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Family Involvement Strategies of Asian Students with High Achievement in Middle School Mathematics: A Phenomenological Study

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The No Child Left Behind Act of 2001 requires that schools maintain policies, strategies, and practices that support parental involvement in the education of all children (No Child Left Behind [NCLB], 2002). Houtenville and Conway (2008) found that by implementing strategies which promote family engagement in the educational process, schools can save up to one thousand dollars per child in education expenses per year.

However, in spite of the challenges faced by minority learners, Asian American students have been perceived as super-achievers, particularly in mathematics, where they are seen as having “superior math abilities” (Wing, 2007, p. 467). According to Alvarez (2012) and Shalash (2013), some states in the U.S. institutionalized differentiation in academic achievement standards along ethnic and racial lines. For example, minimum standards for achievement in math that have been set in Virginia and Florida are higher for Asian Americans than for Whites, and much higher than for Blacks and Latinos.

Thus, there is a call from within the field of educational research to identify the involvement strategies used by Asian American families (Hill & Tyson, 2009). Hill and Tyson (2009) noted, “Other than with African Americans, the body of literature on parental involvement in middle school does not include sufficient studies of other sizable ethnic groups, such as Latinos or Asian Americans” (p. 760). Also, Yoder and Lopez (2013) noted that research on parental involvement often fails to highlight the perspectives of uninvolved parents of the minority population. They stated, “Studies that can access uninvolved parents are needed to better understand the experiences of a parent’s involvement in children’s education” (p. 431).

This qualitative, phenomenological narrative study explored the involvement strategies used by families of Asian American students who consistently achieved high in middle-school mathematics. Participants were parents of middle-school Asian-American students whose achievement in math was consistently 80% or higher. The school was a middle-school in a charter school in Southeast Texas. The overarching question in this study was: What involvement strategies do Asian American families use that motivate their children to achieve high in middle school mathematics? By identifying and exposing these

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strategies, schools may benefit by steering parent involvement efforts as mandated in Title I of the NCLB Act toward strategies that increase their overall effectiveness.

Summary of the Literature

There is an extensive research literature, framed within parental involvement in the academic lives of their children (Crespo-Jimenez, 2011; Flores, 2007; Henderson & Mapp, 2002; Orkazaki, 2009; Pomerantz & Moorman, 2007; Hill & Tyson, 2009; Yin-Jin & Acock, 2013; Yoder & Lopez, 2013) from which support for this study was drawn. A limited number of the studies in literature have been briefly discussed.

Cultural values of Asian American families. Sue and Okazaki (2009) examined the connection between high academic achievement by Asian Americans and some selected cultural factors (such as child-rearing practices, virtues that extol education, personality, heredity, socialization experiences) and argued that making such connections can lead to disputes involving “cultural superiority or deficits” (p. 45).

Language used in the Asian American family. Boroditsky (2011) suggested that different languages impact cognitive skills in different ways. According to Cushner, McClelland, and Safford (2006) language is a profound source of cultural learning because the acquisition of other cultural knowledge and values occurs through use of language. Children in the company of other individuals in their environment are programmed to learn and acquire languages and sign systems used around them. Cushner et al. also argued that language is one of the sociocultural factors that lead to development of learning styles which bears significant impact on a child’s educational outcome.

According to the United States Department of Education [USDOE] (2005), up to 79% of Asian American adolescents have knowledge of both English language and a second heritage language. Yee et al. (2007) suggested that being bilingual or multilingual enhances not only a student’s cognitive ability but also confers on them certain social advantages such as: divergent thinking, metalinguistic awareness, problem-solving capabilities, and intercultural interactive skills.

Nature of Parent-child Interaction. Child development theorists, Grolnick, Deci, and Ryan (1999) emphasized that the nature of parent-child interaction is critical not only to children’s motivation to learn but also to how children internalize certain social behaviors. For example, if a mother and child share a warm and caring relationship the child may develop positive motivation toward learning from the experience. On the other hand, if the interaction is confrontational and less warm it may impact the child’s motivation negatively.

Influence of Community and Environment. Su and Hynie (2011) investigated the impact of some community and environmental factors on parenting practices of mothers of selected mainland Chinese, Canadian Chinese, and European Chinese students. They found that immediate social environment influenced parenting practices in a significant

way. Su and Hynie suggested that social environment interacted with family culture to shape parenting practices that ultimately impacted child's development in a positive way.

Methodology

Research questions

The overarching question in this study was: What involvement strategies do Asian American families use to motivate their children to achieve in middle school mathematics? The following research questions further guided the direction of this study:

1. In what way does the culture of the student's family influence academic achievement?
2. In what way does the parent-child interaction in the family influence academic achievement?
3. In what way does the larger Asian community engage with the student to influence academic achievement?

This study was conducted at a 6th through 12th grade charter high school in a Southeast Texas independent school district. The school had a diverse student population typical of the demographic in that part of the state. The site in this study had a population of 977 students.

