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Santa Barbara

Family-School Cultural Continuity and School-Based Parental Engagement

A dissertation submitted in partial satisfaction of the
requirements for the degree of Doctor of Philosophy
in Counseling, Clinical, and School Psychology

by

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By

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Emotional Disturbance Decision Tree (EDDT)
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Kaufman Assessment Battery for Children - Second Edition (KABC-II)
Stanford-Binet Intelligence Scales, Fifth Edition (SB-5)
Social Skills Rating System (SSRS)
Vineland Adaptive Behavior Scales - Third Edition (Vineland-3)
Wechsler Individual Achievement Test - Third Edition (WIAT-III)
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ABSTRACT

Family-School Cultural Continuity and School-Based Parental Engagement

by

Yuexin Zhang

Parental engagement is impacted by a plethora of factors. Using a large international sample involving countries and regions from Asia, Europe, and Latino America, the first half of this research investigates the association between parental engagement and family-school cultural congruity using the BCH approach for Latent Class Analysis (LCA). The findings from Study 1 confirm that family-school cultural continuity is associated with level of parental engagement in schools. Parents actively participating in all engagement opportunities are more likely to show high family-school cultural congruity. On the contrary, parents who are less engaged in all engagement opportunities usually are the parents who experience lower levels of cultural congruity between home and school. The parents who participate in some forms of opportunities but not the others show different cultural congruity profiles. Moreover, lower-educated parents are less likely to question the services they received. In light of these findings, ongoing efforts are needed to address disparities in the school engagement experiences of culturally different families, especially families from less educated backgrounds. Study 1 points to the importance of a more comprehensive conceptualization of family-school cultural congruity and thus, leads to the research endeavor

of the establishment of a cross-cultural cultural congruity scale, which is the focus of Study 2. Study 2 shows satisfactory measurement invariance of the School Cultural Congruity Scale (SCCS) between China and U.S., which makes it possible for mean-based research comparison regarding family-school cultural congruity across these two countries.

Keywords: parental engagement, cultural congruity, promoting engagement

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Chapter 1: Introduction to Study 1

The 21st century promises an increasingly interconnected world. Growth in global migration has led to more diversity in schools internationally in terms of race, ethnicity, gender, age, languages, and mental and physical characteristics (Suárez-Orozco, 2001). The intersectionality of the marked identities further complicates the challenges facing schools, as each of the types of inequalities is interconnected and cannot be understood in isolation from one another in the related systems of oppression and social stratification. In light of the shifting composition of modern society and the complexities of systems of inequality and privilege, schools around the world are confronted with the social and pedagogical challenges of combating educational inequalities for disadvantaged children.

In the quest for educational equity, it is no enigma that parents play a crucial role in this pursuit. Across the world, there is a growing recognition of the importance of building strong and stable links between school and home to increase the educational attainment of the youth (Bowen, 2009; DEECD, 2008). There is a plethora of evidence manifesting that parental engagement in schooling, which includes a wide variety of behaviors and attitudes, is closely associated with pupil school success and optimal development (i.e., Araque et al., 2017; Kethineni et al., 2021; Latunde & Clark-Louque, 2016; Redding et al., 2004; Sheridan et al., 2010). On the other hand, engaging parents is a shared goal and challenge in many countries and across different school systems, because it is convoluted with the historically embedded sociocultural impediments that parents often face (Mendez, 2010). Such hurdles include psychological and material barriers that operate differentially and discriminately across the social classes and individual differences among parents within social classes (Harris & Goodall, 2007).

Promoting parent engagement in disadvantaged groups requires actively challenging the biased views shaped by the fallen system and striving for evidence-based and culturally sensitive endeavors. First, educators around the world ought to be acutely aware of the dangerous hierarchical view on the nature of minority parental engagement in children's education. There has long been the jeopardous belief of seeing minority parents as less engaged in the children's education due to a lack of interest or care (Kim, 2009). When considering the data of parental engagement and children's academic achievement, the misconception that the underachievement of children from minority backgrounds is associated with their parents' lack of engagement in school further causes greater division and hinders parental engagement. Such misconception contradicts the consistent research showing minority parents' care and interests in their children's education and well-being as much as their counterparts (DeCastro-Ambrosetti & Cho, 2005; Drummon & Stipek, 2004; Martin, 2015; Valencia, 2002). The field has long called for studying the factors impacting the school involvement of parents, minority parents particularly, to better understand the dynamics behind family-school interactions.

Second, many approaches adopted by schools to promote parental engagement are flawed because they neglect the diversity among parents and assume power equality between schools and parents as well as in majority-minority relations, which may in the long run broadening the gap between the involved and the uninvolved parents and the achievement gap among students (Crozier & Davies, 2007). It is dangerous to assume that all families are the same in terms of their needs, values, resources, preferred interactions with schools, and challenges faced by the families. This "blanket assumption" bewilders the urgency of tackling structural oppressions because it assumes the homogeneity of power, capabilities,

social capital among parents in school engagement. Also, the “one size fits all” approach can double jeopardize educational equality around class, ethnicity, and socioeconomic status, and exacerbate the existing power divisions between schools and families (Harris & Goodall, 2008). Such false views and approaches need to be corrected with the precondition of a deeper understanding of the difference between schools and families.

Researchers have studied the role of cultural discontinuity in the dynamics behind racial/ethnic minority students’ learning and school engagement. “Cultural discontinuity” describes the specific discrepancies (i.e., language, behavioral norms) between the mainstream culture and the minoritized culture and the degree of such a discontinuity that can interfere with students’ involvement and learning in schools (i.e., Trueba, 1987; Tyler et al., 2008; Weisner et al., 1988). Cultural discontinuity can impact student engagement according to the contextual view of cognition: cultural context impacts the development of social and cognitive processes, and different sets of cognitive and social-behavioral repertoires are developed when there are important differences between the mainstream culture and the minority culture. It is hypothesized that the academic and psychological challenges faced by many cultural minority students are linked to perceived cultural discontinuity with the school systems of which they are part as they may find the adaptation process more challenging, or they can encounter difficulties in decoding the cues presented in the classroom (Bingham & Okagaki, 2012).

Given that cultural discontinuity between family and school is likely to impact student engagement, can the hypothesis be extended to parental engagement in school? There is a scarcity of empirical studies to examine family-school cultural congruity and parental engagement. The majority of the existing literature related to cultural congruity concentrates

heavily on student outcomes such as socialization (Lovelace & Wheeler, 2006), academic performance (i.e., Allen & Boykin, 1992; Penderi et al., 2009; Taggart, 2017; Torres, 2017), psychological distress (i.e., Cholewa & West-Olatunji, 2008), and dropout (i.e., Garrett, 1995). Studies examining parents' perspectives towards family-school dissonance and how it can impact parental engagement remain relatively scarce. In addition, much of the research examining parental engagement use data specific to one country; studies based on data from outside contexts are considerably fewer in number (Sebastian et al., 2017). Empirical evidence across a variety of contexts is needed to find out whether family-school cultural incongruity composes a significant part of parents' school engagement experiences.

Part one of the dissertation study seeks to close the literature gap by exploring the association between family-school cultural congruity and parental engagement in schools. A theoretical model, the VISION model, is first presented, which is used to capture basic elements of family-school cultural congruity. The first half of the dissertation study focuses on quantitatively investigating the association between parental engagement and cultural congruity between school and home using an international dataset, the 2018 OECD Programme for International Student Assessment (PISA 2018). Specifically, a few items from PISA 2018 were selected to represent the construct of parental engagement and home-school cultural congruity based on the VISION model. Latent class analyses (LCAs) were then conducted to identify homogeneous subgroups of parental engagement. Next, the cultural congruity items were used as auxiliary variables to examine how likely an individual is to adopt a pro-cultural-congruity response based on the parent engagement level. The last step of Study 1 involved adding parental education level as covariates to investigate how the link between family-school cultural congruity and parental engagement would be impacted.

The cultural congruity items rather than parental engagement items were used as auxiliary variables because auxiliary variables, or outcome variables, can serve for schools to identify areas of improvement for cultural practices in the school-family interactive dynamics. If parental engagement items were to be used as the auxiliary items, schools would discern parents' preferred engagement activities depending on their family-school cultural congruity pattern, but will not obtain direct implications for improvement of cultural practices with families. It is essential to clarify that even though the cultural congruity items were added as the "auxiliary outcome variables," there is no casual relationship in the LCAs. Therefore, it is untenable to perceive in anyway that parents' perception of family-school cultural congruity, either satisfaction or dissatisfaction, is caused by their precedented engagement pattern.

Study 1 Research Questions and Hypotheses

The purpose of part one of this dissertation research seeks to explore the relationship between family-school cultural congruity and school-based parental engagement using Latent Class Analysis (LCA) and an international dataset, PISA 2018. The following research questions are to be answered by part one of this dissertation:

RQ1: How does parents' family-school cultural congruity level associate with their parental engagement level?

H₁: A parent with a higher level of family-school cultural congruity will be more likely to belong to the latent classes showing a higher and more balanced school-based parental engagement pattern.

RQ2: Controlling for parent education level, what is the relation between cultural congruity and parental engagement?

H₂: Controlling for the parents' education level, high and balanced school-based parental engagement is still linked with high family-school cultural congruity.

To answer the research questions, the theoretical model used to capture the concept of cultural congruity is first introduced in Chapter 2. Chapter 3 is the methodology section, which outlines a description of the sample, the selection procedure of items representing school-based parental engagement and family-school cultural congruity, and the data analysis plan. The analysis results are presented in Chapter 4, and Chapter 5 contains the discussions of the results.

Chapter 2: Theoretical Framework: the VISION Model

The dissertation research applies the VISION Model of Cultural Responsiveness (Barbet et al., 1997) to conceptualize family-school cultural congruity. Originated from the anthropological culture theory of Goodenough (1981), the VISION model does not use ethnographic descriptions to create portraits of communities' cultures, but instead emphasizes the ongoing processes that constantly influence the contents of the communities' culture pools. The model offers insights into the interactive relations that can lead to cultural evolutions and changes. Based on the VISION model, family-school cultural congruity is measured by capturing the following six aspects: (1) Values and belief systems, (2) Interactional style, (3) Structuring style, (4) Operational strategies, (5) Interpretation of experiences, and (6) Needs.

The component of *Values and Belief Systems* asks the question of "what is important to you?" This domain attends to how much the family's systems of values and beliefs resemble that of the school. Differences in value and belief orientation manifest how the school and the family vary in ways of perceiving the world and how the daily practices are

performed differently according to the variances. This section collects information on the extent of shared cultural understanding between the school and the family. This section also collects information on the cultural representation and the cultural background matching between the school and the family. Research has shown that a lack of shared cultural understanding between school staff and racially and ethnically diverse families considerably hinder family engagement regarding school event attendance and volunteering at school (Noel et al., 2013). Parental engagement also seems to be impacted by the presence of school staff with similar cultural backgrounds. Vinopal (2018) suggested that compared to children in the same classroom who share similar cultural backgrounds with the teacher, the parental-teacher racial-ethnic mismatch is linked to a significantly lower likelihood of teacher-initiated parental engagement or parent conference attendance. Mundt et al. (2015) found that parent engagement is higher among Latinx families when their child has a Latinx teacher. It is worth noting that the diversity of the students should go beyond race and ethnicity, which is the purpose of incorporating the VISION model.

The component of *Interactional Style* seeks to answer the question of “what is the preferred mode of communication?” This part focuses on the preferred style of communication between the family and the school, which includes communication content and approach. Knowing more about the parents’ perspectives regarding family-school communication can strengthen parental engagement. Swick (2003) highlights the importance of using authentic, meaningful, and growth-promoting communication to strengthen family-school partnership, which is an important indicator of parental engagement. The items under the section of *Interactional Style* addresses the core components of accessible communication: regularity, multi-modal, being offered in a language that is easy to

understand by the parents, and reporting useful information (i.e., progress, behaviors; Tarasawa & Waggoner, 2015). Items under the section of interactional style seek to capture if the school's communication style, content, language, among other communication characteristics, match those of the family.

The *S* component of the VISION model refers to *structuring a relationship* that best fits the unique needs of the involved parties. This section aims at collecting information on parents' perceptions towards their current relationship with the school. Families with a minority status (i.e., low-income, immigrants) are generally disadvantaged in their relationship with school due to unfamiliarity with the dominant school culture compared to other families (Kim, 2009). School and family can have different perceptions about how their relationship should be structured. Some may consider a close collaboration to be ideal; others may consider space and distance to be respectful and a gesture of trust. Variance in how to structure school-home relationships is an indicator of cultural mismatch. Traditionally, schools have certain values and requirements towards parents, and those who do not meet such values are considered "hard to reach parents." However, the parents may perceive it differently depending on the backgrounds and values they hold (Crozier & Davies, 2005). Bringing awareness to how the school and the family expect to structure their relationship and process can shed light on the diverse values and contributions parents make in their children's education and advance the family-school partnership.

Interpretation of Experiences is the fourth component of the VISION model, which features an individual's internal responses to external stimuli. In other words, it captures an individual's interpretation of experiences in an individual's phenomenal world, which would impact the individual's emotions and behaviors and produce interactive learning. This

component of the VISION model is reflected in the response scale of SCCS, where parents' interpretation of their cultural interactions with the school is collected.

Operational Strategies centers on the congruency between the school and the family's approach to achieving the educational goals. This section of the scale captures information on learning environment, curriculum, and pedagogy. First, a safe environment is central to develop a culturally responsive classroom and facilitate effective learning and teaching. Such an environment can be cultivated through meaningful and collaborative relationships, equitable treatment, the enhancement of self-confidence, cooperation, and motivation to excel (Cartledge, 2008; Johnson, 2019; Linan-Thompson, 2018; Morrison, 2008; Quezada, 2019; Weinstein, 2003; Weinstein, 2004). Second, Morrison et al. (2008) suggest that curriculums, learning activities, and learning materials be chosen based on student and family input so they are culturally relevant for their student population. Research also recommends selecting curriculums that represent diversity (i.e., pictures, languages, people from diverse backgrounds) and demonstrate diverse viewpoints (Gay, 2002; Morrison et al., 2008; Shultz et al., 2014). The curriculum can be more culturally responsive by allowing students to learn and present what they learned in ways relevant to their cultural background, including presenting in the native language and engaging in class discussions with their cultural knowledge (Morrison et al., 2008). Third, adopting culturally relevant pedagogy to teach the materials is also conducive to integrating culture into the curriculum (Abdulrahim and Orosco, 2020). It is critical for teachers to work with students and families in a culturally appropriate way. It is also important for teachers to relate their teaching to students' cultures and to teach students in a way that makes sense given their cultural backgrounds (Keehne, 2018; Gay, 2002; Linan-Thompson, 2018; Weinstein 2003).

Understanding the congruence between the school's educational approach and that of the family can provide education professionals with an understanding of the degree to which their approaches are inclusive of the students they serve.

Needs in the VISION model gives insight into the desired outcomes and needs agreed on by the family and the school (Ballon-Harn & Garrett, 2008). It seeks to answer the question of what are your hopes for your child? The family culture—their values, beliefs, and attitudes—will dictate what they want for their child, which can differ from the school. Research has shown that for underrepresented families, such variances are more visible and there is greater discomfort in response to the different values in children's behavioral and academic expectations from the dominant school culture. These differences between the families and the school staff can considerably impede parental engagement in school (Öztürk, 2013). Differences often exist regarding parents and schools' expectations for children's behavior. Most of these expectations and problem-solving methods held by educators tend to be based on individualistic middle-class cultural perspectives (Amatea, 2009). A deeper understanding of these differences can facilitate better collaborative strategies to address the existing expectation incongruence and to enhance school-family partnership.

Summary

Part one of this dissertation study uses the VISION Model of Cultural Responsiveness (Barbet et al., 1997) to select items related to family-school cultural congruity from the PISA 2018 dataset. Items are selected for each of the five domains of the VISION model (values and beliefs, interactions, relationships, operational strategies, needs and desired outcomes).

The sixth component of the VISION model, interpretation of experiences, is reflected in

responses to measure items. The next chapter will discuss the methodology in greater detail.

Chapter 3: Study 1 Methodology

This section of the dissertation research concentrates on the design of Study 1. Study 1 seeks to explore the association between cultural congruity and parental engagement in schools. Study 1 uses Latent Class Analysis (LCA) to quantitatively investigate cultural congruity between school and home from the parents' perspectives and how it associates with school-based parental engagement using an international dataset, PISA 2018. This chapter includes a description of the sample and the item selection procedure from the dataset, PISA 2018, that represent school-based parental engagement and family-school cultural congruity. The chapter also outlines the data analysis plan.

Participants

The PISA 2018 data are used to examine the relationship between proactive parental engagement and home-school cultural congruity. The PISA assessments are conducted by the Organization for Economic Cooperation and Development (OECD) every three years with the goal of representing countries across the world. PISA 2018 assessed the cumulative outcomes of education and learning of children at the age of 15, which is a point when most children are still enrolled in formal education. A two-stage sampling procedure was conducted. A representative sample of at least 150 schools was first collected, considering factors such as location and level of education. In the second stage, roughly 42 15-year-old students were randomly selected from each school. The sample size of most countries ranges from 4000 to 8000 students (Schleicher, 2019). Schools could be excluded from the PISA sample if the school was too small, too remotely located, or situated in inaccessible locations

(OECD, 2019). A sample of approximately 600,000 children from 79 participating countries and economies participated in PISA 2018.

