was significant, $F_{(5, 38)} = 3.067$, p = .02, with an $R^2 = .29$. Child worry as an individual predictor, however, was not significantly associated with math outcome, $t = -1.35$, $p = .185$.

Child report of worry. The overall model analyzing math's association with child-report of worry and controlling for related covariates resulted in a significant model, $F_{(5,30)} = 3.09$, p = .02, with an $R^2 = .34$. Child worry as an individual predictor, however, was not significantly associated with math outcome, $t = -.1.48$, $p = .15$.

Worry and Outcomes Summary

Overall, child worries were significantly correlated with adjustment and math outcomes. Further regression analyses revealed the strongest association between worry and outcomes emerged with parent-report of child worry and child adjustment difficulties. These findings suggest child worry may have meaningful implications for

child adjustment at the transition to Kindergarten. While other significant models were calculated, child worry did not remain a unique predictor of outcomes in those models.

Research Question 3: How does parent efficacy relate to children's Kindergarten adjustment?

In order to address the third research question, preliminary correlation analyses will be presented. Building from the significant findings in the previous section, a moderation model will be presented next. Then, post-hoc exploration regression analyses will be presented followed by a summary.

Preliminary Analyses

Full descriptive statistics, in addition to ANOVA confirming no significant differences, are presented in Tables 18 and 19. Pearson bivariate correlations were first calculated between parent efficacy and key outcomes variables including behavioral adjustment, socio-emotional adjustment, overall adjustment, reading, verbal skills, math, peer relationships, and ability to follow directions. The correlation matrix can be found in Table 20. Multiple outcomes emerged as significantly correlated with parent efficacy. Parent efficacy was significantly and positively correlated with reading, $r(46) = .314$, $p < .034$, math $r(46) = .381$, $p = .009$, peers $r(46) = .347$, $p = .018$, and following directions $r(46) = .367$, $p = .012$, indicating greater outcomes in those areas were correlated with greater parental efficacy. Relatedly, parent efficacy was significantly, positively, associated with academic outcomes as a scale, $r(43) = .506$, $p < .001$. Additionally, Pearson's correlations demonstrated parent efficacy was negatively associated with adjustment, $r(47) = -.416$, $p = .004$, and social outcome difficulties, $r(46) = -.343$, $p =$

.020. This indicated greater parental efficacy was associated with less difficulty in these areas.

Parent Efficacy Interaction

The original hypothesis included potential interactions between parent efficacy and child worry within significant models observed as part of Research Question 2, hypothesizing that parent efficacy may interact with child worry such that parents who are highly efficacious serve as a buffer between their children's worry and adjustment issues. The significant model, as described earlier, demonstrated parent report of child worry to be significantly associated with adjustment issues such that greater worry was associated with greater adjustment issues. These are the variables I will use in this moderation analysis.

Given the response patterns and the number of the sample who exited the survey prior to answering necessary sections, there was not enough power to detect a significant interaction; that is, there is a high likelihood of a Type II error with these analyses. I did conduct a GPower power analysis using a conversative, small effect size (.30). The results suggested a total sample size of N = 77 would have been the minimum in order to detect a significant interaction with a small effect size. Analyses were still conducted to explore these data. The results are presented in Table 21.

First, I calculated centered mean scores for child worry (parent report) and parent efficacy in order to create an interaction term and avoid issues of multicollinearity. Difference scores were created for each participant based on their unique scores and subtracting it from the centered mean. Those difference scores were then included in the regression analyses, as were covariates and the interaction term. The resulting overall

model, in Table 18, was statistically significant, $F_{(6,38)} = 2.45$, p = .03, with an $R^2 = .32$. However, this model did not provide any statistically significant individual predictors. The coefficients were in the direction expected, however, and should be further analyzed with larger, more representative samples to continue exploring how parent efficacy may serve as a protective factor for children with greater worry.

Post hoc Parent Efficacy Analyses

Because the moderation model was underpowered, I wanted to further explore these data for indication of how parental efficacy may be associated with children's outcomes at the transition to Kindergarten. Building from significant Pearson correlations, I defined a series of linear regression analyses.

Linear Regression. Linear regression analyses were conducted to analyze associations between parental efficacy scores and children's outcomes. Full models included all covariates from the previous research questions (child sex, parent education, income, and preschool experience). Full results are summarized in Table 19.

The first set of analyses included the scaled outcomes of academic outcomes, adjustment difficulties, social outcomes, and behavioral outcomes. The academic outcomes model was significant, $F_{(5,34)} = 4.69$, p = .002, with an $R^2 = .41$. After controlling for all covariates, parent efficacy remained significantly associated with academic outcomes, $t = 4.19$, $p < .001$. Adjustment was significantly associated with parent efficacy, $F_{(5,39)} = 2.80$, p = .03, with an $R^2 = .26$. Parent efficacy as an individual predictor remained significant after controlling for all covariates, $t = -2.48$, $p = .02$. Neither social outcomes or behavioral outcomes were significantly associated with parent

efficacy, $F_{(5,38)} = 1.50$, p = .214, with an $R^2 = .16$, and $F_{(5,38)} = 1.58$, p = .188 with an $R^2 = .17$, respectively.

Just as I examined the individual academic outcome items in the previous section of child worry, I repeated that process as I examined associations with parent efficacy. These analyses included each academic outcome individually. The reading model demonstrated no significant association with parent efficacy, $F_{(5,38)} = 1.74$, p = .15, with an $R^2 = .19$. The math model did demonstrate a significant effect, $F_{(5,38)} = 3.51$, p = .01, with an $R^2 = .32$. However, parent efficacy, as an individual predictor, only approached significance, $t = 1.86$, $p = .07$. The peers model (e.g., making friends) was not significantly associated with parent efficacy, $F_{(5,38)} = 2.05$, p = .09, with an $R^2 = .21$. Following directions was significantly associated with parent efficacy, $F_{(5,38)} = 2.77$, p = .03. with an $R^2 = .27$. Additionally, parent efficacy as an individual predictor remained significant after controlling for all covariates, $t = 2.68$, $p = .01$.

Parent Efficacy Summary

Overall, parent efficacy correlations suggest strong associations with a range of adjustment outcomes including individual academic items including reading, math, peers, and following directions, indicating greater outcomes in those areas were correlated with greater parental efficacy. Further, Pearson's correlations demonstrated parent efficacy was negatively associated with academic, adjustment and social outcome scales. Regression analyses, accounting for covariates, demonstrated significant associations between parent efficacy and both academic and adjustment outcome scales. Other models, such as math, did approach significance, suggesting perhaps future studies with greater power may better be able to detect a significant association.

Collectively, these analyses indicate a significant association between parent efficacy and important Kindergarten outcome measures. Results here, though, do need to be interpreted with caution as these data are concomitant and directionality cannot be interpreted.

CHAPTER 4: DISCUSSION

This study was conducted to explore transitions, children's worries, and parent efficacy as they relate to children's adjustment at the transition into Kindergarten. Put simply, beginning Kindergarten is often a complete change in children's lives– new and more peers, adults, routines, expectations, physical surroundings, and more. The continued struggle of new Kindergartners to adjust, despite rising preschool experience, gives reason to continue probing these ideas and exploring how adults can improve the support offered. This discussion will be presented in four sections addressing each research question individually with applicable implications and a final section about limitations and future directions.

What are children's worries related to starting Kindergarten?

Children's worries were reported by both parents and children in this survey. Interestingly, some differences emerged in how each group responded. The most common child worries from parent report included (1) making friends, (2) navigating the school, and (3) learning new routines. The most common child-reported worries included (1) making friends, (2) being separated from their parents, and (3) general anxiety about being ready for Kindergarten.

Social Worries

Social concerns and anxieties were primarily the focus of children's interview responses and this was further emphasized when it emerged as the most worrisome topic for children from both parent and child survey responses. This finding further extends the notion that social interactions are simply salient to Kindergartners (Booth et al., 2019; Harrison & Murray, 2015; Margetts, 2008; O'Farrelly et al., 2020), by indicating social

interactions are not just frequently thought about or considered, but that children are thinking about such things with worry and anxiety. There is some sense of negative emotionality around figuring out their social world – meeting new children, making friends, navigating negative peer interactions, and more. Existing literature has suggested when children are preoccupied with negative feelings or thoughts, it can result in difficulties learning new things or managing behavior (Blair, 2010), further demonstrating the importance of adults providing transition activities to alleviate children's worry. Currently, transition practices most commonly used are not designed to address such social concerns.

Of all of the most commonly participated in transition activities across all three types (school-initiated, parent-initiated, and home activities), none are explicitly designed to support children in meeting and making new friends prior to school starting. The most common activities parents reported engaging are focused on logistics (e.g., open house events) and early academic skills (e.g., early reading and math and regulation skills)– all of the things adults tend to perceive as important (e.g., Dockett & Perry, 2004). While parents do seem to note making social connections as an *effective* strategy for children's transition success, they do not report social activities as a common component to either school-initiated or parent-initiated transition activities.

In regards to school-initiated activities, only about 25% of parent participants noted specific experiences that helped children with social concerns. For example, one parent reported, "[the teacher] established a buddy system and they rotated each week to get to know all their classmates." Another 25% of participants indicated social supports were something that lacked in their school-initiated transition supports. For example, one

parent said, “We didn’t meet any other people cause of COVID pandemic, didn’t know ahead of time who would be in the classroom.” Both of these quotes exemplify the notion that some parents (about half of the participants in total) did recognize the importance of social supports whether perceived to be present or not as part of school-initiated transition activities specifically, but simultaneously this means about half of parent participants did not make any mention about social supports at all. Further, the low frequency that parents and their children engaged in transition activities with some sort of social component is an important point. Integrating social components to the most common transition activities is a missed opportunity for supporting children early in an area they are worried about.

There are immediate and relatively simple adjustments that can be made to existing transition activities such as open house and registration events, post pandemic, to allow and invite children to meet one another and interact to begin supporting social connections before the first day of Kindergarten. Current open house and registration events are long-standing models that certainly serve a purpose (mostly logistical), but there are small changes that may be made to address children’s social worries. Events like open house can be slightly readjusted to be a time of meeting one another in addition to the current purpose of paperwork and building tours. Simple adjustments like all teachers being present, children’s names and photos being posted in the classroom, and an opportunity for parents and families to exchange contact information can easily allow connections to be made well before the first day of school. Another example of an early activity supportive of social connection comes from a parent who reached out to me via social media. Their school hosted an annual picnic for kindergarten families the month

prior to school beginning. It was hosted on the school playground and families provided their own food. This is an example of relatively simple, low-cost event that this parent told me was integral to her child making a smooth transition because she met other children in her class in a low-stress, fun way. It may be that with small adjustments, transition activities may address the biggest worry and result in positive impacts.

Navigating the School Worry

Differences in worry about navigating the school/classroom emerged between children and parents' reports such that parents reported navigating the school as a primary concern, but it fell to the bottom of the worry list based on child report. This difference in level of concern might potentially be explained by examining transition activities and effectiveness. The most common school-initiated transition activities (e.g., open house) are designed to introduced children to the school and classrooms. In terms of effectiveness, parents rated open house and classroom visits as the most effective school-initiated transition activities for reasons including helping children become familiar with the physical space and meeting teachers. Parents likely perceived these activities as being so effective because they also perceived these being key elements of child worry. If we are to assume parents perceived this worry and that prompted engagement in the transition activities, this might explain why children, in their retrospective reporting, did not indicate the navigation of school as particularly worrisome. It very well may have been a worry, but because the worry was matched with the transition supports, it was alleviated by the transition activity provided. This is some indication that existing transition supports such as open house events, may be work for what they are designed to

do. This further adds support to the overall notion that when transition supports address specific aspects of child worry, they are effective.

Another idea that may explain the difference in parent and child worry related to navigating the school is that parents are perhaps more worried about the logistics and perceive their children to be similarly worried. Parents have lived the experience already and may project their worry on children based on their personal history. Research has indicated parents' personal experiences influence their own ideas and approaches to their children's Kindergarten (McIntyre et al., 2007; Miller, 2014; Miller et al., 2011). This idea suggests the difference in worry reported by parents and children is based on parents drawing from their personal experiences and children's lack of experience at this point in their academic journey.

Being Generally Ready for Kindergarten Worry

Another area children and parents seem to differ in perspective is in their perception of general worry related to starting Kindergarten. Parents rated this as one of the least concerning of children's worries, but children rated it as one of their most concerning. This difference in report might be caused by developmental and experience differences that create a difference in interpretation by parents and children.

There is an overall different developmental perspective when asking this question of parents versus children. Parents are inundated with information about Kindergarten readiness – information gathered from friends, social media, parenting blogs, etc., that they likely draw on when considering a question related to children's "readiness" to begin Kindergarten. The word "readiness" itself is hotly debated in research, education, and parenting circles – it is layered with interpretation. Parents may have interpreted the

general worry question as one about "kindergarten readiness" rather than children's feelings of worry or excitement about going to Kindergarten. Asking the same question of children with no previous knowledge of "readiness" or formal school experience likely resulted in something very different, perhaps a much simpler interpretation of being ready or not. This has larger implications when considering the overall concept of different perspectives related to children's worries and whether or not parents are attuned to children's perspectives.

Children are concerned about starting Kindergarten and they have specific worries about starting that differ from adults' perspectives. It is important for parents to be attuned to this idea and be aware that children are anxious because parents have to be aware in order to create and engage in activities that will help alleviate the worry. By relying only on parent perception, the supports put in place may not be the types of supports children most need.

Differing Perspectives

This difference in perspective between parents and children reports of worry has important implications for both practice and future methodology. While adults are privy to the logistics of kindergarten, children are privy to their own internal experiences and worries and this information may have unique contributions to make to the transition experience into kindergarten and inform adult transition practices. As demonstrated in this study, even while the sample of children was smaller than the parent participants, differences in perspective regarding worry still emerged. Children have a unique perspective about starting Kindergarten from adults (Cowan & Heming, 2005; Dockett & Perry, 2004; O'Farrelly et al., 2020; Wong, 2015). Studies have demonstrated children

and parents focus on different aspects of the Kindergarten experience (Dockett & Perry, 2004), and that adults tend to interpret it more positively than children do (Wong, 2015). Similarly demonstrated in this study, parents seem to focus on the academic and logistic aspects of the school transition, yet children are worried about social things. This difference in perspective becomes important when considering the associations of children's worry and Kindergarten outcomes. Adults need to be aware of what children are worried about in order to support children in specific areas of concern.

This difference in perspective and focus may also explain why adults do not already integrate more social supports into transition activities. Since adult focus tends to be on adjustment and academics (Dockett & Perry, 2004), it makes sense the most commonly employed transition activities focus on the same things. By inviting children to identify worries, this may enlighten adults as to prominent areas of worry for children and prompt adults to include more transition activities specifically designed to address areas of concern.

How are children's worries associated with adjustment?

In an effort to further justify why it is important to explore children's worries, I sought to demonstrate how children's worries are associated with transition outcomes. Early Kindergarten academic and social skills have been well-documented to be related to both short- and long-term success and struggles for children (Burchinal et al., 2020; Ladd et al., 2000; Ladd & Price, 1987; Nathanson et al., 2009; Rimm-Kaufman & Pianta, 2000). Given the unique contribution of social, academic, and behavioral skills to children's overall adjustment, the survey utilized in this study included elements of each, measuring academic, social-emotional, behavioral, and general adjustment outcomes.

Adjustment

The strongest association for child worry emerged with parent-report of child worry and children's general adjustment difficulties. This specific adjustment scale was a mean score comprised of parent report items of changes observed in children after the start of in-person Kindergarten including things like changes in sleep, emotionality, behavior regulation, and enjoyment of school – all things associated with performance in school (e.g, Puccioni, 2020).

Child worry may be predictive of adjustment outcomes because the more children are preoccupied with dealing with feelings of worry or anxiety, the less they are able to devote cognitive resources to controlling behavior and emotions. This may explain why parents report observing less behavioral regulation, more emotionality, and sleep change during the transition. This combination of negative adjustment outcomes limits children's ability to adequately engage in their new Kindergarten environment, which may cause concern for long-term adjustment, both academic and social. Again, this supports the notion that by addressing children's concerns earlier, adults may be better able to alleviate worry, supporting children's transition success.

Future research in this area should consider child-level characteristics and associations of worry. Child-level constructs such as attachment and personality may have important implications for children's worry but also how worry is associated with outcomes such as adjustment. For example, children who are prone to worry versus children who are not may have different experiences of worry or be worried about different things related to starting Kindergarten, and their worry may be more or less acknowledged by adults because of that. Further understanding in this area may help

parents and educators better identify children who will benefit from additional supports at the transition to Kindergarten.

Math

Worry's association with math outcomes was also examined closer as it was significantly correlated with child report of worry and approached significance with parent report of worry. When attempting to understand why such a relationship may exist with math and not literacy, the findings from this study suggest a couple different explanations.

First, children likely have much less experience with early math concepts (counting and numeracy). While parents in this study reported working on early math skills as effective, it was *not* one of the most common activities. Early literacy activities seem to be much more prevalent – reading books, singing songs, telling stories, etc. Early math skills are likely much less the focus of early activities parents choose to design or provide for children. Therefore, having less experience with math activities already makes math more difficult. Perhaps this indicates being more worried and preoccupied with the changes experienced during Kindergarten make it even more difficult to engage in early math learning. An interesting area for future research would be to further understand the specific type and frequency of transition supports such as math activities and if they uniquely predict children's outcomes.

While early math was significantly correlated with children's worry, it did not remain so after accounting for other known covariates (SES, parents' education, sex, and preschool experience). This lack of significance might simply be due to low power (only 38 children responded). Given the importance of early math for later academic

achievement (Watts et al., 2014), future studies should further examine significant associations between children's worries and math.

How is parent efficacy associated with children's adjustment?

