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Dominican, Salvadoran, and Chinese Immigrant Parents' Reasoning about School
Readiness Skills

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Abstract

Background. The importance of parental beliefs and practices related to children's school readiness skills is widely documented, but few studies explicitly focus on immigrant families. Further, no known studies have examined immigrant parents' beliefs about what skills children need to be successful in kindergarten.

Objectives. The overarching aim of this mixed-methods study was to investigate the school readiness beliefs of parents who are identified as immigrants in the United States. We examined the skills they prioritized as well as parents' reasoning about their prioritization.

Methods. Sixty-three immigrant parents from three different countries of origin—China, the Dominican Republic, and El Salvador—completed a Q-sort and subsequent interview about their school readiness beliefs as well as a measure of acculturation.

Results. Results indicated two school readiness belief profiles. Parents in the first profile primarily emphasized academic skills; parents in the second profile primarily emphasized learning-related skills. Parents' country of origin predicted their profile membership. Six themes emerged to explain parents' school readiness beliefs. Although parents in the two profiles prioritized different skills, parents' reasoning about the importance of select skills showed many similarities.

Conclusions. Study findings provide a nuanced view of immigrant parents' school readiness beliefs, which is particularly useful for early childhood educators to consider as they develop culturally responsive family-school partnerships.

Keywords: early childhood; school readiness; immigrants; Latino; Chinese

Dominican, Salvadoran and Chinese Immigrant Parents' Reasoning about School Readiness Skills

The early childhood years are critical in building the foundational skills for children to enter kindergarten primed for optimal academic success (Duncan et al., 2007). These skills, widely termed school readiness skills, are multi-dimensional and encompass physical well-being and motor development, social and emotional development, approaches to learning, language, and cognition and general knowledge (e.g., Barbarin et al., 2008; National Education Goals Panel, 1991). This multidimensional framework, which originally emerged in the National Educational Goals Panel's *Building a Nation of Learners* (1991), has served as the basis for school readiness research and has been incorporated to differing degrees into state-level early learning standards (e.g., Scott-Little, Kagan, & Frelow, 2006).

A large corpus of empirical work has documented group-based differences in children's school readiness skills, with studies predominantly focusing on racial/ethnic or socio-economic comparisons (e.g., Cheadle, 2008; Burchinal et al., 2011; Galindo & Sonnenschein, 2015). However, relatively few studies focus on children who are immigrants, a large and fast-growing population in the U.S. education system. Approximately one-quarter (27%) of U.S. children are first or second generation immigrants, which represents a 51% growth rate in the last 15 years. The majority of children who are immigrants come from Latino (54%) or Asian (17%) backgrounds (Child Trends, 2018).

Recently, several studies have found wide variability in the school readiness skills of children who are immigrants (Crosnoe & Fuligni, 2012; Ha, Ybarra, & Johnson, 2017;

Han, 2008; Han, Lee, & Woldfohl, 2012; Koury & Votruba-Drzal, 2014). In part, differences may be due to variations in parental beliefs and practices. The importance of parental beliefs and academic socialization practices for children's school readiness skills has robust empirical support (e.g., Barbarin et al., 2008; Elliott & Bachmann, 2018; Serpell, Baker, & Sonnenschein, 2005; Puccioni, 2015). For example, parents' school readiness beliefs are related to academic socialization practices, which in turn predict children's mathematics and reading scores in kindergarten (Elliott & Bachmann, 2018). A small but emerging body of research has also found positive relations between immigrant parents' academic socialization practices and children's school readiness skills (Ansari & Crosnoe, 2015; Huntsinger, Jose, Larson, Balsink Krieg, & Shaligram, 2000; Koury & Votruba-Drzal, 2014; Lahaie, 2008). Yet, only one known study conducted by Cycyk and Hammer (2020) has explicitly examined immigrant parents' beliefs about what skills children need to be successful in kindergarten (hereafter referred to as school readiness beliefs), with this study focused on the beliefs of Mexican parents. No studies have deeply examined the beliefs of immigrants from different racial or ethnic groups.

This study is grounded in two conceptual frameworks that posit how children's development is influenced by distal and proximal factors. In Ecological Systems Theory (Bronfenbrenner & Ceci, 1994), the child's microsystem, including parents and home context, is the most proximal influence on their development. Microsystems, and in turn, children's development, are influenced by more distal factors, such as parents' resources (e.g., income and education) and family's cultural values. Recently, Yoshikawa and Kalil's (2011) conceptual model elucidates how children's development in immigrant families is influenced by proximal and distal experiences both in their home and host

countries, such as conditions in their home countries before they immigrate, conditions and resources in their host country, and family processes (e.g., time and investment in children's education).

In the current study, we focused on the child's microsystem, namely immigrant parents' school readiness beliefs. We further examined what select parent characteristics were related to their beliefs. It was beyond the scope of this study to deeply investigate all of the constructs represented in Yoshikawa and Kalil's model. In this study, parents' connection to their home country was operationalized as their country of origin and their level of enculturation (i.e., identification with the culture of their home country; Oetting & Beauvais, 1991). Parents' experience in their host country (i.e., United States) was operationalized as parents' level of acculturation to the United States (i.e., identification with the dominant White American culture; Oetting & Beauvais, 1991), and their level of resources was represented by income and education.

Given the unique contexts of immigrants compared to non-immigrants, it is important not to generalize the findings of school readiness studies with non-immigrant families to immigrant families. For instance, research has shown differences between immigrant and non-immigrant parents in academic socialization practices (Huntsinger et al., 2000; Lahaie, 2008; Tamis-Lemonda, Sze, Ng, Kahana-Kalman, & Yoshikawa, 2013), parenting beliefs (Okagaki & Sternberg 1993), and self-efficacy beliefs (Yamamoto & Holloway, 2010). Additionally, since several studies have shown variability in children's skills and parenting practices within immigrant populations (e.g., Koury & Votruba-Drzal, 2014; Tamis-Lemonda et al., 2013), it is important not to assume that immigrant parents are a homogeneous group. In this vein, we investigated

the school readiness beliefs of parents who are identified as first or second generation immigrants from three countries of origin - China, the Dominican Republic, and El Salvador. We included both first and second generation immigrants because they typically show different levels of acculturation (e.g., Cuéllar et al., 1995), which was a variable of interest in this study.

We selected these specific countries for two primary reasons. First and practically speaking, immigration from these countries is prevalent and fast-growing in the United States, in general, as well as in the Mid-Atlantic region where this study was conducted (Zong & Batalova, 2019). Second, there are key differences in parent characteristics and children's development across Asian and Latino immigrants, which may be related to parents' school readiness beliefs. Children of Asian immigrants have significantly higher school readiness skills than children of Latino immigrants (Ansari & Crosnoe, 2015; Koury & Votruba-Drzal, 2014). Parents' socio-economic status (i.e., education, income, and employment) is positively related to children's achievement (e.g., Brooks-Gunn & Markman, 2005; Hoff, 2013). On average, immigrants from China have substantially higher levels of education and income than do immigrants from the Dominican Republic or El Salvador (Echeverria-Estrada & Batalova, 2020; Pew Research Center, 2018). Additionally, according to Yoshikawa and Kalil's (2011) conceptual model, home country conditions and the reasons why individuals immigrate may be related to children's development. Recent Chinese immigrants often immigrate to the United States to pursue employment opportunities, and those who are more affluent are likely to immigrate to pursue higher education (Costigan & Koryzma, 2011; Echeverria-Estrada & Batalova, 2020). Although Dominican and Salvadoran families

living in the United States are demographically similar in regard to parental education and income (Pew Research Center, 2018), recent immigrants to the United States from the Dominican Republic or El Salvador may come to the United States for different reasons. Dominicans typically immigrate to the United States for financial reasons (i.e., opportunities for income) (Zong & Batalova, 2018). While Salvadorans also leave their home country due to economic circumstances, many are fleeing violence due to civil unrest and crime (Menjivar & Gomez Cervantes, 2018).

As will be described, few studies have examined the school readiness beliefs of Asian and Latino parents, and none of these have specifically examined Dominican or Salvadoran parents' beliefs.

Parents' Beliefs about School Readiness Skills

Numerous studies, including large national samples (i.e., National Household Education Survey and the Early Childhood Longitudinal Study- Kindergarten and Birth Cohorts), have examined parents' beliefs about school readiness skills, including beliefs of parents from racial/ethnic minority backgrounds (Achhpal, Goldman, & Rohner, 2007; Barbarin et al, 2008; Belfield & Garcia, 2014; Cycyk & Hammer, 2020; Diamond, Reagan, & Bandyk, 2000; Kim, Murdock, & Choi, 2005; Peterson, Bruce, Patel, & Chamberlain, 2018; Piotrkowski, Botsko, & Matthews, 2000; Puccioni, 2015, 2018). In the majority of these studies, parents completed a Likert scale survey whereby they rated the importance of a select number of school readiness skills (Belfield & Garcia, 2014; Diamond et al., 2000; Kim et al., 2005; Peterson et al., 2018; Piotrkowski et al., 2000; Puccioni, 2015, 2018; for exceptions, see: Achhpal et al., 2007; Barbarin et al., 2008; Cycyk & Hammer, 2020). Overall, parents reported that all of the presented skills were

important, which may not be surprising given that parents may feel a pressure to indicate that all presented skills are valuable (i.e., social desirability bias). Academic (e.g., counting) and motor skills (e.g., uses pencils) were often rated as slightly lower in importance than language skills (e.g., communicates needs/wants), approaches to learning (e.g., curious), and social-emotional development (e.g., takes turns). While these studies serve as a strong basis of knowledge, the Likert scale methodology prohibits a deep understanding of parents' school readiness beliefs. Furthermore, the majority of these studies only probed for a limited number of skills (6-7), although the Early Childhood Longitudinal Study-Birth Cohort and Piotrkowski and colleagues (2000) expanded the number of skills (15 and 21, respectively).