The PISA 2018 dataset includes items assessing parental engagement and representing family-school cultural congruity according to the VISION model (i.e., teaching and curriculum, expectation, communication, family-school relation, representation). Surveys were distributed to parents of participating students in 17 countries and economies: Belgium, Brazil, Chile, Germany, Dominican Republic, Georgia, Hong Kong-China, Croatia, Ireland, Italy, Korea, Luxembourg, Macao, Mexico, Malta, Panama, and Portugal. As shown in Table 1, response rates from parents vary from country to country. Study 1 only uses data from the five countries and economies that have adequately high parent response rates (> 95%). These countries and regions are Dominican Republic, Georgia, Korea, Macao, and Mexico. The final sample for the study consisted of 28, 970 students from 1093 schools across these 5 countries.

Table 1
Parents Participation Rate in PISA 2018

Country	N parents	N students	Parent Participation Rate (%)
Belgium	3915	8475	46
Brazil	8719	10691	82
Chile	6908	7621	91
Germany	2583	5451	47
Dominican Republic	5450	5674	96
Georgia	5332	5572	96
Hong Kong	5507	6037	91
Croatia	5687	6609	86
Ireland	4925	5577	88
Italy	9882	11785	84
Korea	6566	6650	99
Luxembourg	2713	5230	52
Macao	3704	3775	98
Mexico	6989	7299	96

Malta	2659	3363	79
Panama	4865	6270	78
Portugal	5361	5932	90
Total	91765	112011	

Note. N parents: parents answers with the highest frequencies
Countries and economies with parent response rates > 95% in **bold**

Procedure

Items from PISA 2018 were selected to represent the construct of parental engagement and home-school cultural congruity based on the VISION model. To decide on the items representing parental engagement, exploratory factor analysis (EFA) and confirmatory factor analysis were conducted since the PISA 2018 does not specify the items pertaining to parental engagement.

Identification of Auxiliary Variables Measuring Home-School Cultural Congruity

The PISA 2018 does not have a specific section to collect data related to cultural congruity. However, it has items that collect information on teaching and curriculum, expectation, communication, family-school relation, and representation, which corresponds to each of the five components of the proposed School Cultural Congruity Scale (SCCS) based on the VISION model. Table 3 illustrates the items selected to measure cultural congruity. Four of the five items come from the parent questionnaire (PA007Q06TA, PA009Q09NA, PA007Q03TA, PA007Q07TA) and one is from the student questionnaire (ST023Q05TA). For easier data analysis purpose, these five cultural congruity items are coded as representation (ST023Q05TA), communication (PA007Q06TA), relation (PA009Q09NA), teaching (PA007Q03TA), and expectation (PA007Q07TA).

The four parent self-report items were originally measured on a four-point, Likert-type scale (1 =strongly agree, 2 = agree, 3 = disagree, and 4 =strongly disagree). The student item's four answer options were “mostly my heritage language,” “about equally often my

heritage language and test language,” “mostly test language,” and “not applicable (e.g., because heritage language and test language are the same).” Items were dichotomized after reverse coding certain items so that all item endorsements (indicated by a value of 1) represented pro-cultural congruity responses. Table 6 presents the item wording for all five cultural congruity items.

Table 2

Questionnaire Items Pertaining to School Cultural Congruity

VISION Model	PISA 2018 Item	Description
Values and Belief Systems (Representation)	ST023Q05TA ^a	Which language do you usually speak with: my schoolmates?
Interactional Style (Communication)	PA007Q06TA ^b	Agree: My child's school provides regular and useful information on my child's progress.
Structuring Style (Family-School Relations)	PA009Q09NA ^b	Agree: My child's school provides an inviting atmosphere for parents to get involved.
Operational Strategies (Teaching and Curriculum)	PA007Q03TA ^b	Agree: I am happy with the content taught and the instructional methods used in my child's school.
Needs (Expectation)	PA007Q07TA ^b	Agree: My child's school does a good job in educating students.

Note. ^aDichotomized: 1 = mostly my heritage language, not applicable because heritage and test language are the same for the student item; 0 = mostly test language, about equally often my heritage language and test language.

^bDichotomized: 1 = strongly agree, agree; 0 = strongly disagree, disagree.

Identification of Latent Class Indicators Measuring Parental Engagement

Table 2 shows items in PISA 2018 that asks parents to report whether, during the previous academic year, they had participated in the school-related activities (“yes”, “no”, “not supported”). To determine which items measure parental engagement, EFA and CFA were run. The PISA dataset is randomly split into two equal datasets. The first split ($N = 14,485$) was used to perform an EFA. CFA was performed using the second half of the randomly selected cases ($N = 14,485$).

Table 3

Parent Questionnaire Items Pertaining to Participation in School-Related Activities

Item	Description
<i>During the last academic year, have you participated in any of the following school-related activities? (Yes/No)</i>	
PA008Q01TA	Discussed my child's behavior with a teacher on my own initiative.
PA008Q02TA	Discussed my child's behavior on the initiative of one of his/her teachers.
PA008Q03TA	Discussed my child's progress with a teacher on my own initiative.
PA008Q04TA	Discussed my child's progress on the initiative of one of their teachers.
PA008Q05TA	Participated in local school government (e.g., parent council or school management committee).
PA008Q06NA	Volunteered in physical or extracurricular activities (e.g., building maintenance, carpentry, gardening or yard work, school play, sports, field trips).
PA008Q07NA	Volunteered to support school activities (volunteered in the school library, media center, or canteen, assisted a teacher, appeared as a guest speaker).
PA008Q08NA	Attended a scheduled meeting or conferences for parents.
PA008Q09NA	Talked about how to support learning at home and homework with my child's teachers.
PA008Q10NA	Exchanged ideas on parenting, family support, or the child's development with my child's teachers.

The following criteria was used to determine the optimal number of factors: parallel analysis, chi-square test of model fit, root-mean-square error of approximation (RMSEA) fit

index, comparative fit indices (CFI), Tucker–Lewis index (TLI), standardized root-mean-square residual (SRMR) fit index, and factor loadings. The following criteria are adopted to determine goodness of fit. A RMSEA value less than or equal to .05 indicates a good fitting model and values up to .08 indicate adequate fitting models (Browne & Cudeck, 1992). CFI greater than .90 indicates acceptable fit. CFI close to or greater than .95 indicates Good fit (Hu & Bentler, 1999). An SRMR as close to zero as possible is the desired value for indication of good model fit. SRMR values less than .08 is an indication of a “reasonably good fit (Hu & Bentler, 1999).

EFA. Parallel analysis comparing the observed data’s eigenvalues with a random set of eigenvalues indicated to retain three factors. Parallel analysis suggests that three factors account for more variance than is expected by chance. After the eigenvalue for the third factor, the eigenvalues from the randomly generated data exceed the eigenvalues of the research data.

Model 3, the three-factor model, meets the criteria of model fit for RMSEA, CFI, and SRMR. Goodness-of-fit statistics supported the three- factor model with the set of 10 items, $\chi^2(18) = 1575.81, p < .001$, RMSEA = .078 (90% confidence interval [CI] = .075 – .082), CFI = .945, TLI = .862 and SRMR = .060. Thus, Model 3 was chosen.

An EFA was performed to examine the latent factor structure for the 10 items. The maximum likelihood estimation with robust standard errors (ML) method was used to fit the model. To allow for the probability that the emergent factors are correlated, oblique ProMax rotation using R-Studio software version 3.6.3 was applied.

Next, the rotated structure coefficients were reviewed, as shown in Table 4. As recommended by Howard (2016) regarding satisfactory factor loadings in EFA, it is optimal

that variables (a) load onto their primary factor above 0.40, (b) load onto alternative factors below 0.30, and (c) demonstrate a difference of 0.20 between their primary and alternative factor loadings. As shown in Table 4, the following three factors emerged: parental engagement, teacher-initiated, and parent volunteering. The rotated structure coefficients by variable are represented in Table 4.

Table 4

*Goodness of Fit Values for EFA Aiming at Identifying Parental Engagement Items
(N = 14,116)*

	RMSEA 90% CI	CFI	TLI	SRMR	χ^2	df	Number of Parameters
Model 1 One Factor	.139* [.137, .141]	.662	.565	.091	9558.86*	35	30
Model 2 Two Factors	.127* [.124, .130]	.790	.637	.063	5926.41*	26	39
Model 3 Three Factors	.078* [.075, .082]	.945	.862	.060	1575.81*	18	47
Model 4 Four Factors	-	-	-	-	-	-	-

Note. χ^2 = chi-square test of model fit; RMSEA = root-mean-square error of approximation; CI = confidence interval; RMSR = root-mean-square residuals.
* $p < .001$.

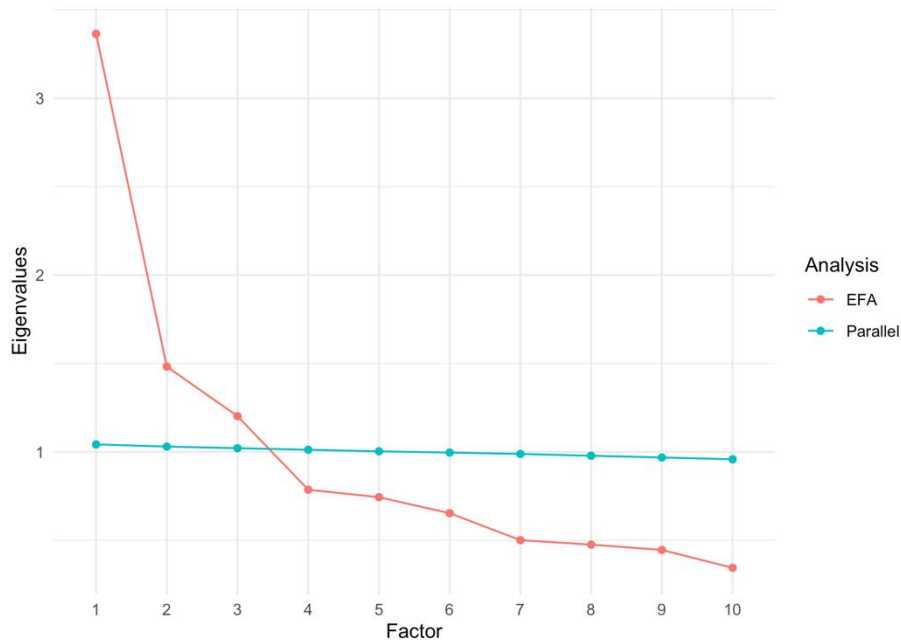


Figure 1. Parallel analysis using eigenvalues from EFA analysis from the research dataset and random data. Arrow indicates that eigenvalues from random data exceed the eigenvalues from research data after the third factor.

Table 5

Factor Loadings for Exploratory Factor Analysis with Geomin Rotation

Item	Label	Factor 1 Parental Engagement	Factor 2 Teacher- Initiative	Factor 3 Parent Volunteering
PA008Q01TA	Discussed my child's behavior with a teacher on my own initiative.	.715	.042	-.002
PA008Q03TA	Discussed my child's progress with a teacher on my own initiative.	.796	-.054	-.018
PA008Q08NA	Attended a scheduled meeting or conferences for parents.	.399	-.083	.148
PA008Q09NA	Talked about how to support learning at home and homework with my child's teachers.	.521	.011	.197
PA008Q10NA	Exchanged ideas on parenting, family support, or	.395	.144	.233

the child's development with my child's teachers.				
PA008Q02TA	Discussed my child's behavior on the initiative of one of his/her teachers.	-.001	.925	.001
PA008Q04TA	Discussed my child's progress on the initiative of one of their teachers.	.175	.589	.000
PA008Q05TA	Participated in local school government (e.g., parent council or school management committee).	.129	-.087	.489
PA008Q06NA	Volunteered in physical or extracurricular activities (e.g., building maintenance, carpentry, gardening or yard work, school play, sports, field trips).	-.015	.017	.674
PA008Q07NA	Volunteered to support school activities (volunteered in the school library, media center, or canteen, assisted a teacher, appeared as a guest speaker).	-.007	.004	.736

Note. Factor loadings >.30 are in boldface.

CFA. The CFA was performed using ML estimation methods. CFA was carried out to confirm the three-factor structure yielded by the outcomes of EFA. A unit loading identification (ULI) method was used, where the item with the highest leading variable for each factor was set to 1.0 and the rest of variables specified for each factor were freely correlated. Goodness-of-fit statistics supported the three-factor model with the set of 10 items, $\chi^2(32) = 2706.24$, $p < .001$, RMSEA = .077 (90% confidence interval [CI] = .075 – .079), CFI = .906, TLI = .868 and SRMR = .042.

Table 6

ULI Factor Loadings for Confirmatory Factor Analysis to Identify Parental Engagement Items in PISA 2018 (N = 14088)

Item (Recoded Name)	Label	Factor 1 Parental Engagement	Factor 2 Teacher- Initiative	Factor 3 Parent Volunteering	R^2
PA008Q01TA (PE01)	Discussed my child's behavior with a teacher on my own initiative.	0.975			.502*
PA008Q03TA (PE03)	Discussed my child's progress with a teacher on my own initiative.	1.000			.514*
PA008Q08NA (PE08)	Attended a scheduled meeting or conferences for parents.	0.480			.193*
PA008Q09NA (PE09)	Talked about how to support learning at home and homework with my child's teachers.	0.919			.436*
PA008Q10NA (PE10)	Exchanged ideas on parenting, family support, or the child's development with my child's teachers.	0.833			.344*
PA008Q02TA (PE02)	Discussed my child's behavior on the initiative of one of his/her teachers.		0.835		.511*
PA008Q04TA (PE04)	Discussed my child's progress on the initiative of one of their teachers.		1.000		.734*
PA008Q05TA (PE05)	Participated in local school government (e.g., parent council or school management committee).			0.845	.277*
PA008Q06NA (PE06)	Volunteered in physical or extracurricular activities (e.g., building maintenance, carpentry,			1.000	.424*

PA008Q07NA (PE07)	gardening or yard work, school play, sports, field trips). Volunteered to support school activities (volunteered in the school library, media center, or canteen, assisted a teacher, appeared as a guest speaker).	0.974	.521*
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Note. * $p < .001$. Parental engagement items to be used in the LCA analyses in **Bold**.

The above analysis supported the factor structure of three categories. To determine the nature of school participation of the three categories, the study of Sebastian and colleagues (2017) was referred to. In the study of Sebastian and colleagues (2017) on PISA 2012, three types of parental involvement were found based on the factor analysis results: teacher-initiated, parent-initiated, and parent volunteering. Comparing the parental engagement items in PISA 2012 with PISA 2018, 5 items are worded in the exact same way (PA008Q01TA-PA008Q05TA), with the PISA 2018 items combining 7 parent volunteerism items from PISA 2012 into 3 and adding some new items. Compared to the categories in the study of Sebastian and colleagues (2017), the three categories were adopted for the PISA 2018 parental involvement items: parent engagement, parent volunteering, and teacher-initiative.

Items that measure parental engagement were used for Study 1. Items that measure parental participation in school-related activities because of teacher initiative and volunteer opportunities were excluded for the following reasons. First, volunteer opportunities in schools are not commonly available in every country, especially in middle schools. Second, the interest of this study is how cultural congruity impacts parents' willingness or reluctance

to get involved. Teacher-initiated engagement does not capture this feature. For instance, item PA008Q02TA, “discussed my child's behavior on the initiative of one of his/her teachers,” measures more of the teacher’s outreach effort than parents’ attitude towards parental engagement. Therefore, in the interest of this study, items pertaining to teacher initiative engagement and parent volunteerism were excluded.

After excluding teacher-initiative engagement and parent volunteerism, the five items adopted for Study 1 were PA008Q01TA, PA008Q03TA, PA008Q08NA, PA008Q09NA, and PA008Q10NA. For the purpose of data analysis, these five items were coded as PE01 (PA008Q01TA), PE03 (PA008Q03TA), PE08 (PA008Q08NA), PE09 (PA008Q09NA), and PE10 (PA008Q10NA).

Data Analysis Plan

To understand the association between parental engagement and cultural congruity, LCAs with binary auxiliary variables were administered using Mplus 8.6 (Muthén & Muthén, 2009). Specifically, parental engagement variables were used as the response indicators for the LCA model. Next, the cultural congruity items were used as auxiliary variables to examine how likely parents are to adopt a pro-cultural-congruity response based on the parent engagement level. The last step of Study 1 involved adding parental education level as a covariate to investigate how the association between family-school cultural congruity and parental engagement is impacted.