Building from existing literature that points to the possibility that parental efficacy may play a role in assisting children with Kindergarten adjustment (Puccioni, 2015), an original goal was to further explore this concept by examining potential interactions between parent efficacy and child worries. I anticipated parent efficacy may serve as a buffer or protective factor for children who experience high levels of worry such that parents who have high efficacy about supporting their children may mitigate the effects of child worry on adjustment outcomes. Unfortunately, the model ran in this study was underpowered to produce meaningful results. However, correlation analyses and linear regression conducted with parent efficacy and all outcome measures (academic, social, behavioral, adjustment, and individual academic items) revealed multiple significant relationships indicative of parent efficacy having a meaningful association with how children adjust at the transition to Kindergarten. Specifically, significant associations were demonstrated between academic outcomes and adjustment outcomes. Higher efficacy for supporting children with specific worries was associated with better academic outcomes and less adjustment difficulties for children.

One reason parent efficacy may work to support children's transition to Kindergarten is that the more parents believe they can help children prepare for the transition and believe they know how to help, the more likely they are to engage in such transition practices. Similar efficacy beliefs have been addressed in other areas of research like early reading, such that parents who have stronger efficacy beliefs about

their own ability to help their children are more likely to engage their children in early reading activities (Yeo, Ong, & Ng, 2014).

Parent efficacy may be an important consideration to how schools – preschools and elementary schools – approach the transition to Kindergarten. It might be that the more preschool and elementary teachers and other school personnel seek to share information with and empower parents prior to the Kindergarten transition, the more parents will engage with their children and actively work to support children's transition. For example, preschools can create a series of parent workshops or periodic newsletters providing brief explanation about development skills and the ways that parents can – and likely already are – supporting those in children. Also making this a specific area of feedback for parent-teacher conferences and communication may be very beneficial to supporting parent efficacy. Parents often view educators as the experts and value what teachers have to say (Malsch et al., 2011). Thus, teachers providing feedback and information to parents in a positive, encouraging, affirming way, may be a simple way to indirectly support children as they approach and transition into Kindergarten.

Theoretical Applications

Another objective of this study was to create a survey designed for child-report of worries. This was an initial step to expanding the current predominant approach with U.S. samples that tends to rely on adult particpants. Inviting children to answer about their worries, acknowledges children as active agents at the center of their experience to more accurately align with the predominant theoretical approach of Rimm-Kaufman and Pianta's (2000) Ecological and Dynamic Model of Transition framework, an expansion

of Bronfenbrenner's Ecological Framework (Bronfenbrenner, 2005; Bronfenbrenner & Morris, 1998).

Despite only half of the total sample completing this section, the survey did perform well, demonstrating a good reliability. This reliability was good enough to calculate an overall worry score and calculate a limited set of analyses to explore how children's report of their own worry may relate with Kindergarten outcomes. These results provide some initial evidence that children do indeed have unique worries to report (worries different from what their parents report) and that those worries are associated with outcomes not identified through correlations with parent report. This initial piece of evidence warrants further exploration with larger, more diverse samples to replicate findings and to determine if findings are generalizable to a wider population. Further understanding how children's perspectives are uniquely associated with outcomes may help better shape transition activities.

Limitations

There are some limitations with this study. First, this study was conducted in the second year of the COVID-19 global pandemic. In response to that event, many schools delayed the start of the school year, closed buildings, and implemented virtual learning approaches. The overall stress of school – and life – likely impacted the concepts of school in a unique way including what children were worried about, how efficacious parents felt about supporting children, and the transition activities offered. Despite adjusting questions and items for this study in an attempt to most closely reflect "typical" experiences, there is no fully accounting for the unique experiences of these particular parents and children. There is certainly evidence of the unique impact of beginning

Kindergarten during COVID-19 observed between the two academic years included in this study. Children and parents who started Kindergarten at the beginning of the COVID-19 pandemic reported different experiences in transition activities and worries compared to the group of parents and children who started Kindergarten a year later when restrictions and changes to school systems were not as different from pre-pandemic experiences.

Another caution to generalizability of findings is the homogeneity of the sample. This study included a homogenous group of parents who were predominantly White, upper SES, highly educated, and highly efficacious. Further, 38% of those who reported their employment indicated they worked in preschools and elementary schools. Educators have knowledge about school expectations, routines, and specific training in preparing children for the school setting that non-educator parents do not have. Additionally, children of educators may have also have additional exposure to school buildings and staff prior to beginning Kindergarten, likely affecting children's worries and adjustment. This creates a confound not able to be accounted for in analyses. Children in the sample were also predominantly White, had preschool experience, and demonstrated low adjustment issues. Future studies will want to include samples with more sociodemographic diversity, as there is evidence children who are from low SES, single-parent, and racial minority families experience more difficulties during the transition to Kindergarten (e.g., Jiang et al., 2021). This may be because social risk variables are associated with lower kindergarten readiness (e.g., early math, early literacy, and early regulation skills) and Kindergarten has become an increasingly academic-focused setting

(Bassok et al., 2016). As such, worries may be exacerbated and transition activities may be even more important to other, more diverse populations.

The survey length and order of questions seems to be an unexpected limitation. The transition questions were placed at the front of the survey, followed by the more detailed section that included ratings about children's worry, parents' own efficacy related to each topic of worry, and how effective parents viewed school-initiated and parent-initiated transitions to be at alleviating the specific worries. The demographic section of the survey came next. The biggest percentage of participants who exited early, did so before reaching the demographic questions. Unfortunately, this limited analyses between parents who only answered the front 30% of questions and the half of participants who completed the entire survey with child responses. Based on these results, a shorter survey or including incentives to participants to compete the full survey should be used.

Additionally, this study collected all data retrospectively and at a single time. While this method provided initial evidence of associations between worry, parent efficacy, and Kindergarten outcomes, future studies would benefit from a longitudinal design. Measuring worry and parent efficacy well before Kindergarten entrance and measuring outcomes after Kindergarten begins would allow for interpretation of directionality between child worry, parent efficacy, and Kindergarten outcomes. Additionally, including teachers as participants for outcomes would alleviate parental bias and provide an understanding of how children are succeeding (or not) in the classroom from teachers' perspectives.

It is short-sighted to assume all children experience the beginning of Kindergarten similarly and that all transition activities serve all children equally. Knowing more about who struggles with worry and how to best support worry may help educators and parents better meet the needs of new Kindergartners. Further understanding in these areas can better inform transition supports created and used by parents, early childhood professionals, Kindergarten teachers, and other elementary school personnel. Providing the most effective transition supports possible to both parents and children may lead to smoother Kindergarten transition experiences and increase the likelihood children begin to establish more successful academic and social trajectories.

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FIGURES

Figure 1

School Transition Activity Mean Differences

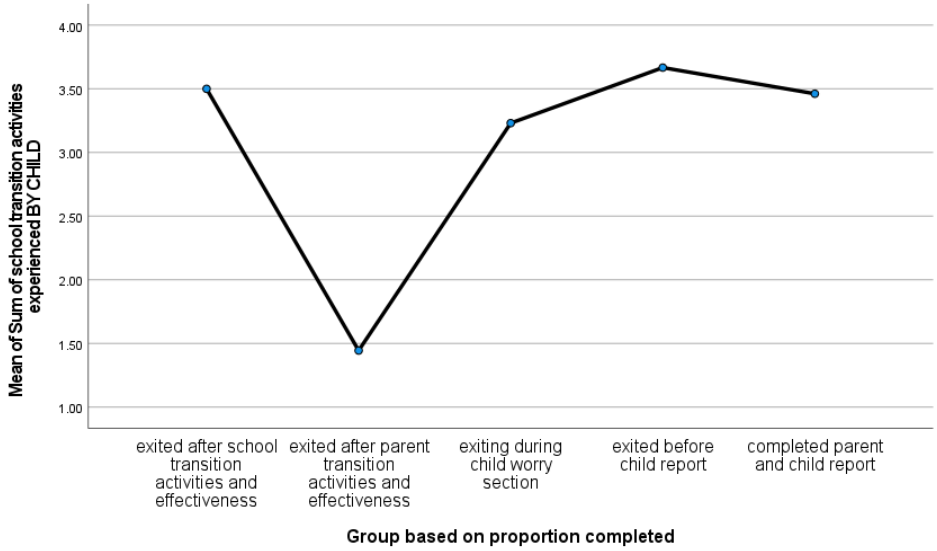


Figure 2

Child Response Question Example

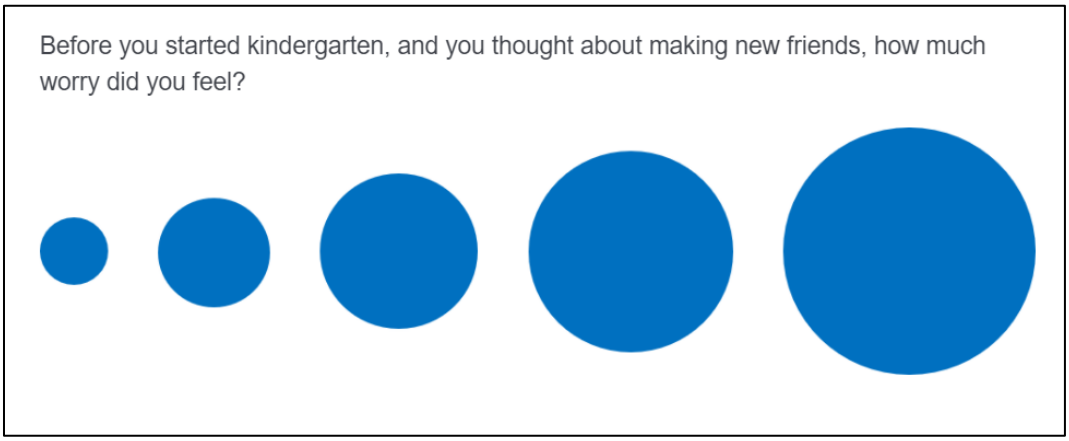


Figure 3

Helpful elements identified in parent text responses

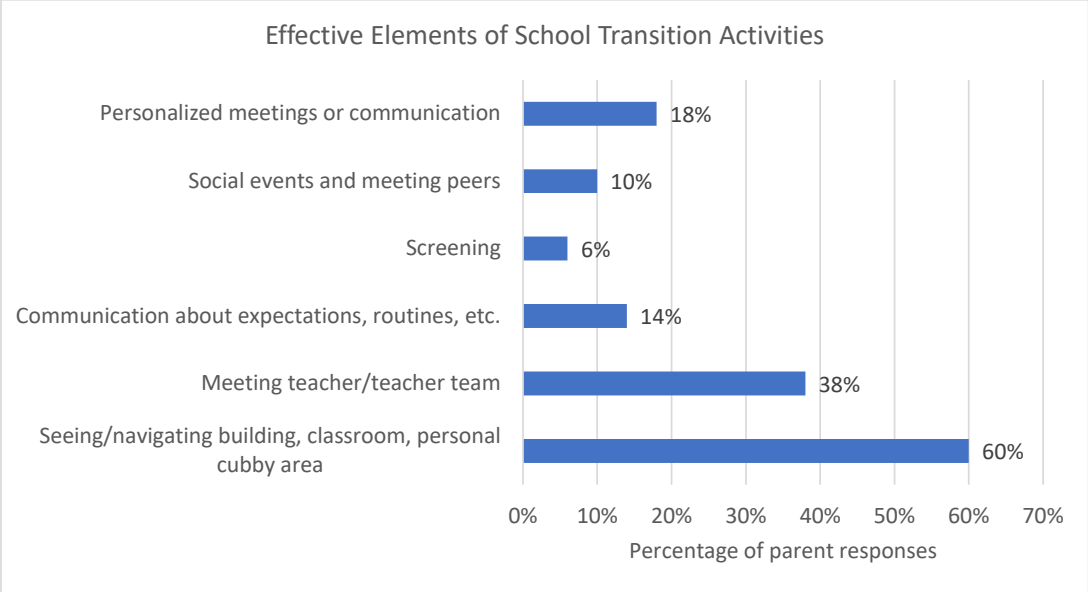


Figure 4

Parent suggestions to improve school transitions

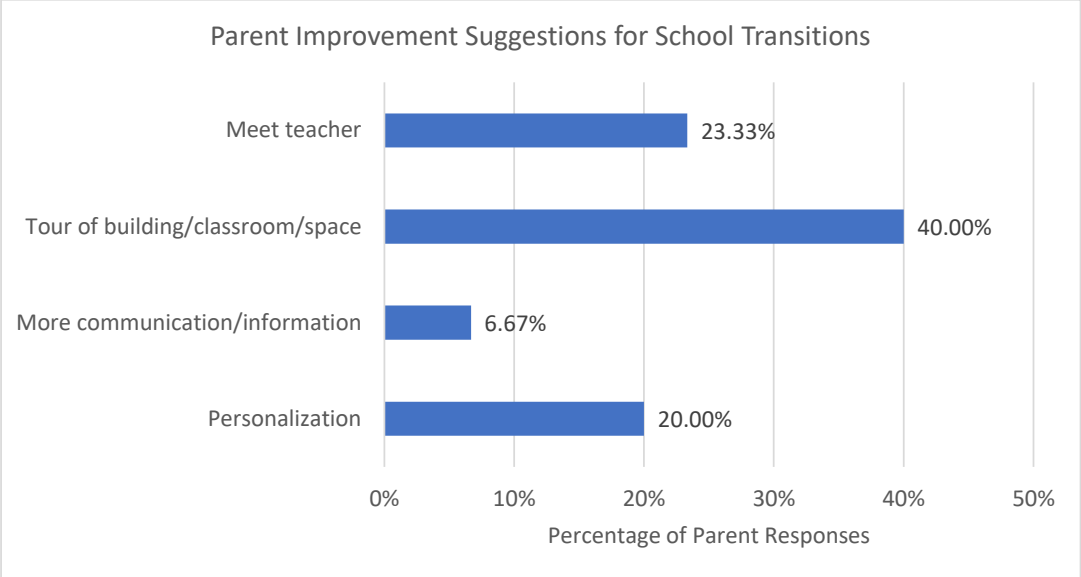
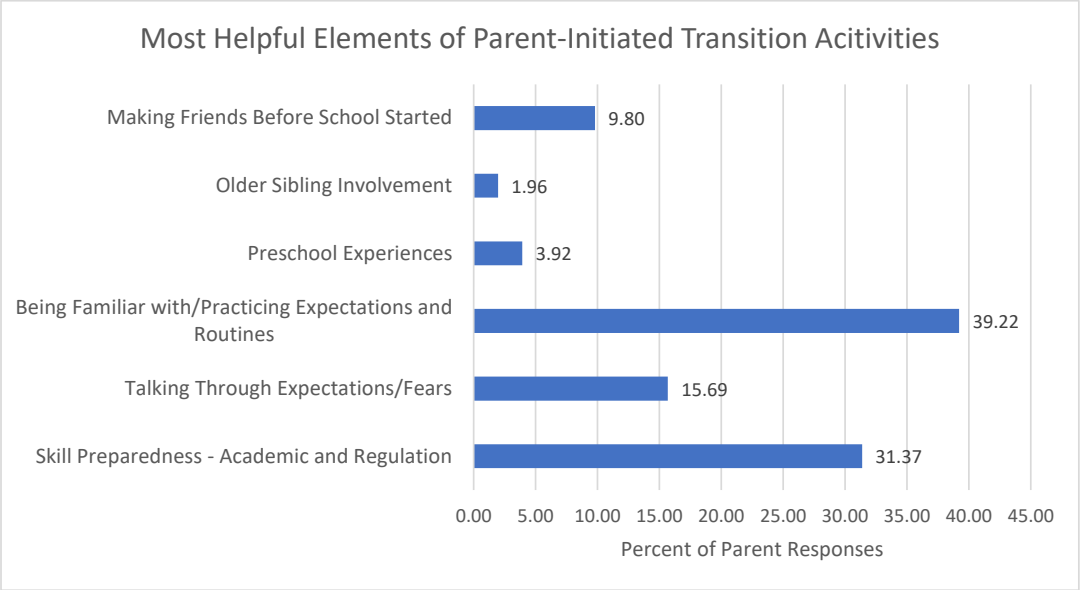


Figure 5

Open-ended Themes of Effectiveness – Parent-Initiated Transition Activities



TABLES

Table 1

Sociodemographic Characteristics of Study 1 Participants

	n or mean (SD)	%
Parent		
Relationship to child		
Mother	18	94.74%
Father	1	5.26%
Age	36.8 (2.5)	
Race/Ethnicity		
Non-Hispanic, White	19	100%
Family Structure		
2-parent, married	17	89.47%
2-parent, cohabitating	1	5.26%
Other	1	5.26%
Highest educational level		
Technical Training or Partial College	1	5.26%
2-year College or Associate's Degree	2	10.53%
4-year college or Bachelor's Degree	4	21.05%
Graduate training or Degree	12	63.16%
Household Income		
$20,000-$39,000	2	10.53%
$60,000-$79,000	5	26.32%
$80,000-$99,000	1	5.26%
$100,000+	11	57.89%
Child	*n or mean (SD)*	%
Gender		
Female	13	72.21%
Male	5	27.78%
Age	5.68 (.28)	
Race/Ethnicity		
Non-Hispanic, White	17	89.47%
Hispanic, White	1	5.26%
Non-Hispanic, Bi-racial	1	5.26%
No. Siblings	2.06 (1.4)	
Birth Order		
First-born or Only Child	10	55.56%
Later-born	8	44.45%
Prior to Kindergarten		
Full-time preschool	9	50.0%
Part-time preschool	6	33.33%
Stayed home with full-time parent	2	11.11%
Other- full-time in-home care	1	5.56%
Time in preschool		
Less than year	3	17.65%
More than a year	14	82.35%

Table 2

Sociodemographic Characteristics of Study 2 Participants

	n or mean (SD)	%
Parent		
Relationship to child		
Mother	44	97.8%
Father	1	2.2%
Child's Kindergarten Year		
Current (2021-2022)	42	48.15%
Previous Year (2020-2021)	39	51.85%
Age	36.6 (4.04)	
Family Structure		
2-parent, married	40	90.91%
2-parent, cohabitating	2	4.55%
1-parent household	2	4.55%
Highest educational level		
Technical Training or Partial College	2	4.55%
2-year College or Associate's Degree	2	4.55%
4-year college or Bachelor's Degree	16	36.36%
Graduate training or Degree	24	54.55%
Household Income		
Not currently working/no current income	1	2.3%
$40,000-$59,000	5	11.63%
$60,000-$79,000	5	20.93%
$80,000-$99,000	5	20.93%
$100,000+	19	44.19%
Child	*n or mean (SD)*	%
Gender		
Female	21	46.67%
Male	24	53.33%
Age	6.28 (.85)	
Race/Ethnicity		
Non-Hispanic, White	43	93.47%
Hispanic, White	1	.02%
Non-Hispanic, Non-White	2	.05%
No. Siblings	2.02 (1.32)	
Birth Order		
First-born or Only Child	22	48.89%
Second-born	13	28.89%
Third or later-born	10	22.22%
*Prior to Kindergarten (*multi-answer*)		
Head Start	2	3.45%
Full-time preschool	20	34.48%
Part-time preschool	18	31.03%
Stayed home with full-time parent	15	25.86%
Other (e.g., Title I, quarantined)	3	5.17%

*Parents were allowed to select all the care types experienced by their child during the 12 months prior to kindergarten entry.