Latino and Asian parents' beliefs. Several studies have specifically reported the school readiness beliefs of Latino and/or Asian parents (Achhpal et al., 2007; Barbarin et al., 2008; Diamond et al., 2000; Kim et al., 2005; Peterson et al., 2018). However, only Cycyk and Hammer (2020) explicitly examined beliefs of immigrant parents, and few studies provided information on parents' country/territory of origin. As such, the degree to which these findings can be generalized to beliefs of Chinese, Salvadoran, and Dominican immigrants is unknown. Prior to presenting school readiness belief findings, we begin with general information about Latino and Asian parents' cultural and educational beliefs.

Latino parents. Latino parents strongly value education and often come to the United States to provide their children with a better education (e.g., Cycyk & Hammer, 2020; Goldenberg, Gallimore, Reese, & Garnier, 2001; Reese, 2002). In general, Latino parents hold three inter-related core values that emphasize interdependence: *familismo*,

respeto, and *educación* (e.g., Aldoney & Cabrera, 2016; Calzada, 2010). *Familismo* refers to loyal, close and harmonious family relationships. *Respeto* centers on creating social harmony through exhibiting prosocial behavior and obedience. *Educación* focuses on teaching children to be moral and well-disciplined individuals. Latino parents believe these core values are the foundation to children's academic success (e.g., Reese, 2002). Researchers have documented that positive relations exist among Latino parents' educational aspirations, Latino adolescents valuing of *respeto* and *familismo*, and adolescents' effort in school, educational values, and educational achievement (Aretakis, Ceballo, Suarez, & Camacho, 2015; Ceballo, Maurizi, Suarez, & Aretakis, 2014).

While many of the aforementioned school readiness belief studies included Latino parents, only some studies separately report the beliefs of Latino preschool parents (Achhpal et al., 2007; Barbarin et al., 2008; Cycyk & Hammer, 2020; Diamond et al., 2000; Peterson et al., 2018). Three of these studies used an interview methodology and found that social-emotional skills, language and literacy skills and basic academic skills were most often mentioned as important school readiness skills by Puerto Rican parents, (Achhpal et al., 2007), Mexican mothers (Cycyk & Hammer, 2020), and (country of origin unspecified) Latino parents (Barbarin et al., 2008). Mexican immigrant mothers of toddlers also noted the importance of self-care skills, such as independent dressing and toileting (Cycyk & Hammer, 2020), which is likely due to the younger age of children. Other skills, such as self-regulation, motor skills, and creativity, were less often mentioned as important. More advanced academic knowledge (e.g., rhyming, reading a few words) was indicated as important by only one percent of parents in Barbarin et al. (2007) and not noted by parents in Achhpal et al.'s (2007) or Cycyk & Hammer's (2020)

studies. Studies by Peterson et al. (2018) and Diamond et al. (2000) are less informative given the design; parents completed a Likert-scale to indicate the importance of six or seven skills, respectively, and Latino parents reported all skills were important.

Asian parents. Chinese American parents, and Asian American parents more generally, hold high educational expectations for their children's schooling (e.g., Sy & Schulenberg, 2005; Yamamoto & Holloway, 2010). Chinese parents' views of the importance of education stem from Confucian beliefs that promote the importance of "gaining knowledge, internalizing social norms, being modest about success and ashamed of failure, displaying self-restraint and filial piety, and maintaining harmonious relationships with others" (Luo, Tamis-LeMonda, & Song 2013, p. 853). Chinese mothers attribute effort, motivation and persistence as critical in gaining knowledge (Kinlaw et al., 2001; Luo et al., 2013).

Only three known studies provide information on Asian parents' beliefs about school readiness, and none exclusively focused on parents of preschool children (Kim et al., 2005; Sy & Schulenberg, 2005; Zhang et al., 2008). Additionally, Sy and Schulenberg only examined parents' beliefs about three academic skills, so little can be drawn from this study about the scope of parents' school readiness beliefs. Kim, Murdock, and Choi (2005) analyzed the National Household Education Survey data and found that most Asian/Pacific Islander parents of children ages 3-8 years of age were likely to rate social skills and academic skills as fairly equal in importance. However, Zhang, Sun, and Gai (2008) found that 218 parents of kindergarteners living in China gave more importance to children's confidence and interest in learning, with lesser

importance given to academic skills. Note, however, it is unknown whether Chinese parents living in the United States share similar priorities.

Factors That May Influence School Readiness Beliefs

In addition to investigating immigrant parents' school readiness beliefs, we sought to understand what parental factors may relate to these beliefs. Specifically, in alignment with our theoretical framework, we focused on (a) parent's country of origin and acculturation (i.e., identification with the culture of their home country and the United States), and (b) resources, namely highest level of parental educational attainment (in either their home country or in the United States) and household income.

Country of Origin and Acculturation. No known studies have examined how parents' country of origin is related to school readiness beliefs. However, research, which often compares the beliefs of parents of color and White parents, has found that parents' race or ethnicity is associated with school readiness beliefs (Achhpal et al., 2007; Diamond et al., 2000; Kim et al., 2005; Puccioni, 2015, 2018; Sy & Schulenberg, 2005).

Because no known studies have examined the relation between parents' school readiness beliefs and acculturation, we draw on related studies about beliefs and practices of Latino parents of young children. In a study of Latino (primarily Mexican) parental schooling aspirations and expectations for their kindergarten children, Goldenberg and colleagues (2001) found no relation between beliefs and parents' acculturation. Yet, several studies suggest an association between acculturation and other parental beliefs or practices (Rodríguez & Olswang, 2003; Tamis-LeMonda et al., 2013; Yamamoto & Holloway, 2010). Interestingly, Tamis-LeMonda and colleagues (2013) found that the association between acculturation and parental practices differed depending on how

acculturation was represented. Mothers who spoke English to their children, a proxy measure showing greater acculturation to the United States, were more likely to teach advanced concepts to their preschool children compared to mothers who spoke Spanish. Yet, the number of years Latino immigrant parents had lived in the United States, another proxy measure, was not associated with parents' teaching behaviors.

Education and Income. Studies have shown an inconsistent relation between parents' educational attainment, household income, and school readiness beliefs. Kim et al. (2005) found that parents who placed less emphasis on academic skills compared to other school readiness skills had higher income and educational levels than parents who placed similar emphasis on academic and other school readiness skills. However, other studies found no relation between income, education, and school readiness beliefs (Barbarin et al., 2008; Piotrkowski et al., 2000; Puccioni, 2015).

Study Purpose

The current mixed-methods study adds to the field's understanding of school readiness beliefs in two important ways. First, to our knowledge, this study is the first to examine the school readiness beliefs of immigrant parents from different countries of origin. Second, this study contributes to a deeper understanding of parents' school readiness beliefs. Studies have predominantly used Likert scales that allow parents, in theory, to indicate that all skills are equally important. In contrast, the current study used a Q-sort methodology, which tasked parents with prioritizing a broad array of school readiness skills on a continuum of very to less important. Additionally, parents were interviewed to determine parents' reasoning about the importance of skills, which no previous studies have done.

Three research questions guided this study:

1. Which school readiness skills are prioritized by Chinese, Dominican, and Salvadoran immigrant parents?
2. If at all, to what degree are parents' resources (i.e., income and education) and culture (i.e., country of origin and acculturation) related to their school readiness beliefs?
3. What reasoning do parents provide about why select school readiness skills are more or less important for children's success in kindergarten?

The hypotheses for the two quantitative research questions (questions 1 and 2) are based on extant literature, albeit limited, of Latino and Asian parents. For our first research question, we hypothesized that parents would prioritize social-emotional skills and basic academic skills (e.g., knowing colors) over more advanced academic skills (e.g., reading words). We hypothesized other skills, such as motor skills, would be less important than social-emotional skills and basic academic skills. For our second research question, we hypothesized that parents would prioritize different school readiness skills based on country of origin, acculturation, parental education, and household income. No research has examined parents' reasoning about school readiness beliefs. Thus, the third qualitative research question is exploratory and inductively analyzed, and as such, no hypothesis was generated.

Method

Participants

Using purposive sampling, 63 parents of preschool children who identified as first or second generation immigrants from China ($n = 22$), Dominican Republic ($n = 19$), or

El Salvador ($n = 22$) participated in this study. Only one parent in the family was interviewed; the mother was typically interviewed ($n = 58$), although five fathers were interviewed. Table 1 reports the demographics of the full sample and for each of the three countries of origin.