The following is the data analysis plan: 1) decide on the proper number of classes for parental engagement, which is the class enumeration step; and 2) using the BCH method to evaluate the association between the latent class of parental engagement and the auxiliary variables of family-school cultural congruity; 3) using the BCH method to investigate

parental engagement and its association with family-school cultural congruity after controlling for parental education level. The specific method to conduct class enumeration and the BCH step is listed below.

Class Enumeration

A series of models were assessed to decide on the proper number of classes for parental engagement, beginning with a 1-class model followed by models with an increased number of classes (e.g., 2-class, 3-class, and 4-class) to find the model with the best model fitness. To find the optimal model selection, several indicators of model fit were used since there is no perfect single indicator of the best model. Models with a different number of classes were compared using recommended indices including low Adjusted Bayesian Information Criterion (BIC) relative to other models and significant bootstrap likelihood ratio test (BLRT) (Nylund et al., 2007). The lower values of the BIC indicated better fit and the BLRT was used to evaluate if adding an additional class significantly improved model fit. The entropy was reported to reflect the overall classification of individuals into the latent classes but was not used for model selection. Entropy ranges between 0 and 1, where 1 is perfect classification and values closer to 0 indicate a clearer delineation of classes.

LCA Analyses

Once the appropriate number of classes was identified, a final model including the binary auxiliary variables was run. There are multiple LCA methods to investigate the relationship between the latent class and the auxiliary variables. Examples include the 3-step approach, the Bolck, Croon, & Hagenars approach (BCH), and the Lanza's approach. For Study 1, the automatic BCH approach was used considering entropy and possible latent class shift when involving multiple steps.

When auxiliary variables are added to an LCA model, the latent class can have an undesirable shift as it is not only measured by the latent class indicators but also by the auxiliary variables. Such an undesirable shift is likely to cause analysis biases as the original latent class changes. In general, the more steps involved in the analysis process, the more likely an unwanted class shift is induced. According to Asparouhov and Muthén (2014), the Mplus implementation of the 3-step approach does not solve the problem of shifting classes completely, and in some cases the shift can be so substantial that it invalidates the results. According to Bakk and Vermunt (2016), the approach of Lanza (2013) can also lead to invalid results due to its underlying assumptions of equal variance across classes. When the entropy is low or the variances of the distal outcome across classes vary substantially, the Lanza approach is not ideal. Simulation studies about the stepwise BCH method with auxiliary variables showed that the BCH method substantially outperforms Lanza's method and the 3-step method in that the BCH method avoids shifts in latent class in the final stage. The BCH method also performs well when the variances of the auxiliary variables vary considerably across classes (Bakk & Vermunt, 2016).

Based on the methodological considerations, the BCH method was adopted for Study 1. Two analyses were conducted. The first model was to measure the association between parent engagement and cultural congruity (Figure 3), which can be achieved using the automatic version of the BCH method with a single step. The second model included the covariates of father education level and mother education level as the covariates. The purpose was to understand the relationship between parent engagement and cultural relationship in the presence of covariates (Figure 4).

Automatic BCH Method with Auxiliary Variables. To answer Research Question 1, or how does family-school cultural congruity level associate with their parental engagement level, automatic BCH method with auxiliary variables was adopted to examine the association between parental engagement profile and level with family-school cultural congruity level. In the variable commend, the statement “AUXILIARY = auxiliary variables (BCH)” was specified, which yielded the mean of each distal outcome variables across classes. The implementation of the automatic BCH approach also generated results of equality tests of means across classes, which can answer the research question of whether the differences of the auxiliary variables across classes were statistically significant. Figure 3 represents the path diagram for the analysis plan of automatic BCH approach.

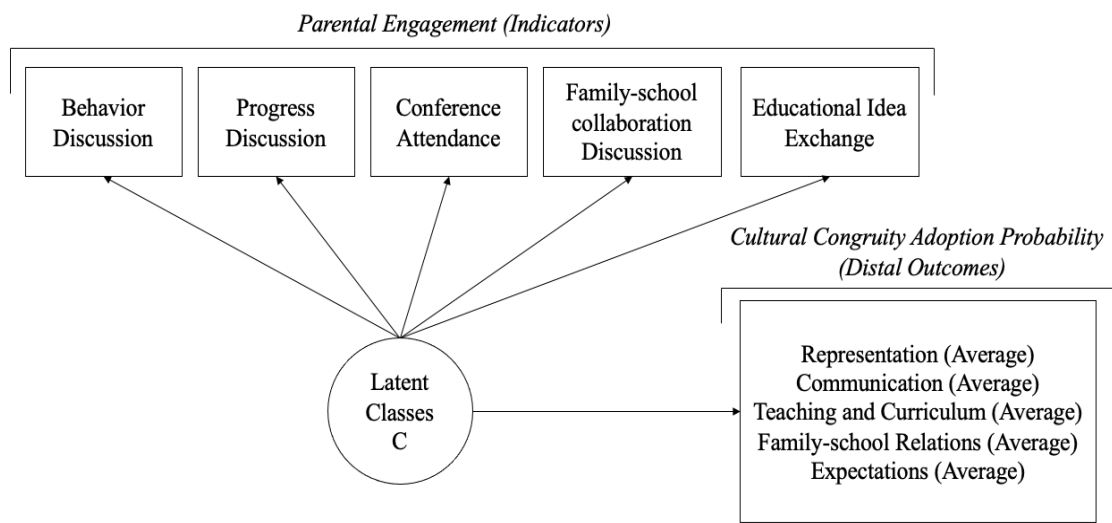


Figure 2. Path diagram for the latent class analysis model modeling the cultural congruity items conditioned on the latent class variable with parental engagement indicators.

BCH Method with Covariates and Auxiliary Variables. To answer Research Question 2, which is “controlling for the contextual factor of parent education level, what is the relationship between family-school cultural congruity and parental engagement,” an auxiliary model involving latent classes, covariates, and auxiliary variables was used as

shown in Figure 4. The model was manually set up using the BCH method in two separate runs. The first run estimated the LCA model using only the latent class indicator variables (i.e., parental engagement items) to compute and save the BCH weights along with the auxiliary variables (i.e., cultural congruity variables) and covariates of interest (i.e., parental education level). In the first run, the item thresholds for each class produced by the unconditional LCA model were used to obtain the same class order, as instructed by Wang and Wang (2019). In the second run, the saved data file was retrieved for further analysis by regressing the latent classes on covariates and regressing the distal outcome variables on the latent classes.

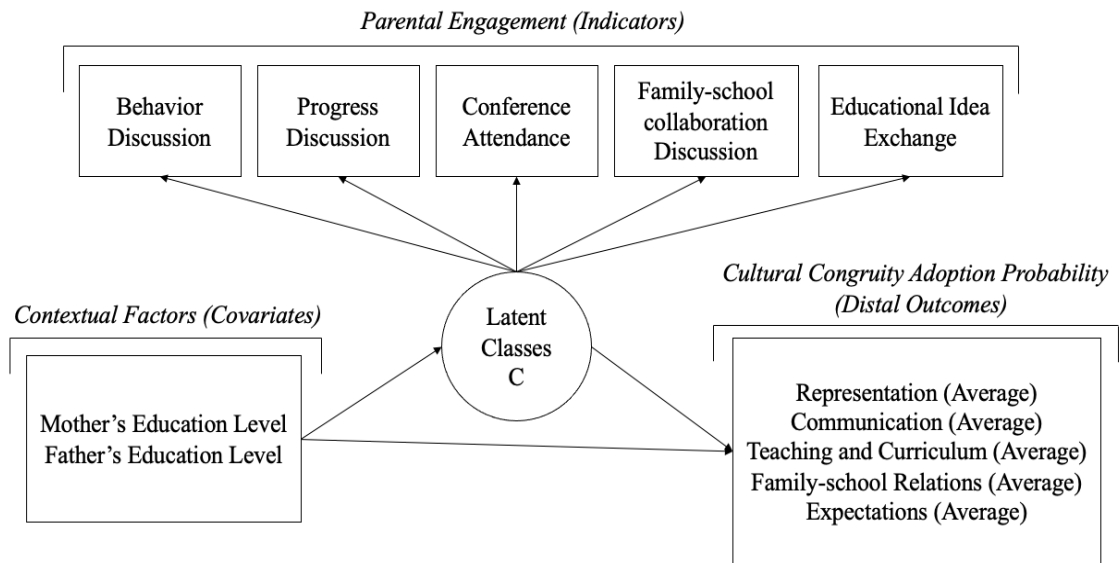


Figure 3. Path diagram for the latent class analysis model modeling the cultural congruity items conditioned on the latent class variable with parental engagement indicators controlling for contextual factors.

Chapter 4: Results for Study 1

Pearson Correlations Among Study Variables

Table 7 presents the Pearson correlations of the studied variables. The Pearson correlations indicate that the cultural congruity and parental engagement indicators were positively correlated with each other.

Table 7

Correlation Matrix for Parental Engagement and Cultural Congruity Variables (n = 28970)

	PE01	PE03	PE08	PE09	PE10	Rep	Commu	Rela	Teach	Exp
PE01	1.00									
PE03	.61	1.00								
PE08	.30	.31	1.00							
PE09	.40	.44	.35	1.00						
PE10	.37	.35	.25	.49	1.00					
Rep	.04	.04	.04	.01	.02	1.00				
Commu	.10	.12	.11	.17	.11	.01	1.00			
Rela	.05	.06	.07	.09	.09	.01	.36	1.00		
Teach	.05	.06	.06	.09	.06	.02	.37	.34	1.00	
Exp	.04	.05	.06	.07	.05	.01	.39	.39	.52	1.00

Note.

Cultural Congruity Items: representation, communication, relation, teaching, expectation

Parental Engagement Items: PE01, PE03, PE08, PE09, and PE10

Behavior Discussion (PE01) = “Discussed my child's behavior with a teacher on my own initiative.”

Progress Discussion (PE03) = “Discussed my child's progress with a teacher on my own initiative.”

Conference Attendance (PE08) = “Attended a scheduled meeting or conferences for parents.”

Family-School Collaboration Discussion (PE09) = “Talked about how to support learning at home and homework with my child's teachers.”

Educational Idea Exchange (PE10) = “Exchanged ideas on parenting, family support, or the child’s development with my child’s teachers.”

Rep = Representation

Commu = Communication

Rela = Relation

Teach = Teaching

Exp = Expectation

Class Enumeration Results

The LCA model included the five parental engagement items as the latent variables. To identify the optimal number of subgroups (or classes), several LCA models with varying numbers of classes were estimated before deciding on the best model that fit the data. Using several model fit criteria, the five-class model was identified as the model that fit the data both statistically and substantively. The model fit indices for the six models are presented in Table 8.

In the table, BIC shows the minimum value for the five-class model. Moreover, the p values from the BLRT tests for the five- and six-class models were noted as significant ($p < .01$) and non-significant ($p = 0.5$), respectively. Although loglikelihood results did not show minimum values at the five-class model, the decrease in their values from the five-class to the six-class model was marginal, which also supports the five-class model.

These results support that the five-class model is the optimal solution. Based on the examination of model fit indices, the five-class model was selected for subsequent analyses in this case. The entropy measure, which represents the quality of classification, was 0.709.

Table 8

Model Fitness Indices for Exploratory Latent Class Analysis for Parental Engagement (n = 28144)

Model	LogL	BIC	BLRT p	Entropy
one-class	-86007.41	172066.0	NA ^a	NA ^a
two-class	-73661.28	147435.3	< .01	.759
three-class	-72673.54	145521.2	< .01	.724
four-class	-71845.32	143926.3	< .01	.697
five-class	-71815.82	143928.7	< .01	.709
six-class	-71813.53	143985.6	.5	.676

Note.

LogL = Loglikelihood, BIC = Bayesian Information Criteria, BLRT = bootstrap likelihood ratio test.

The five-class model was selected for subsequent analyses because BIC showed minimum value for the six-class model and the BLRT test was not statistically significant for the six-class model. Although loglikelihood results do not show minimum values at the five-class model, the amount of decreases in their values from the five-class to the six-class model were marginal, which also could support the five-class model.

Best-fitting model according to that index in **Bold**.

^a BLRT and Entropy are not available for the one-class model

Figure 5 presents the probabilities of endorsing the five indicators in the five-class model. There were five subtypes of parental engagement within this sample. The first group involved 43.07% ($n = 12,121$) of parents who showed high engagement in all five participation types. The second group consisted of 6.27% ($n = 1,764$) of parents who were engaged in behavior discussion and idea exchange. 15.41% ($n = 4,336$) of parents comprised the third group, which showed higher engagement in home support and idea exchange. 15.6% ($n = 4,389$) of parents showed higher levels of behavior discussions and progress discussions with teachers. The last group comprises 19.66% ($n = 5,531$) of the sample with parents showing low level of engagement in all five participation opportunities.

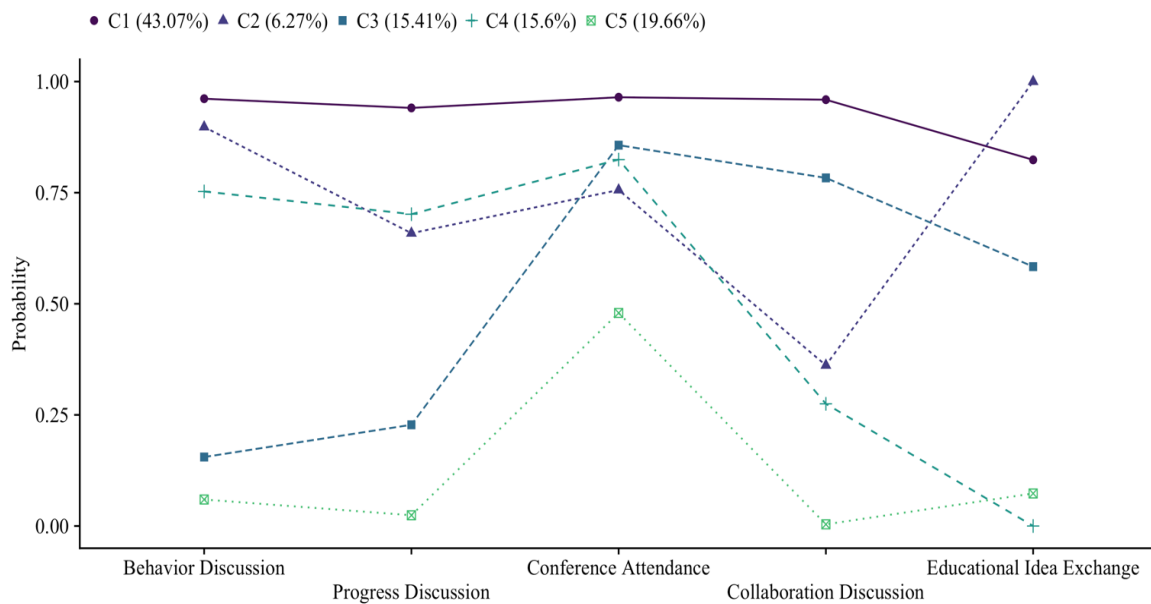


Figure 4. Item probability plot for the five-class LCA model for the Parental Engagement items.

C1 = balanced high engagement

C2 = engaged in behavior discussion and idea exchange

C3 = engaged in home support and idea exchange

C4 = engaged in behavior and progress discussions

C5 = balanced low engagement

Behavior Discussion (PE01) = “Discussed my child's behavior with a teacher on my own initiative.”

Progress Discussion (PE03) = “Discussed my child's progress with a teacher on my own initiative.”

Conference Attendance (PE08) = “Attended a scheduled meeting or conferences for parents.”

Family-School Collaboration Discussion (PE09) = “Talked about how to support learning at home and homework with my child's teachers.”

Educational Idea Exchange (PE10) = “Exchanged ideas on parenting, family support, or the child’s development with my child’s teachers.”

Automatic BCH Method Results

With the five-class model determined, further investigations towards the differences in auxiliary outcomes between classes were conducted using the BCH method (Bolck et al., 2004). The automated BCH method was used to evaluate whether there is significant difference in the mean scores of family-school cultural congruity across latent classes using the chi-square tests.

Table 9

Distal Outcome Analysis Results Showing the Likelihood of Endorsement for Cultural Congruity Across Latent Classes (n = 28,144)

Parental Engagement Latent Class	Family-School Cultural Congruity				
	Values and Belief Systems (Rep)	Interactional Style (Commu)	Structuring Style (Rela)	Operational Strategies (Teach)	Needs (Exp)
Class 1 Balanced high engagement	.955 (.002)	.907 (.003)	.913 (.003)	.916 (.003)	.935 (.003)
Class 2 Engaged in behavior discussion and idea exchange	<i>Mean</i> (.977) <i>(SE)</i> (.007)	.749 (.016)	.853 (.014)	.788 (.015)	.861 (.013)
Class 3 ^a Engaged in home support and idea exchange	.936 (.005)	.855 (.008)	.883 (.007)	.886 (.007)	.916 (.006)
Class 4 ^b Engaged in behavior and	.957 (.005)	.763 (.009)	.819 (.008)	.843 (.008)	.893 (.006)

progress discussions					
Class 5 Balanced low engagement	.936 (.004)	.727 (.007)	.819 (.006)	.827 (.006)	.871 (.005)
Overall	43.42*	738.98*	285.38*	252.11*	146.57*
Class 1 vs Class 2	7.38*	79.66*	16.52*	59.88*	27.41*
Class 1 vs Class 3	10.11*	33.28*	13.35*	13.81*	7.48*
Class 1 vs Class 4	0.10	212.72*	110.24*	72.11*	31.93*
Class 1 vs Class 5	18.96*	565.99*	198.64*	187.07*	121.44*
Class 2 vs Class 3	18.74*	30.11*	3.49	30.17*	12.77*
Class 2 vs Class 4	5.84*	0.57	4.61*	10.53*	4.93*
Class 2 vs Class 5	25.16*	1.55	4.99*	5.41	0.51
Class 3 vs Class 4	7.56*	49.92*	30.05*	14.18*	5.19*
Class 3 vs Class 5	0.00	128.91*	41.07*	36.56*	26.43*
Class 4 vs Class 5	10.71*	9.13*	0.00	2.71	6.17*

Note.