Table 3

Patterns of Primary Completion Points

	n	% of participants completed	Survey Proportion
Sections			
First set – school transition activities and effectiveness	85	100%	13%
Second set - transition activities initiated by parent/caregiver and effectiveness	73	85.88%	20%
Child worry section (at least partial)	64	75.29%	25-30%
Demographics and child adjustment	46	54.12%	40-80%
Complete all parent section and child worry section	38	44.71%	100%

Table 4

Child Interview Themes

Interview Theme	Overall Statements		Example quotes
Positive statements	52.6%		"Kindergarten is super fun with my teacher. We have a lot of recesses. I was excited because I already knew all my friends. I felt a little anxious, but it was exciting."
Negative/Worry statements	47.4%		"Before I went to kindergarten I felt really scared when my mom told me. At bed time…I kept crying every night because I was scared and I also missed my old teachers. There were all these people I didn't know and I just felt like my brother wouldn't be there ."
	Total Proportion	Proportion of Worry Statements	
Social	42.4%	58.6%	
Statements made specifically about friends, interacting with new adults, or understanding new rules, expectations			"I felt a little bit shy because I didn't know people." "I didn't know people and I didn't really like kindergarten at first."
Cognitive/Learning	23.8%	34.5%	"I was worried everything was going to break my brain and be hard. I'm really scared about everything is going to blow my mind."
Statements that referenced academic subjects or school skills (e.g., using scissors)			"I don't know all the numbers and I don't know which number to choose."
Logistics	21.9%	6.9%	"I had to find my classroom by myself."
Statements made about navigating the school building, having school materials, preparing for the day (e.g., getting dressed, eating, etc.)			"[Mommy helped] get my backpack all done. [Daddy helped] get my snack and my water bottle."
Independence	11.9%	0%	"I can find my classroom by myself now…I don't need any help."
Statements about doing things by themselves, or showing interviewer what they've learned/done			"I already know all my numbers and letters."

Table 5

Child Worry Descriptive Statistics – Parent Report

	Current Kindergarten 2021-2022		Previous Year Kindergarten 2020-2021		Overall
Sample Size	*N*	%	*N*	%	
# of children (*N*=64)	34	53.12%	30	46.88%	
Worry items – Parent Report	*M* (*SD*) n	Min, Max	*M* (*SD*) or %	Min, Max	*M* (*SD)*
Navigating new school	39.12 (37.77) 34	0, 100	55.00 (32.24) 30	0, 100	46.56 (35.91)
Learning school rules	25.62 (26.14) 32	0, 90	41.43 (29.78) 28	0, 100	33.00 (28.78)
Managing own behavior	14.67 (23.00) 30	0, 80	22.80 (25.90) 25	0, 100	18.36 (24.48)
Learning new things	18.89 (28.47) 27	0, 90	43.60 (30.67) 25	0, 100	30.77 (31.80)
Meeting and making friends	43.08 (40.28) 26	0, 100	57.60 (30.45) 25	0, 100	50.20 (36.19)
Knowing how/who to ask for help	32.17 (37.17) 23	0, 100	39.17 (28.27) 24	0, 100	35.74 (32.75)
Being away from parent/caregiver	35.00 (38.70) 26	0, 100	31.67 (30.88) 24	0, 100	33.40 (34.85)
Learning new routines	39.23 (35.20) 26	0, 100	44.17 (31.75) 24	0, 100	41.60 (33.34)
Independent (self-help skills)	15.60 (24.17) 25	0, 100	13.33 (20.99) 24	0, 70	14.49 (22.46)
Generally being ready for kindergarten	20.00 (32.17) 24	0, 100	30.00 (33.10) 24	0, 100	25.00 (32.68)
Worry – overall mean	31.36 (23.88) 34	0, 90	42.90 (23.68) 30	0, 100	36.83 (24.24)

Table 6

ANOVA of Child Worries Between Kindergarten Years – Parent report

	SS	*df*	*Mean Square*	*F*	*Sig*
Navigating new school	4020.221	1	4020.221	3.228†	.077
	77223.529	62	1245.541		
	81243.750	63			
Learning school rules	3729.643	1	3729.643	4.793*	.033
	45130.357	58	778.110		
	48860.000	59			
Managing own behavior	902.061	1	902.061	1.520	.223
	31450.667	53	593.409		
	32352.727	54			
Learning new things	7926.564	1	7926.564	9.081**	.004
	43642.667	50	872.853		
	51569.231	51			
Meeting and making friends	2688.193	1	2688.193	2.097	.154
	62809.846	49	1281.834		
	65498.039	50			
Knowing how/who to ask for help	574.298	1	574.298	.530	.470
	48774.638	45	1083.881		
	49348.936	46			
Being away from parent/caregiver	138.667	1	138.667	.112	.739
	59383.333	48	1237.153		
	59522.000	49			
Learning new routines	304.051	1	304.051	.269	.606
	54167.949	48	1128.499		
	54472.000	49			
Independence (self-help skills)	62.912	1	62.912	.122	.728
	24149.333	47	513.816		
	24212.245	48			
Generally being ready for kindergarten	1200.000	1	1200.000	1.126	.294
	49000.000	46	1065.217		
	50200.000	47			
Worry - overall	2173.466	1	2173.466	3.867*	.054
	34844.050	62	562.001		
	37017.515	63			

†$p \leq .10$ *$p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Table 7

Child Worry Descriptive Statistics – Child Report Version

	Current Kindergarten 2021-2022		Previous Year Kindergarten 2020-2021		Overall
Sample Size	*N*	%	*N*	%	
# of children (*N*=38)	19	50.00%	19	50.00%	
Worry items – Child Report	*M* (*SD*)	Min, Max	*M* (*SD*)	Min, Max	*M* (*SD*)
Finding classroom/desk	2.11 (1.56)	1, 5	2.11 (1.49)	1, 5	2.11 (1.48)
Learning school and class rules	2.32 (1.49)	1, 5	2.37 (1.30)	1, 5	2.34 (1.38)
Learning alphabet, letters and sounds	2.05 (1.58)	1, 5	2.11 (1.45)	1, 5	2.08 (1.50)
Learning to read	2.89 (1.70)	1, 5	1.89 (1.29)	1, 5	2.39 (1.57)
Math, adding, subtracting	2.42 (1.57)	1, 5	2.26 (1.56)	1, 5	2.34 (1.55)
Counting, numbers	2.11 (1.56)	1, 5	1.47 (1.02)	1, 5	1.79 (1.34)
Making friends	3.05 (1.47)	1, 5	3.11 (1.28)	1, 5	3.08 (1.36)
Having someone to play with	2.16 (1.46)	1, 5	2.68 (1.63)	1, 5	2.42 (1.55)
Meeting the teacher	2.11 (1.52)	1, 5	2.74 (1.24)	1, 5	2.42 (1.41)
Finding someone to ask for help	1.84 (1.30)	1, 5	2.53 (1.39)	1, 5	2.18 (1.37)
Being away from parent/caregiver	2.79 (1.56)	1, 5	3.21 (1.29)	1, 5	3.00 (1.56)
Learning new routines	2.74 (1.56)	1, 5	2.79 (1.51)	1, 5	2.76 (1.51)
Being ready for kindergarten	2.89 (1.56)	1, 5	3.11 (1.29)	1, 5	3.00 (1.41)
Worry – overall scale mean	2.43 (.85)	1.00, 4.17	2.49 (.76)	1.17, 3.75	

Table 8

ANOVA of Child Worries - Child Report- Between Kindergarten Years

	SS	*df*	*Mean Square*	*F*	*Sig*
Finding classroom/desk	0.000	1	0.000	.000	1.000
	81.579	36	2.266		
	81.579	37			
Learning school and class rules	0.026	1	0.026	.013	.908
	70.526	36	1.959		
	70.553	37			
Learning alphabet, letters and sounds	0.026	1	0.026	.011	.915
	82.737	36	2.298		
	82.763	37			
Learning to read	9.500	1	9.500	4.192**	.048
	81.579	36	2.266		
	91.079	37			
Math, adding, subtracting	0.237	1	0.237	.097	.758
	88.316	36	2.453		
	88.553	37			
Counting, numbers	3.789	1	3.789	2.182	.148
	62.526	36	1.737		
	66.316	37			
Making friends	0.032	1	0.032	.017	.898
	66.725	35	1.906		
	66.757	36			
Having someone to play with	2.632	1	2.632	1.094	.303
	86.632	36	2.406		
	89.263	37			
Meeting the teacher	3.789	1	3.789	1.964	.170
	69.474	36	1.930		
	73.263	37			
Identify someone to ask for help	4.447	1	4.447	2.453	.126
	65.263	36	1.813		
	69.711	37			
Being away from parent/caregiver	1.684	1	1.684	.687	.413
	88.316	36	2.453		
	90.000	37			
Learning new routines	0.026	1	0.026	.011	.916
	84.842	36	2.357		
	84.868	37			
Being ready for kindergarten	0.421	1	0.421	.206	.653
	73.579	36	2.044		
	74.000	37			
Worry – overall mean	0.040	1	0.040	.061	.806
	23.406	36	0.650		
	23.445	37			

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$

Table 9

Transition Activity Descriptive Statistics – School-Initiated

	Current Kindergarten 2021-2022		Previous Year Kindergarten 2020-2021		Overall	Chi-Square Results	
Sample Size	*N*	%	*N*	%			
# of children represented (*N*=85)	47	55.29%	38	44.71%			
Sum Scores	Mean (SD)	Min, Max	Mean (SD)	Min, Max		x^2	*p*
	3.44 (1.78)	0,8	3.00 (1.87)	0,8		5.002	.757
School-Initiated Transition Activities	n	%	*n*	%	%	x^2	*p*
Kindergarten Registration	27	57.4%	21	55.3%	56.5%	.04	.840
Open House	34	72.3%	16	42.1%	58.8%	7.93	.005
Classroom Visit	25	53.2%	11	28.9%	42.4%	5.06	.025
Home Visit	2	4.3%	0	NA	2.4%	1.66	.198
School-wide Event	24	51.1%	1	2.6%	29.4%	23.16	<.001
Meeting with Teacher	12	25.5%	10	26.3%	25.9%	.007	.935
Shared Preschool Records	7	14.9%	5	13.2%	14.1%	.052	.819
Information sent home	20	42.6%	16	42.1%	42.4%	.002	.967
Personal call or letter from teacher before the first day	6	12.8%	17	44.7%	27.1%	10.88	<.001
Virtual Welcome/Virtual Tour	5	10.6%	17	44.7%	25.9%	12.74	<.001

Table 10

Parent Ratings of School-Initiated Transition Activity Effectiveness

	Current Kindergarten 2021-2022			Previous Year Kindergarten 2020-2021			Overall	ANOVA	
Sample Size	*n*	%		*n*	%				
Parents (*N*=55)	32	58.18%		23	41.82%				
School-Initiated Transition Activities	*n*	*x (SD)*	Min, Max	*n*	*x (SD)*	Min, Max	*x(SD)*	$F_{(df1, df2)}$	*p*
Kindergarten Registration	29	2.24(1.41)	0,4	23	1.91(1.24)	0,4	2.10(1.33)	$F_{1,50}$ = .776	.383
Open House	32	3.22(.792)	1,4	16	2.56(1.03)	1,4	3.00(.923)	$F_{1,46}$= 5.97	.018
Classroom Visit	23	3.09(1.20)	0,4	12	2.92(.669)	2,4	3.03(1.04)	$F_{1,33}$= .205	.653
Home Visit	1	4.00(NA)	NA	0	NA		4.00(NA)	NA	NA
School-wide Event	23	3.04(.976)	0,4	1	2.00(NA)	NA	3.00(.978)	$F_{1,22}$= 1.10	.307
Meeting with Teacher	10	3.20(.789)	2,4	11	2.91(.944)	1,4	3.05(.865)	$F_{1,19}$= .580	.455
Shared Preschool Records	6	2.33(1.86)	0,4	5	3.00(.707)	1,4	2.64(1.43)	$F_{1,9}$= .564	.472
Information sent home	19	2.53(1.02)	1.02	17	2.53(1.01)	1,4	2.53(1.00)	$F_{1,19}$= .000	.993
Personal call or letter from teacher before the first day	6	3.50(.548)	3,4	17	2.59(1.00)	1,4	2.83(.984)	$F_{1,21}$= 4.39	.048
Virtual Welcome/Virtual Tour	5	2.60(1.14)	1,4	18	2.11(.832)	1,4	2.22(.902)	$F_{1,21}$= 1.16	294

Table 11

Parent Responses to What Was Effective About School-Initiated Transition Activities

Sample of parent responses

Personal interaction between my child and the teacher	*Having the open house allowed my child to see a classroom where they might be. It was good for them to see the inside of the school since summer school was not offered.*
Direct communication with the Kindergarten teacher was most effective as it allowed me to discuss my child's specific needs and explain strategies that have been effective in the past.	*He received a letter from his teacher that got him excited and asking questions about school. He went to meet the teacher night and saw his classroom and got a feel for things before the big day.*
My child appreciated being able to meet her teacher, see some of the other students, the playground, and they had a nice cream social afterward	*he seem to feel better having seen exactly where he would be and meeting his teacher*
Meet the teacher night helped him see the building and his class, meet his teacher in person, and get more comfortable with the new space.	*I believe it help orient him to the new school, classroom and meeting his teacher was nice. His teacher happened to be the one who had done his screening. He liked that because they already knew one another*
She had the opportunity to see other Kindergartners in the environment they would be in	*I was able to discuss my child's particular situation and strategies for the transition.*
As a parent of a Kindergartner entering school during a pandemic with a lot of uncertainty everything that my child's school did to build a connection helped ease fears of the unknown.	*She could see a picture of her teacher and know something about her, instead of walking in the first day to meet a complete stranger.*
Getting to see the classroom and interacting with her teacher.	*Knowledge is power, we liked knowing what would be expected and seeing where the learning would be done*
Finding her "spot" where her things belong	

Table 12

Transition Activity Descriptive Statistics – Parent-Initiated

	Current Kindergarten 2021-2022		Previous Year Kindergarten 2020-2021		Overall	Chi-Square Results	
Sample	*N*	%	*N*	%			
# of children represented (*N*=73)	38	52.05%	35	47.95%			
Sum Score	Mean (SD)	Min, Max	Mean (SD)	Min, Max		x^2	*p*
	5.74 (2.19)	0, 10	6.74 (2.37)	0, 11		14.24	.220
Parent-Initiated Transition Activities	n	%	*n*	%	%	x^2	*p*
Contact the teacher about curriculum	3	6.4%	5	13.2%	9.4%	.736	.383
Contact the teacher about child's individual needs	12	25.5%	17	44.7%	34.1%	2.20	.138
Talk with child about Kinder	34	72.3%	35	92.1%	81.2%	3.90	.048
Read books about school	28	59.6%	28	73.7%	65.9%	.407	.524
Arrange school visit	9	19.1%	13	34.2%	25.9%	1.57	.211
Work on early literacy skills	29	61.7%	27	71.1%	65.9%	.007	.933
Work on early math skills	26	55.3%	25	65.8%	60.0%	.078	.780
Work on self-regulation skills	27	57.4%	30	78.9%	67.1%	2.29	.130
Work on emotion regulation skills	25	53.2%	27	71.1%	61.2%	1.15	.284
Work on peer/social skills	20	42.6%	21	55.3%	48.2%	.402	.526

Table 13

Parent Ratings of Parent-Initiated Transition Activity Effectiveness

	Current Kindergarten 2021-2022			Previous Year Kindergarten 2020-2021			Overall	ANOVA	
Sample Size	*n*	%		*n*	%				
Parents (*N*=67)	33	49.25%		34	50.75%				
Parent-Initiated Transition Activities	*n*	*x (SD)*	Min, Max	*n*	*x (SD)*	Min, Max	*x(SD)*	$F_{(df1, df2)}$	*p*
Contact the teacher about curriculum	4	1.75(2.06)	0,4	6	1.83(1.17)	0,3	1.80(1.48)	$F_{1,8}$ = .007	.936
Contact the teacher about child's individual needs	11	2.91(1.38)	0,4	17	2.71(.849)	1,4	2.79(1.07)	$F_{1,26}$= .236	.631
Talk with child about Kinder	33	2.85(.972)	1,4	34	2.41(.743)	1,4	2.63(.885)	$F_{1,65}$= 4.29	.042
Read books about school	27	2.63(.926)	1,4	27	2.33(.783)	1,4	2.48(.863)	$F_{1,52}$= 1.61	.210
Arrange school visit	9	2.56(1.01)	1,4	12	2.67(.651)	2,4	2.62(.805)	$F_{1,19}$= .094	.763
Work on early literacy skills	29	2.93(.842)	1,4	26	2.77(.710)	2,4	2.85(.780)	$F_{1,53}$= .586	.447
Work on early math skills	26	3.00(.849)	0,4	24	2.75(.608)	1,4	2.88(.746)	$F_{1,48}$= 1.41	.240
Work on self-regulation skills	26	3.19(.749)	2,4	29	2.72(.922)	1,4	2.95(.870)	$F_{1,53}$= 4.21	.045
Work on emotion regulation skills	24	3.00(.933)	1,4	26	2.54(.706)	1,4	2.76(.847)	$F_{1,48}$= 3.93	.053
Work on peer/social skills	19	3.50(1.00)	2,4	20	2.65(.988)	1,4	2.92(.957)	$F_{1,37}$= 3.57	.067