On average, parents were approximately 35 years of age. Most ($n = 54$) were first generation immigrants who had resided in the United States for approximately 14 years. The majority of parents spoke both English and Chinese or Spanish with their children. There were no statistically significant group differences related to country of origin for (a) immigration generation status and (b) language(s) used with their children. Parents reported varying levels of education and annual income. Chinese parents had statistically significantly higher levels of education and income than Dominican or Salvadoran parents. Parents reported strong enculturation to their home country and moderate acculturation to the United States, which did not vary by country of origin. Aligning with extant research (e.g., Cuéllar et al., 1995), first generation immigrants were significantly more highly enculturated to their country of origin than second generation immigrants ($M = 99.89$, $SD = 13.57$ versus $M = 81.56$, $SD = 13.45$; $t(57) = 3.76$, $p > .001$), whereas second generation immigrants were more highly acculturated to the United States than first generation immigrants ($M = 95.33$, $SD = 20.43$ versus $M = 71.00$, $SD = 17.93$; $t(57) = 10.16$, $p > .01$).

Children's mean age was approximately 53 months (range: 36 – 59 months). No significant group differences emerged for child age. Although gender of children was equally distributed for the full sample, Dominican mothers were more likely to have sons and Salvadoran mothers were more likely to have daughters. Children, on average, had

one older sibling (range 0-4) but only approximately one-quarter of the children had younger siblings (range 0-2). Number of siblings did not differ by country of origin. Additionally, all children were enrolled in early care and education programs.

Compliance with Ethical Standards

Study procedures were approved by the authors' university institutional review boards. Prior to participating in data collection, all participants provided informed consent in the language of their preference.

Procedures

Parents were recruited via local early childhood educational programs (e.g., Head Start) and community organizations (e.g., churches, weekend language/cultural schools, restaurants). Wechat (social media platform) was also used to recruit Chinese parents. Parents participated in two one-on-one sessions, approximately one week apart with a trained interviewer. Interviews were conducted in Mandarin, Spanish, or English, depending on the parents' preference, with an interviewer fluent in that language. Parents completed the demographic questionnaire and acculturation measure during the first session and the Q-sort measure with follow-up interview during the second session. Interviews were audio recorded and transcribed. Interviews conducted in Mandarin or Spanish were then translated into English. English translations were then checked against the original Mandarin or Spanish transcription by a native Mandarin or Spanish speaker to determine accuracy.

Measures

The three measures used in the study were available in English, Spanish, and Mandarin. Consistent with recommended practices (Peña, 2007), all measures were translated and back translated by native speakers.

Demographics. We used an adapted version of the Center for Early Care and Education Research-Dual Language Learners (CECER-DLL) Child and Family Questionnaire developed by Hammer and colleagues (2020). The CECER-DLL is specific to Latino populations, so we modified question stems and responses to include options for our Chinese sample (e.g., China as country of origin, Mandarin as language spoken). The CECER-DLL is very lengthy, so we reduced the items to those that were pertinent to this study: parents' and children's age, generation status, length of time living in the United States, parents' educational level, family income, languages spoken in the home, and number of siblings.

Acculturation. We adapted the Acculturation Measure for Mexican Americans - II (ARSMA- II; Cuéllar et al., 1995) to be suitable for administration with Chinese, Dominican, and Salvadoran parents. The ARSMA-II is comprised of two subscales – Mexican Orientation and Anglo Orientation – that tap three factors: (a) language, (b) ethnic identity, and (c) ethnic interactions. We created different versions for Chinese, Dominican, and Salvadoran parents. Examples for language include “I enjoy speaking Spanish/Mandarin¹” and “I enjoy watching television or movies in English.” Examples for ethnic identity include “I enjoy cooking Dominican/ Salvadoran/ Chinese food” and “I celebrate traditional American holidays.” Examples for ethnic interactions include “My friends are other Latinos or Hispanics/Chinese” and “I associate and interact with

¹ The version for the Dominican and Salvadoran parents stated, “I enjoy speaking Spanish,” whereas the version for the Chinese parents stated, “I enjoy speaking Mandarin” and so forth for the other questions.

Americans/Anglos.” Parents rated each item on a five-point scale, which depending on the question, ranged from either (a) *not at all* to *all of the time* or (b) *none* to *all*.

Specifically, we treated acculturation as a bidimensional construct (Jones & Mortimer, 2014) where we computed a sum score for each of the subscales, which we termed Enculturation to Country of Origin (25 items; potential range: 25-125) and Acculturation to United States (23 items; potential range: 23-115). Internal consistency was strong as evidenced by Cronbach’s alpha scores of 0.90 for Enculturation to Country of Origin Subscale Items and 0.96 for Acculturation to United States Subscale Items.

School readiness skills. Parents completed a Q-sort task where they ranked 36 school readiness skills along a continuum of importance for being successful in kindergarten. These skills were developed based on the National Educational Goals Panel’s (1991) school readiness dimensions as well as empirical studies (Barbarin et al., 2008; Piotrkowski et al., 2000): (a) social-emotional (6 items; e.g., *gets along with others, takes turns*), (b) academic (8 items; e.g., *knows how to: count to 20, write name*), (c) language (5 items; e.g., *can communicate well in: Mandarin or Spanish, English; has good vocabulary*), (d) approaches to learning (8 items; e.g., *shows independence, eager to learn*), (e) school-related behaviors (4 items; e.g., *uses materials carefully, follows directions*), and (f) motor/self-help skills (5 items; e.g., *holds pencil to write, dresses independently*). Parents were instructed to place nine skills into each of four categories in relation to children’s success in kindergarten: very important, important, somewhat important, and less important. During the interview, parents were only asked to provide a rationale for the 18 skills that they placed in the very important and less important categories in order to limit participant fatigue.

Analytical Approach

We conducted our analyses in three steps. First, we conducted a Q-Factor Analysis to create Q-sort profiles to describe parents' school readiness beliefs (McKeown & Thomas, 1988). A principal component analysis (PCA) extraction with varimax rotation was selected for the Q-Factor Analysis. Components with loadings above .30 were retained and considered meaningful members of a particular profile (Tabachnick & Fidell, 2007). Second, we conducted logistic regression to predict Q-sort profile membership based on parental educational level, household income, country of origin, and acculturation. We initially included child age as a covariate since parents' school readiness beliefs are related to child's age (Belfield & Garcia, 2014; Piotrkowski et al., 2008). Child age was not significant ($p = .071$), so we removed it from the model for parsimony. All quantitative analyses were conducted with IBM SPSS version 24.

Third, to deepen our understanding of the profiles, we used inductive coding to analyze parents' open-ended responses about why select skills were prioritized as very or less important. The first author initially used in vivo coding to identify the reasons given for prioritizing each of the skills identified as strong indicators (see results) for profile membership (Saldaña, 2016). The third and fourth co-authors reviewed the in vivo codes to determine their representativeness. No changes in coding were noted. Next, the first and third authors separately analyzed the in vivo codes to develop emergent themes for each of the skills, and then these skill themes were further analyzed to develop broader themes (Saldaña, 2016; see Supplemental Table 1). At both theme development steps, discussions were held until consensus was reached.

Results

Prioritized Skills

To describe immigrant parents' school readiness beliefs (research question 1), we conducted Q-Factor Analysis to develop belief profiles. Data from 60 participants were included in the Q-Factor Analysis (data from 3 were missing). Eigenvalues and variance components for the potential factor solutions are presented in Table 2. Initially, eigenvalues for factor solutions up to 15 groups were above 1.0; however, adhering to Kaiser's rule of accepting factor solutions based on this eigenvalue cut-off point often produces inaccurate, over-factored results (Costello & Osborne, 2005). Therefore, a parallel analysis was used to compare the observed eigenvalues to simulated eigenvalues from randomly generated data of the same sample size (Hayton, Allen, & Scarpello, 2004; Horn, 1965). When the observed eigenvalue is greater than the simulated eigenvalue, a factor is typically retained as this indicates that this factor is functioning better than chance; the parallel analysis suggested retention of two groups.

When conducting a Q-Factor Analysis, it is important to consider interpretability of the factors alongside statistical criteria since smaller sample sizes in Q-sort studies may influence both the meaningfulness and statistical significance of the results (McKeown & Thomas, 1988). Therefore, the two-, three, and four-group solutions were compared descriptively. Based on interpretability of the groups, minimization of cross-loadings onto multiple groups, and group sizes, the two-group solution suggested by the parallel analysis was selected as the final solution.

In this solution, five participants failed to map significantly onto either group; therefore, the sample consisted of 55 parents for the final Q-Factor Analysis. A series of chi squared analyses and *t*-tests indicated that no statistically significant differences were

found for any demographic variables between participants who significantly loaded onto a profile versus those who did not, including country of origin ($\chi^2 (2, N=60) = 0.793, p = .673$), immigrant generation status ($\chi^2 (1, N=60) = 0.720, p = .396$), the number of years parents had lived in the United States ($t (53) = -.681, p = .499$), language(s) spoken ($\chi^2 (2, N=60) = 0.720, p = .396$), parent education ($\chi^2 (6, N=60) = 4.225, p = .646$), parent income ($\chi^2 (10, N=60) = 6.68, p = .755$), parent age ($t (57) = 1.533, p = .131$), child age ($t (58) = 0.399, p = .322$), child gender ($\chi^2 (1, N=60) = 0.496, p = .481$), parent's acculturation to the United States ($t (57) = -0.771, p = .444$), and parent's enculturation with their home country ($t (57) = -0.558, p = .552$).

Twenty-seven parents had primary membership in profile 1 ($n = 19$ Chinese, 3 Dominican, 5 Salvadoran), and 28 parents in profile 2 ($n = 2$ Chinese, 10 Dominican, 16 Salvadoran). Thirteen parents had significant cross-loadings in both profiles, but the profile with the strongest loading was chosen as the final membership for each parent.