^a Parents in Class 3 are engaged in facilitating idea exchange and home support collaborating with school

^b Parents in Class 4 are engaged in facilitating behavior and progress discussions with school
* $p < .05$

Parents in the balanced high engagement group are more likely to be culturally congruent with the school compared to parents in the least engaged group index in **Bold**.

Teach = Teaching: "Agree: I am happy with the content taught and the instructional methods used in my child's school."

Exp = Expectation: "Agree: My child's school does a good job in educating students."

Commu = Communication: "Agree: My child's school provides regular and useful information on my child's progress."

Rep = Representation: "Which language do you usually speak with: my schoolmates? (1 = mostly my heritage language, not applicable because heritage and test language are the same for the student item; 0 = mostly test language, about equally often my heritage language and test language)"

Rela = Relation: "Agree: My child's school provides an inviting atmosphere for parents to get involved."

According to the results of the overall chi-square analysis, all the means scores of the five cultural congruity variables showed significant differences between classes (Table 9). As an example, the overall χ^2 of the teaching variable was 252.11, $p < .05$, which suggests that

the mean scores of “teaching congruity” for each class differed significantly. The mean score can be interpreted as the probability to say “yes” to the designated cultural congruity variables. For instance, the mean score of “teaching congruity” for Class 1, the balanced high engaged parent group, was .916. It suggests that for parents in the balanced high engagement group, they had a 91.6% chance to say yes to the cultural congruity question of “teaching”, which is “I am happy with the content taught and the instructional methods used in my child's school.” In other words, for the balanced and highly engaged parents, they were 91.6% likely to feel happy with the teaching method used by their children’s schools.

When compared to different classes, parents in Class 1, the balanced high engagement group, were more likely to adopt a higher cultural congruity between family and school at a statistically significant level. Take “expectation” for instance. Parents in the highly engaged class ($M = .935$) had a high possibility to feel that their children’s schools do a good job in educating students compared to parents in Class 2 ($M = .861$), Class 3 ($M = .916$), Class 4 ($M = .893$), and Class 5 ($M = .871$), suggesting a higher congruity of educational expectation between family and school among highly engaged parents compared to parents that were not as engaged. This highest probability of adopting cultural congruity holds for four out of the five cultural congruity domains: teaching, expectation, communication, and relation, and showed no statistically significant difference in the representation domain when compared to Class 4, the mixed engaged group which showed high progress and behavior discussion between family and school. For the domain of representation, parents across the 5 classes were all highly likely to say yes to the cultural representation questions, with the probability all higher than 93%. It is expected for such an

insignificant difference to appear with all parents having a considerably high possibility to say yes to the “representation” question.

It is worth noting that parents in the balanced-high engagement group were more likely to be culturally congruent with the school compared to parents in the least engaged group. The Class 1 vs Class 5 χ^2 all are significant ($\chi^2_{Teaching} = 187.07$; $\chi^2_{Expectation} = 121.44$; $\chi^2_{Communication} = 565.99$; $\chi^2_{Representation} = 18.96$; $\chi^2_{Relation} = 198.64$). It was observed that parents with the highest teaching, representation, communication, and relation mean were in Class 1, the highly engaged class, while parents with the lowest cultural congruity mean across all five domains were in Class 5, the least engaged class.

Regression Auxiliary Model Combined with Latent Class Regression Results

Table 10 presents the class-specific item endorsement probability for the five cultural congruity scores controlling for contextual factors. All the probability estimates were statistically significant. Table 10 also includes the results of the general Wald test results as well as the Wald tests for pairwise comparisons across all class-specific thresholds within the same distal outcome model. The pairwise comparison results also show that parents with the balanced high engagement pattern are correlated with highest cultural congruity outcomes compared to parents with the balanced low engagement pattern (Class 1 vs. Class 5, $p < .05$), controlling for the contextual factors of parental education level.

Parents from the balanced high engagement class (Class 1) also reported significantly higher congruity in communication (9.4% higher, $p < .05$) compared to Class 2, the group engaged in behavior discussion and idea exchange. Parents from the balanced high engagement class (Class 1) also reported significantly higher congruity in relation (7.5% higher, $p < .05$) and communication (11.4% higher, $p < .05$) compared to parents who were

only engaged in behavior and progress discussions (Class 4). Results also showed that parents who were engaged in home support and idea exchange (Class 3) were higher in communication (10.2% higher, $p < .05$) and relation congruity (5.2% higher, $p < .05$) compared to parents who were least engaged (Class 5). Parents who were engaged in behavior and progress discussions (Class 4) reported higher expectation congruity than parents who were least engaged (Class 5) (2% higher, $p < .05$).

With regards to the covariates, parental education level, especially father’s education level seems to show negative correlations with reported congruity scores. It was negatively correlated with four out of the five cultural congruity domains except relation. Fathers with higher education levels are linked with lower home-school congruity in teaching style ($p < .05$), communication preference ($p < .05$), education expectation ($p < .05$), as well as cultural representation ($p < .05$). Mothers with higher education levels are associated with lower teaching ($p < .05$) and communication congruity ($p < .05$).

Table 10

Descriptive Statistics for Covariates and Cultural Congruity Auxiliary Variables

Variables	N	Min	Max	Mean	SD
Covariates					
Mother Education Level	27777	0.00	2.00	1.44	0.65
Father Education Level	27405	0.00	2.00	1.44	0.67
Cultural Congruity Auxiliary Variables					
Representation	27860	0.00	1.00	0.95	0.22
Communication	27934	0.00	1.00	0.83	0.38
Teaching and Curriculum	27988	0.00	1.00	0.87	0.33
Family-School Relations	27867	0.00	1.00	0.87	0.34
Expectations	27979	0.00	1.00	0.91	0.29

Table 11

Family-School Cultural Congruity by Class Controlling for Student Gender, Parent Education Level, and Guardian Role (n = 25797)

	Cultural Congruity Distal Outcome Variables									
	Values and Belief Systems (Rep)		Interactional Style (Commu)		Structuring Style (Rela)		Operational Strategies (Teach)		Needs (Exp)	
	THLD ^a (SE)	Prob ^b	THLD (SE)	Prob	THLD (SE)	Prob	THLD (SE)	Prob	THLD (SE)	Prob
Class 1 Balanced high engagement	-3.13*	.956	-2.53*	.888	-2.35*	.904	-2.83*	.906	-2.87*	.928
	(0.07)		(0.05)		(0.05)		(0.05)		(0.06)	
Class 2 Engaged in behavior discussion and idea exchange	-3.50*	.969	-1.88*	.794	-2.02*	.869	-2.20*	.821	-2.36*	.881
	(0.16)		(0.07)		(0.09)		(0.08)		(0.10)	
Class 3 ^a Engaged in home support and idea exchange	-2.81*	.940	-2.09*	.839	-2.06*	.876	-2.51*	.876	-2.60*	.910
	(0.09)		(0.06)		(0.06)		(0.07)		(0.07)	
Class 4 ^b Engaged in behavior and progress discussions	-3.10*	.954	-1.72*	.774	-1.70*	.829	-2.33*	.846	-2.46*	.894
	(0.10)		(0.06)		(0.06)		(0.06)		(0.07)	
Class 5 Balanced low engagement	-2.79*	.938	-1.48*	.737	-1.65*	.824	-2.16*	.831	-2.24*	.874
	(0.08)		(0.05)		(0.05)		(0.05)		(0.06)	
Overall Wald test p-value	< .05*		< .05*		< .05*		< .05*		.12	
	The Wald Chi-Square Pairwise Test									
	<i>p</i> value		<i>p</i> value		<i>p</i> value		<i>p</i> value		<i>p</i> value	
Class 1 vs Class 2	.86		.03*		.62		.82		.600	
Class 1 vs Class 3	.07		.08		.51		.06		.693	
Class 1 vs Class 4	.22		< .05*		< .05*		.62		.578	
Class 1	< .05*		< .05*		< .05*		< .05*		< .05*	

vs					
Class 5					
Class 2	.32	.33	.92	.37	.798
vs					
Class 3					
Class 2	.43	.83	.26	.92	.376
vs					
Class 4					
Class 2	.12	.24	.11	.14	.495
vs					
Class 5					
Class 3	.69	.10	.09	.29	.447
vs					
Class 4					
Class 3	.32	< .05*	< .05*	.51	.176
vs					
Class 5					
Class 4	.17	.16	.53	.07	< .05*
vs					
Class 5					
Covariates					
	Est. (SE)	Est. (SE)	Est. (SE)	Est. (SE)	Est. (SE)
Mother's	0.06	-0.15*	-0.04	-0.17*	-0.06
Education	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Father's	-0.11*	-0.16*	-0.03	-0.22*	-0.15*
Education	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)

Note. * $p < .05$.

^a Thresholds

^b Only the probability scale of the statistically significant thresholds is reported. Only the probability of “distal outcome = 1” is reported.

Teach = Teaching: “Agree: I am happy with the content taught and the instructional methods used in my child's school.”

Exp = Expectation: “Agree: My child's school does a good job in educating students.”

Commu = Communication: “Agree: My child's school provides regular and useful information on my child's progress.”

Rep = Representation: “Which language do you usually speak with: my schoolmates? (1 = mostly my heritage language, not applicable because heritage and test language are the same for the student item; 0 = mostly test language, about equally often my heritage language and test language)”

Rela = Relation: “Agree: My child's school provides an inviting atmosphere for parents to get involved.”

Chapter 5: Discussion

Study 1 informs the literature on cultural congruity by using an international dataset of 5 countries and economies (i.e., Korea, Macao, Dominican Republic, Mexico, Georgia) to

examine the association between parental engagement and family-school cultural congruity. Using latent class analysis (LCA), five significantly different groups of parental engagement were identified: balanced high engagement (Class 1), engaged in behavior discussion and idea exchange (Class 2), engaged in home support and idea exchange (Class 3), engaged in behavior and progress discussions (Class 4), and balanced low engagement (Class 5). The names for the five-subgroup typology of parental engagement based on the narrative interpretation of the survey response data are to provide a concise depiction of parental engagement patterns in the five countries and regions. After identifying the five subgroups, family-school cultural congruity items were added as the outcome variables. Such an association was further investigated after controlling for the contextual factors of parental education levels.

As hypothesized, of the five distinct subgroups of parent engagement identified in the data, the parent groups with the high balanced pattern of engagement (43.07% of the sample) demonstrated the highest level of family-school cultural congruity. On the opposite end of the typology, low family-school cultural congruity was most associated with parents who were the least engaged (19.66% of the sample). This finding debunks the myth of the hard-to-reach parents by providing evidence in support of the existing literature which posits that family-school interaction and cultural congruity correlate, and that meaningful parent participation necessitates organizational efforts to foster respectful and sensitive cultural practices (Bryk et al., 2010; Hill, 2010; Mapp & Hong, 2010). After controlling for parental education level, such associations still existed as parents demonstrating a high and balanced engagement pattern were those who shared a high cultural congruity with the school, and parents who were least engaged were more likely those experiencing cultural mismatch,

regardless of their educational attainment. Next, the focus of the discussion will turn to the association between family-school cultural congruity and the subgroups that show unbalanced parental engagement, namely, engaged in certain engagement opportunities and unengaged in others. The discussion will describe such associations with or without the presence of influence from parental education levels.

Class 2 consists of 6.27% of the sample and was the smallest class. Parents identified in Class 2 were more engaged in discussing their children's behaviors with a teacher on their initiative and exchanging ideas on parenting, family support, or their children's development with teachers. Parents in this group tend to be less engaged in collaborative and progress-focused interactions such as working with teachers to support learning and homework at home and discuss progress of their children with teachers. Compared to Class 3 and Class 4, parents in Class 2 were also less involved in universal engagement opportunities such as conference attendance. It is likely that parents who are engaged in idea exchange with teachers may consider attending conferences not as important based on their other interactions with teachers that do not require regular check-in with teachers. Such a combination of interaction pattern can also suggest that teachers may not be attentive to parent out-reach efforts, for which parents may feel the need to take the initiative for home-school interactions. Such assumptions correspond with the findings that parents in Class 2 showed lower cultural congruity with schools in *communication* compared to Class 3, in which parents were more proactive in conference attendance and collaboration. Parents in Class 2 also portrayed a lower level of cultural congruity in *teaching* and *expectation* compared to parents who focused more on their children's progress and conference attendance (Class 4). The only one cultural congruity area in which Class 2 scored higher

than Class 3 and 4 was *representation*. It is worth noting that this was the area exhibiting the highest item endorsement probability ($> .938$) across all 5 classes. It was found that parents who experience a higher cultural match in *teaching* and *expectation* with the school were more likely to be involved in progress-focused and action-oriented interaction with school personnel, such as discussing the children's progress or working together to generate strategies for parents to support their children's learning at home. It was also found that parents who enjoyed cultural congruity in the area of *communication* are more likely to attend school-host activities that involve parents such as conferences or meetings. Notably, parents in Class 2 still showed higher cultural congruity in 2 out of the 5 areas (i.e., *representation* and *teaching*) compared to parents that were least engaged (Class 5) at a statistically significant level. In the other three areas, namely, *communication*, *expectation*, and *relation*, the cultural congruity scores of Class 2 and Class 5 did not show statistically significant difference. In other words, parents in Class 2, who were engaged in some opportunities, in general showed higher cultural congruity scores than parents who were least engaged. Such findings extend the research on the nature of parent engagement and its association with family-school partnership as it showed that the "hard-to-reach" parents tend to be those experiencing the lowest level of cultural congruity between family and school. School leaderships seeking to engage parents as an important collaborative force need to address the gap existing in communication, teaching, and expectation. For instance, to engage parents in proactive and progress-focused collaboration efforts, which has been shown to be more correlated with student school success, schools need to consider how to facilitate and maintain culturally meaningful communications between home and school. Schools should also focus on families who perceive notable disagreements with schools'

teaching practices because the findings showed that these families tend to be less likely to engage in universal school-related opportunities.

Parents in Class 3, comprising 15.41% of the sample, emerged as the group that exhibited the pattern of being more engaged in collaborative interactions with teachers. Parents in this group were more engaged in discussing with teachers how to support learning and homework at home and exchanging ideas on parenting, family support, or their children's development. We found that the family-school cultural congruity of this group rated higher than Class 2, 4, and 5 in nearly all aspects. Class 3 was the group with the second highest cultural congruity scores. Parents in Class 3 showed higher congruity scores than those in Class 4 in all five cultural congruity domains at a statistically significant level. Family-school cultural congruity of Class 3 was higher than that of Class 5 in all domains except representation, where there was no statistically significant difference. Compared to Class 2, the only congruity domain where Class 3 yielded lower endorsement probability is representation. Representation of Class 3 was still high in that parents in this group had a probability of 93.6% to agree to the representation item. In general, Class 3 showed a high level of family-school cultural congruity. Families who perceive themselves to be culturally congruent with school are more likely to engage in home-school collaboration that is essentially "a style for direct interaction between at least two coequal parties voluntarily engaged in shared decision making as they work toward a common goal (Friend & Cook, 2003)." To achieve such a coequal collaboration between home and school, schools need to be cautious about viewing the families, especially with a culturally and linguistically diverse background, through an "additive lens" (as an asset) or a "deficit lens" (as an obstacle or burden) to make the coequal parties possible. Schools should also strive to provide

information and support in the best interest of the child and with respect for the parents' wishes (Olivos, 2009).

Parents in Class 4 comprised 15.6% of the sample and had a higher probability of endorsing the progress discussion and behavior discussion items, suggesting they tend to be more engaged in talking to teachers about their children's behaviors and progress on their own initiative. As discussed above, family-school cultural congruity in Class 4 was not as promising as Class 3. That is, parents more engaged in collaborative interactions with teachers were found to enjoy a higher family-school cultural congruity compared to parents who were less engaged in collaborative synergy but participated more in discussions related to their children's particular behaviors and progress. Parents in Class 2 and Class 4 presented some similarity in that they both engaged in behavioral discussions, while parents in Class 4 were more progress focused. Cultural congruity in these two groups was diverging as Class 4 rated higher in teaching and expectation while Class 2 scored higher in representation and relation. They showed no statistically significant difference in communication. Class 4 demonstrated higher cultural congruity between home and school than Class 5.