Table 14

Parent Responses to What Was Effective About Parent-Initiated Transition Activities

Sample of parent responses

Any activities done at home gave my child the experience of what they might do at school.	*Getting background knowledge on subject matter, becoming familiar with work and completing it.*
At the time, I was an early childhood special education teacher, so I knew how to help him.	*He already knew alphabet, letter sounds, numbers, and had read 20 beginning books on his own. He was ahead of his peers.*
Being a consistent, loving parent helped provide stability and allowed for social emotional growth appropriate for his age	*I think talking about kindergarten helped to calm some of his fears about school. He had wonderful experiences learning from his childcare provider through play and practicing social skills. He practiced letters, writing, prereading skills, and math all through play activities, which gave him a firm foundation before school.*
Being a good listener seems like one of the most basic expectations to prepare for a school setting. Also, making friends outside of home helped her prepare to make friends in school	*My daughter was in preschool full time for two years and gained several skills from that experience. I am also an educator and have made sure she is in an environment at home that promotes these skills.*
Being able to read has opened up the kindergarten room to my son. He's met friends by reading to them. Knowledge of numbers helped his confidence as well.	*Learning how to manage expectations was the most helpful thing we did. It enabled him to feel more confident walking into a new, slightly scary situation.*
Being prepared and ahead of the game	*It sets the child's expectation levels for what kindergarten would be like, and gave them a skill set to draw on when confronted with issues they were advised may come up.*
Building in fun, consistent "school" activities made our son comfortable with the needed skill sets and what class work might look like.	*Play dates to allow her to meet other children prior to school starting to help her have a familiar face and friend*
Experience with activities they would do in K.	
Frequent exposure to help her get used to the idea and express her fears	

Table 15

Transition Activity Descriptive Statistics – Home Activities

	Current Kindergarten 2021-2022		Previous Year Kindergarten 2020-2021		Overall
Sample Size	*N*	%	*N*	%	
# of children represented (*N*=71)	37	55.11%	34	47.89%	
	Mean SD)	Min, Max	Mean (SD)	Min, Max	Mean (SD)
Overall	1.78 (.55)	.79, 2.57	1.84 (.69)	.36, 3.08	
Home Activities					
Tell Stories	2.28(1.16)	0,4	2.38(1.26)	0,4	2.33(1.20)
Read Books	2.68(.747)	1,4	3.09(.900)	1,4	2.87(.844)
Sing Songs	2.46(1.04)	0,4	2.50(1.29)	0,4	2.48(1.16)
Play/make music	.70(.878)	0,3	.97(.937)	0,3	.83 (.910)
Art	1.65(1.18)	0,4	1.79(1.04)	0,4	1.72(1.11)
Science	.70(.878)	0,2	.82(.673)	0,2	.76(.643)
Explore nature	1.95(.848)	1,4	1.97(1.00)	0,4	1.96(.917)
Build/play with blocks	2.16(1.04)	0,4	2.03(1.03)	0,4	2.10(1.03)
Play games	1.27(.693)	0,3	1.32(.912)	0,4	1.30(.800)
Child reads	1.62(1.04)	0,3	1.97(1.14)	0,4	1.83(1.17)
Child chores	2.14(1.00)	0,4	1.94(1.01)	0,4	2.04(1.04)
Practice reading skills	2.03(1.09)	0,4	1.97(1.14)	0,4	2.00(1.11)
Practice math skills	2.00(1.11)	0,4	1.79(1.07)	0,4	1.90(1.08)

Items were reported on a frequency scale (0 = Never to 4 = Multiple times a day)

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Table 16

Descriptive and Correlations for Worry and Outcomes

Variable	*n*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11
1. Child Worry – parent report	64	24.24	24.24	—										
2. Child Worry – child report	38	2.46	0.80	.357*	—									
3. Adjustment	47	1.50	1.10	.379*	.194	—								
4. Behavioral	46	1.53	0.51	.188	-.104	.042	—							
5. Social	46	1.44	0.45	.222	.124	.324	.356*	—						
6. Academic	43	71.56	13.28	-.029	-.253	.034	-.381*	-.377*	—					
7. Reading	46	70.00	19.55	.089	-.257	.085	-.030	.024	NA	—				
8. Verbal	46	76.96	18.72	.118	-.151	.086	−.209	−.148	NA	.243	—			
9. Math	46	66.96	17.75	-.287†	-.325*	.038	-.088	-.290	NA	.596***	.172	—		
10. Peers	46	71.52	21.18	.065	-.011	.082	-.426**	-.374**	NA	.011	-.488***	-.005	—	
11. Follow Directions	46	72.61	21.85	-.090	-.178	.131	-.552***	-.362**	NA	.333**	.346**	.325**	.548***	—

†$p \leq .10$ *$p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Table 17

Worry Regression Analyses

	Parent Report of Child Worry					Child Report of Child Worry				
Outcomes	*n*	*B*(SE)	*β*	*t*	*p*	*n*	*B*	*β*	*t*	*p*
Adjustment	46	.021	.379	2.75	.009	37	.282	.194	1.19	.244
*Full model	45	.16 (.007)	.318	2.18	.035	35	.178 (.230)	.134	.775	.444
Math	45	-.268	-.287	-1.99	.053	37	-7.67	-.325	-2.06	.047
*Full model	43	-.180(.134)	-.202	-1.35	.185	35	-5.27 (3.57)	-.231	-1.48	.150

Variance explained for the whole model, adjustment: Parent-report of child worry, r = 0.69, Child-report of worry, r = 0.71; Math: Parent-report of child worry r = 0.29, Child report of worry, r = .34

* Full model covariates include child sex, parent education, household income, and preschool experience

Table 18

Parent Efficacy Items Descriptive Statistics

	Current Kindergarten 2021-2022		Previous Year Kindergarten 2020-2021	
Sample Size	*N*	%	*N*	%
# of parents (*N*=60)	30	50.0%	30	50.0%
Confidence in Supporting these Child Worries	*M* (*SD*) Or %	Min, Max	*M* (*SD*) or %	Min, Max
Navigating new school	83.00 (23.06)	0, 100	82.33 (21.28)	10, 100
Learning school rules	86.07 (17.92)	30, 100	82.59 (16.07)	50, 100
Managing own behavior	81.30 (29.12)	10, 100	82.23 (21.14)	30, 100
Learning new things	88.64 (20.77)	40, 100	83.60 (20.99)	10, 100
Meeting and making friends	69.05 (30.15)	0, 100	75.20 (22.93)	20, 100
Knowing how/who to ask for help	72.50 (31.93)	0, 100	83.48 (18.49)	40, 100
Being away from parent/caregiver	71.74 (33.52)	0, 100	83.04 (18.44)	40, 100
Learning new routines	70.44 (30.22)	0, 100	80.95 (20.47)	30, 100
Independent (self-help skills)	82.73 (20.97)	30, 100	87.73 (21.58)	10, 100
Generally being ready for kindergarten	90.00 (15.27)	50, 100	85.45 (23.45)	10, 100
Parent Efficacy – overall mean	77.95 (18.51)	26.57, 100	82.76(15.25)	43.75, 100

Table 19

ANOVA of Parent Efficacy - Between Kindergarten Years

	SS	*df*	*Mean Square*	*F*	*Sig*
Managing own behavior	10.55	1	10.545	.016	.899
	28047.23	43	652.261		
	28057.78	44			
Peer relationships	432.00	1	432.004	.617	.436
	30804.95	44	700.113		
	31236.96	45			
Learning new things	296.82	1	296.824	.680	.414
	19635.09	45	436.335		
	19931.92	46			
Knowing who/how to ask for help	1289.31	1	1289.307	1.965	.168
	26896.74	41	656.018		
	28186.05	42			
Physically navigating school/classroom	6.67	1	6.667	.014	.908
	28566.67	58	492.529		
	28573.33	59			
Learning rules and expectations	166.35	1	166.352	.573	.452
	15386.38	53	290.309		
	15552.73	54			
Knowing/learning new routines	1214.31	1	1214.305	1.791	.188
	28476.61	42	678.014		
	29690.91	43			
Separation Anxiety	1469.57	1	1469.565	2.007	.164
	32217.39	44	732.213		
	33686.96	45			
Meeting the teacher	3.789	1	3.789	1.964	.170
	69.474	36	1.930		
	73.263	37			
Self-help skills	275.00	1	275	.607	.440
	19022.73	42	452.922		
	19297.73	43			
Being ready for kindergarten	210.64	1	210.643	.522	.474
	15745.46	39	403.73		
	15956.10	40			
Parental Efficacy – overall mean	347.91	1	347.909	1.134	.291
	17791.00	58	306.741		
	18138.91	59			

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$

Table 20

Descriptive and Correlations of Parent Efficacy and Outcomes

Variable	*n*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. Parent Efficacy	63	80.43	17.96	—									
2. Reading	46	70.00	19.55	.314*	—								
3. Verbal	46	76.96	18.72	.214	.243	—							
4. Math	46	66.96	17.75	.381**	.596***	.172	—						
5. Peers	46	71.52	21.18	.347*	-.011	.488***	-.005	—					
6. Following Directions	46	72.61	21.85	.367*	.333*	.346*	.325*	.548***	—				
7. Academic (scale)	43	71.86	13.28	.506***	NA	NA	NA	NA	NA	—			
8. Adjustment	47	1.62	1.12	-.416**	.024	.026	−.146	.059	-.046	-.034	—		
9. Behavior	46	1.53	.51	-.258†	-.030	-.209	-.088	-.426**	-.552***	-.381**	.283	—	
10. Social	46	1.44	.45	-.343**	.024	-.148	-.290†	-.374**	-.362**	-.377**	-.261	.356**	—

†$p \leq .10$. *$p \leq .05$. ** $p \leq .01$. *** $p \leq .001$

Table 21

Moderation Model

	B(SE)	β	*t*	*p*
Main effects				
Parent efficacy	.016(010)	.265	1.66	.106
Child worry (parent report)	-.015(.009)	-.300	-1.69	.100
Interaction				
Parent effects * Child worry	.000(.000)	-.132	-.802	.427

*Covariates included child sex, parent education, household income, and preschool experience.

Table 22

Linear Regression Analyses Examining the Influence of Parent Efficacy on Adjustment Outcomes

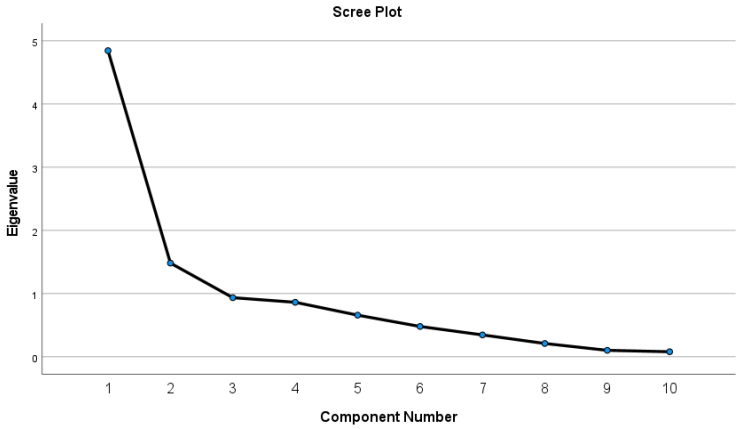
Outcomes	*n*	*B(SE)*	β	*t*	*p*
Reading	43	.313 (.178)	.277	1.76	.080
Math	43	.273 (.147)	.269	1.86	.070
Peers	43	.566 (.192)	.459	2.96	.005
Following Directions	43	.513(.191)	.402	2.68	.011
Academic	43	.427 (.102)	.597	4.19	<.001
Adjustment	44	-.022(.009)	-.370	-2.48	.018
Social	43	-.010 (.004)	-.395	-2.44	.019
Behavioral	43	-.009 (.005)	-.316	-1.96	.057

*Covariates included child sex, parent education, household income, and preschool experience

APPENDIX

Below are tests supporting factor analyses of novel measure of parent efficacy

Measure: Parent efficacy



- Bartlett's Test of Sphericity ($p < .001$)
- KMO of Sampling Adequacy = .640, approaching "middling" based on Kaiser and Rice's (1974) rule
- Parallel Analysis, eigenvalue comparisons
    - Factor I comparison: 4.85 > 2.10
    - Factor II comparison: 1.48 < 1.71

Factor Loadings for Parent Efficacy

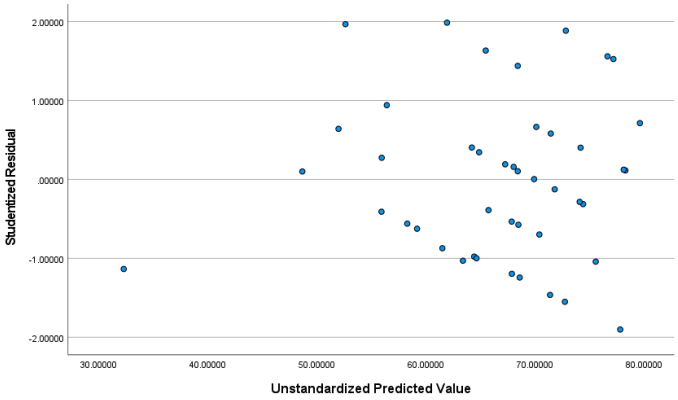
Items **"I felt confident in supporting my child" [in this worry]**	**Factor loading**
Physically navigating a new school (e.g., finding classroom, desk, cubby, bathroom, not "getting lost," etc.)	0.382
Learning the rules and expectations of school and teacher (e.g., knowing what to do and when to do it)	0.674
Managing own behavior (e.g., controlling own behavior, avoiding temper tantrums, following directions, etc.)	0.686
Learning new things (e.g., reading, writing, mathematics)	0.704
Peer relationships (e.g., meeting and making new friends, conflict management, finding someone to play with, etc.)	0.660
Knowing how/who to ask for help, make his/her needs known	0.786
Being separated from parents/caregivers	0.635
Toilet training and other self-help skills (e.g., tying shoes, zipping jacket. etc.)	0.552
Knowing new routines (e.g., lunch routines, bus riding, "how will I know" questions)	0.695
Generally being "ready" for kindergarten	0.703

Extraction Method: Principal Axis Factoring

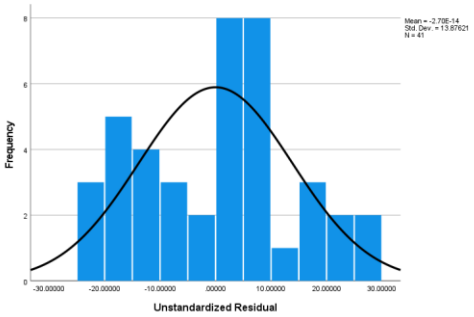
Below are tests of assumptions for each regression model.

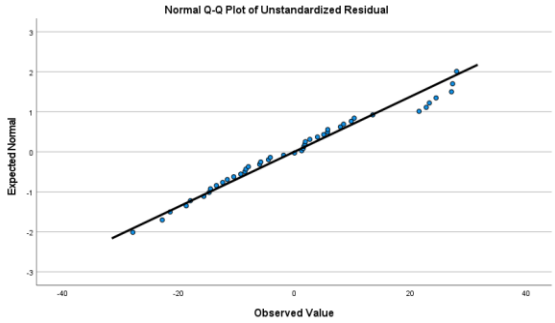
Model: Parent-report worry, associations with math outcome

Independence, homoscedasticity, and linearity assumptions check



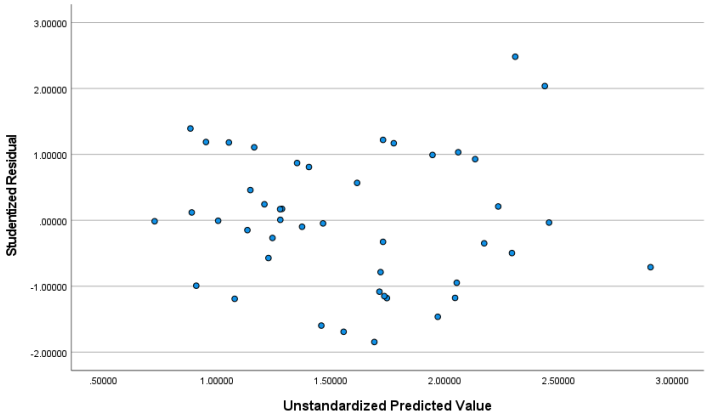
Normality and collinearity checks: Shapiro-Wilk Test Result: W(44) = .964, p = .187 | VIF = 1.27



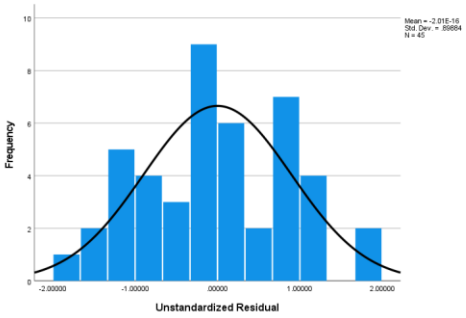


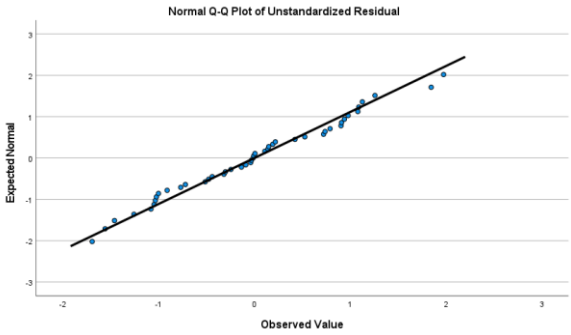
Model: Parent-report worry predicting adjustment