Next, the average centered Q-sort responses were examined to assign names to the profiles. Centered scores above +1.00 or below -1.00 were considered strong positive or negative profile indicators; centered scores between an absolute value of .46 -.99 were considered to be moderate indicators. Table 3 provides positive and negative indicators for each profile. Based on these characteristics, profile 1 was named Learning-Related Skills, and profile 2 was named Academic Orientation. Parents in the Learning-Related Skills profile generally prioritized social-emotional skills and approaches to learning as of higher importance and academic skills as of lesser importance. Parents in the Academic Orientation profile generally prioritized academic skills as of higher importance and did not have a clear pattern of skills that were of lesser importance.

Parents' academic priorities typically represented basic knowledge (e.g., knows shapes, knows colors) but parents also occasionally indicated the importance of advanced knowledge (e.g., can read a few words).

Factors Related to Belief Profiles

To determine which parent and child factors predicted school readiness beliefs (research question 2), a binary logistic regression analysis was conducted with profile membership as the dependent variable. The coefficients represent the odds of being in the Learning-Related Skills profile with Academic Orientation serving as the comparison profile. The independent variables were country of origin (with China serving as the comparison category), parent education, household income, enculturation to their country of origin, and acculturation to the United States. The model was statistically significant, $\chi^2(6) = 27.65, p < .001$. The pseudo- R^2 coefficients indicated that the model accounted for approximately half of the variance related to group membership (Cox and Snell $R^2 = .41$; Nagelkerke $R^2 = .54$).

As shown in Table 4, parent education level, household income, enculturation to country of origin, and acculturation to the United States were not significant predictors of profile membership. Country of origin was statistically significant when comparing those from the Dominican Republic ($B = -3.34, SE = 1.30, p < .05$) and El Salvador ($B = -3.82, SE = 1.16, p < .01$) with those from China. The odds ratios indicated that being from the Dominican Republic and El Salvador was associated with a 96.5% and 97.8%, respectively, decrease in the odds of being in the Learning-Related Skills profile compared to being from China, while controlling for the other variables.

Reasoning

For each skill that was noted as a strong positive or negative indicator in the belief profiles (see Table 3), we qualitatively analyzed the reasons that parents provided for why these skills were endorsed as very or less important (research question 3). Overall, six themes emerged from parents' reasons. Although parents in the two profiles prioritized different skills, their reasoning about why specific skills were more or less important was often similar. The majority of themes captured reasoning of both profiles of parents and are organized according to level of importance.

Themes for very important skills. Three themes emerged for why parents found select skills to be very important.

Socially-oriented skills are important in society, the classroom, and for the individual (primarily Learning-Related Skills profile). Parents in both profiles, particularly in the Learning-Related Skills, described how specific socially-oriented skills were important for functioning in broader society, being a member of the classroom community, and meeting individual needs. Specifically, parents in both profiles described how *shows respect* is helpful in society, classrooms, and individually, while parents in the Learning-Related Skills profile also described the importance of *gets along with others*, *uses good manners*, and *expresses wants/needs*. We use the term socially-oriented skills because the skills relate to social interactions with others.

Showing respect. Parents in both profiles communicated that *showing respect* is important in broader society and has long-term implications. For instance, a Chinese parent in the Learning-Related Skills profile said, "You will have to be in touch with other people in society, so showing respect for others is important." A Dominican parent stated that *showing respect* "will help her for the rest of her life."

Parents also described how *showing respect* is important in a classroom community since these skills are necessary to develop relationships with peers and teachers. For instance, a Dominican mother in the Learning-Related Skills profile indicated that *showing respect* is important to develop a supportive teacher-student relationship: “If a kid doesn’t respect the teacher, I’m not saying that they publicly will not show respect for your kid, but you’ll just be another piece of the furniture in the classroom.” Further, parents in both profiles described how *showing respect* is beneficial for the individual child. For example, a Dominican mother in the Academic Orientation profile described how *showing respect* to others leads to being treated more kindly: “It just adds more value to him.”

Other socially-oriented skills. Parents in the Learning-Related Skills profile also talked about the importance of *getting along with others*, *using good manners*, and *expressing wants/needs* at the society, classroom, and individual levels. As an example at the societal level, a Salvadoran parent described how *using good manners* is important in all societal contexts and at all ages: “Who doesn’t want a child that says please and thank you and knows exactly how to say sir or ma’am. It’s correct to become a positive member of the society.” In regard to classroom impact, a Chinese mother stated how *getting along with others* is a critical skill in a classroom environment, which in turn influences the child’s attitude about school: “Because you spend majority of the day at school, need to get along with classmates very well, then you would find it interesting to stay.” Parents in the Learning-Related Skills profile also communicated how socially-oriented skills are related to favorable individual learning and affective outcomes for their children. For instance, a Dominican mother described how *using good manners* leads to

additional learning opportunities: “I think using good manners is a good gateway to being able to talk to other people. So if they can easily talk to other people, then they have a better opportunity to be able to interact and receive knowledge.” A Chinese mother described how children who can’t *get along with others* may end up isolating themselves and feeling sad.

Children need positive approaches to learning because learning isn’t easy (Learning-Related Skills profile). The majority of parents in the Learning-Related Skills profile indicated that three learning approaches, namely *eager to learn*, *perseveres in tasks*, and *self-confidence*, were very important school readiness skills. Parents described how *being eager to learn* is important for learning new things and for new possibilities. For example, one Salvadoran mother stated, “If you're eager to learn that means you're open to new things. So even though you might not know all the shapes or all the numbers, if you're eager to learn, that's something that’s teachable.” Parents also articulated how *persevering* and *self-confidence* helps children overcome challenges. For instance, a Chinese mother reasoned about *self-confidence*: “If she is not self-confident and lacks a sense of safety, she won’t be willing to do it or try. If you don’t try, you will never know the possibility. You need to keep trying. You will never make it if you are not self-confident.”

Communication is foundational (primarily Academic Orientation profile). The ability to communicate is a commonality of why parents in the Academic Orientation profile prioritized several school readiness skills: *communicating in English*, *knowing colors*, *name-writing*, and *holding a pencil*. The most apparent communication skill centered around children needing to *know English* to communicate. Although the vast

majority of parents in the Academic Orientation profile spoke primarily Spanish in the home, parents expressed that English is the language of classrooms and broader society. For instance, a Salvadoran mother described the importance of English in the classroom: “It may be that I find a kindergarten where someone speaks Spanish but that’s not guaranteed. What will be guaranteed is that all the teachers speak English and she needs to understand the language.” A Dominican mother also believed that “English is the language that will open many doors for him.” Immigrant parents were cognizant that their children who are living in the United States will need to use the English language in their schooling and that knowing English will offer them future opportunities.

Parents in the Academic Orientation profile indicated that *knowing colors* and *name-writing* represent functional communication skills that allow children to participate in activities. *Knowing colors* is important to be able to describe or distinguish objects, which may be needed to follow directions or accomplish learning tasks. Parents indicated that *name-writing* is a first step in written communication as well as allows the child to understand his/her place in the classroom. A Salvadoran mother shared, “When he sees a paper so he can say I did this and write his name, or when he sits down in a chair, for example, in kindergarten they put their name on the desk and know how to recognizing where is his seat.”

Themes for less important skills. Three themes emerged for why parents found select skills to be less important.

Timing matters (both profiles). Parents in both profiles expressed that timing is a critical reason why select skills are deemed less important for school success because the child either already possessed the skill or would be learning the skill in kindergarten or

later. Parents in the Academic Orientation profile prioritized two motor skills – *stacks blocks* and *jumps, kicks, throws*- as less important and commonly indicated that their children had already mastered these skills. Parents in both profiles also regularly noted that their children already knew how to *use scissors*. For parents in the Learning-Related Skills profile, there was a roughly even break-down in regard to whether the child would learn academic and motor skills that were deemed less important later or had already mastered the skill. These skills included *knowing colors and shapes, counting to 20, and holding a pencil*. For more difficult linguistic and cognitive skills that were deemed less important, namely *rhyming* (both profiles), *reading a few words* (Learning-Related Skills profile), and *finding patterns* (Academic Orientation profile), parents most commonly indicated that children would learn these skills in formal schooling.

Skills are negatively perceived (both profiles). Parents perceived some skills negatively, including being potentially dangerous. For instance, parents in both profiles regularly cited safety concerns with young children *using scissors*. *Jumps, kicks, throws* was a strong negative indicator for parents in the Academic Orientation profile. The most common reason was that this skill is indicative of challenging behavior. For example, a Salvadoran mother stated “That is a little like making a tantrum. That isn’t important or good.” Although not a common response, one Salvadoran parent in the Academic Orientation profile also commented that too much *curiosity* could lead children into trouble.

Parents’ also discussed how some skills were not critical for school success. This was a common response for *using scissors* (both profiles), *stacking blocks* and *jumping, etc.* (Academic Orientation profile), and *knowing shapes* (Learning-Related Skills

profile). For instance, one Chinese mother stated “I think using scissors is a very practical skill, which I think I don’t need to put much effort into practical skills.”

Skills are inherent to children (Academic Orientation profile). For two skills, namely being *curious* and *sitting still*, parents in the Academic Orientation profile commonly expressed they were less important because these were related to inherent traits of children. For instance, a Dominican mother commented on how *sitting still* is an unrealistic expectation for children: “Because they are children. The children have to move a lot. I say that if he is still, he is sick.”