Mother and father education levels were added as covariates because of prior evidence of the consistent association between parental engagement and cultural capital, which includes parents' educational attainment (Lee & Bowen, 2006; Ringenberg & McElwee, 2009). When investigating parental education level in assignment to parental engagement class, we found that parents' education levels were associated with the cultural congruity variables, with class membership as a moderator. Parents' educational level impacted four out of the five cultural congruity domains, except relation. Family-school cultural congruity indicators were all negatively associated with parent's educational levels

in cases where the covariates had a statistically significant impact. In general, we found that higher-educated parents are more likely to report incongruity with schools in schools' *teaching, communication, and expectation*.

The education level of fathers may have a bigger impact on family-school cultural congruity than mothers' education level among the countries included in the sample. Father's education was negatively associated with cultural congruity in four out of five indicators, all except the home-school relation indicator. Mother's education was negatively correlated with three out of five cultural congruity indicators. In addition, in the same cultural congruity indicator, the coefficient of father's education level was unexceptionally larger than that of mother's education, which suggests that one unit change in father's education level will lead to a greater difference in the distal outcome compared to mother's education level change. Our findings are aligned with prior research showing that parents' education level is linked with parent efficacy, a set of attitudes about one's ability to get necessary resources and offer effective help, which impacts parental involvement behaviors (Hoover-Dempsey et al., 1992). Higher levels of education may give parents a higher level of skill and knowledge and can impact parental involvement outcomes (Kohl et al., 2000). The decision to question and even challenge schools' current infrastructure requires that one has educationally relevant knowledge to notice areas of growth and vision potential changes within the school system, especially in the domains that require more knowledge and insights such as teaching, expectation, and communication.

After controlling for parents' education levels, the difference of cultural congruity across classes was less salient. Before adding the covariates, nearly all classes showed a statistically significant difference between classes with regards to cultural congruity scores.

Parents in the less engaged group reported lower family-school cultural congruity than parents in all the other four classes at a statistically significant level. After parent education levels were added, the difference was not as obvious as reflected by parents in Class 2, 3, and 4 where parents who were engaged solely in some opportunities did not report statistically significant higher scores than parents from Class 5, the least engaged group. However, it is worth noting that parents in Class 1 displaying balanced high engagement were still culturally more congruent with schools in all cultural congruity domains than parents in Class 5, at a statistically significant level. Also, the overall Wald test results were significant in four out of five cultural congruity indicators, suggesting that the overall trend of unbalanced and lower parent engagement may be associated with lower cultural congruity scores.

Parent's education level had the biggest impact on the cultural congruity domain of *teaching*. Both mother's and father's education level revealed a statistically significant negative association with cultural congruity in *teaching*. The coefficients of parental education level under the *teaching* domain were the most salient compared to all other coefficients, in the cases where parent's education level was statistically significant. The fact that parents with lower education reported a higher level of agreement with school's culturally related teaching practice may reflect less adequate knowledge of culturally relative pedagogy or lower confidence or self-efficacy to disagree with school's teaching method.

The second family-school cultural congruity domain most impacted by parent's education level is communication, as indicated by the statistically significant coefficients of both father and mother's education level. The item used to measure communication congruity is: "My child's school provides regular and useful information on my child's

progress.” Such a finding is congruent with the existing literature on higher-educated parents showing more disagreements and lower satisfaction with the services they received, either from schools or from other service providers. For instance, the Shao et al. (2021) study showed that the higher the education level, the higher parents’ expectations of online education, causing low satisfaction with online education. Another example is the Kelesidou et al. (2017) study where higher educated parents rated day-care centers less favorably as compared to lower educated parents. Our findings are congruent with the literature both in and outside the U.S. context showing parents with higher educational level are more critical about the services they receive, and lower-educated parents are “silenced” by systematic hinderances due to a lack of knowledge, availability, resources, or self-efficacy (Mac Naughton & Hughes, 2011; Matthiesen, 2016; Olivos, 2021).

It is worth noting that home-school relationships do not appear to be impacted by parental education levels. The item used to measure the home-school relational structure is: “My child's school provides an inviting atmosphere for parents to get involved.” The insignificant impact of parent’s education on this cultural congruity indicator may reflect that parent’s judgment of an inviting school atmosphere was not related to their education level. How parents feel about the school atmosphere was not dependent upon their education attainment. It is unsure if such an insignificant association can be applied to other family-school relation concepts; thus, future research should use a comprehensive scale to capture the concept of family-school relation to further analyze the role of parent’s education level.

Controlling for parent’s education level, the cultural congruity domain most associated with parental engagement is communication, as indicated by the four between-class statistically significant differences (i.e., 1 vs 2, 1 vs 4, 1 vs 5, and 3 vs 5). This finding

reiterates the fact that communicative practices shape the parent-school encounters and parental engagement as supported by existing literature (Emerson et al., 2012; Saltmarsh & McPherson, 2019).

These results are meaningful in the following ways. First, Study 1 is the first in capturing the concept of family-school cultural congruity using a theoretical model related to culture. Second, Study 1 is among the first to examine the association between parent engagement and family-school cultural congruity in the global settings by using data from countries from Asia, Europe, and Latino America. Third, adding parental education level as a contextual factor to the auxiliary regression model allows our findings to reinforce existing studies on cultural congruity linking with socio-economic factors. In addition, Study 1 applied the BCH method to avoid the methodology errors possibly induced by using Manual 3-step method. These results shed light on how cultural discontinuity is likely to impact parent engagement in schools.

Limitations and Future Directions

Despite empirical contributions to the existing literature, the results of the studies should be interpreted in light of a few limitations. Study 1 is among the first to show parental engagement patterns from an international perspective by including countries and regions from three different continents, but it solely includes five countries and regions, and all of them are middle-upper income or high-income areas according to the World Bank (n.d.). There may be variations in parent perceptions in other cultural and national contexts. Parents from different regions can have different parent engagement patterns that link differentially with various family-school cultural congruity status. While Study 1 strengthens the existing body of evidence on the association between family-school cultural congruity and parent

engagement, the findings may not be generalized to other cultural subgroups that are not included in the sample. Caution should be encouraged in generalizing the results; future research is encouraged to expand this work within other cultural contexts. Efforts can also be made to research how different countries moderate the association between parent engagement pattern and family-home cultural congruity by adding countries as covariates. Results can inform targeted systematic changes to enhance family-school collaboration for other cultural and national groups.

Another limitation to Study 1 involves not having a cultural congruity scale to comprehensively capture the cultural dynamic between home and school. The five cultural congruity items included in Study 1 have relatively high item endorsement ($M > .80$) and they were not a robust representation of their corresponding subdomains. Although Study 1 employs the VISION model as the theoretical reference to seize the core composition of cultural congruity, which is appropriate to our analysis and allows us to preliminarily study the association between parent engagement and cultural congruity, further research should focus on using a home-school cultural congruity scale to address the limitation. Development of a family-school cultural congruity scale that is suitable to be applied in diverse social and cultural settings can support further understandings of family-school cultural congruity and its impact.

Third, the results about associations between subgroup classification and auxiliary variables in Study 1 should not be considered as causal. In other words, causal links between parental engagement pattern and family-school cultural congruity cannot be examined or established. We caution against viewing parents' engagement patterns as the reason for the presence of discontinuity between family and school. There has long been the jeopardous

belief of blaming minority parents for their children's performances and casting this group as being irresponsible or careless (Kim, 2009). Educational professionals ought to be acutely aware of the dangerous hierarchical view on the nature of minority parental engagement in children's education.

Fourth, although the data used in Study 1 is adequately large, the sample centers on middle school students. Notably, parent engagement patterns can differ at different grade levels and present different forms according to different developmental stage and cultural contexts (Bond, 2019; Gonida et al., 2007; Rattenborg et al., 2019). When selecting parental engagement indicators for Study 1, items that involves engagement opportunities not commonly available to the middle-school or the cultural settings were intentionally ruled out, but in future studies, it will be important to replicate the findings for other age groups (e.g., primary school and high school). Future researchers can also compare the similar or the different relationship between family engagement and family-school cultural congruity by age group. Such work would have implications for our understanding of parent engagement and culture from more angles.

Fifth, although Study 1 investigates how the associations between parental engagement and family-school cultural congruity can be moderated by parents' education level, there may be other contextual factors with mediation or moderation effects on the association that are not fully explored. For instance, socio-economic status and cultural capital possessed by families are influential factors on parental engagement as indicated by existing literature (Lee & Bowen, 2006; Malone, 2017; Tan et al., 2020). While adding these covariates is outside the bounds of the current study, future studies are recommended to include other factors that can shape the indirect relationship between parental engagement

and family-school cultural congruity. Also, Study 1 limits the investigation efforts to family-school cultural congruity and its association with parental engagement. Other school-related constructs, for instance, student academic achievement and student engagement, to name a few, were not considered but merit future research attention. For instance, the literature has suggested a potential link between cultural discontinuity and student performances, which needs to be tested further due to the divergent findings (Conner, 2013; Ledlow, 1992; Michael, 2004; Ogbu, 1992; Taggart, 2017; Torres, 2017). Future research is encouraged to study other constructs of interest using the School Cultural Congruity Scale (SCCS) in the corresponding cultural context.

It should be also noted that authority deference is a cultural phenomenon possibly present in some of the sample countries included in Study 1 (Dalton & Ong, 2005; Selvarajan et al., 2018; Vong, 2008). It is likely that the PISA data collected from self-report surveys can be subject to bias and social desirability, which is a concern for any researchers employing a survey methodology. It is not known whether or how much social desirability or authority deference bias was induced in the dataset used, but in looking forward, future research could consider using multiple methods of data collection to reduce such possible biases.

Chapter 6: Introduction to Study 2

Understanding associations between cultural differences and the quality of parental engagement necessitates a comprehensive measure to evaluate cultural congruity. The School Cultural Congruity Scale (SCCS) was developed first in English, namely SCCS-US, to measure the potential discrepancy between family and staff values. The purpose of Study 2 is to establish the measurement invariance of the SCCS-US and expand its potential to the

Chinese context. The validated measure will help educators, policymakers, and scholars to better understand parents' perspectives of the cultural congruity between the family and the school and promote effective parental engagement for all students, particularly diverse families.

Never in the history of the world has the migration of diverse racial, ethnic, cultural, linguistic, religious groups been as rapid and numerous, which raises such complex and difficult questions about how to provide the groups in minority the recognition and equal educational opportunities. Schools in China face the same challenge. China has been ethnically, linguistically, and religiously diverse throughout its history. It is a nation with fifty-five officially designated ethnic minority groups and enormous language varieties that comprise roughly 130 to 300 languages, including over 80 minority ethnic languages plus 10 dialects families (Lewis, 2009; Tang, 2014). The contemporary large-scale migration trends further complicate the issue. Since the economic reforms in the late 1970s, over 270 million migrants have been drawn from villages to cities for socioeconomic attainments (NBS, 2015). The migration has evolved from a single person to a family movement. The 2000 census data showed more than 20 million migrant children in Chinese cities and the number is assumed to be closed to 30 million (Lu & Chou, 2013).

Previous studies have found a substantial educational attainment gap in cities between rural migrant children and nonmigrant urban children (CYRC, 2006; Guo, 2002). Even compared with the left-behind children in the rural villages, migrant children in the cities can be more vulnerable to academic disengagement, psychological distress, social exclusion, and discrimination (Chen et al., 2013; Lu & Zhou, 2013; Xiong, 2015). Chinese policymakers,

educators, and scholars confront a dilemma of how to tread a delicate line between implementing an indigenized version of diversity and multicultural education to students. Parental engagement has been suggested by scholar to compensate for limited resources and lower socioeconomic status for minoritized families in China, as it was found that high-achieving migrant children tend to have more parental support in academic socialization at home and in school compared to their low-achieving migrant peers (Liu et al., 2020). It is in the interest of researchers to further understand how different cultural ideologies may lead to differences in the quality of parental engagement (Fang et al., 2017).

Understanding the relationships between cultural differences and the quality of parental engagement necessitates a measure to evaluate cultural congruity in China. The School Cultural Congruity Scale (SCCS) was developed first in English to measure the potential discrepancy between family and staff values. The purpose of the current study is to establish the measurement invariance of the Cultural Congruity Scale and expand its potential to the Chinese context. The validated measure will help educators, policymakers, and scholars to better understand parents' perspectives of the cultural congruity between the family and the school and how to promote effective parental engagement for all students, particularly diverse families.

Chapter 7: Study 2 Methodology

Translation Procedure

To translate the SCCS-US into Chinese, the repeated forward-backward translation procedure was adopted (Meadows et al., 1996). First, a bilingual but native Chinese speaker translated the SCCS-US from English to Chinese. The translator was a psychology/mental

health professional with experiences in schools and understood the study's purpose. The first Chinese version of the SCCS was drafted based on the translation. Second, an independent English-speaking translator fluent in Chinese translated the first version back to English. The translator did not have a psychology-related background nor have working experiences in schools. This is to make sure parents not familiar within the educational field can still demonstrate the same level of understanding of the scale. Third, the research team reviewed the translated and original versions to develop a preliminary version of the SCCS in Chinese (SCCS-CHN). Next, the preliminary version of the SCCS-CHN was administered in the form of personal interviews to 20 Chinese parents from different geographical regions to determine any difficulty in the comprehension of the items. The research team reviewed the results of the pilot assessment and modified the scale accordingly. Based on the evaluation of judges and pilot testing, a final version of the SCCS-CHN was established.

Data Collection

Institutional Review Board (IRB) approval was obtained prior to data collection. The U.S. survey was accessed by 617 participants through Amazon Mechanical Turk (MTurk). To access the survey, participants were required to be 18 years of age and a parent of a child attending school in the United States. Participants accessed the survey using the URL on the MTurk task page. The link included a description of qualifications, the purpose of the study, nature of the questionnaires to be completed, potential risks and benefits of participation, contact information for the primary researchers, and informed consent. Keywords listed on MTurk for this survey opportunity included "parents," "survey," "school," and "child." Participants completed a brief qualification survey to confirm participation requirements were met and receive access to the study link. To maintain a

balanced sample of mothers and fathers, when the sample became more populated by mothers, only fathers received access to the study link following the screening survey. Through the MTurk pay system, participants received \$0.01 for completing the screening survey and \$0.99 for completing the study survey.

The data in China was collected in two rounds online via the platform named wjx.cn, which is a survey collection platform in China. Wechat, a communication app commonly used in China, was used to recruit parents via advertisement posting. The data was collected in two rounds, because after the first round of data collection, some parents reported that the first survey was considerably long. The survey of the first round was longer than that of the second round with additional questions about parent engagement and engagement barriers included. Therefore, a shorten version of the survey was sent out during the second round of data collection. The cultural congruity items were included in both surveys. Apart from the cultural congruity items, each survey contained different additional questions of interest. For instance, the survey for round 2 included questions from PISA 2018 related to parents' participation in school-related activities while the survey for round 1 did not. Two volunteers were invited to complete the two surveys before a large-scale distribution to estimate time needed complete each survey, which served as a criterion to detect ineffective responses in later data analysis. Parents were able to access the survey via phone or computer website. Parents completing survey 1 had a 20% chance of winning 20 RMB. Parents completing survey 2 received an incentive of 3 RMB. 325 responses were collected during round 1, and 439 during round 2, which leads to a total sample size of 764 before data screening.

Data Screening

Preliminary data screening was conducted before measurement invariance analyses were performed. The following data deletion criteria was used: (1) if respondents did not agree to the confidentiality statement; (2) if they used significantly lower response time (i.e., < 300 seconds for the first survey and < 180 seconds for the second survey); and (3) if they did not choose “C” as instructed for the item asking them to do so. The total sample size was 764 and after deleting items based on the above criteria, there were 675 in total, with an effective rate of 88.35%. Data were also screened to detect missing data. In the 675 observations, no missing data were found. Table 12 shows a description of the U.S. and the China sample.

Table 12

Demographic Characteristic

	China (N = 675)		U.S. (N = 601)	
	N	%	N	%
Parental Role				
Mother	453	67	326	54
Father	168	25	263	44
Marital Status				
Married	602	89	487	81
Divorced	8	1.2	22	3.7
Single	5	0.7	52	8.6
Separated	2	0.3	7	1.2
Domestic Relationship	6	0.9	27	4.5
Widowed	15	2.2	2	0.3
Geographic Location*				
Rural	63	19	99	16.4
Suburban	51	16	201	33.4
Urban	206	63	295	49

Note. *The China survey that contains the question of geographic location has 326 participants. The percentage is calculated based on the 326 participants.

Data Analysis Plan

Factor analyses were conducted in two primary stages using Mplus to establish factor structure and to test measurement invariance. Stage 1 involved the establishment of the scale in the U.S. group with the goal of deleting items. Stage 2 focused on testing a series of hierarchically nested models using multigroup CFAs (MGCFA) with progressively more stringent restrictions.