Independence, homoscedasticity, and linearity assumptions check



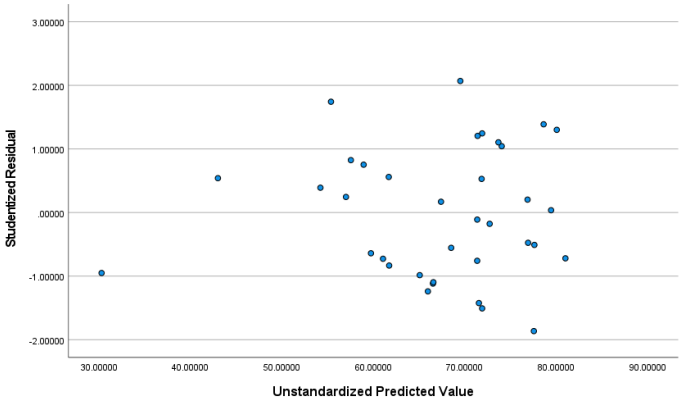
Normality and collinearity checks: Shapiro-Wilk Test Result: W(45) = .979, p = .591 | VIF = 1.09



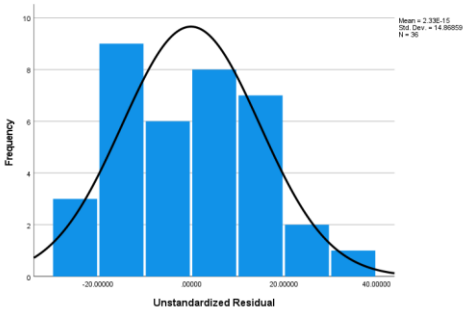


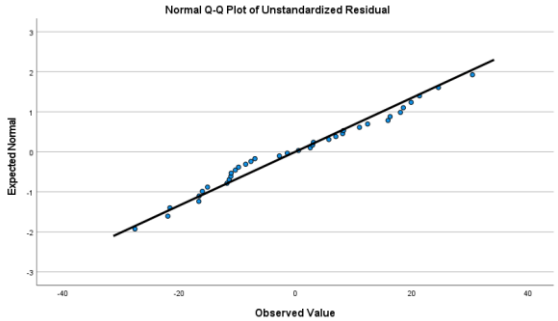
Model: Child-report worry, associations with math outcome

Independence, homoscedasticity, and linearity assumptions check



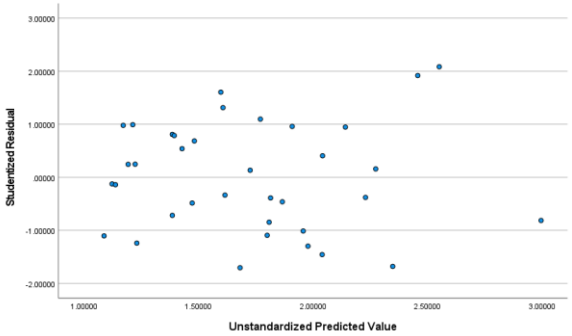
Normality and collinearity checks: Shapiro-Wilk Test Result: W(36) = .970, p = .43 | VIF = 1.11



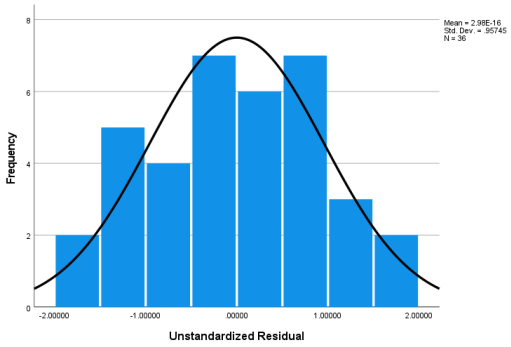


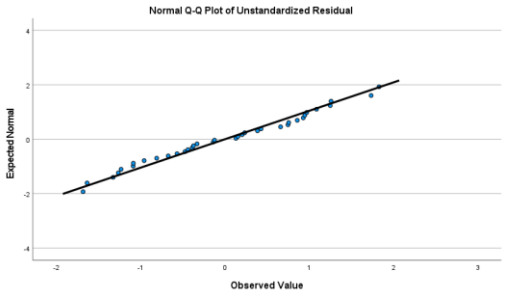
Model: Child-report worry, associations with adjustment outcome

Independence, homoscedasticity, and linearity assumptions check



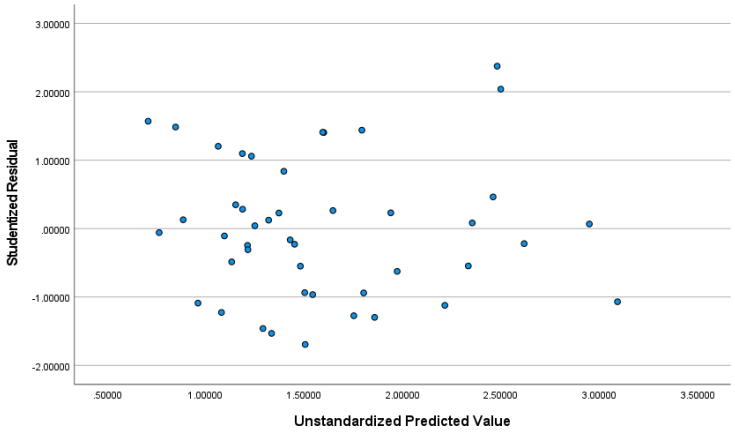
Normality and collinearity checks: Shapiro-Wilk Test Result: W(36) = .972, p = .470 | VIF = 1.11



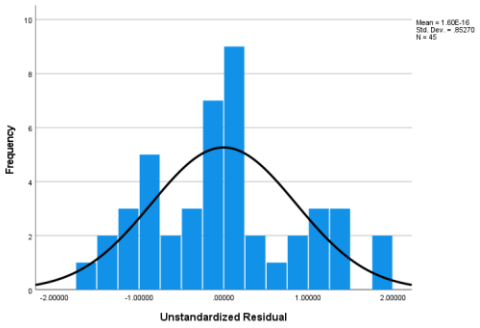


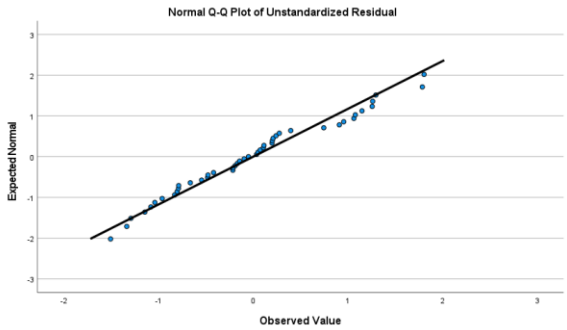
Model: Parent Efficacy, Child Worry Interaction Model

Independence, homoscedasticity, and linearity assumptions check



Normality and collinearity checks: Shapiro-Wilk Test Result: W(45) = .967, p = .230 | VIF = 1.33





SURVEY

Survey Flow

Standard: WELCOME/CONSENT (6 Questions)
Standard: SCREENER QUESTIONS (4 Questions)
Standard: TRANSITION PRACTICES SURVEY (PARENT) (15 Questions)
Standard: CHILD WORRY AND PARENT EFFICACY (42 Questions)
Standard: ADJUSTMENT (8 Questions)
Standard: FAMILY DEMOGRAPHICS AND BACKGROUND (PARENT) (21 Questions)
Block: KINDERGARTEN TRANSITION READINESS SURVEY (CHILD) (24 Questions)
Standard: Block 7 (1 Question)

Page Break

Start of Block: WELCOME/CONSENT

You and your child are being asked to participate in a research study. This research is being conducted to help understand children's and parents' experiences at the transition to kindergarten. When you are invited to participate in research, you have the right to be informed about the study procedures to help decide whether you want to consent to participate. If this form contains words, ideas, or phrases that are unfamiliar to you, please let the researchers know and they will provide more information. You and your child's participation is voluntary. You and your child do not have to be in the study if you do not want to. After your initial consent, if you or your child do not want to continue to be in the study, you or your child may stop at any time without penalty or loss of benefits to which you are otherwise entitled.

The goal of this study is to learn more about children's and parents' perceptions of worry, readiness and adjustment when children started kindergarten. The researchers are interested in understanding what young children identify as concerning and how parents view their own role in supporting children during the transition.

HOW LONG WILL MY CHILD AND I BE IN THE STUDY? Children and parents will be asked to fill out an online survey, which should take approximately 25 minutes to complete, total. The survey will be accessible immediately after consent.

WHAT ARE WE BEING ASKED TO DO?

Parent participants will be asked to complete an online questionnaire to provide information about transition activities, child worries, perception of child behaviors and emotions at the kindergarten transition, and family demographics. Parents will then be asked to ask their children to contribute to a child-answer portion of the survey. Parents will ask children to rate how big their worries were related to a range of school-related topics by selecting from increasing sized circles.

WILL I BE COMPENSATED?

There is no compensation.

PARTICIPATION IS VOLUNTARY

Participation in this research is voluntary. You may refuse participation and/or refuse to allow your child to participate at any time. You may also withdraw yourself or your child from the study at any time. Your child may also refuse to participate or withdraw themselves at any time. Neither you or your child will not be penalized in any way if you decide not to participate or to withdraw from this study.

CONFIDENTIALITY

You and your child's identity and participation will remain confidential. No names nor other information will be given to anyone outside of the research team. All records identifying participants will be maintained in a password-protected file on a password-protected hard drive. No other files with participant information will be maintained. Aggregated data from this research study will be published in peer-refereed journals.

Investigator Contact Information (Please contact us with any questions you have)

· Danielle Turley (816-519-4942; dngdk4@mail.missouri.edu)
413 Gentry Hall, University of Missouri, Columbia, MO 65211
·Louis Manfra (573-882-8455; manfral@missouri.edu)
401 Gentry Hall, University of Missouri, Columbia, MO 65211

If you want to talk privately about your rights or any issues related to your participation in this study, you can contact University of Missouri Research Participant Advocacy by calling 888-280-5002 (a free call), or emailing MUResearchRPA@missouri.edu

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CONSENT

I have read this consent form above and have been given the opportunity to ask questions. I agree to participate in this study and I give my permission for my child to participate in this study. I understand that participation is voluntary and I can withdraw myself or my child at any time without penalty or loss of benefits. I understand I will be informed of any significant new findings discovered during the course of this study that might influence my child's health, welfare, or willingness to continue participation in this study.

End of Block: WELCOME/CONSENT

Start of Block: SCREENER QUESTIONS

For this particular study, we are interested in parents and children who just completed kindergarten for the very first time during the 2020-2021 school year AND parents and children who are just beginning kindergarten during the 2021-2022 school year. Choose the one that best reflects your child's kindergarten status:

- ○ My child completed his/her kindergarten year during the 2020-2021 academic year.
- ○ My child will begin kindergarten during the 2021-2022 academic year for the first time.
- ○ Neither of the above accurately describe my child's kindergarten status.

Display This Question:

If For this particular study, we are interested in parents and children who just completed kindergar... = Neither of the above accurately describe my child's kindergarten status.

Thank you for your interest in helping with our study! Unfortunately, you do not qualify for this current study. Please consider contributing to future studies, though!

Skip To: End of Survey If Thank you for your interest in helping with our study! Unfortunately, you do not qualify for this... Is Displayed

Additionally, we are seeking the input of parents and children who attended **in-seat/in-person** school for at least part of their academic year. Which of the following best reflects your child's experience with in-seat school?

- ○ My child experienced in-seat kindergarten at least part of the 2020-2021 school year.
- ○ My child is now attending in-seat kindergarten for 2021-2022 school year
- ○ My child did/will not attend any in-seat kindergarten.

Display This Question:

If Additionally, we are seeking the input of parents and children who attended in-seat/in-person sch... = My child did/will not attend any in-seat kindergarten.

Thank you for your interest in helping with our study. Unfortunately, you do not quality for this current study. Please consider contributing to future studies!

Skip To: End of Survey If Thank you for your interest in helping with our study. Unfortunately, you do not quality for this... Is Displayed

End of Block: SCREENER QUESTIONS

Start of Block: TRANSITION PRACTICES SURVEY (PARENT)

Welcome to the survey!
This survey consists of two (2) parts.

1. **Parent Section**: This section will ask about (a) activities you may have done with your child to prepare for the transition into kindergarten, (b) potential worries your child may have had, (c) how your child adjusted to the start of kindergarten, and (d) family demographics.
2. **Child Section**: The last set of questions will ask you to read prompts to your child to obtain their responses to a list of typical worries.

Please make note: The survey will take about 20-30 minutes total. You can save and exit and return later to finish, if needed.

○ Click here to acknowledge you read the above and are ready to proceed.

Page Break

Display This Question:

If For this particular study, we are interested in parents and children who just completed kindergar... = My child completed his/her kindergarten year during the 2020-2021 academic year.

First, we'd like you to briefly explain your child's experience attending kindergarten during the 2020-2021 school.
Specifically, we are interested in the **pattern of virtual and in-person school across your child's kindergarten year**. *For example a child who attended Columbia Public Schools may explain, "virtual for 2 months, in-person for a month, virtual for 2 more months, and in-seat for the remainder of the year."*

_____

_____

_____

_____

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Page Break

A variety of activities and outreach efforts are often **initiated by the school or teacher** before kindergarten begins.

Which of these things were offered by your child's school or teacher **prior** to school starting?

- [ ] Kindergarten registration
- [ ] Kindergarten open house
- [ ] Classroom visits
- [ ] Kindergarten teacher home visits
- [ ] School-wide event hosted by the elementary school
- [ ] Parent meeting with kindergarten teacher
- [ ] Preschool records are shared with the kindergarten teacher
- [ ] Information about kindergarten sent home (either via email or mail)
- [ ] A personal call or letter from the kindergarten teacher before the first day of kindergarten
- [ ] Virtual welcome or virtual tour

Carry Forward Selected Choices from "A variety of activities and outreach efforts are often initiated by the school or teacher before kindergarten begins. Which of these things were offered by your child's school or teacher prior to school starting?"

Of the activities that were offered, which did **your child** participate?

- [ ] Kindergarten registration
- [ ] Kindergarten open house
- [ ] Classroom visits
- [ ] Kindergarten teacher home visits
- [ ] School-wide event hosted by the elementary school
- [ ] Parent meeting with kindergarten teacher
- [ ] Preschool records are shared with the kindergarten teacher
- [ ] Information about kindergarten sent home (either via email or mail)
- [ ] A personal call or letter from the kindergarten teacher before the first day of kindergarten
- [ ] Virtual welcome or virtual tour

Carry Forward Selected Choices from "Of the activities that were offered, which did your child participate?"

Of those activities your child participated, how effective were they in supporting your child's successful kindergarten transition?	Not effective at all	Slightly effective	Moderately effective	Very effective	Extremely effective
Kindergarten registration	○	○	○	○	○
Kindergarten open house	○	○	○	○	○
Classroom visits	○	○	○	○	○
Kindergarten teacher home visits	○	○	○	○	○
School-wide event hosted by the elementary school	○	○	○	○	○
Parent meeting with kindergarten teacher	○	○	○	○	○
Preschool records are shared with the kindergarten teacher	○	○	○	○	○

Information about kindergarten sent home (either via email or mail)	○	○	○	○	○
A personal call or letter from the kindergarten teacher before the first day of kindergarten	○	○	○	○	○
Virtual welcome or virtual tour	○	○	○	○	○

Display This Question:

If Of those activities your child particpated, how effective were they in supporting your child's su... = Moderately effective

Or Of those activities your child particpated, how effective were they in supporting your child's su... = Very effective

Or Of those activities your child particpated, how effective were they in supporting your child's su... = Extremely effective

If any were effective, in your opinion, what made these specific activities so effective?

_____

What could the school or teacher have done to improve your child's transition into kindergarten?

_____

Page Break

We are also interested in knowing which of these activities **you or another parent/caregiver** did with your child specifically to prepare him/her to begin kindergarten:

- ☐ Contact the kindergarten teacher about curriculum
- ☐ Contact the kindergarten teacher about child's specific needs or concerns
- ☐ Talk with child about what kindergarten would be like
- ☐ Read books together about kindergarten/school
- ☐ Arrange a visit to the school and/or to the school playground (not a school-sponsored event)
- ☐ Work on reading skills to prepare child for kindergarten expectations
- ☐ Work on math skills to prepare child for kindergarten expectations
- ☐ Work on following directions and listening skills to prepare for kindergarten expectations
- ☐ Work on controlling emotions to prepare for kindergarten expectations
- ☐ Work on peer/friendship skills by arranging play dates or enrolling in social groups to specifically prepare for kindergarten expectations
- ☐ Other (please specify) _____

Carry Forward Selected Choices - Entered Text from "We are also interested in knowing which of these activities you or another parent/caregiver did with your child specifically to prepare him/her to begin kindergarten:"

Of those activities you did with your child, how effective were they in supporting your child's successful kindergarten transition?	Not effective at all	Slightly effective	Moderately effective	Very effective	Extremely effective
Contact the kindergarten teacher about curriculum	○	○	○	○	○
Contact the kindergarten teacher about child's specific needs or concerns	○	○	○	○	○
Talk with child about what kindergarten would be like	○	○	○	○	○
Read books together about kindergarten/school	○	○	○	○	○
Arrange a visit to the school and/or to the school playground (not a school-sponsored event)	○	○	○	○	○
Work on reading skills to prepare child for kindergarten expectations	○	○	○	○	○
Work on math skills to prepare child for kindergarten expectations	○	○	○	○	○

Work on following directions and listening skills to prepare for kindergarten expectations	○	○	○	○	○
Work on controlling emotions to prepare for kindergarten expectations	○	○	○	○	○
Work on peer/friendship skills by arranging play dates or enrolling in social groups to specifically prepare for kindergarten expectations	○	○	○	○	○
Other (please specify)	○	○	○	○	○

Display This Question:

If Of those activities you did with your child, how effective were they in supporting your child's s... = Moderately effective

Or Of those activities you did with your child, how effective were they in supporting your child's s... = Very effective

Or Of those activities you did with your child, how effective were they in supporting your child's s... = Extremely effective

If any home activities were effective, in your opinion, what made them effective?