Discussion

This study extends previous research on parents’ school readiness beliefs, a critical element in a child’s microsystem, in two ways. First, the study focuses on parents who are immigrants, which is a population that has been underrepresented in extant literature, and furthermore examines the variation in beliefs of parents from three different countries of origin. Second, the Q-sort methodology provided a rich accounting of parents’ beliefs by documenting how and why parents prioritized certain school readiness skills. Prior research has often used Likert-scale measures where parents indicated that a variety of skills are of roughly equal importance (e.g., Diamond et al., 2000; Puccioni, 2015).

Our study hypotheses were partially supported. In regard to our first hypothesis about which school readiness beliefs were prioritized, parents placed high priority on social-emotional skills (Learning-Related Skills profile) and basic academic skills (Academic Orientation), which was consistent with our hypothesis; however, inconsistent with our hypothesis, parents in the Learning-Related Skills profile also prioritized

approaches to learning. Our second hypothesis for the factors that predicted parents' beliefs was only minimally supported. Grounded in Yoshikawa and Kalil's (2011) conceptual model, we expected that culture (i.e., country of origin and acculturation) and resources (i.e., education and income) would be associated with immigrant parents' school readiness beliefs. However, only country of origin significantly predicted profile membership.

Parents in the Learning-Related Skills profile were more likely to be Chinese immigrants, whereas parents in the Academic Orientation were more likely to be Dominican and Salvadoran immigrants. However, it is important to note that country of origin was related to parent's education and household income. As found in national demographic trends (Pew Research Center, 2018), our sample of Chinese parents was more educated and had higher income than our Dominican or Salvadoran parents. Thus, parents' resources (i.e., income and education) may not have emerged as significant predictors due to their shared variance with country of origin.

Salvadoran and Dominican parents strongly prioritized *shows respect*, which is a key cultural value (e.g., Aldoney & Cabrera, 2016). However, Salvadoran and Dominican parents did not prioritize other social-emotional skills to the same degree as basic academic skills, such as knowing colors, shapes, names and sounds of letters, and counting to 20. Latino parents strongly value educational achievement as the vehicle for their children's success (e.g., Cycyk & Hammer, 2020; Reese et al., 2002), and they likely see these basic academic skills as foundational. These findings align with that of Barbarin et al (2008) and Piotrkowski et al. (2001) who found that Latino parents often reported basic academic knowledge was very important to school readiness. Further, the

Dominican and Salvadoran parents were primarily low-SES, and Kim et al. (2005) found that low-SES parents were more likely to prioritize academic skills compared to higher SES parents. Piotrkowski and colleagues (2001) posit that low-income parents may prioritize academic skills because of fear that their children may not receive adequate instruction in local schools and as such, they must prepare children to master these “concrete skills to help children adjust quickly and successfully to classroom demands” (p. 554). As such, this concern about school quality may be a potential reason why parents viewed basic academic skills as very important, although it is important to note that this conjecture was not directly supported by parents’ open-ended responses.

It may be somewhat surprising that Salvadoran and Dominican parents did not prioritize more social-emotional skills given that research has shown that Latino parents strongly value social-emotional skills as important school readiness skills (Achhpal et al., 2007; Barbarin et al., 2008; Cychk & Hammer, 2020). The qualitative data potentially provide several interpretations. First, the timing of skills was critically important to parents. That is, parents considered whether a child already had the skill or were likely to learn that skill in kindergarten. Given that social-emotional skills are deeply engrained in parents’ cultural values of familismo, respeto, and educación, parents may feel that children already have these skills and thus were less likely to prioritize them in relation to academic skills. Indeed, some research shows that young Latino children perform better on social emotional skills than their White peers (Galindo & Fuller, 2010). Second, Dominican and Salvadoran parents’ reasoning sheds some light on how parents see skills intersecting. Parents in the Academic Orientation profile described how children’s skills,

such as holding a pencil and communicating in English, are necessary to be a full academic and social member of classroom life.

Chinese parents typically prioritized social-emotional skills and approaches to learning as more important, whereas academic skills were less important. This finding aligns with work that shows that Chinese parents place equal or stronger emphasis on social-emotional skills, confidence, and motivation compared to academic skills (Kim et al., 2005; Okagi & Sternberg, 1993; Zhang et al., 2008). Additionally, Kim et al. (2005) also found that higher-income parents, which characterized our Chinese sample, were less likely to prioritize academic skills. Open-ended responses revealed that Chinese parents emphasized the importance of learning-related skills in society, the classroom, and individually and rooted their beliefs in the context of Confucian ideas of learning knowledge and social norms as well as maintaining harmonious relationships. For instance, similar to findings in Luo et al. (2013), parents in our study discussed how children's approaches to learning would allow them the fortitude to overcome learning challenges in order to gain knowledge. Thus, Chinese parents were likely viewing social-emotional skills and approaches to learning as foundational to academic success.

Importantly, some similarities in skill priorities and reasoning between the profiles also emerged. Both profiles prioritized *showing respect* for others as highly important and motor skills as of lesser importance (with exception of *holding pencil to write* which was very important to the Academic Orientation group), with very similar reasoning about the relative importance of the skills. Other studies have shown the high value that parents place on *showing respect* (Achhpal et al., 2007; Cycyk & Hammer, 2020). In the current study, parents in both profiles explained that *showing respect* is

critical to engaging in general society, being a member of the classroom community (which requires children to take turns and share), and being a happy individual.

The finding that parents viewed motor skills as of lesser importance than other skills, such as academic or social-emotional skills, also aligns with results from previous studies (Barbarin et al., 2008; Kim et al., 2005; Piotrkowski et al., 2001). In fact, Barbarin and colleagues (2008) found that less than five percent of parents mentioned motor skills as important school readiness skills. In the current study, parents explained that motor skills were of lesser importance because they were skills that could be learned in kindergarten (or later schooling) or they were skills that the child already mastered.

Limitations and Future Directions

Several limitations require mention which have important implications for future research. Our sample was constrained in important ways. First, characteristics of our sample limit generalizability. Parents' income and education were not equivalent across the three country of origin groups. As was expected from national trends, Chinese parents had significantly higher levels of education and income than the Dominican and Salvadoran parents. Studies have found inconsistent relations between SES and parents' school readiness beliefs (Barbarin et al., 2008; Puccioni, 2015). Future research should further explore this relation with parents who are immigrants by recruiting different immigrant groups of both higher and lower SES to examine similarities and differences across countries of origin as well as SES. Also, our sample was comprised primarily of first generation immigrants. Given this as well as our somewhat small sample size overall, we were not able to explicitly examine differences in beliefs related to generational status. Note we did investigate the relation between beliefs and

acculturation, which was significantly associated with generation status, and found no significant relation. Future research should explore variability of beliefs of first and later generation immigrants by considering factors beyond acculturation, such as experiences with U.S. schools. Additionally, all parents had children enrolled in prekindergarten programs, so we cannot generalize our findings to parents who may not enroll their children in early education programs. Children's attendance in early childhood education is associated with immigrant parents' practices (Ansari & Crosnoe, 2015; Belfield & Garcia, 2014). Future research should include parents whose children do not attend early childhood programs.

Second, several measurement issues present limitations. The acculturation measure used in the study (i.e., ARSMA-II) has not been validated for individuals from Salvadoran, Dominican, or Chinese backgrounds. Additionally, we did not collect data on numerous experiences or contexts that are highlighted as critical to the development of immigrant children based on the model by Yoshikawa and Kalil (2010). For instance, future research could elucidate first generation immigrant parents' personal schooling experiences in their home country and how those experiences intersect with their children's experiences in school in the United States to influence parents' school readiness beliefs. Last, because we did not collect data on children's skills, we were not able to examine the association between parents' beliefs and children's skills. Parental beliefs have been shown to be related to children's skill development with diverse samples (e.g., Barbarin et al., 2008; Puccioni, 2015), and future research should extend this investigation to immigrant families.

Implications for Practice

A critical element of culturally-responsive practice is for teachers to understand and value parents' beliefs and practices (e.g., Gay, 2002). When children sense an alignment between their home and school contexts, they feel welcomed in the classroom. Early childhood teachers should take time to engage parents in talking about which skills parents think are important as well as when they believe children should acquire these skills. Teachers can explicitly incorporate those beliefs into their practices, such as talking with children about the varying cultural ways that respect to adults and peers can be shown. They can also better understand what skills parents place more in the realm of the school's, versus the home's, authority. For instance, in the current study, parents expressed that some skills, such as finding patterns and rhyming, were skills that children would learn in school. These discoveries can lead to rich conversations about school-family partnerships. Teachers can speak with parents about why some school readiness skills are important for children's later academic success and how these skills are developed, including how parents can teach or reinforce these skills in the home context.

Conclusion

This mixed-methods study revealed patterns of school readiness beliefs of parents who are immigrants. Two distinct belief profiles emerged that was related to parents' country of origin. Interestingly, parents' reasoning was fairly similar across the profiles, particularly for the lesser important skills, and revealed that reasons often went below the surface. For example, academic skills were described as foundational for participating in the life of the classroom rather than simply facts to know. The articulation of why parents prioritize school readiness skills is particularly useful for educators to consider as they develop family-school partnerships.