Stage 1: Establishment of the Five-Factor Structure of SCCS-US

The evaluation procedure in Stage 1 sought to obtain an initial indication of the plausibility of the five-factor structure proposed for the school cultural congruity scale and how well the items mapped onto the theoretical domain. The factor structure of the SCCS-US was first established using half of the data collected. It is worth noting that during the scale development stage, the research team had not restricted the number of items under each subscale with the mindset that some items could be simplified during the statistical analysis stage. Therefore, it was expected that some items from the original questionnaire would be eradicated if the removal of such items would considerably improve the model fitness of the five-factor structure. Items under the communication subscale would be prioritized since this subscale has substantially more items than the others.

Below is the evaluation phase in Stage 1. First, the data were split into two equal samples (i.e., sample 1 and sample 2). Second, sample 1 was used to run CFAs from which the modification indices were used to detect items to be removed. Third, CFAs were used to test the simple structure five-factor model of SCCS-CHN using sample 1 using all the remaining items. A simple structure five-factor model was analyzed using all the remaining items. The scale was further simplified according to the need of improving model fit. Fourth, this phase of the study was the validation phase, which involves administering the reduced

scale to a different sample, sample 2. Cross-validating the findings from the previous steps is important to further support the decision of item discard to show that the new model reflects a reasonable approximation to the data (Wren & Benson, 2004). After the factor structure is established for the U.S. sample, we moved on to stage 2 to conduct measure invariance analysis using the U.S. and the Chinese sample.

Stage 2: Measurement Invariance

In stage 2, confirmatory factor analysis (CFA) was employed to test the fit of the factor structure of the SCCS. A full-sample CFA was conducted first, including all survey respondents. CFAs were run separately for each country.

Once adequate model fit was established for each country separately (i.e., U.S., China), a series of multigroup CFA with progressively more stringent restrictions were performed to test measurement invariance and structural invariance of the best fitting model, as recommended by Vandenberg and Lance (2000). The invariance testing process involved several steps. The four measurement invariance steps considered were (1) *configural* (reference model with the same structure presented in the compared group); (2) *metric* (factor loading equivalence in both groups); (3) *scalar* (equivalence of factor loadings and item intercepts or thresholds); and (4) *strict* (equivalence of factor loadings, item intercepts, and residual variances).

For configural invariance, there was no constraint on item parameters, factor variances, or latent means across the two groups. For metric invariance, equality constraints were imposed on the factor loadings across the groups to investigate whether the same unit of measurement hold for the items across the groups. The scalar invariance step was to assess the equivalence of covariance between the latent variables. When factor covariance

invariance is met, it is possible to make group comparisons since it implies that all latent factors have the same relationship in both groups. If strict invariance is met, the measurement invariance is further confirmed.

In the present study, the degree of model fit was assessed using a chi-square difference test comparing the change in fit after constraints were applied. It is worth noting that the chi-square test is sensitive to sample size, and it can reject the model even if the fit is acceptable when the sample is sufficiently large (Cudeck & Browne, 1983). Thus, other fit indices were used as suggested by Hu and Bentler (1999): standardized root-mean-square residual (SRMR), comparative fit index (CFI; Bentler, 1990), and root-mean-square error of approximation (RMSEA; Steiger and Lind, 1980) with a 90 % confidence interval. Specifically, SRMR was examined with a value lower than the .08 desired. Values lower than .05 for the RMSEA indicate good fit and values below .08 reflect adequate fit. CFI values higher than .95 indicate good fit and higher than .90 indicate adequate fit. The differences in CFI values between models should be smaller than or equal to .01, as suggested by Cheung and Rensvold (2002). The differences in SRMR should be smaller than .03 to establish metric invariance and smaller than .015 for scalar invariance according to Chen (2007). Chen (2007) also suggests the differences in RMSEA should be less than .015.

Chapter 8: Results for Study 2

Stage 1

The U.S. sample was split in half to establish the five-factor structure model. CFA was first ran using Sample 1. Modification indices (MIs) indicated three items under the communication scale to be highly correlated (Modification indices > 45) while the MI all other items were all centered around 0-20. Since the communication subscale has more items than all the other scale (11 items for the communication subscale), item removal prioritized this subscale. The three items were removed, which is “The school staff speak the language I prefer,” “I get information from this school in the language I prefer,” and “My child can speak the language they prefer with their peers.” All these three items focused on language. Each subscale had an item capturing the core of the concept measured by that subscale and these items were all kept. Therefore, even removing a few items were considered proper.

After removing the three items, another CFA was run using Sample 1 ($N = 300$) to detect any other item to be removed. Results showed a good model fitness. Another CFA was run using Sample 2 ($N = 301$) to cross-validate the structure established in Sample 1. all other fit indices were within the recommended criteria, SRMR = .061, RMSEA = .050, 90 % CI [.045, .056], CFI = .912, and TLI = .904. Thus, the model adequately fit the data.

Stage 2

Using the full sample ($N = 1274$), a confirmatory factor analysis (CFA) was conducted to test the fit of the two-level structure using the 34 items.

Each item showed satisfactory factor loadings on the 5 factors. All parameter estimates were found to be statistically significant ($p < .01$; Table 11). While the chi-square test results were significant, $\chi^2 = 1717.53$, $df = 517$, $p < .01$, all other fit indices fell within the recommended criteria, SRMR = .037, RMSEA = .043, 90 % CI [.040, .045], CFI = .943, and TLI = .938. Thus, the model adequately fit the data.

Two CFAs were conducted separately to validate the identified factor structure in the group of U.S. and China, which also yielded good model-data fit. The fitness statistic for the China group was $\chi^2 = 1524.24$, $df = 517$, $p < .01$, SRMR = .034, RMSEA = .054, 90 % CI [.051, .057], CFI = .934, and TLI = .928. The CFA model for the U.S. group yielded the following results, $\chi^2 = 1139.27$, $df = 517$, $p < .01$, SRMR = .052, RMSEA = .045, 90 % CI [.041, .048], CFI = .926, and TLI = .920. We thus felt confident in interpreting the tests of invariance.

Table 13

Standardized Factor Loadings for the School Cultural Congruity Scale (SCCS) using the Whole Sample (N = 1274)

Scale	Item	Loading	
Values and Belief Systems (Representation)	Other people at this school share similar customs as my family (e.g., dietary, traditions, holidays).	.66	
	The pictures or objects around this school represent my family's culture.	.70	
	The staff at this school share my family's cultural background (e.g., race, nationality, religion, etc.).	.69	
	This school knows how my child's backgrounds and experiences impact them at school (e.g., developmental history, family routines, community stressors, religious practices, etc.).	.69	
	This school supports parents to share their family's culture.	.75	
	My child has chances to honor their culture at school.	.68	
	Other students at this school share my child's cultural backgrounds (e.g., race, nationality, religion, etc.).	.70	
	My family values and this school's values are similar.	.81	
	Interactional Style (Communication)	This school reports my child's progress to me in a way that makes sense to me (e.g., Progress updates, test scores, report cards, etc.).	.70
		School documents make sense to me.	.66
I feel like I can talk to school staff about my family values.		.70	
I feel like I can talk to school staff about family habits related to schoolwork.		.74	
I like the way the school invites discussions with me.		.77	
I like how often I get information about my child.		.80	
I know clearly what the school expects of my child.		.81	
This school communicates well with me.		.82	

Structuring Style		
(Relation)		
	The staff at this school works with my family in the way I like.	.84
	The amount I like to be a part of my child's education and what the school expects of me is alike.	.80
	I am comfortable with the ways I can be a part of my child's education.	.81
	I like the way the school invites family involvement.	.82
	I am happy with the family-school relationship.	.88
Operational Strategies		
(Teaching)		
	My child's classroom is a good place for them to learn.	.78
	I like the way the school staff works with my child.	.82
	My child's schoolwork is related to their background and experiences.	.76
	I like the way my child is taught, given my values of learning.	.83
	My child can access books or materials that represent their background and experiences.	.75
	My family's culture is correctly and respectfully included in my child's schoolwork.	.75
	I like this school's approach to education.	.85
Needs		
(Expectation)		
	What I expect for my child's education matches what the school expects.	.83
	The school's and my family's approaches to discipline are alike.	.75
	The behavior I expect of my child matches what the school expects.	.79
	How I expect my child to build relationships with others matches what the school expects.	.80
	The school teaches my child the skills that are important to me for them to learn.	.81
	What I hope for my child matches what this school hopes for my child.	.85

Note. All loadings were statistically significant at $p < .05$

Using the full sample, measurement invariance testing was performed in four steps. Model 1 (M1) tested the configural invariance across countries. Invariance at the configural level means that the basic form of the construct (i.e., the pattern of free and fixed loadings) is supported in both countries. Based on the fit information, there was evidence for configural invariance using the subjective indexes of fit (M1; Table 12), which suggests that the pattern

of free and fixed loadings (e.g., those that are estimated by the model and those that are fixed at 0) across the China and the U.S. groups were statistically identical.

Model 2 (M2) constrained all of the first-order factor loadings to be equal across groups. Comparing the configural CFA model (Model 1) to Model 2 with metric invariance across groups using the chi-square statistic, there was a significant increase in model misfit ($\Delta\chi^2 (29, N = 1274) = 78.33, p < .01$). However, considering the sensitivity of the chi-square test towards a large sample size, other indexes of fit were also taken into considerations. When considering ΔCFI , $\Delta SRMR$, and $\Delta RMSEA$, all showed a minimal shift in the model fit (Table 12), suggesting that constraining the factor loadings equal across U.S. and China did not significantly increase model misfit. Thus, there was evidence that metric invariance held.

Model 3 was equivalent to Model 2, but with the additional constraints that the measurement intercepts were set to be equal across groups. Equality of the unstandardized item intercept (scalar invariance) was then tested across groups and compared to the metric model. The scalar model fit well (see Table 12) according to fit indices with the exception of the chi-square test results, $\Delta\chi^2 (29, N = 1294) = 133.89, p < .01$. Comparing Step 2 and Step 3, there was minimal change in CFI, SRMR, and RMSEA values, indicating evidence for scalar invariance for these two groups.

Since scalar invariance was supported, the final step for establishing measurement invariance was to test for residual invariance. Model 3 and Model 4 were identical, with the exception that additional constraints were set to equal item residuals across country groups. This model yielded a good fit to the data with inconsequential changes in CFI, SRMR, and RMSEA.

In sum, the results showed that the five-factor model of SCCS had evidence of measurement invariance across the China group and the U.S group.

Because strict equivalence was established, factor mean differences could be investigated. Table 13 showed that there was significant difference between the U.S. and China in family-school cultural congruity in the four out of the five domains. The U.S. parents scored higher than Chinese parents in cultural *representation*. The U.S. parents also reported higher family-school cultural congruity in the domains of *communication*, *family-school relation*, and *teaching*. There was no statistical difference in *expectation* between the U.S. and China group.

Based on the findings above, the SCCS could be used to measure parent perceptions of family-school cultural congruity in the context of China and U.S. The SCCS could also be used to compare family-school cultural congruity between the Chinese and U.S. population.

Table 14

Goodness of Fit Statistics of Multiple Group CFA Models Evaluated

	χ^2	df	Models (M)	$\Delta\chi^2$	Δdf	RMSEA (90% CI)	SRMR	CFI	ΔCFI	$\Delta RMSEA$
Single Group Solution										
Overall Sample (N = 1274)	1717.52 (p < .01)	517	-	-	-	.043 (.040, .045)	.037	.943	-	-
U.S. (N = 601)	1139.27 (p < .01)	517	-	-	-	.045 (.041, .048)	.052	.926	-	-
China (N = 675)	1524.24 (p < .01)	517	-	-	-	.054 (.051, .057)	.034	.934	-	-
Measurement Invariance										
M1 Configural	2693.26 (p < .01)	1034	-	-	-	.050 (.048, .053)	.043	.931	-	-
M2 Metric	2771.59 (p < .01)	1063	2 v 1	78.33	29	.050 (.048, .053)	.051	.929	-.002	< .001
M3 Scalar	2905.48 (p < .01)	1092	3 v 2	133.89	29	.051 (.049, .053)	.051	.925	-.004	.001
M4 Strict	3137.48 (p < .01)	1095	4 v 3	232	3	.054 (.052, .056)	.058	.916	-.009	.003

Table 15

Factor Means Obtained by Fixing Factor Variances and Equal Covariances (N = 1294)

Group: U.S. Means	Estimate	S.E.	Est./S.E.	<i>p</i> value
Values and Belief Systems (Representation)	0.180	0.060	3.023	< .01
Interactional Style (Communication)	0.204	0.059	3.485	< .01
Structuring Style (Relation)	0.198	0.060	3.310	< .01
Operational Strategies (Teaching)	0.238	0.058	4.122	< .01
Needs (Expectation)	0.022	0.058	0.376	.707

Chapter 9: Study 2 Discussion

A significant limitation in scholarship related to parent-school cultural congruity is the absence of a comprehensive measurement serving to capture the concept of family-school cultural congruity. The primary aim of Study 2 was instrument development. To be specific, Study 2 aimed at exploring the measurement invariance of the SCCS by country and expanding the SCCS-US scale to the Chinese setting. In Study 2, we demonstrated the strategy of testing measurement invariance in a five-factor model representing the construct of family-school cultural congruity. The model hypothesized that the responses to the measurement of family-school cultural congruity could be explained by five first-order factors (values and belief systems, interactional style, structuring style, operational strategies, and needs). Our measurement invariance investigation involved 4 steps tested in sequence: configural invariance, metric invariance, scalar invariance, and strict invariance.

Measurement invariance provided strong evidence that the same construct was measured across U.S. and China. Study 2 indicated that the five-factor structure of the SCCS-

US measuring family-school cultural congruity from parents' perceptions was likely identical with the structure of the SCCS-CHN. The invariance was established to the most conservative level, the strict invariance level, which opens doors for means-based research that aims to confidently compare the cultural congruity scores across U.S. and China as the intercepts of a subset of items showed measurement invariance.

Going beyond strictly established measurement invariance, Study 2 revealed interesting findings of the cultural congruity construct measured by SCCS-US and SCCS-CHN. Specifically, data from the U.S. scale showed higher scores in 4 out of 5 cultural congruity domains than the Chinese sample. The only exception was in *expectation*, where Chinese and American parents showed no difference in family-school cultural congruity. Such findings are thought-provoking because presumptively, a country with a smaller racially diverse population or immigrants and only one official language commonly used in all regions may be expected to score higher in the family-school cultural congruity. The counterintuitive results, nevertheless, point to the effectiveness of the scale to capture cultural elements beyond race, color, language, and so forth.

Such findings underscore the importance of multicultural education in China. Multicultural education, which aims at ending the stigma and endemic devaluation of all peoples, classes, and groups, can serve to promote diversity, quality for all, equity, and equality in education (Liu, 2022). However, the advancement of multicultural education faces numerous hurdles in China. The gap between the ideals within a nation and the actual practice in schools is visible. For instance, according to the official state policy of China, ethnic groups have the right to be educated in their native languages and have their ethnic and community cultures recognized in state schools (Leibold & Chen, 2014). However,

“linguistic imperialism” forces the retention of home, community, and ethnic languages for the acquisition of Putonghua (literally: common speech), which has raised issues of deculturation and subtractive schooling in China (Postiglione, 2014). There is a critical need for multicultural education in China to protect cultural diversity and plurality (Wang & Phillion, 2009).

Multicultural education involves any set of processes by which schools work with rather than against oppressed groups, including minority families. The advancement of multicultural education necessitates the involvement of families (Pattnaik, 2003; Ramirez, 2005; Swick, 1994). Cross-cultural studies have indicated the positive impact of Chinese parents’ involvement in students’ school success and well-being (Li et al., 2020; Zong, 2018). Research has indicated the critical mediating role of Chinese parental involvement in compensating for limited resources, lower socioeconomic status, lower family income, migration status (Duan et al., 2018; Gao & Xue, 2021; Guo et al., 2018; Li et al., 2015; Liu et al., 2020).

Understanding how cultural factors impact parental involvement requires a validated scale established in the context of China. In addition, the disjuncture between school and community is listed as one of the structural features that limit the progress of positive systematic change within and schools and reproduce inequalities that multicultural education challenges (Sleeter, 1992). To rebuke such a disjuncture requires a deeper understanding of the similarity and differences between home and school. To date, no studies were found that used a measure of cultural congruity through parents’ perspectives for use with Chinese families. Therefore, the development of a Chinese version of the SCCS scale can help schools in China or schools with the Chinese population evaluate the degree to which their

school is meeting the needs of the families they serve. The SCCS-CHN can also support future research endeavors investigating cultural congruity between family and school with its relation to other variables of interest in the context of China. In addition, establishing an international scale that measures cultural congruity from parents' perspectives is important to extend the understanding of parents' involvement in children's learning beyond the United States. Last but not least, the SCCS-CHN can provide valuable information for educators, policymakers, and academics to better embrace the complexity of change in education in China and respond to local, national, and global influences.