_____

In a typical week **prior to the start of kindergarten**, how often did you and your child engage in the following activities at home:	Never	1-2 times each week	3-4 times each week	Daily	Multiple times a day
Tell stories	○	○	○	○	○
Read books	○	○	○	○	○
Sing songs	○	○	○	○	○
Play musical instruments	○	○	○	○	○
Create art projects	○	○	○	○	○
Conduct science experiments	○	○	○	○	○
Explore nature	○	○	○	○	○
Build with blocks or other materials	○	○	○	○	○
Play board games	○	○	○	○	○
Child reads or pretends to read to adult	○	○	○	○	○

Do house chores	○	○	○	○	○
Practice reading or other early literacy skills (letter recognition, letter sounds)	○	○	○	○	○
Practice math or other early math skills (counting, measuring, comparing)	○	○	○	○	○
Other (please explain)	○	○	○	○	○

What activity or skill do you think helped your child the most with his/her transition into kindergarten?

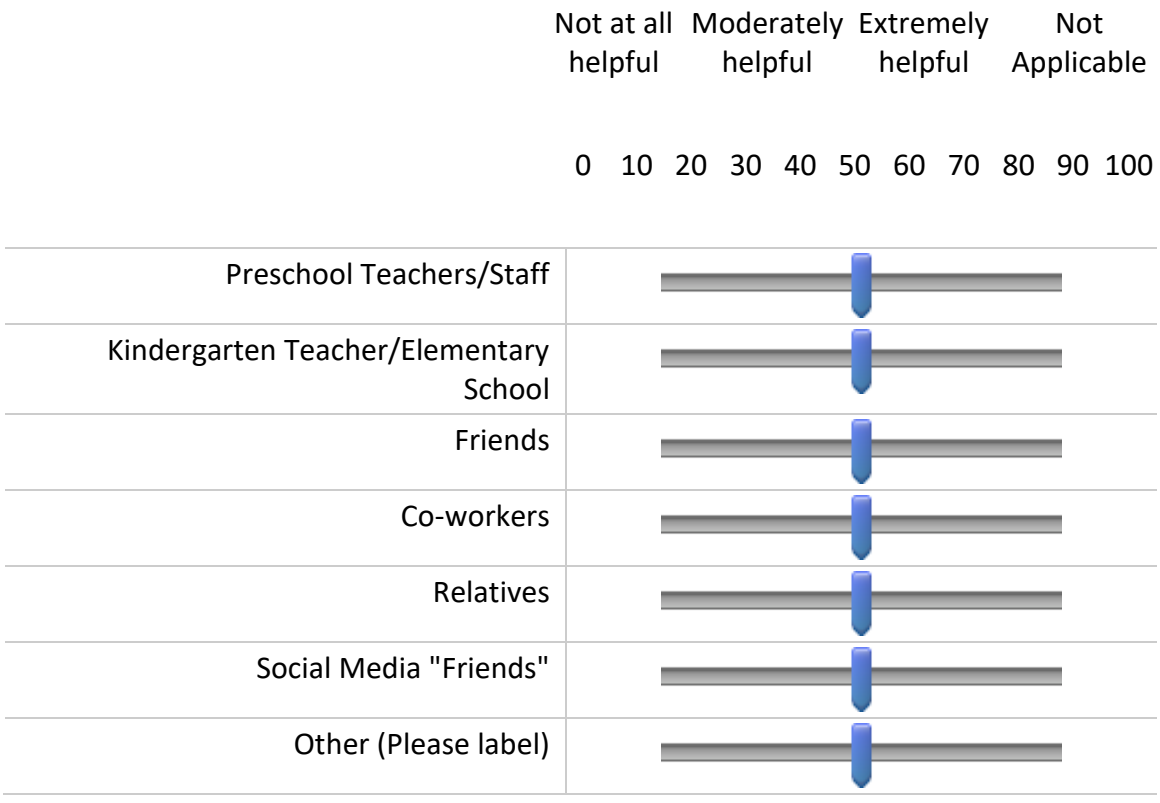
_____

Page Break

Please rank order what **you** considered when deciding what activities or events to do in order to prepare your child for kindergarten, with one (1) being the biggest priority/weight to your decisions.

_____ My judgement of what my child needs
_____ My own experiences as a child
_____ Advice from friends
_____ My child's expressed interest or worries
_____ Kindergarten School's/Teacher's recommendation
_____ Personal research via online resources
_____ Preschool/Preschool teacher recommendations
_____ Social media outreach (e.g., asking for advice online)

How helpful were the following people to assisting **you** (the parent/caregiver) feel confident in supporting your child transition in to kindergarten?



Page Break

End of Block: TRANSITION PRACTICES SURVEY (PARENT)

Start of Block: CHILD WORRY AND PARENT EFFICACY

This next set of questions asks about ten (10) potential concerns commonly reported by children before they enter kindergarten.

Potential Area of Concern: **Physically navigating a new school (e.g., finding classroom, desk, cubby, bathroom, not "getting lost," etc.)**

	Not at all 0 10 20 30 40 50 60 70 80 90 100 Very much
My chld was worried about this at the beginning of kindergarten.	
I felt confident in supporting my child.	
School/Teacher transition activities (e.g., open houses) helped alleviate this worry	
Activities we (parent/caregiver) did at home helped alleviate this worry	

Display This Question:

If Potential Area of Concern: Physically navigating a new school (e.g., finding classroom, desk, cub... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Physically navigating a new school (e.g., finding classroom, desk, cub... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what the school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

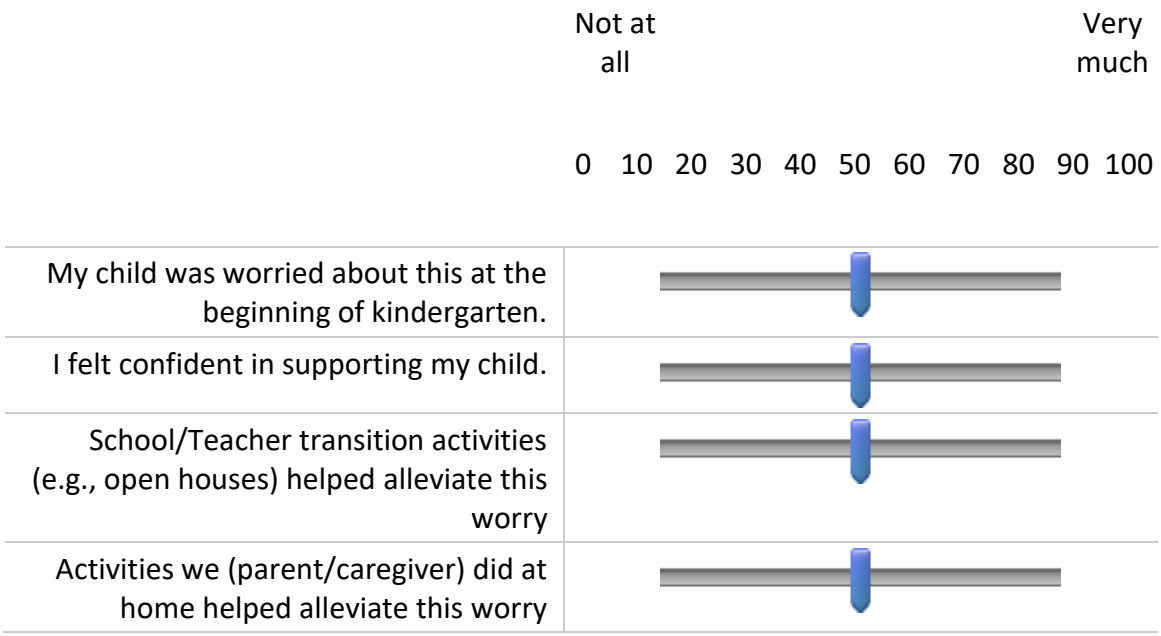
If Potential Area of Concern: Physically navigating a new school (e.g., finding classroom, desk, cub... [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Potential Area of Concern: **Learning the rules and expectations of school and teacher (e.g., knowing what to do and when to do it)**



Display This Question:

If Potential Area of Concern: Learning the rules and expectations of school and teacher (e.g., knowi... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Learning the rules and expectations of school and teacher (e.g., knowi... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

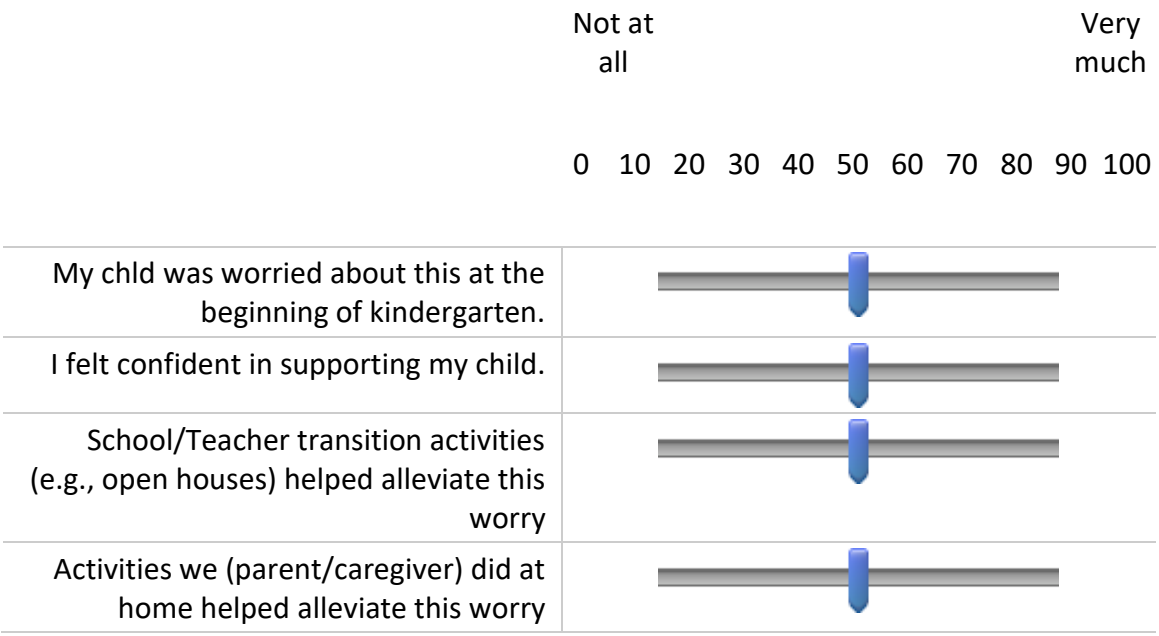
If Potential Area of Concern: Learning the rules and expectations of school and teacher (e.g., knowi... [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Potential Area of Concern: **Managing own behavior (e.g., controlling own behavior, avoiding temper tantrums, following directions, etc.)**



Display This Question:

If Potential Area of Concern: Managing own behavior (e.g., controlling own behavior, avoiding temper... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Managing own behavior (e.g., controlling own behavior, avoiding temper... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

If Potential Area of Concern: Managing own behavior (e.g., controlling own behavior, avoiding temper... [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Page Break

Potential Area of Concern: **Learning new things (e.g., reading, writing, mathematics)**

	Not at all 0 10 20 30 40 50 60 70 80 90 Very much 100
My chld was worried about this at the beginning of kindergarten.	
I felt confident in supporting my child.	
School/Teacher transition activities (e.g., open houses) helped alleviate this worry	
Activities we (parent/caregiver) did at home helped alleviate this worry	

Display This Question:

If Potential Area of Concern: Learning new things (e.g., reading, writing, mathematics) [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Learning new things (e.g., reading, writing, mathematics) [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

If Potential Area of Concern: Learning new things (e.g., reading, writing, mathematics) [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Potential Area of Concern: **Peer relationships (e.g., meeting and making new friends, conflict management, finding someone to play with, etc.)**

	Not at all — Very much 0 10 20 30 40 50 60 70 80 90 100
My child was worried about this at the beginning of kindergarten.	
I felt confident in supporting my child.	
School/Teacher transition activities (e.g., open houses) helped alleviate this worry	
Activities we (parent/caregiver) did at home helped alleviate this worry	

Display This Question:

If Potential Area of Concern: Peer relationships (e.g., meeting and making new friends, conflict man... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Peer relationships (e.g., meeting and making new friends, conflict man... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

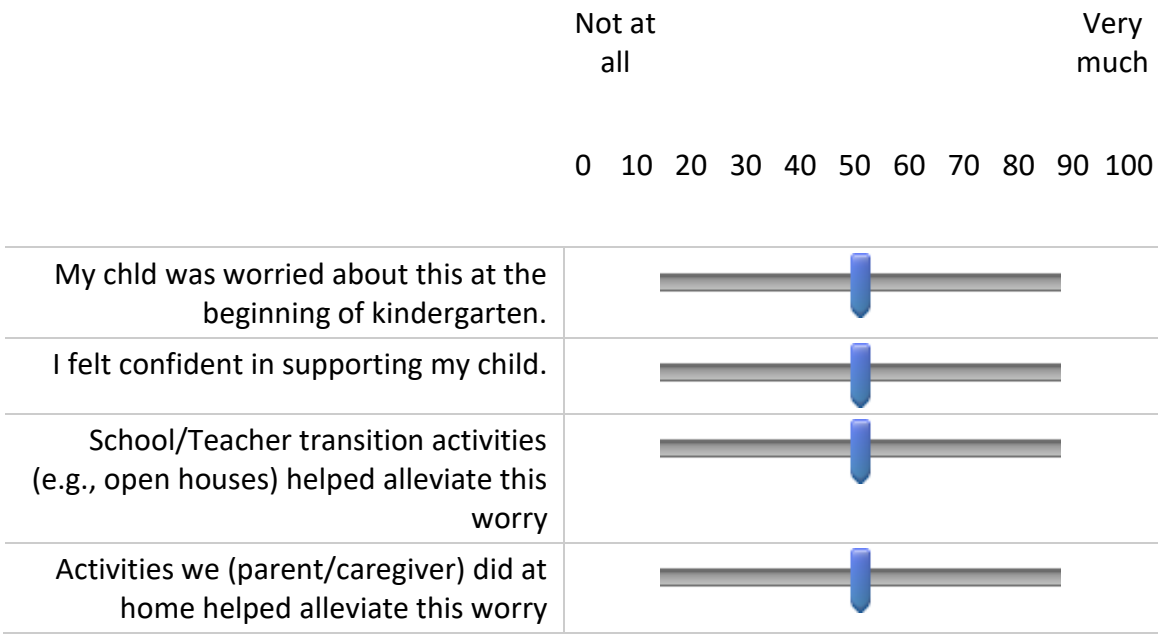
If Potential Area of Concern: Peer relationships (e.g., meeting and making new friends, conflict man... [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Potential Area of Concern: **Knowing how/who to ask for help, make his/her needs known**



Display This Question:

If Potential Area of Concern: Knowing how/who to ask for help, make his/her needs known [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Knowing how/who to ask for help, make his/her needs known [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

If Potential Area of Concern: Knowing how/who to ask for help, make his/her needs known [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Potential Area of Concern: **Being separated from parents/caregivers**

	Not at all 0 10 20 30 40 50 60 70 80 90 100 Very much
My chld was worried about this at the beginning of kindergarten.	
I felt confident in supporting my child.	
School/Teacher transition activities (e.g., open houses) helped alleviate this worry	
Activities we (parent/caregiver) did at home helped alleviate this worry	

Display This Question:

If Potential Area of Concern: Being separated from parents/caregivers [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Being separated from parents/caregivers [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

If Potential Area of Concern: Being separated from parents/caregivers [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 40

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Potential Area of Concern: **Toilet trainig and other self-help skills (e.g., tying shoes, zipping jacket. etc.)**

	Not at all 0 10 20 30 40 50 60 70 80 90 100 Very much
My child was worried about this at the beginning of kindergarten.	
I felt confident in supporting my child.	
School/Teacher transition activities (e.g., open houses) helped alleviate this worry	
Activities we (parent/caregiver) did at home helped alleviate this worry	

Display This Question:

If Potential Area of Concern: Toilet trainig and other self-help skills (e.g., tying shoes, zipping... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Toilet trainig and other self-help skills (e.g., tying shoes, zipping... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

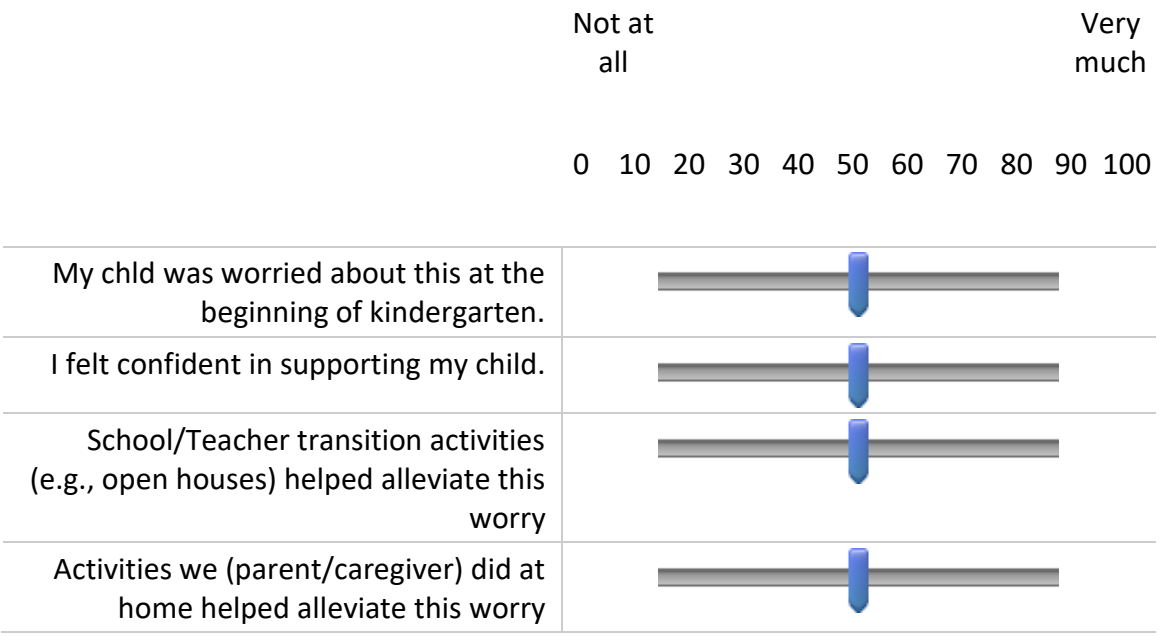
If Potential Area of Concern: Toilet trainig and other self-help skills (e.g., tying shoes, zipping... [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Potential Area of Concern: **Knowing new routines (e.g., lunch routines, bus riding, "how will I know" questions)**



Display This Question:

If Potential Area of Concern: Knowing new routines (e.g., lunch routines, bus riding, "how will I kn... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Knowing new routines (e.g., lunch routines, bus riding, "how will I kn... [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

If Potential Area of Concern: Knowing new routines (e.g., lunch routines, bus riding, "how will I kn... [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Page Break

Potential Area of Concern: **Generally being "ready" for kindergarten**

	Not at all 0 10 20 30 40 50 60 70 80 90 Very much 100
My chld was worried about this at the beginning of kindergarten.	
I felt confident in supporting my child.	
School/Teacher transition activities (e.g., open houses) helped alleviate this worry	
Activities we (parent/caregiver) did at home helped alleviate this worry	

Display This Question:

If Potential Area of Concern: Generally being "ready" for kindergarten [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] >= 60

Please indicate (1) what the school/teacher activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Display This Question:

If Potential Area of Concern: Generally being "ready" for kindergarten [School/Teacher transition activities (e.g., open houses) helped alleviate this worry] <= 40

Please indicate (1) what school/teacher activity you are thinking of and (2) why you feel so strongly that it was not helpful.