References

- Aldoney, D., & Cabrera, N. J. (2016). Raising American citizens: Socialization goals of low-income immigrant Latino mothers and fathers of young children. *Journal of Child and Family Studies*, 25, 3607-3618.
- Ansari, A., & Crosnoe, R. (2015). Immigration and the interplay of parenting, preschool enrollment, and young children's academic skills. *Journal of Family Psychology*, 29, 382-393. doi: 10.1037/fam0000087.
- Achhpal, B., Goldman, J. A., & Rohner, R. P. (2007). A comparison of European American and Puerto Rican parents' goals and expectations about the socialization and education of pre-school children. *International Journal of Early Years Education*, 15, 1-13. doi.org/10.1080/09669760601106620
- Barbarin, O. A., Early, D., Clifford, R., Bryant, D., Frome, P., Burchinal, M., ... & Pianta, R. (2008). Parental conceptions of school readiness: Relation to ethnicity, socioeconomic status, and children's skills. *Early Education and Development*, 19, 671-701.
- Belfield, C., & Garcia, E. (2014). Parental notions of school readiness: How have they changed and has preschool made a difference?. *The Journal of Educational Research*, 107, 138-151. doi: 10.1080/00220671.2012.753863
- Brooks-Gunn, J., & Markman, L. B. (2005). The contribution of parenting to ethnic and racial gaps in school readiness. *The Future of Children*, 139-168.
- Burchinal, M., McCartney, K., Steinberg, L., Crosnoe, R., Friedman, S. L., McLoyd, V., ... NICHD Early Child Care Research Network (2011). Examining the Black-White achievement gap among low-income children using the NICHD Study of

- Early Child Care and Youth Development. *Child Development*, 82, 1404-1420.
doi: 10.1111/j.1467-8624.2011.01620.x
- Calzada, E. J. (2010). Bringing culture into parent training with Latinos. *Cognitive and Behavioral Practice*, 17, 167-175. doi: 10.1016/j.cbpra.2010.01.003
- Cheadle, J. E. (2008). Educational investment, family context, and children's math and reading growth from kindergarten through the third grade. *Sociology of Education*, 81, 1-31. doi: 10.1177/003804070808100101
- Child Trends. (2018). *Immigrant children*. Retrieved from
<https://www.childtrends.org/?indicators=immigrant-children>
- Costello, A., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation*, 10(7), 1-9
- Costigan, C. L., & Koryzma, C. M. (2011). Acculturation and adjustment among immigrant Chinese parents: Mediating role of parenting efficacy. *Journal of Counseling Psychology*, 58, 183-196. <https://doi.org/10.1037/a0021696>
- Crosnoe, R., & Fuligni, A. J. (2012). Children from immigrant families: Introduction to the special section. *Child Development*, 83, 1471-1476.
- Cuéllar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic journal of behavioral sciences*, 17, 275-304. doi: 10.1177/07399863950173001
- Cyck, L. M., & Hammer, C. S. (2020). Beliefs, values, and practices of Mexican immigrant families towards language and learning in toddlerhood: Setting the

- foundation for early childhood education. *Early Childhood Research Quarterly*, 52, 25-37. doi: /10.1016/j.ecresq.2018.09.009
- Diamond, K. E., Reagan, A. J., & Bandyk, J. E. (2000). Parents' conceptions of kindergarten readiness: Relationships with race, ethnicity, and development. *The Journal of Educational Research*, 94, 93-100. doi: 10.1080/00220670009598747
- Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., ... & Sexton, H. (2007). School readiness and later achievement. *Developmental Psychology*, 43, 1428-1466. doi: 10.1037/0012-1649.43.6.1428
- Elliott, L., & Bachman, H. J. (2018). Parents' educational beliefs and children's early academics: Examining the role of SES. *Children and Youth Services Review*, 91, 11–21. <https://doi.org/10.1016/j.childyouth.2018.05.022>
- Echeverria-Estrada, C. & Batalova, J. (2020). Chinese immigrants in the United States. Retrieved from <https://www.migrationpolicy.org/article/chinese-immigrants-united-states-2018>
- Galindo, C., & Fuller, B. (2010). The social competence of Latino kindergartners and growth in mathematical understanding. *Developmental Psychology*, 46, 579 -592. <https://doi.org/10.1037/90017821>
- Galindo, C., & Sonnenschein, S. (2015). Decreasing the SES math achievement gap: Initial math proficiency and home learning environments. *Contemporary Educational Psychology*, 43, 25-38. doi: 10.1016/j.cedpsych.2015.08.003
- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of Teacher Education*, 53, 106-116. doi: 10.1177/0022487102053002003

- Goldenberg, C., Gallimore, R., Reese, L., & Garnier, H. (2001). Cause or effect? A longitudinal study of immigrant Latino parents' aspirations and expectations, and their children's school performance. *American Educational Research Journal*, 38, 547–582. doi: 10.3102/00028312038003547
- Ha, Y., Ybarra, M., & Johnson, A. D. (2017). Variation in early cognitive development by maternal immigrant documentation status. *Early Childhood Research Quarterly*, 41, 184-195. doi: 10.1016/j.ecresq.2017.07.006
- Hammer, C.S., Cycyk, L.M., Scarpino, S., Sawyer, B.E., & Jury, K. (2020). Development of the CECER-DLL child and family questionnaire: A new tool for documenting the language and literacy experiences of Latino dual language learners. *International Journal of Bilingual Education and Bilingualism*. Advance online publication. <https://doi.org/10.1080/13670050.2020.1840507>
- Han, W. J. (2008). The academic trajectories of children of immigrants and their school environments. *Developmental Psychology*, 44, 1572–1590. doi: 10.1037/a0013886
- Han, W. J., Lee, R., & Waldfogel, J. (2012). School readiness among children of immigrants in the US: Evidence from a large national birth cohort study. *Children and Youth Services Review*, 34, 771-782. doi: 10.1016/j.childyouth.2012.01.001
- Hayton, J. C., Allen, D. G., & Scarpello, V. (2004). Factor retention decisions in exploratory factor analysis: A tutorial on parallel analysis. *Organizational Research Methods*, 7, 191-205. doi: 10.1177/1094428104263675

- Hoff, E. (2013). Interpreting the early language trajectories of children from low-SES and language minority homes: implications for closing achievement gaps. *Developmental Psychology*, 49, 4-14.
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 30, 179-185. doi: 10.1007/BF02289447
- Huntsinger, C. S., Jose, P. E., Larson, S. L., Balsink Krieg, D., & Shaligram, C. (2000). Mathematics, vocabulary, and reading development in Chinese American and European American children over the primary school years. *Journal of Educational Psychology*, 92, 745-760. doi: 10.1037//0022-0663.
- Jones, N., & Mortimer, A. (2014). Measuring acculturation with the ARSMA-II: Bidimensional analysis increases accuracy as frequency of use increases over time. *Hispanic Journal of Behavioral Sciences*, 36, 387-412. doi: 10.1177/0739986314548025
- Kim, J., Murdock, T., & Choi, D. (2005). Investigation of Parents' Beliefs about Readiness for Kindergarten: An Examination of National Household Education Survey (NHES: 93). *Educational Research Quarterly*, 29(2), 3-17.
- Kinlaw, C. R., Kurtz-Costes, B., & Goldman-Fraser, J. (2001). Mothers' achievement beliefs and behaviors and their children's school readiness: A cultural comparison. *Journal of Applied Developmental Psychology*, 22, 493-506. doi: 10.1016/S0193-3973(01)00090-9
- Koury, A. S., & Votruba-Drzal, E. (2014). School readiness of children from immigrant families: Contributions of region of origin, home, and childcare. *Journal of Educational Psychology*, 106, 268-288. doi: 10.1037/a0034374

- Lahaie, C. (2008). School readiness of children of immigrants: Does parental involvement play a role? *Social Science Quarterly*, 89, 684-705. doi: 10.1111/j.1540-6237.2008.00554.x
- Luo, R., Tamis-LeMonda, C. S., & Song, L. (2013). Chinese parents' goals and practices in early childhood. *Early Childhood Research Quarterly*, 28, 843-857. doi: 10.1016/j.ecresq.2013.08.001
- McKeown, B., & Thomas, D. (1988). *Q methodology*. Newbury Park, CA: Sage.
- Menjivar, C., & Gomez Cervantes, A. (2018). *El Salvador: Civil war, natural disasters, and gang violence drive migration*. Retrieved from <https://www.migrationpolicy.org/article/el-salvador-civil-war-natural-disasters-and-gang-violence-drive-migration>
- National Education Goals Panel. (1991). *The national education goals report: Building a nation of learners*. Washington, DC: Author.
- Oetting, E. R., & Beauvais, F. (1991). Orthogonal cultural identification theory: The cultural identification of minority adolescents. *International Journal of the Addictions*, 25(sup5), 655-685.
- Okagaki, L., & Sternberg, R. J. (1993). Parental beliefs and children's school performance. *Child Development*, 64, 36-56. doi: 10.1111/j.1467-8624.1993.tb02894.x
- Parmar, P., Harkness, S., & Super, C. M. (2008). Teacher or playmate? Asian immigrant and Euro-American parents' participation in their young children's daily activities. *Social Behavior and Personality: An International Journal*, 36, 163-176. doi: 10.2224/sbp.2008.36.2.163

Peña, E. D. (2007). Lost in translation: Methodological considerations in cross-cultural research. *Child Development*, 78, 1255-1264. doi: 10.1111/j.1467-8624.2007.01064.x