Limitations and Future Directions

Despite empirical contributions to the existing literature, the results of the studies should be interpreted in light of a few limitations. Study 1 is among the first to show parental engagement patterns from an international perspective by including countries and regions from three different continents, but it solely includes five countries and regions, and all of them are middle-upper income or high-income areas according to the World Bank (n.d.). There may be variations in parent perceptions in other cultural and national contexts. Parents from different regions can have different parent engagement patterns that link differentially with various family-school cultural congruity status. While Study 1 strengthens the existing body of evidence on the association between family-school cultural congruity and parent engagement, the findings may not be generalized to other cultural subgroups that are not included in the sample. Caution should be encouraged in generalizing the results; future research is encouraged to expand this work within other cultural contexts. Efforts can also be made to research how different countries moderate the association between parent engagement pattern and family-home cultural congruity by adding countries as covariates.

Results can inform targeted systematic changes to enhance family-school collaboration for other cultural and national groups.

Another limitation to Study 1 involves not having a cultural congruity scale to comprehensively capture the cultural dynamic between home and school. The five cultural congruity items included in Study 1 have relatively high item endorsement ($M > .80$) and they were not a robust representation of their corresponding subdomains. Although Study 1 employs the VISION model as the theoretical reference to seize the core composition of cultural congruity, which is appropriate to our analysis and allows us to preliminarily study the association between parent engagement and cultural congruity, further research should focus on using a home-school cultural congruity scale to address the limitation. Development of a family-school cultural congruity scale that is suitable to be applied in diverse social and cultural settings can support further understandings of family-school cultural congruity and its impact.

Third, the results about associations between subgroup classification and auxiliary variables in Study 1 should not be considered as causal. In other words, causal links between parental engagement pattern and family-school cultural congruity cannot be examined or established. We caution against viewing parents' engagement pattern as the reason for the presence of discontinuity between family and school. There has long been the jeopardous belief of blaming minority parents for their children's performances and casting this group as being irresponsible or careless (Kim, 2009). Educational professionals ought to be acutely aware of the dangerous hierarchical view on the nature of minority parental engagement in children's education.

Fourth, although the data used in Study 1 is adequately large, the sample centers on middle school students. Notably, parent engagement patterns can differ at different grade levels and present different forms according to different developmental stage and cultural contexts (Bond, 2019; Gonida et al., 2007; Rattenborg et al., 2019). When selecting parental engagement indicators for Study 1, items that involves engagement opportunities not commonly available to the middle-school or the cultural settings were intentionally ruled out, but in future studies, it will be important to replicate the findings for other age groups (e.g., primary school and high school). Future researchers can also compare the similar or the different relationship between family engagement and family-school cultural congruity by age group. Such work would have implications for our understanding of parent engagement and culture from more angles.

Fifth, although Study 1 investigates how the associations between parental engagement and family-school cultural congruity can be moderated by parents' education level, there may be other contextual factors with mediation or moderation effects on the association that are not fully explored. For instance, socio-economic status and cultural capital possessed by families are influential factors on parental engagement as indicated by existing literature (Lee & Bowen, 2006; Malone, 2017; Tan et al., 2020). While adding these covariates is outside the bounds of the current study, future studies are recommended to include other factors that can shape the indirect relationship between parental engagement and family-school cultural congruity. Also, Study 1 limits the investigation efforts to family-school cultural congruity and its association with parental engagement. Other school-related constructs, for instance, student academic achievement and student engagement, to name a few, were not considered but merit future research attention. For instance, the literature has

suggested a potential link between cultural discontinuity and student performances, which needs to be tested further due to the divergent findings (Conner, 2013; Ledlow, 1992; Michael, 2004; Ogbu, 1992; Taggart, 2017; Torres, 2017). Future research is encouraged to study other constructs of interest using the School Cultural Congruity Scale (SCCS) in the corresponding cultural context.

It should be also noted that authority deference is a cultural phenomenon possibly present in some of the sample countries included in Study 1 (Dalton & Ong, 2005; Selvarajan et al., 2018; Vong, 2008). It is likely that the PISA data collected from self-report surveys can be subject to bias and social desirability, which is a concern for any researchers employing a survey methodology. It is not known whether or how much social desirability or authority deference bias was induced in the dataset used, but in looking forward, future research could consider using multiple methods of data collection to reduce such possible biases.

Study 2 also has some limitations that should be considered when interpreting the results. The first limitation is the use of the same U.S. sample for item removals and measurement invariance testing. Although the U.S. sample was split in half with the first half being used for item removal and the second half used for testing the replication of the same model structure, future research efforts can consider using a different sample for invariance establishment. Second, researchers have advocated the use of at least $n = 150$ for each scale subgroup with at least three indicators under each subgroup (Anderson & Gerbing, 1984). Therefore, the sample of Study 2 across the two countries are sufficient ($N > 600$). Given the large populations of China and U.S., and that model parameter estimation are generally stronger with larger samples, future research can focus on incorporating a larger sample size.

Chapter 10: Practice Implications

The study has some potentially important implications for practice. Primarily, our results highlight the importance of taking into account the transactional nature of interactions between family and school. This dissertation cautions against viewing culture as a set of ethnodescriptive characteristics shared by some people, but rather as interactively learned behaviors between individuals and groups as suggested by the VISION model and the anthropological cultural theory (Goodenough, 1981). Parental engagement as a behavior involving both school and family necessitates consensus and collaborative efforts from both sides. The adoption the VISION model allows educators and scholars to reconsider the concept of culture and parental engagement as a cultural interactive dynamic between family and school, which serves to inform implications for research and practice. The dissertation further illustrates how to evaluate between-group cultural congruity using the VISION model and the SCCS.

The findings of Study 1 confirm much of the prior research on parental engagement being impacted by contextual forces (e.g., Lee & Bowen, 2006; Malone, 2017; Tan et al., 2020). The main findings from the current studies corroborates the idea that family-school cultural congruity is an important factor influencing family engagement and family-school collaboration. From an international perspective, the dissertation demonstrates that school leadership must attend to the transactional dynamics between family and school and its impact on various aspects of individuals involved in such interactive relations. It points to the five domains that schools can aim attention at as a starting point to enact a more positive family-school dynamic, which is highly associated with proactive and meaningful parental engagement. The following discussions concentrate on how the components of the VISION

model could help transform school strategies pertaining to family-school connection and collaboration.

For one, school personnel should be encouraged to assess their own values and to identify the potential mismatch with the values and beliefs of the parents they are working with. Items from the Values and Belief Systems of the SCCS scale can enlighten educational professionals on potential areas to carry out conversations. Such conversations should occur early in the partnership for both sides to understand their differences in worldview and preferences so that potential conflicts can be addressed before they become obstacles. Intentionally learning about various value systems, school personnel ought to confront their judgment and prejudice against parents holding distinct values and beliefs and to explore the power dynamics between school and families, especially families, especially families with a minoritized background. The issues of stereotypes, prejudices, and even discriminations should be firmly addressed in a consistent and intentional manner as they can consciously or unconsciously coarsen school personnel's attitudes and behaviors against certain families and students.

Second, schools seeking to effectively structure the interactions between families and school should consider discussing families' preferences on how they would like the family-school relationship and process to be structured, including the frequency, approach, as well as degree to get involved. Having this fuller picture of the parents' perceptions could be helpful in identifying potential barriers to meaningful family-school partnership, effectively problem solving when confronted with disagreement, and fostering mutual trust and respect.

On the basis of a trusting relationship, understanding family's preferred mode of communication can reduce unintentional miscommunications and misunderstandings. School

personnel and families can openly discuss their communication preferences and even address the cultural nuances and meanings behind such patterns to develop deeper mutual understandings and even appreciation. For instance, teachers can invite parents to share about their family values and habits. Such information is critical to accurately interpret a person's communicative behaviors and can increase teachers' self-awareness about their communication style, which can be different from others' preferred way of communications. Also, schools could build in culturally responsive infrastructure to help school staff communicate more effectively across cultural differences (Eberly et al., 2007), such as professional development and collaboration with teacher and principal preparation program to support such growth. In addition, beyond face-to-face meetings, a variety of channels (e.g., Internet/new media, community liaison officers, school-based homework center) should be used to enhance communication between schools and parents. Whatever form of communication is adopted, schools ought to ensure the information and language employed is accessible to parents from different cultural and socioeconomic backgrounds (Emerson et al., 2012).

Culture shapes not only parents and schools' values and beliefs towards child development and their interactions patterns (i.e., communication, relation), but also shapes their interpretations and attributions of children's well-being and misbehaviors. Families and school cultures can therefore have differing expectations for childrearing. For instance, some research documented that families of Mexican descent tend to embrace a more authoritarian educational style and embrace strictness as a childrearing strategy more so than leniency (Auerbach, 2007). They also tend to value a split in the responsibilities of home and school in fulling educating their children with home-based education focusing on moral development

and the school focusing on academic development (Hill et al., 2003). Such expectations may or may not align with the school's expectation towards families. Some common expectations related to the schooling involve discipline approach, teaching method, behaviors of children, students' relationship building, educational hopes for the children, and so forth. Schools can create ongoing opportunities, either school-wide or for targeted population, to incorporate family voice in the clarification of expectations to transform decision-making around school activities and programs.

Schools are not cultural neutral environments as cultures shape schools' preferences and beliefs about the appropriateness and effectiveness of particular educational content, strategies, and behaviors. Being part of the school system, teachers and school personnel all hold worldviews that impact the teaching style, strategies, and materials. Regardless of their cultural background, school personnel are traditionally trained to educate students in a way that will reproduce the dominant culture. For instance, in the U.S. context, an emphasis is placed on aspects such as individual achievement, self-esteem, and self-expression. Teaching materials and curriculums normally reflect such American values and cultural orientation, which may not be familiar with culturally and linguistically minoritized children and can lead to student disengagement. Once they fall short of these expectations, minoritized children are prone to internalize such as their faults (Christenson & Reschly, 2010). It is critical that teachers work with parents to incorporate culturally relevant pedagogy to serve the interests of culturally minoritized families and students. Goodman and Hooks (2016) illustrate an example of working with linguistically minority parents to transform the curriculum and instructional practice in the classroom. Educators seeking to enhance family-school collaboration should merit such practices as culturally relevant pedagogy is found to be

associated with positive and productive family partnerships (Blanchett et al., 2009). Examples also include teaching in students' native languages, using examples from the student's cultural background, linking material to real-world applications relevant to the student's community, and devising learning activities that invite students to bring their cultural knowledge and understanding to the teachings (Abdulrahim and Orosco, 2020; Keehne et al., 2018).

Apart from the implications based on the VISION components, the finding of the model with covariates, which illustrates parental education level's association with parental engagement and family-school cultural congruity, hold important implications to inform schools' practice of working with families with different educational backgrounds. The findings suggest that lower-educated parents are less likely to challenge schools' practices compared to parents with a higher education degree. Research has demonstrated how parental engagement is linked with cultural capital, which includes educational attainment, and the achievement gap among students (e.g., Lee & Bowen, 2006). Identifying and reducing barriers to parental engagement among less educated parents should be an important focus of school staff. Schools should adopt creative strategies in an effort to construct a safe and supportive environment for less educated parents to obtain the information they need, raise questions, and voice their opinions.

Conclusions

Using a large international sample involving countries from Asia, Europe, and Latin America, the first half of this research investigates the association between parental engagement and family-school cultural congruity under a transactional theoretical model. This model is particularly important as there has been a prevailing focus on the

characteristics shared by groups as a way to define culture, especially in the field of psychology and education. The study points to the importance of a more comprehensive conceptualization of family-school cultural congruity that includes all dimensions of the VISION model and thus, confirms the research endeavor of developing a cross-cultural scale, which is the focus of Study 2. The findings from Study 1 confirms that cultural continuity can be associated with parental engagement. Also, family-school cultural congruity differs by parental engagement patterns. In general, parents actively engaged in all opportunities are more likely to show high family-school cultural congruity. On the contrary, parents who are less engaged in all domains usually are the parents who experience less cultural congruity between home and school. The parents who participate in some forms of opportunities but not others show different cultural congruity profile, depending on the nature of their engagement. Parents who are less educated also are less likely to speak up for themselves or question the services they received. In light of these findings, ongoing efforts are needed to address disparities in the engagement experiences of culturally different families, especially families from less educated backgrounds. Ongoing exploration of culturally relevant school and community-based changes is critically importance to facilitate family's engagement which considerably impacts students' learning and well-being supported by existing developmental literature and research generated from the fields of mental health, education, and positive youth development.

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APPENDIX

Institutional Review Board Approval Letter

UNIVERSITY OF CALIFORNIA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

SANTA BARBARA
FWA#00006361

Office of Research
Human Subjects Committee
Santa Barbara, CA 93106-2050

Web: <http://www.research.ucsb.edu>

04/27/2021

VERIFICATION OF ACTION BY THE UCSB HUMAN SUBJECTS COMMITTEE

RE: HUMAN SUBJECTS PROJECT NUMBER 36

FROM: UCSB HUMAN SUBJECTS COMMITTEE

PROTOCOL NUMBER 36-21-0275

TYPE: NOTICE OF EXEMPT DETERMINATION

TITLE(S):

School Cultural Congruity & Parent Engagement

INVESTIGATORS:

Shane Jimerson

Mihya Weber

Alessandra Mittelstet

Yuexin Zhang

The above identified protocol may commence on 04/27/2021. Exempt protocols do not expire.

The research activities under this submission qualify as Exempt from the Federal Regulations at 45 CFR 46.104(d) under the following Categories: 2

Although your study qualifies as exempt research, investigators are expected to adhere to UCSB policies and conduct their research in accordance with the ethical principles of Justice, Beneficence, and Respect for Persons as described in the Belmont Report.

AMENDMENTS/MODIFICATIONS/CHANGES:

Any change in the design, conduct, or key personnel of this research must be reviewed by the UCSB HSC prior to implementation. This includes changes to the study procedures and/or documents (e.g., protocol, consent form, recruitment materials, addition of data points, addition or change of research sites) and changes to the research team. If you are unsure whether your changes constitute a protocol modification, contact the HSC for guidance. Changes may result in a reevaluation of eligibility of an Exempt Determination.

UNANTICIPATED PROBLEMS/ADVERSE EVENTS:

If any study subject experiences an unanticipated problem involving risk to subjects or others, and/or a serious adverse event, the HSC must be informed promptly. An e-mail or phone call must be received within 7 days. Further reporting requirements will be determined by the HSC at that time.

RECORDS RETENTION REQUIREMENTS:

Please remember that signed consent forms must be maintained for a minimum of three years after the end of the calendar year in which the research is completed. Additional requirements may be imposed by your funding agency, your department, or other entities.

If you have any questions about the above, please contact the Human Subjects Committee Coordinator at: (805) 893-3807; (805) 893-2611 (fax); hsc@research.ucsb.edu

For more details on this protocol, go to the ORahs website: <https://orahs.research.ucsb.edu>

School Cultural Congruity Scale-China Survey Flyer



家校共育匿名调查问卷

ANONYMOUS QUESTIONNAIRE



亲爱的家长您好~我们是来自中美高校的研究团队
如果您有孩子就读于
【幼儿园】，【小学】，【中学】或【特殊教育学校】
我们都诚挚地邀请您
在百忙之中抽出10分钟填写这份问卷
您填写的内容将会帮助科研人员、
学校管理者和政策制定者更好地服务您和您的孩子📖
所有答案没有正确、错误与好坏之分，
所有信息是匿名且严格保密的
填写完后即可点击参与现金红包🧧抽奖，
抽奖将在本轮问卷停止后开启，真实有效
期盼您也能帮助转发给更多家长，丰富样本的多样性和研究的代表性
长按左下方二维码即可填写，非常感恩您的贡献，祝您和宝贝健康快乐！



如果您有任何问题，欢迎联系我们的研究团队：
SHANEJIMERSON教授(JIMERSON@UCSB.EDU);
张悦新研究员(YZHANG983@UCSB.EDU);
或者黄玉蕾研究员(201827061005@MAIL.BNU.EDU.CN).
再次感谢您的支持!

School Cultural Congruity Scale-China
Online Survey Consent

尊敬的家长:

您们好, 我们是来自美国加州大学圣巴巴拉分校应用心理学院和北京师范大学心理学部教育心理学分支的研究团队, 非常荣幸能够邀请您加入我们这项旨在帮助学校促进家庭合作的跨国研究中。

在以下问卷中, 您将被问及您的**家庭文化与学校的相同或者不同之处**, 您提供的信息会帮助我们制定一份关于家庭与学校文化匹配度的中文量表, 这份量表旨在帮助学校和政策制定者更好地服务不同背景的家庭和学生。在填写问卷的过程中, 请**尽可能准确地**回答每一个问题, 答案没有正确错误和好坏之分。

研究结果仅用于科学研究, 我们承诺对收集的数据进行**严格保密**。一旦收集到信息, 所有的名字会被相应数字代替, 原始问卷最后也会被销毁。您可以与任何您愿意的人讨论本问卷, 但是研究团队不会向学校或学生透漏您的答案与姓名。您大约需要 20分钟来完成本问卷。等待研究员将所有问卷收集完成, 您即可以参与抽奖微信红包, 具体开奖时间取决于研究项目的数据收集进度。

如果您有任何问题, 欢迎联系我们的研究团队:
Shane Jimerson 教授 (jimerson@ucsb.edu); 张悦新研究员 (yzhang983@ucsb.edu); 或者黄玉蕾研究员 (201827061005@mail.bnu.edu.cn).