_____

Display This Question:

If Potential Area of Concern: Generally being "ready" for kindergarten [Activities we (parent/caregiver) did at home helped alleviate this worry] >= 60

Please indicate (1) what the home activity was and (2) how it was particularly helpful to alleviate this worry.

_____

Were there any other significant concerns your child expressed before going to kindergarten? If so, how did you support your child in that specific worry?

_____

End of Block: CHILD WORRY AND PARENT EFFICACY

Start of Block: ADJUSTMENT

This set of questions helps us understand how your child adjusted to his/her new environment and routines of kindergarten.

Sometimes children display different behaviors between school and home. Teachers often report these types of behaviors and skills to parents via email, phone, phone apps, reports, daily notes, and/or parent-teacher conferences.

We are interested in how often the following behaviors were reported to you and/or **<u>observed at the beginning</u>** of in-person kindergarten by both the teacher (at school) and you (at home).

	To my knowledge, my child's **teacher observed** this in my child **at school**			**I observed** this in my child **at home**		
	Not at all	Sometimes	Frequently	Not at all	Sometimes	Frequently

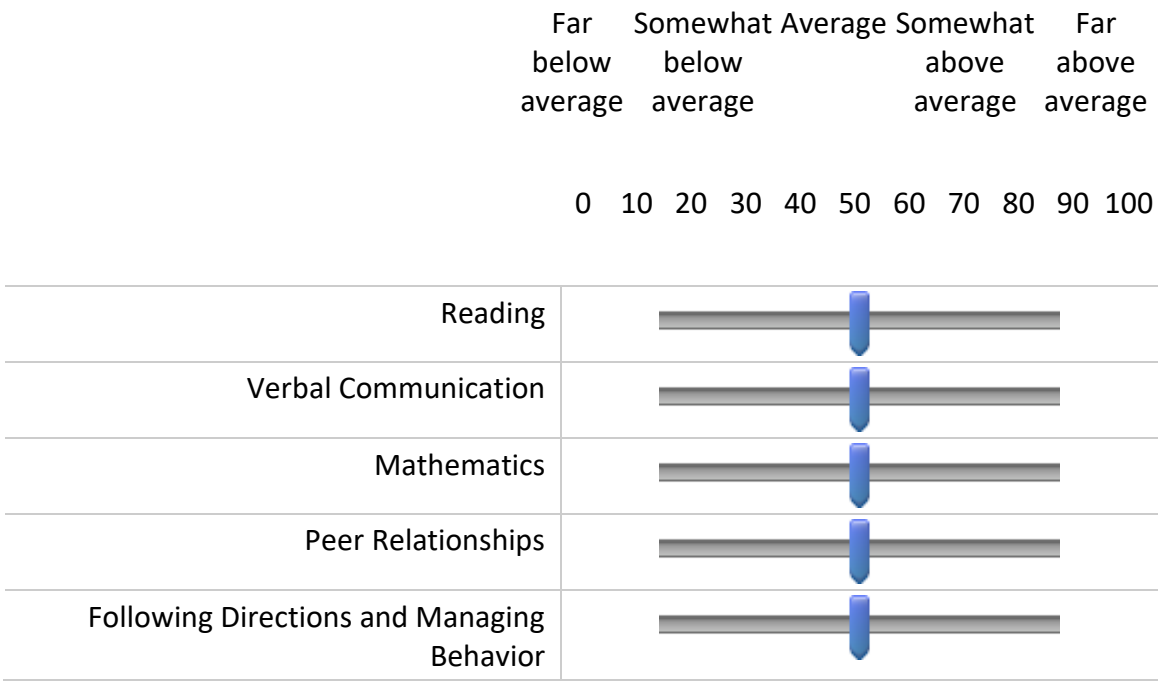
Temper tantrums	○	○	○	○	○	○
Annoy other children	○	○	○	○	○	○
Destructive behavior	○	○	○	○	○	○
Acts impulsively	○	○	○	○	○	○
Is overly active	○	○	○	○	○	○
Works until finished	○	○	○	○	○	○
Pays attention well	○	○	○	○	○	○
Has difficulty concentrating	○	○	○	○	○	○
Is restless and fidgety	○	○	○	○	○	○
Is invited by other children to play	○	○	○	○	○	○
Is eager to learn new things	○	○	○	○	○	○
Is accepted and liked by other children	○	○	○	○	○	○
Comforts other children who are upset	○	○	○	○	○	○
Works independently	○	○	○	○	○	○
Stands up for others	○	○	○	○	○	○

Tries to understand others	○	○	○	○	○	○

Display This Question:

If For this particular study, we are interested in parents and children who just completed kindergar... = My child completed his/her kindergarten year during the 2020-2021 academic year.

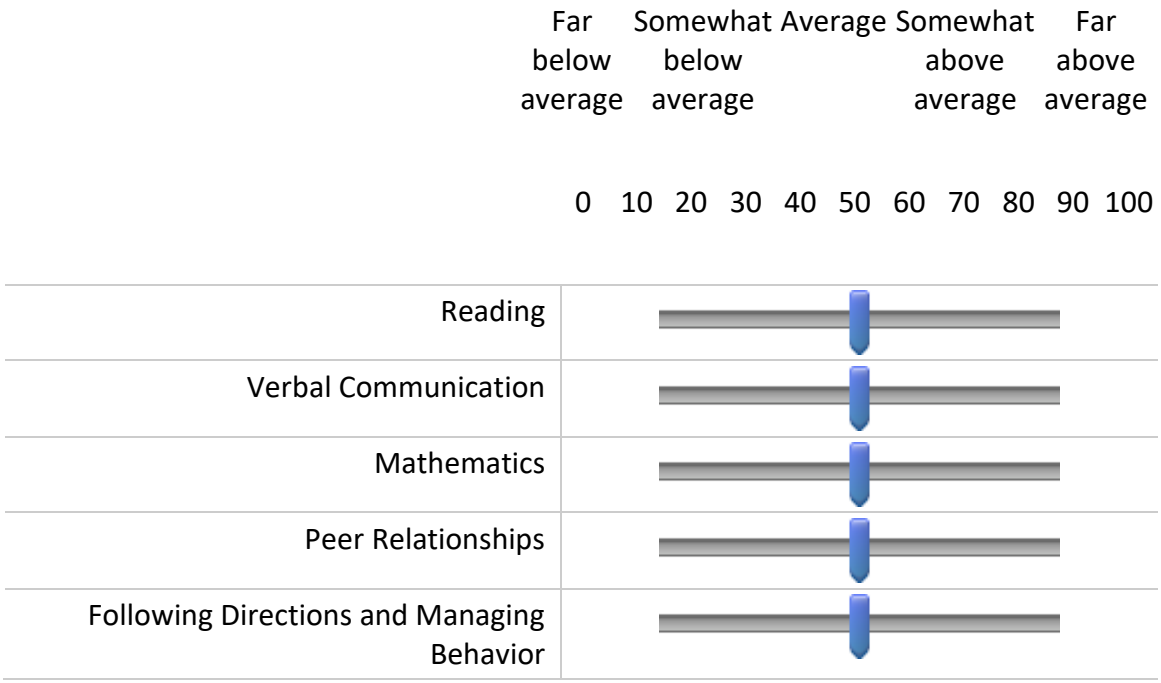
Based on school reports and/or parent-teacher conferences <u>during their kindergarten school year</u>, please indicate about where your child performed in the following categories:



Display This Question:

If For this particular study, we are interested in parents and children who just completed kindergar... = My child will begin kindergarten during the 2021-2022 academic year for the first time.

Based on kindergarten screening results and/or any early feedback from the kindergarten teacher, please indicate about where your child performs in the following categories:



Page Break

The following is a list of common adjustment behaviors.
Thinking back to the month leading up to and following the start of in-seat/in-person kindergarten, how well do the following behaviors describe **observed behavior change** before and after the start of kindergarten?

	Describes my child **in the weeks leading up to** in-person kindergarten...			Describes my child **in the weeks following the start of** in-person kindergarten		
	Not at all	Somewhat	Very much	Not at all	Somewhat	Very much

Sleep : increase or change in night wakings, bad dreams, arguing about going to bed, etc.	○	○	○	○	○	○
Separation: Increase or change in not wanting to be alone, separating from parent, clinginess, etc.	○	○	○	○	○	○
Social Skills (peers): Change in or difficulty with meeting new kids, getting along with peers, emotional about seeing or leaving visits with friends	○	○	○	○	○	○
Worry/Anxiety: Increase or change in hesitancy about trying new things or meeting new people, dependency on adults, etc.	○	○	○	○	○	○
Physical Wellness: Increase or change in physical complaints with seemingly no medical reason (e.g., headaches, stomach aches, other physical complaints)	○	○	○	○	○	○
Emotions: Noticeable change in emotionality (more or less emotional), tearful, scared or angry about going to school, generally unhappy	○	○	○	○	○	○

School **Liking:** Expressed dislike for school, avoided going to school, made negative comments about own ability or intelligence	○	○	○	○	○	○

Did you think your child was ready for in-seat/in-person kindergarten?

- ○ Definitely yes
- ○ Probably yes
- ○ Might or might not
- ○ Probably not
- ○ Definitely not

Display This Question:

If Did you think your child was ready for in-seat/in-person kindergarten? = Might or might not

Or Did you think your child was ready for in-seat/in-person kindergarten? = Probably not

Or Did you think your child was ready for in-seat/in-person kindergarten? = Definitely not

What behaviors did your child exhibit that make you think they were not ready to attend in-seat kindergarten?

_____

Is there anything else you would like to share, thinking about your child's experience as they started kindergarten?

_____

_____

_____

_____

_____

End of Block: ADJUSTMENT

Start of Block: FAMILY DEMOGRAPHICS AND BACKGROUND (PARENT)

This section will ask demographic questions about you, your child, and your family.

Your general area of the state where your child attended/attends kindergarten:

- ○ Kansas City area
- ○ St.Louis area
- ○ Columbia area
- ○ Springfield area
- ○ Other (pease specify) _____

Which best describes the region where your child attended kindergarten:

- ○ Rural
- ○ Suburban
- ○ Urban

Your relationship to the child:

- ○ Mother
- ○ Father
- ○ Step-mother
- ○ Step-father
- ○ Other caregiver (please specify):

_____

Your present age:

_____

Your highest, completed level of education:

- ○ Less than 7th grade
- ○ Junior High School/9th grade
- ○ Partial High School (10th or 11th grade)
- ○ High School Graduate or GED
- ○ Partial College (at least 1 year or technical training)
- ○ 2-year college or Associate's degree
- ○ 4-year college or Bachelor's degree
- ○ Graduate training or degree

Your current job:

_____

Annual **household** income:

- ○ Not currently working
- ○ Less than $10,000
- ○ $10,000-$19,999
- ○ $20,000-$29,999
- ○ $30,000-$39,999
- ○ $40,000-$49,999
- ○ $50,000-$59,999
- ○ $60,000-$69,999
- ○ $70,000-$79,999
- ○ $80,000-$89,999
- ○ $90,000-$99,999
- ○ $100,000+

How would you describe the family structure in which your kindergartner currently lives:

- ○ 2-parent, married household
- ○ 2-parent, cohabitating household (but not married)
- ○ 1-parent, divorced household
- ○ 1-parent, never-married household
- ○ other caregiver (please specify):

_____

Page Break

Has your family experienced any of the following? If so, how recently?

	No, we did not experience this	Yes, since the pandemic began	Yes, before the pandemic began
A parent/caregiver job loss	○	○	○
A parent/caregiver started new job	○	○	○
Significant income loss	○	○	○
Significant income increase	○	○	○
A parent/caregiver moved out	○	○	○
A parent/caregiver moved in	○	○	○
Family moved to a new home	○	○	○
Serious illness or injury impacting day-to-day life	○	○	○
New childcare arrangements (babysitter, childcare hours change, prolonged closings, etc.)	○	○	○
An adult in the house was ill with COVID-19	○	○	○
The child was ill with COVID-19	○	○	○

Page Break

The following questions are about your (2020-2021 or 2021-2022) kindergartner.

Child's sex:

- ○ Male
- ○ Female
- ○ Other (please specify)

_____

Child's birthday

- ○ MM/DD/YYYY (e.g., 06/07/2015)

_____

How do you identify your child's race? Select all that apply:

- [ ] American Indian or Alaska Native
- [ ] Asian
- [ ] Black or African American
- [ ] Native Hawaiian or Other Pacific Islander
- [ ] White
- [ ] Other race (please specify): _____
- [ ] Prefer not to answer

How do you identify your child's ethnicity?

- ○ Hispanic, Latino, or Spanish origin
- ○ Not Hispanic, Latino, or Spanish origin
- ○ Prefer not to answer

Child's number of siblings:

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ Other _____

The child's birth order:

- ○ 1st born
- ○ 2nd born
- ○ 3rd born
- ○ 4th born
- ○ Other: _____

Child's primary language:

- ○ English
- ○ Spanish
- ○ Other: _____

Child's secondary language (if any):

- ○ None
- ○ English
- ○ Spanish
- ○ German
- ○ Other: _____

Please indicate how much each grouping of statements describe your child. My child is...

	Does not describe my child at all				Describes my child moderately well					Describes my child very well
	0	10	20	30	40	50	60	70	80	90	100

insecure, fearful, afraid of a lot of things, lacks confidence, irritable, quick-tempered, short-attention span, easily distracted, forgets easily	
sociable, outgoing, makes friends easily, loves to be with other people, energetic, always on the move, a joy to be with, sweet, loving	
quick to learn, has a good memory, has good thinking abilities, a lot of imagination, interested in new things, curious, likes to ask questions	
organized, does things carefully, self-disciplined, hard worker, drive to do better, obedient, dependable, quick to learn, a good memory	
thoughtful of others, considerate, sensitive to others' feelings, obedient, self-disciplined, dependable and trustworthy, a joy to be with, sweet, loving	

Page Break

Which best represents your child's care during the 12 months prior to kindergarten? Select all that apply.

- [ ] Attended Head Start
- [ ] Attended another preschool full-time (e.g., most of a work day, Monday thru Friday)
- [ ] Attended another preschool part-time (e.g., less than a typical work day, or less than 5 days/week)
- [ ] Stayed home with parent or caregiver most of a typical work day and week
- [ ] Stayed home with a friend
- [ ] Other care (please specify): _____

Page Break

End of Block: FAMILY DEMOGRAPHICS AND BACKGROUND (PARENT)

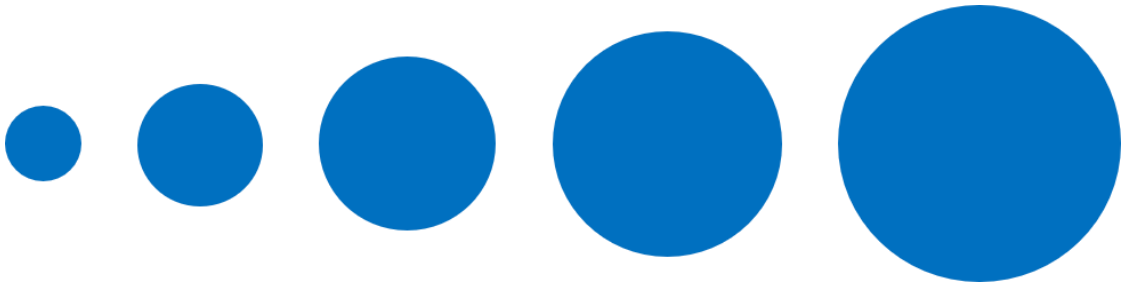
Start of Block: KINDERGARTEN TRANSITION READINESS SURVEY (CHILD)

This next section is for your kindergartener to share with you how they felt about starting kindergarten. For this section, we'd like you to read the prompts to your child and invite him/her to indicate their response. Each question will ask about how much worry was felt before they became a kindergartener. There will be two practice questions at the beginning. Please read the scripts as indicated in *italics* and reply as your child replies. Remember, you are able to save and return later to complete.

Page Break

Parent, please read this script to your child: *I'm going to read some things about kindergarten and ask how worried you felt about those things. If you felt a little or a small worry, then you are going to choose a small circle. If you felt a lot or a big worry, then you will choose one of the bigger circles.*

Let's try one together. What if you feel very worried about something - it's a big worry? Which circle might you choose?