Peterson, J., Bruce, J., Patel, N., & Chamberlain, L. J. (2018). Parental attitudes, behaviors, and barriers to school readiness among parents of low-income Latino children. *International Journal of Environmental Research and Public Health*, 15, 188-196. Doi: 10.3390/ijerph15020188

Pew Research Center (2018). *Education levels of U.S. immigrants are on the rise*. Retrieved from <https://www.pewresearch.org/fact-tank/2018/09/14/education-levels-of-u-s-immigrants-are-on-the-rise/>

Piotrkowski, C. S., Botsko, M., & Matthews, E. (2000). Parents' and teachers' beliefs about children's school readiness in a high-need community. *Early Childhood Research Quarterly*, 15, 537-558. doi: 10.1016/S0885-2006(01)00072-2

Puccioni, J. (2015). Parents' conceptions of school readiness, transition practices, and children's academic achievement trajectories. *The Journal of Educational Research*, 108, 130-147. doi: 10.1080/00220671.2013.850399

Puccioni, J. (2018). Parental beliefs about school readiness, home and school-based involvement, and children's academic achievement. *Journal of Research in Childhood Education*, 32, 435-454. doi: [10.1080/02568543.2018.1494065](https://doi.org/10.1080/02568543.2018.1494065)

Reese, L. (2002). Parental strategies in contrasting cultural settings: Families in Mexico and "El Norte." *Anthropology & Education Quarterly*, 33, 30-59. doi: 10.1525/aeq.2002.33.1.30

- Rodríguez, B. L., & Olswang, L. B. (2003). Mexican-American and Anglo-American mothers' beliefs and values about child rearing, education, and language impairment. *American Journal of Speech-Language Pathology*, 12, 452-462. doi: 10.1044/1058-0360(2003/091)
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). London: Sage Publications.
- Scott-Little, C., Kagan, S., & Frelow, V. (2006). Conceptualization of readiness and the content of early learning standards: The intersection of policy and research? *Early Childhood Research Quarterly*, 21, 153–173. doi: 10.1016/j.ecresq.2006.04.003
- Serpell, R., Baker, L., & Sonnenschein, S. (2005). *Becoming literate in the city: The Baltimore early childhood project*. Cambridge, UK: Cambridge University Press.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5). Boston, MA: Pearson.
- Tamis-LeMonda, C. S., Sze, I. N. L., Ng, F. F. Y., Kahana-Kalman, R., & Yoshikawa, H. (2013). Maternal teaching during play with four-year-olds: Variation by ethnicity and family resources. *Merrill-Palmer Quarterly*, 59, 361-398. doi: 10.13110/merrpalmquar1982.59.3.0361
- Yamamoto, Y., & Holloway, S. D. (2010). Parental expectations and children's academic performance in sociocultural context. *Educational Psychology Review*, 22, 189-214. doi: 10.1007/s10648-010-9121-z
- Yoshikawa, H., & Kalil, A. (2011). The effects of parental undocumented status on the developmental contexts of young children in immigrant families. *Child Development Perspectives*, 5, 291-297. Doi: [10.1111/j.1750-8606.2011.00204.x](https://doi.org/10.1111/j.1750-8606.2011.00204.x)

Zhang, X., Sun, L., & Gai, X. (2008). Perceptions of teachers' and parents' regarding school readiness. *Frontiers of Education in China*, 3, 460-471. doi: 10.1007/s11516-008-0030-6

Zong, J. & Batalova, J. (2018). *Dominican immigrants in the United States*. Retrieved from <https://www.migrationpolicy.org/article/dominican-immigrants-united-states-2016>.

Zong, J., & Batalova, J. (2019). *Immigrants from new origin countries in the United States*. Retrieved from <https://www.migrationpolicy.org/article/immigrants-new-origin-countries-united-states>

Table 1
Participant Demographics

	Total sample (<i>N</i> = 63)		Chinese Participants (<i>n</i> = 22)		Dominican Participants (<i>n</i> = 19)		Salvadoran Participants (<i>n</i> = 22)		χ^2	F
	<i>M</i> or %	<i>SD</i>	<i>M</i> or %	<i>SD</i>	<i>M</i> or %	<i>SD</i>	<i>M</i> or %	<i>SD</i>		
Parent age (years)	35.58	6.33	37.60	4.68	33.44	6.48	35.76	7.18	0.79	2.12
Generation Status										
First Generation	86%		90.9%		84.2%		81.8%			
Second Generation	14%		9.1%		15.8%		18.2%		39.21***	1.97
Years living in U.S. ^a	14.46	8.22	12.11	5.40	13.86	10.84	17.44	7.77		
Highest level of parental education										
High School Diploma /	30.7%		18.2%		27.8%		45.5%			
GED or Less										
Associate's Degree	30.6%		4.5%		44.4%		45.4%		37.14**	
Bachelor's Degree	20.9%		36.4%		22.2%		4.5%			
Graduate Degree	17.7%		40.9%		5.6%		4.5%			
Annual Income										
Median	\$30,001-40,000		\$90,001-100,000		\$30,001-40,000		\$30,001-40,000		4.75	
Language(s) Spoken to Child									11.08**	0.77
All Mandarin/Spanish	20.0%		21.1%		15.8%		22.7%			
All English	1.7%		5.3%		0%		0%			
Both Other and English	78.4%		73.6%		84.2%		77.3%			
Child gender (female)	50.8%		54.5%		21.1%		72.7%			
Child age (months)	52.65	9.29	52.05	9.35	52.79	11.06	53.14	7.86		
Number of Siblings in Home										
Older Siblings	0.97	1.05	1.05	0.94	0.74	0.99	1.09	1.07		0.67
Younger Siblings	0.27	0.55	0.14	0.36	0.42	0.69	0.27	0.55		1.30
Encultur.: Home Country	97.16	14.81	97.14	18.50	95.78	12.90	98.32	12.51		0.14
Accultur.: U.S.	73.61	20.44	73.55	20.06	74.33	20.64	73.09	21.59		0.02

^a years living in United States applies only to first generation immigrants

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .00$

Table 2

Eigenvalues and Corresponding Percentage of Variance Accounted for by Each Factor

Factor	Eigenvalue	% of Variance	Cumulative %
1	17.44	29.07	29.07
2	6.34	10.57	39.64
3	3.60	6.00	45.64
4	3.52	5.86	51.50
5	3.02	5.03	56.53
6	2.80	4.66	61.19
7	2.56	4.27	65.46
8	2.33	3.88	69.34
9	1.96	3.27	72.61
10	1.88	3.13	75.74

Table 3

Indicators Defining Group Characteristics

Group 1: Learning-Related Skills	Group 2: Academic Orientation
Strong Positive Indicators	
Uses good manners	Knows the names of colors
Shows respect for others	Shows respect for others
Eager to learn	Knows how to write his/her name
Can express his/her wants or needs in words	Communicates well in English
Perseveres in tasks	Holds pencil to write
Gets along with others	
Is self-confident	
Moderate Positive Indicators	
Shows independence	Knows how to count to 20
Imaginative or creative	Has a good vocabulary
Takes turns	Knows the names of shapes
Follows directions	Follows directions
Is curious	Is self-confident
Willing to be corrected	Knows how to read a few words
	Knows the names and sounds of letters
	Uses good manners
Moderate Negative Indicators	
Knows the names of sounds of letters	Willing to be corrected
Jumps, Kicks, throws	Completes tasks on time
Has a good vocabulary	Dresses independently
Stacks blocks	Perseveres in tasks
Uses materials carefully	
Strong Negative Indicators	
Uses scissors	Jumps, Kicks, throws
Knows the names of colors	Uses scissors
Knows how to count to 20	Stacks blocks
Knows the names of shapes	Can recognize patterns
Knows how to write his/her name	Is curious
Holds pencil to write	Can rhyme words
Can rhyme words	Uses materials carefully
Knows how to read a few words	Sits still

Table 4
Results of the Logistic Regression Analysis Predicting Group Membership

	B	S.E.	Wald	df	p-value	Odds Ratio	95% C.I. for Odds Ratio	
							Lower	Upper
Constant	-.314	4.092	.006	1	.939	.731		
Dominican Republic	-3.341	1.301	6.593	1	.010	.035	.003	.453
El Salvador	-3.815	1.161	10.791	1	.001	.022	-3.815	1.161
Family Income Level	.079	.174	.209	1	.647	1.083	.770	1.522
Parent Education Level	-.145	.316	.210	1	.647	.865	.466	1.607
Enculturation to Country of Origin	.026	.031	.684	1	.408	1.026	.966	1.090
Acculturation to U.S.	.005	.025	.038	1	.846	1.005	.956	1.056

Supplemental Table 1

Parents' Beliefs of the Importance of Indicators

	Very Important		Less Important	
	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28
Strong Indicators of Profile Membership				
Knows name of colors (academic)				
Frequency		<i>n</i> = 14 (50%) endorsed as very important	<i>n</i> = 10 (37%) endorsed as less important	
Description		<ul style="list-style-type: none"> to describe or distinguish objects (<i>n</i> = 6) sense of accomplishment (<i>n</i> = 3) visual problem if can't do it (<i>n</i> = 1) 	<ul style="list-style-type: none"> already knows (<i>n</i> = 4) learn in K or later (<i>n</i> = 4) non-critical skill (<i>n</i> = 1) no reason (<i>n</i> = 1) 	
Knows how to write name (academic)				
Frequency		<i>n</i> = 14 (50%) endorsed as very important	<i>n</i> = 6 (22%) endorsed as less important	
Description		<ul style="list-style-type: none"> name is identity (<i>n</i> = 8) writing first step (<i>n</i> = 3) builds self-confidence (<i>n</i> = 1) no reason (<i>n</i> = 2) 	<ul style="list-style-type: none"> learn in K or later (<i>n</i> = 4) already knows (<i>n</i> = 1) no reason (<i>n</i> = 1) 	
Knows how to count to 20 (academic)				
Frequency			<i>n</i> = 12 (44%) endorsed as less important	
Description			<ul style="list-style-type: none"> will learn in K or later (<i>n</i> = 8) already knows (<i>n</i> = 3) 	