School Cultural Congruity Scale-China Measures

中国家校教育跨文化研究(中文版)

第一部分 学生基本信息

您家有几个孩子? [单选题] *

- 1 2 3 4 5

其他(请说明)

please
specify

您是孩子的? [单选题] *

- 父亲 母亲 爷爷 奶奶 外公 外婆

其他家
长

- *

如果您有**超过 1 名孩子**, 请选择**其中一位**正在学龄期(幼儿园、小学、中学)的孩子, 参与之后的问题填写.

这个孩子的性别是? [单选题] *

- 男生 女生

其他(请说明)

孩子在哪个省市区上学? [填空题] *

孩子所在学校的类型是? [单选题] *

- 普通学校(公立) 普通学校(民办)
 职业学校 特殊教育学校

国际双语学校

其他(请说明) _____ *

孩子当前上几年级? [单选题] *

幼儿园

小学一年级

小学二年级

小学三年级

小学四年级

小学五年级

小学六年级

初中(包括职业学校) 一年级

初中二年级

初中三年级

高中(包括职业学校) 一年级

高中二年级

高中三年级

高中四年级(复读)

孩子学校处于 [单选题] *

农村、乡镇

县城、城郊

非省会城市

省会城市、直辖市、一线城市

孩子是否在学校寄宿 [单选题] *

是

否

其他情况

请说明

孩子是否是转学生 [单选题] *

○是 _____
可说明转学到目前学校的时长

○否

孩子目前就读班级的人数是? [单选题] *

○1~15

○16~30

○31~50

○50~70

○70 及以上

孩子的民族是? [单选题] *

○汉族

○中国其他少数民族

○非中国籍

您是否是孩子教育的主要辅导人 [单选题] *

○是

○不是 _____ *

不是请注明谁主要参与、辅导孩子教育

您是否能准确估计孩子在年级中的学习成绩排名 [单选题] *

○能

○不太清楚

在最近一次大型考试(期中考试、期末考试)中, 您的孩子的**学习成绩排名**在年级是什么位置?

[输入 0(排名比 0%的人高)到 100(排名比 100%的人高)的数字]*

与其他同年龄孩子相比, 您认为您的孩子性格属于? [单选题] *

○非常内向

○有点内向

○有点外向

○非常外向

请您相对于孩子学校的同龄人, 对孩子在以下几个方面表现作出评价.[矩阵量表题] *

	比较差/不合格	合格	良好	比较优秀	非常优秀
学业成绩	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
人际交往	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

情绪心理	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
品德情操	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
行为习惯	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

第二部分 家长信息

您的年龄 [填空题]

孩子父母目前的婚姻状态是 [单选题] *

- 已婚
 分居
 结婚了但不住在一起
 离婚
- 寡居
 单身
 同居
 没结婚但住在一起

您的受教育程度是? [单选题] *

- 小学及小学以下
 初中
- 高中(含中专、技校、职高)
 中专
- 大专(含函授大专、成人教育、自考)
 本科
- 研究生及以上(硕士、博士)

孩子母亲的受教育程度是? [单选题] *

- 小学及小学以下
 初中
- 高中(含中专、技校、职高)
 中专
- 大专(含函授大专、成人教育、自考)
 本科

研究生及以上(硕士、博士)

孩子父亲的受教育程度是? [单选题] *

小学及小学以下

初中

高中(含中专、技校、职高)

中专

大专(含函授大专、成人教育、自考)

本科

研究生及以上(硕士、博士)

您的职业情况 [单选题] *

A. 临时工、失业、待业人员、非技术工及农业劳动者，如农民

B. 体力劳动工人、一般商业服务人员、技术工及同级工作者，如建筑工人及相关人员

C. 初级专业技术人员（如普通教师、普通医生等）、一般管理人员（如小企业主，大型企业初级主管等）、办事人员（商业服务业员工、事业单位干事等）、个体工商户

D. 中层管理人员（如大型企事业单位中层管理人员、中小企业经理人员）与中层专业技术人员（专门从事专业性工作和科学技术工作的骨干人员，如教师中的学科带头人、主治医师等）

E. 高层管理人员（包括在党政、事业和社会团体机关单位中行使实际的行政管理职权的领导干部、大中型企业的高层管理人员和私营企业主等）与高级专业技术人员（教授、资深学者等）

孩子母亲的职业情况 [单选题] *

A. 临时工、失业、待业人员、非技术工及农业劳动者，如农民

B. 体力劳动工人、一般商业服务人员、技术工及同级工作者，如建筑工人及相关人员

C. 初级专业技术人员（如普通教师、普通医生等）、一般管理人员（如小企业主，大型企业初级主管等）、办事人员（商业服务业员工、事业单位干事等）、个体工商户

○D.中层管理人员（如大型企事业单位中层管理人员、中小企业经理人员）与中层专业技术人员（专门从事专业性工作和科学技术工作的骨干人员，如教师中的学科带头人、主治医师等）

○E.高层管理人员（包括在党政、事业和社会团体机关单位中行使实际的行政管理职权的领导干部、大中型企业的高层管理人员和私营企业主等)与高级专业技术人员（教授、资深学者等）

孩子父亲的职业情况 [单选题] *

○A. 临时工、失业、待业人员、非技术工及农业劳动者，如农民

○B. 体力劳动工人、一般商业服务人员、技术工及同级工作者，如建筑工人及相关人员

○C.初级专业技术人员（如普通教师、普通医生等）、一般管理人员（如小企业主，大型企业初级主管等）、办事人员（商业服务业员工、事业单位干事等）、个体工商户

○D.中层管理人员（如大型企事业单位中层管理人员、中小企业经理人员）与中层专业技术人员（专门从事专业性工作和科学技术工作的骨干人员，如教师中的学科带头人、主治医师等）

○E.高层管理人员（包括在党政、事业和社会团体机关单位中行使实际的行政管理职权的领导干部、大中型企业的高层管理人员和私营企业主等)与高级专业技术人员（教授、资深学者等）

您是哪个民族? [单选题] *

○汉族

○中国其他民族

○非中国籍

您每天的平均陪伴孩子的时长是? [填空题] *

您家的平均月收入是 [单选题] *

○<500

○500~2000 元

○2000~5000 元

○5000~8000 元

○8000~10000 元

○10000~20000 元

○20000~50000 元

○50000 元及以上

您一年在子女教育投资（包含参加辅导班，兴趣班，家教，购买学习用品，视听设备等）的费用大约为 [单选题] *

- A.小于等于 1 万元
- B.1 万-2 万元
- C.2 万-5 万元
- D.5 万-10 万元
- E.大于 10 万元

第三部分 学校文化评估问卷

文化对每个人都有不同的意义。您的文化可能包括：宗教信仰和习俗、家庭结构（如双亲、单亲、混合家庭等）、种族/民族、国籍/原籍国、您说的语言、庆祝的节日、家庭价值观、信仰、行为规范等。

以下问卷是关于您孩子所就读的学校(以下简称“这所学校”)和您家庭文化一致性的调查,答案没有正确错误之分,请根据实际情况选择最符合您感受的答案

一

[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
1. 这所学校的其他人与我的家庭有着类似的习俗（如饮	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

食、传统、节日等)。					
2. 这所学校里绘画和物件的布置(图案, 标语等)能够反映我家的文化。	○	○	○	○	○
3. 这所学校的工作人员与我的家庭有着相同的文化背景(如种族、国籍、宗教等)。	○	○	○	○	○
4. 这所学校知道我孩子的背景和经历(例如, 成长经	○	○	○	○	○

<p>历、家规、社会地位、宗教习俗等)对他们在学校的影响。</p>					
<p>5. 这所学校支持家长们分享他们的家庭文化。</p>	○	○	○	○	○
<p>6. 我的孩子有机会在学校以自己家的文化为荣。</p>	○	○	○	○	○
<p>7. 这所学校其他学生与我孩子有着相同的文化背景(如种族、国</p>	○	○	○	○	○

籍、宗教等)。					
8. 我家庭的价值观和这所学校的价值观相似。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

二[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
09. 这所学校的教职人员说的是我喜欢使用的语言。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. 这所学校以我喜欢使用的语言传递学校相关的信息。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. 这所学校以我容易理解	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>的方式向我报告我孩子的进展情况（如学习进度更新、考试分数、成绩单等）。</p>					
<p>12. 学校的文件对我来说是清晰易懂的。</p>	○	○	○	○	○
<p>13. 我的孩子可以用他们喜欢使用的语言和同龄人交流。</p>	○	○	○	○	○
<p>14. 我觉得我可以和学校教职人员谈</p>	○	○	○	○	○

论我的家庭价值观。					
15. 我觉得我可以和学校教职人员谈论关于孩子学业方面我家的习惯做法。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. 我喜欢学校邀请我参与讨论的方式。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. 学校跟我分享我孩子在学校情况的频率让我觉得满意。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. 我清楚学校对	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

我孩子的期望。					
19. 这所学校(的老师、教职人员等)与我沟通良好。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

三[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
20. 这所学校以我喜欢的方式开展家庭合作。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. 我愿意参与孩子教育的程度和学校对我的期望是一致的。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. 我对自己能参与到孩子	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

教育的方式感到满意。					
23. 我喜欢这所学校邀请家庭参与的方式。	○	○	○	○	○
24. 我对我家与学校的关系感到满意。	○	○	○	○	○

四[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
25. 我孩子的教室是一个好的学习环境。	○	○	○	○	○
26. 我喜欢学校工作人员与我孩子相处的方式.	○	○	○	○	○

27. 这所学校的功课设置会考虑孩子的成长背景和经历。	○	○	○	○	○
28. 鉴于我个人的学习观念, 我喜欢我孩子在学校被教育的方式。	○	○	○	○	○
29. 在学校我的孩子可以接触到体现他们成长背景和经历的书籍或材料。	○	○	○	○	○
30. 我的家庭文化被正确和	○	○	○	○	○

尊重地纳入我孩子的学校功课中。					
31. 我喜欢这所学校的教育方式。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

五[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
32. 对于孩子的教育,我和学校的期望是一致的。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. 学校和我家对孩子的管教方式是一致的。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. 对于孩子的行为,我和学校的期	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

望是一致的。					
35. 对于孩子交友(与他人建立关系)的方式,我和学校的期望是相符的。	○	○	○	○	○
36. 这所学校传授给我的孩子我认为很重要的技能。	○	○	○	○	○
37. 我和学校对于我孩子所抱的希望是一致的。	○	○	○	○	○

六 [矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
--	-------	-------	----	------	------

38. 我相信学校老师能够教好我的孩子。	○	○	○	○	○
39. 学校有意识地促进学生德、智、体、美、劳全面发展。	○	○	○	○	○
40. 老师会针对学生的表现和家长及时沟通。	○	○	○	○	○
41. 我认可学校的办学质量。	○	○	○	○	○
42. 我的孩子喜欢去学校上学。	○	○	○	○	○

七[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
43. 学校给每个学生提供至少 1 门可供自选的课程（非必修课）。	○	○	○	○	○
44. 学校里有多样化的阅读空间。	○	○	○	○	○
45. 我的孩子喜欢学校的图书馆。	○	○	○	○	○

八[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
46. 我曾经向学校提出改进建议和意见。	○	○	○	○	○

47. 我曾参与学校的家长义务服务活动。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. 学校曾经就某些活动设计方案征求过我或其他家长的意见。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. 我的孩子曾经参与过学校组织的出国（境）交流（含港澳台）。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

九[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
50. 我能够说出学	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

校徽的 内涵。					
51. 我能够说出学校校训的内涵。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. 学校的对外宣传工作（如微信公众号）做得很好。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. 我认为学校的办学理念有特色。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

十[矩阵量表题] *

	非常不同意	比较不同意	一般	比较同意	非常同意
54. 学校在市、区（县）或更大范围内很有名气。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

55. 我了解学校的历史。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. 我认为学校管理方式民主。	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

下列使一些家长参与孩子日常生活的描述, 作为孩子的家长, 请根据您的实际情况选择最符合的选项, 答案没有正确错误之分[矩阵量表题] *

	从不	很少	有时	经常	总是
我和孩子一起看电影、话剧、体育比赛、或听音乐会等	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我带孩子去参观游览, 如科技馆, 博物馆, 天文馆, 动植物园等	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

我和孩子一起探讨政治、社会问题，或新闻热点话题	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
当孩子有心事和烦恼的时候，我会开导和安慰孩子	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
当孩子在学校表现不好时，我会理解并鼓励孩子	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
当孩子在学校遇到困难时，我会支持孩子	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我帮孩子检查或指	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

导我的作业					
我监督孩子完成家庭作业	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
我和孩子一起讨论学习计划	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

您孩子所在的班级是否有家庭委员会? [单选题] *

- 有, 我是家委会核心成员
- 有, 我是家委会一般成员
- 没有家委会
- 其他 _____ *

您对**学校文化**的了解程度? [单选题] *

- 非常不解 1 2 3 4 5 非常了解

您对**家校合作**的了解程度? [单选题] *

- 非常不解 1 2 3 4 5 非常了解

您对**家校合作**的意愿程度? [单选题] *

- 非常不愿意 比较不愿意 一般 比较愿意 非常愿意

您对**目前学校和家庭合作**的满意程度? [单选题] *

非常不满意 比较不满意 一般 比较满意 非常满意

您与孩子所在学校最常进行家校合作的途径有? [多选题] *

- | | |
|-----------------------------------|---|
| <input type="checkbox"/> A.打电话 | <input type="checkbox"/> B.社交媒体软件（微信、QQ） |
| <input type="checkbox"/> C.校讯通 | <input type="checkbox"/> D.家长会 |
| <input type="checkbox"/> E.老师家访 | <input type="checkbox"/> F.校园开放日、亲子运动会等学校活动 |
| <input type="checkbox"/> G.家庭教育讲座 | <input type="checkbox"/> H.其他 _____ |

您最喜欢的家校合作的途径有? [多选题] *

- | | |
|-----------------------------------|---|
| <input type="checkbox"/> A.打电话 | <input type="checkbox"/> B.社交媒体软件（微信、QQ） |
| <input type="checkbox"/> C.校讯通 | <input type="checkbox"/> D.家长会 |
| <input type="checkbox"/> E.老师家访 | <input type="checkbox"/> F.校园开放日、亲子运动会等学校活动 |
| <input type="checkbox"/> G.家庭教育讲座 | <input type="checkbox"/> H.其他 _____ |

您与孩子所在学校进行家校合作的频率有? [单选题] *

- | | | |
|------------------------------|----------------------------|----------------------------|
| <input type="radio"/> 0次/周 | <input type="radio"/> 1次/周 | <input type="radio"/> 2次/周 |
| <input type="radio"/> 3次/周 | <input type="radio"/> 4次/周 | <input type="radio"/> 5次/周 |
| <input type="radio"/> 5次以上/周 | | |

您认为孩子的教育主要是谁的责任 [单选题] *

- | | | | |
|-----------------------------|--------------------------|-----------------------------|----------------------------|
| <input type="radio"/> 学校和老师 | <input type="radio"/> 家庭 | <input type="radio"/> 学校和家庭 | <input type="radio"/> 孩子自己 |
|-----------------------------|--------------------------|-----------------------------|----------------------------|

您与学校的沟通经常是 [单选题] *

- | | | | |
|---------------------------------|----------------------------------|---------------------------------|---------------------------|
| <input type="radio"/> 班主任主动与我沟通 | <input type="radio"/> 科任教师主动与我沟通 | <input type="radio"/> 家长主动与老师沟通 | <input type="radio"/> 不一定 |
|---------------------------------|----------------------------------|---------------------------------|---------------------------|

学校老师与您沟通的内容主要是(请选频次最高的三项) [多选题] *

- | | | |
|---|---|---|
| <input type="checkbox"/> A.学生的课堂表现 | <input type="checkbox"/> B.学生的学业成绩 | <input type="checkbox"/> C.学生的人际交往 |
| <input type="checkbox"/> D.学生的日常行为习惯、
品德修养 | <input type="checkbox"/> E.学生的心理状况、情绪
性格 | <input type="checkbox"/> F.学生的身体状况 |
| <input type="checkbox"/> G.寻求、倾听家长意见反
馈 | <input type="checkbox"/> H.教育理念和方法讨论 | <input type="checkbox"/> I.事务性通知、学校活动
安排 |

当提到“**学校文化**”,您首先会想到什么?您认为“学校文化”包含什么? [填空题] *

当提到“**家庭文化**”,您首先会想到什么?您认为“家庭文化”包含什么? [填空题] *

您认为学校文化和家庭文化达成一致起来对学生的帮助程度是? [单选题] *

- 没有帮助 比较没帮助 一般 比较有帮助 非常有帮助

非常感谢您的填写~~!祝您新年愉快!