Page Break

Display This Question:

If Parent, please read this script to your child: I'm going to read some things about kindergarten a... = Worry5 [On]

Or Parent, please read this script to your child: I'm going to read some things about kindergarten a... = Worry4 [On]

Or Parent, please read this script to your child: I'm going to read some things about kindergarten a... = Worry 3 [On]

Parent script: *You've got it! The bigger circles are for bigger worries and the small circles are for small worries.*

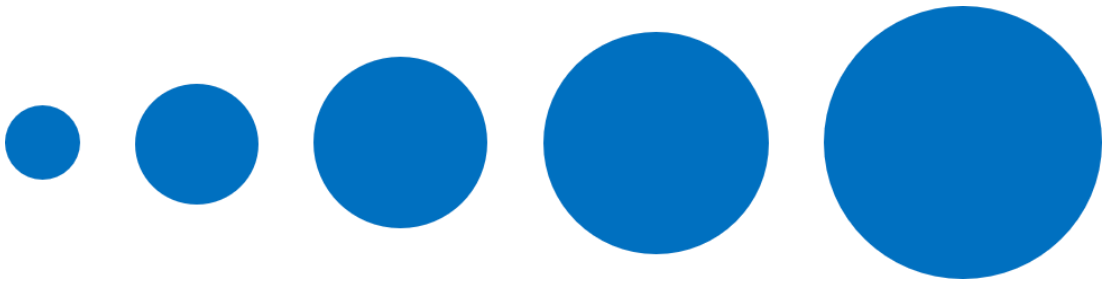
Display This Question:

If Parent, please read this script to your child: I'm going to read some things about kindergarten a... = Worry 1 [On]

Or Parent, please read this script to your child: I'm going to read some things about kindergarten a... = Worry2 [On]

Parent script: *Whoops! Remember, the small circles are for small worries and the big circles are for big worries.*

Parent script: *Let's try one more. What if you do NOT feel very worried about something - it's just a small worry? Which circle might you choose?*



Page Break

Display This Question:

If Parent script: Let's try one more. What if you do NOT feel very worried about something - it's ju... = Worry 1 [On]

Or Parent script: Let's try one more. What if you do NOT feel very worried about something - it's ju... = Worry2 [On]

Parent script: *You got it! The little circles are for little worries and the big circles are for big worries.*

Display This Question:

If Parent script: Let's try one more. What if you do NOT feel very worried about something - it's ju... = Worry5 [On]

Or Parent script: Let's try one more. What if you do NOT feel very worried about something - it's ju... = Worry4 [On]

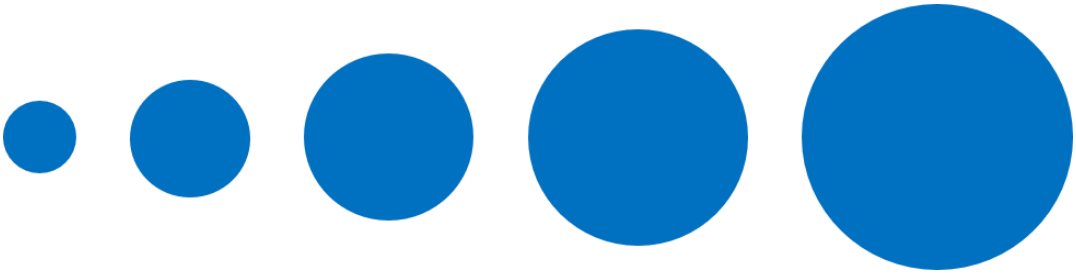
Or Parent script: Let's try one more. What if you do NOT feel very worried about something - it's ju... = Worry 3 [On]

Parent script: *Whoops! Remember little circles are for little worries and big circles are for big worries.*

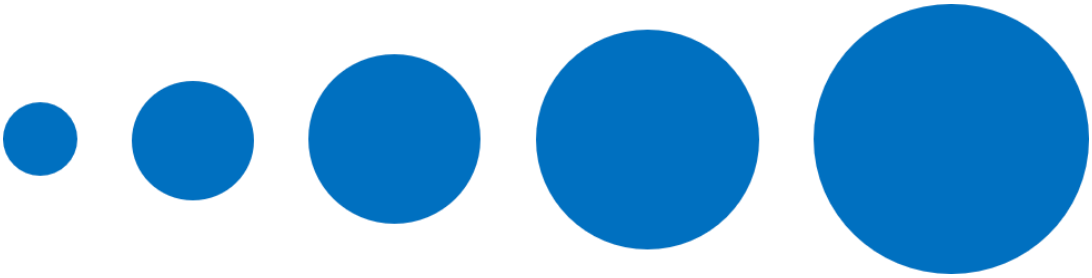
Page Break

Parent script: *The next questions are going to be all about how you felt* ***before*** *you started kindergarten. This time, there are no right or wrong answers - it's just about how you felt before you became a kindergartner.*

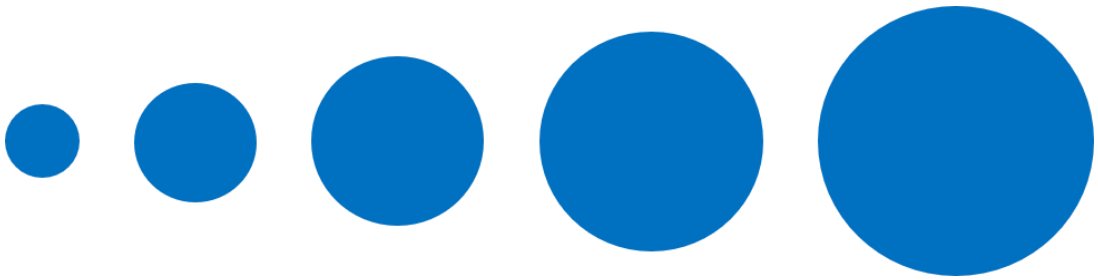
Parent script: *Before you started kindergarten, how much worry did you feel about meeting new kids and making new friends?*



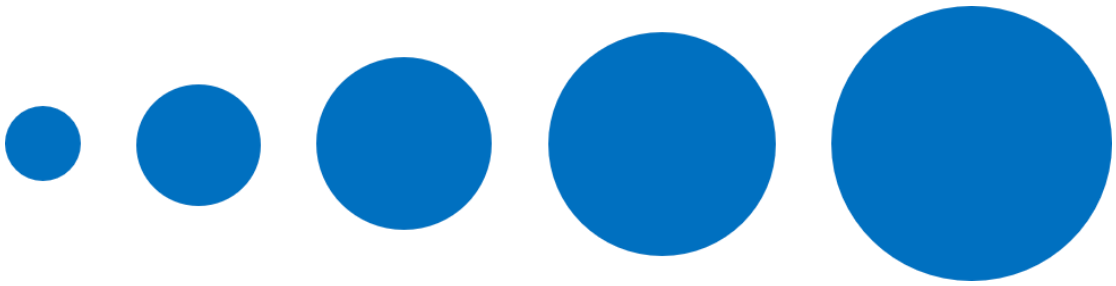
Parent script: *Before you started kindergarten, how much worry did you feel about finding someone to play with you in the classroom or on the playground?*



Parent script: Before you started kindergarten, how much worry did you feel about meeting your new kindergarten teacher?

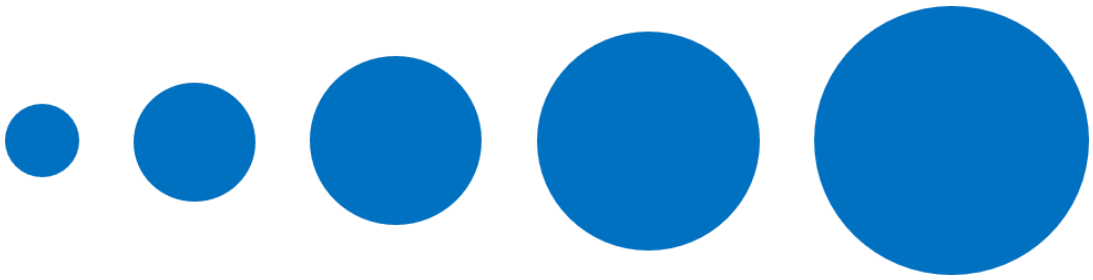


Parent script: *Before you started kindergarten, how much worry did you feel about asking your new kindergarten teacher or other adults for help?*

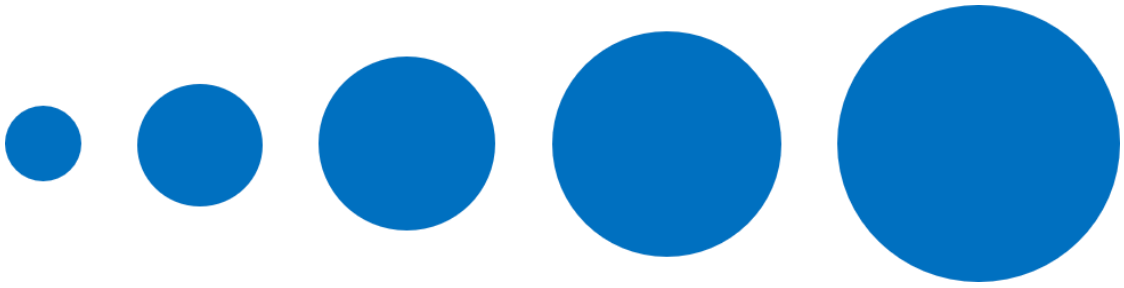


Page Break

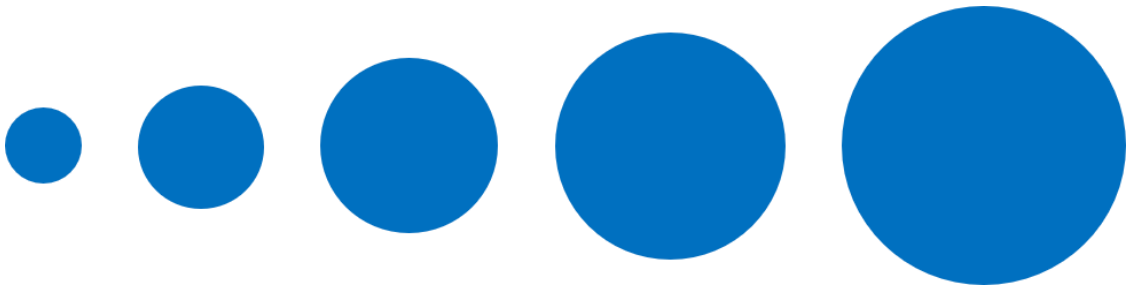
Parent script: *Before you started kindergarten, how much worry did you feel about learning how to read?*



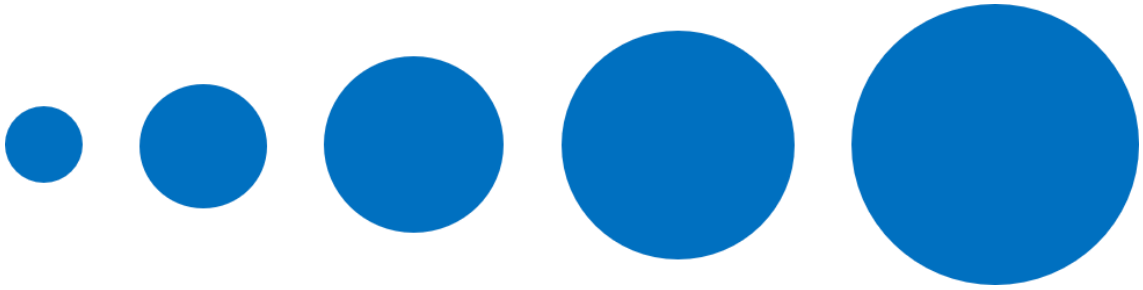
Parent script: *Before you started kindergarten, how much worry did you feel about learning the names and sounds of the letters of the alphabet?*



Parent script: *Before you started kindergarten, how much worry did you feel about learning to add and subtract?*



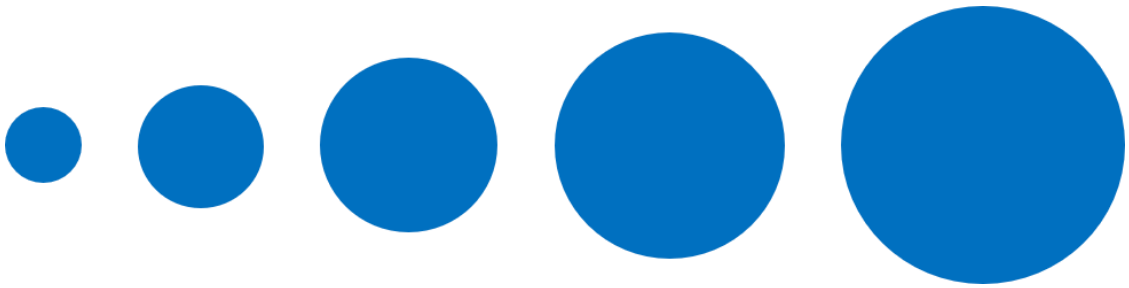
Parent script: *Before you started kindergarten, how much worry did you feel about counting and learning learning about numbers?*



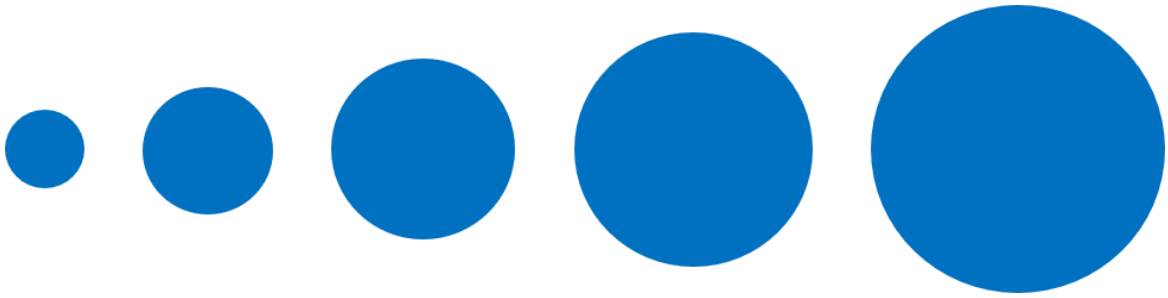
Page Break

Parent script: *You are doing so great! Just a few more questions about how you felt before you went to kindergarten!*

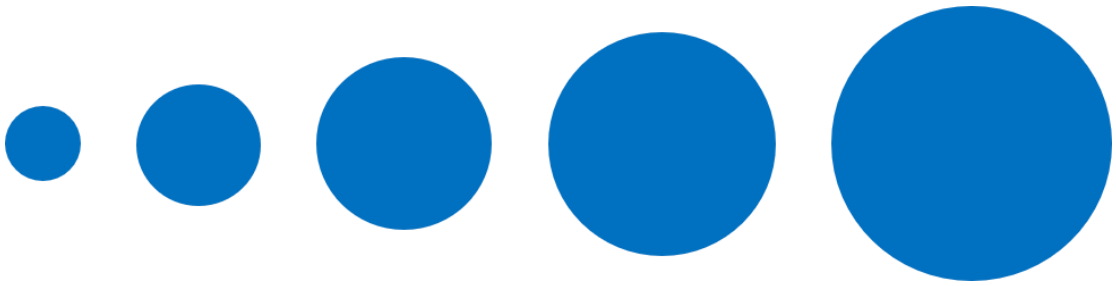
Parent script: *Before you went to kindergarten, how much worry did you feel when you thought about being away from your parent?*



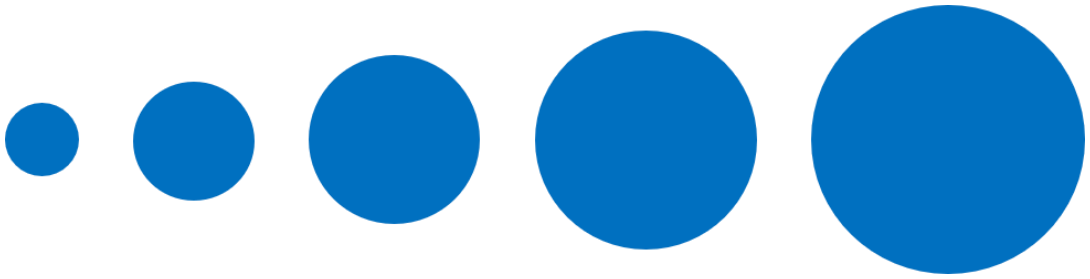
Parent script: *Before you went to kindergarten, how much worry did you feel when you thought about learning the rules and what to do at your new school?*



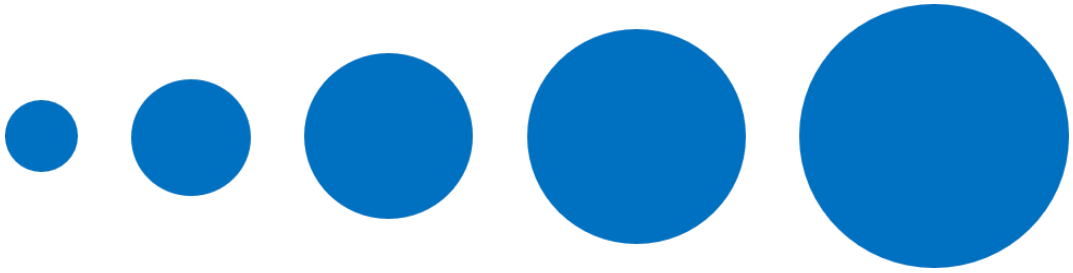
Parent script: *Before you went to kindergarten, how much worry did you feel when you thought about finding your classroom, the bathroom, or your desk?*



Parent script: *Before you went to kindergarten, how much worry did you feel when you thought about new routines like walking to the lunchroom or to the office or riding the bus by yourself?*



Parent script: All together, when you think about going to kindergarten for the very first time, how much worry did you feel?



Parent script: *Was there anything else that made you feel a little or a big worry before you went to kindergarten?*

_____

Thank you so much for helping answer some questions about kindergarten! You're all

done and now your parent is going to finish the survey.

Page Break

End of Block: KINDERGARTEN TRANSITION READINESS SURVEY (CHILD)

Start of Block: Block 7

You and your child have completed the survey.
Thank you so much for participating in our study!

End of Block: Block 7

VITA

Danielle Turley was born in Kansas City, Missouri. She attended the University of Missouri, Columbia for her academic career, earning a Bachelor's Degree in Social Work and Human Development and Family Studies. Later, she earned her Master's and Ph. D. in Human Development and Family Science with an emphasis in Early Childhood Development and a collateral area in Early Childhood Education. Her research broadly examines young children's experiences of life transitions (e.g., beginning formal schooling, experiencing foster care) and the proximal and distal impacts of various support systems during those transition experiences.