	Very Important		Less Important	
	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28
Strong Indicators of Profile Membership			<ul style="list-style-type: none"> no reason (<i>n</i> = 1) 	
Knows names of shape (academic)				
Frequency			<i>n</i> = 9 (33%) endorsed as less important	
Description			<ul style="list-style-type: none"> learn in K or later (<i>n</i> = 4) already knows (<i>n</i> = 3) non-critical skill (<i>n</i> = 3) uncodable (<i>n</i> = 1) 	
Reads a few words (academic)				
Frequency			<i>n</i> = 13 (48%) endorsed as less important	
Description			<ul style="list-style-type: none"> learn in K or later (<i>n</i> = 11) uncodable (<i>n</i> = 2) 	
Recognizes patterns (academic)				
Frequency				<i>n</i> = 11 (39%) endorsed as less important
Description				<ul style="list-style-type: none"> learn in K or later (<i>n</i> = 8) no reason (<i>n</i> = 1) uncodable (<i>n</i> = 2)

Strong Indicators of Profile Membership	Very Important		Less Important	
	Learning-Related Skills	Academic Orientation	Learning-Related Skills	Academic Orientation
	Profile	Profile	Profile	Profile
	<i>n</i> = 27	<i>n</i> = 28	<i>n</i> = 27	<i>n</i> =28
Eager to learn (learning approaches)				
Frequency	<i>n</i> = 14 (52%) endorsed as very important			
Description	<ul style="list-style-type: none">• supports learning new knowledge and skills (<i>n</i> =8)• need when challenged (<i>n</i> = 4)• helps relationship with teacher (<i>n</i> = 1)• no reason (<i>n</i> = 3)			
Perseveres (learning approaches)				
Frequency	<i>n</i> = 13 (48%) endorsed as very important			
Description	<ul style="list-style-type: none">• need when challenged (<i>n</i> = 11)• no reason (<i>n</i> = 1)• uncodable (<i>n</i> = 1)			
Self-confident (learning approaches)				
Frequency	<i>n</i> = 21 (78%) endorsed as very important			
Description	<ul style="list-style-type: none">• need when challenged (<i>n</i> = 15)• helps independence (<i>n</i> = 3)			

	Very Important		Less Important	
	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28
Strong Indicators of Profile Membership				
	<ul style="list-style-type: none"> • important to mental health (<i>n</i> = 3) • no reason (<i>n</i> = 2) 			
Curious (learning approaches)				
Frequency				<i>n</i> = 9 (33%) endorsed as less important
Description				<ul style="list-style-type: none"> • innate trait (<i>n</i> = 6) • non-critical skill (<i>n</i> = 2) • negative trait (<i>n</i> = 1)
Hold pencil to write (motor)				
Frequency		<i>n</i> = 10 (36%) endorsed as very important	<i>n</i> = 11 (41%) endorsed as less important	
Description		<ul style="list-style-type: none"> • first step in writing and needed for classroom activities (<i>n</i> = 8) • teacher won't teach skill (<i>n</i> = 1) 	<ul style="list-style-type: none"> • will learn in K (<i>n</i> = 5) • already knows (<i>n</i> = 3) • no right way to hold (<i>n</i> = 2) • no reason (<i>n</i> = 2) 	
Uses scissors (motor)				
Frequency			<i>n</i> = 15 (56%) endorsed as less important	<i>n</i> = 17 (61%) endorsed as less important
Description			<ul style="list-style-type: none"> • safety concerns (<i>n</i> = 6) • will learn in K or later (<i>n</i> = 7) 	<ul style="list-style-type: none"> • safety concerns (<i>n</i> = 6) • will learn in K or later (<i>n</i> = 5)

	Very Important		Less Important	
	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28
Strong Indicators of Profile Membership			<ul style="list-style-type: none"> • non-critical skill (<i>n</i> = 3) • already knows (<i>n</i> = 6) 	<ul style="list-style-type: none"> • non-critical skill (<i>n</i> = 6)
Stacks blocks (motor) Frequency				<i>n</i> = 20 (71%) endorsed as less important
Description				<ul style="list-style-type: none"> • already knows (<i>n</i> = 10) • non-critical skill (<i>n</i> = 6) • learn in K (<i>n</i> = 1) • not enjoyable (<i>n</i> = 1) • no reason (<i>n</i> = 2) • uncodable (<i>n</i> = 1)
Jumps, kicks, throws (motor) Frequency				<i>n</i> = 17 (61%) endorsed as less important
Description				<ul style="list-style-type: none"> • indicates challenging behavior (<i>n</i> = 8) • non-critical skill (<i>n</i> = 4)

	Very Important		Less Important	
	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28
Strong Indicators of Profile Membership				<ul style="list-style-type: none"> • already knows (<i>n</i> = 3) • maturational (<i>n</i> = 1) • no reason (<i>n</i> = 1)
Shows respect for others (social-emotional)				
Frequency	<i>n</i> = 20 (74%) endorsed as very important	<i>n</i> = 21 (75%) endorsed as less important		
Description	<ul style="list-style-type: none"> • to make friends and get along with others (<i>n</i> = 12) • to gain respect (<i>n</i> = 4) • critical in diverse society (<i>n</i> = 1) • no reason (<i>n</i> = 6) 	<ul style="list-style-type: none"> • to make friends and get along with others (<i>n</i> = 7) • to gain respect (<i>n</i> = 6) • critical in diverse society (<i>n</i> = 1) • no reason (<i>n</i> = 9) 		
Gets along with others (social-emotional)				
Frequency	<i>n</i> = 11 (41%) endorsed as very important			
Description	<ul style="list-style-type: none"> • to make friends and be a part of class community (<i>n</i> = 4) • to interact with those who are different than you (<i>n</i> = 4) 			

Strong Indicators of Profile Membership	Very Important		Less Important	
	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28
	<ul style="list-style-type: none"> • important life skill to learn as child (<i>n</i> = 2) • no reason (<i>n</i> = 2) 			
Uses good manners (social-emotional)				
Frequency	<i>n</i> = 13 (48%) endorsed as very important			
Description	<ul style="list-style-type: none"> • to make friends and be a part of class community (<i>n</i> = 5) • important to show and gain respect (<i>n</i> = 4) • no reason (<i>n</i> = 5) 			
Communicates well in English (language)				
Frequency	<i>n</i> = 13 (46%) endorsed as very important			
Description	<ul style="list-style-type: none"> • U.S. language (<i>n</i> = 5) • need English in school (<i>n</i> = 6) • home language (<i>n</i> = 1) 			
Expresses wants/needs in words (language)				
Frequency	<i>n</i> = 16 (59%) endorsed as very important			
Description	<ul style="list-style-type: none"> • allows teachers to know child's emotional/physical (<i>n</i> 			

	Very Important		Less Important	
	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28
Strong Indicators of Profile Membership				
	= 11) or learning needs (<i>n</i> = 1) • no reason (<i>n</i> = 3)			
Rhyme (language) Frequency			<i>n</i> = 19 (70%) endorsed as less important	<i>n</i> = 9 (32%) endorsed as less important
Description			<ul style="list-style-type: none"> • learn in K (<i>n</i> = 13) • already knows (<i>n</i> = 1) • non-critical skill (<i>n</i> = 2) • no reason (<i>n</i> = 1) • uncodable (<i>n</i> = 4) 	<ul style="list-style-type: none"> • learn in K (<i>n</i> = 4) • already knows (<i>n</i> = 1) • uncodable (<i>n</i> = 3)
Uses materials carefully (school-related) Frequency				<i>n</i> = 12 (43%) endorsed as less important
Description				<ul style="list-style-type: none"> • learn in K (<i>n</i> = 5) • non-critical skill (<i>n</i> = 2) • safety concerns (<i>n</i> = 1) • already knows (<i>n</i> = 2) • uncodable (<i>n</i> = 2)
Sits still (school-related)				

	Very Important		Less Important	
	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28	Learning-Related Skills Profile <i>n</i> = 27	Academic Orientation Profile <i>n</i> = 28
Strong Indicators of Profile Membership				
Frequency				<i>n</i> = 13 (46%) endorsed as less important
Description				<ul style="list-style-type: none"> • unrealistic expectation (<i>n</i> = 7) • need to move to learn (<i>n</i> = 2) • already knows (<i>n</i> = 2) • uncodable (<i>n</i> = 2)

Note: Parents' responses often included multiple reasons why a skill was perceived as very or least important; as such, reasons were not mutually exclusive. Not every parent in the profile prioritized each of these strong positive and negative indicator skills as very or less important skills. Because we only asked parents to provide a reason for the skills they ranked in the very and less important categories (and not the somewhat important or important categories), the number of reason statements that we analyzed per skill varied.