Participants

Selection of the participants in this study was purposeful. Selection began by identifying students who met the following criteria: (a) must be in either sixth, seventh, or eighth grade; (b) be from Asian-American identity; (c) have a record of achievement in mathematics that is not below 80%; and (d) must live in a household with either or both parents or non-parent care-giver. The researcher created a pool of potential participants using a snowball sampling technique whereby key PTA (Parent Teacher Association) members helped to identify students who met the criteria. After the students were identified, the researcher compiled a list, ranking the students in order, from the highest-achieving to the lowest-achieving (not below 80%) in middle-school mathematics. Achievement was determined by the scores received by the students on standardized math tests taken in grades six through eight. Only the parents of the students identified were involved as participants in this study.

Data collection

After obtaining the approval of the University's Institutional Review Board (IRB) and receiving informed consent from the selected participants, the primary data collection method for this study was consistent with acceptable methods in phenomenological investigation. Moustakas (1994) recommended that a qualitative inquirer employ a variety of data collection methods such as, interviews, observations, and written

documents in order to gather extensive details about the phenomenon being studied. This study included face-to-face in-depth, open-ended interviews and field notes that were collected at the homes of the participants.

Treatment of the data

The researcher followed recommendations by Creswell (2013) for phenomenological explication of data. Explication of data, as explained by Hycner (1999) involves an exploration of the components of the interview data while keeping context of the phenomenon intact. The recorded audio was transcribed by the researcher using Express Scribe transcription software that was available for Windows 8. Thereafter, the data were scrutinized to identify all the textural descriptions of the essence, also termed the “what” of the phenomenon (Van Manen, 2014, p. 301).

Findings

The participants’ narratives were examined for common themes using the order in which the research questions were posed. The commonalities discovered in the responses revealed the perception held by the participants about involvement strategies that promote high achievement.

The major findings in this study are summarized by research questions. Research question one explored the influence of family culture on achievement and the following themes emerged: Valuing multiple languages spoken within the family; cognitive ability in math; structure and discipline; and positive adult role-models.

The second research question investigated the nature of parent-child interaction and the following themes emerged: Warmth, and consistent involvement from earlier on in the life of the child. Research question three explored the influence of engagement with the larger Asian community and revealed the following emergent themes: Religion; social-emotional support; problem-solving teams; and community mentorship.

Discussion

Overall, this study concluded that the families of high-achieving students valued and communicated in more than one language at home. In addition, they indoctrinated their children with a high-achievement mindset from earlier on in their lives. Other related conclusions and implications are discussed below in greater detail based on the three research questions.

Research question one. This question investigated the influence of the family culture on the academic achievement of the student. The emergent themes lead to the conclusion that the culture in Asian families is education-focused and induces a high-achievement

mindset in their children. This is consistent with recent studies. For example, according to Jimenez and Horowitz (2013), in the perception of Asian American students “an Asian fail means a ‘B’ or ‘B+’ on a school assignment while a ‘white fail’ signifies receiving an ‘F’ grade” (p. 11). Also, Lee and Zhou (2013) reported similar findings based on the result of a qualitative study in which the concept of frames was applied in exploring perceptions of some second-generation Chinese and Vietnamese American students on educational achievement. For their respondents “high school was mandatory, college was an obligation, and only after earning an advanced degree does one deserve kudos” (p. 215).

Also, another conclusion is that valuing communication in multiple languages had a positive influence on the academic achievement of their children. Boroditsky (2011) suggested that different languages impact cognitive skills in different ways. According to Cushner, McClelland, and Safford (2006) language is a profound source of cultural learning because the acquisition of other cultural knowledge and values occurs through use of language. Children in the company of other individuals in their environment are programmed to learn and acquire languages and sign systems used around them. Cushner et al. also argued that language is one of the sociocultural factors that lead to development of learning styles which bears significant impact on a child’s educational outcome.

Research question two. This question explored participants’ experiences using the following question: In what way does the parent-child interaction in the family influence academic? Findings in this study lead to the conclusion that warm interaction and consistent involvement from earlier on in the lives of the students are common strategies used by Asian parents. Child development theorists, Grolnick, Deci, and Ryan (1999) emphasized that the nature of parent-child interaction is critical not only to children’s motivation to learn but also to how children internalize certain social behaviors. For example, if a mother and child share a warm and caring relationship the child may develop positive motivation toward learning from the experience. On the other hand, if the interaction is confrontational and less warm it may impact the child’s motivation negatively.

Research question three. This question explored the way in which engagement with the larger Asian community influenced academic achievement. Responses revealed four emergent themes namely, religion, socio-emotional support, problem-solving teams, and community mentorship that produce a synergistic influence on students’ educational outcome. This leads one to conclude that engagement with co-ethnic adults at community centers provided mentoring support which promoted social-emotional development in the adolescents. This is consistent with an earlier study in which Su and Hynie (2011) found that social environment interacted with family culture to shape parenting practices that ultimately impacted child’s development in a positive way.

In addition, positive influence of the community was emphasized by Lee and Zhou (2013) who found that because Asian American students are able to access ethnic resources in their social environment, they have a competitive advantage that helps them achieve academically, regardless of the socioeconomic status of their families. Ethnic resources include after-school tutoring help, supplementary educational programs, and college preparation classes.

Implications for Practice

This study uncovered best family involvement practices that helped children of the participants to achieve high in middle-school math. Implications for practice, informed by the emergent themes from this study are discussed below.

Encourage communication in more than one language. It was revealed that more than one language was used as a medium of communication in the households of respective participants. Yee et al. (2007) suggested that being bilingual or multilingual enhances not only a student's cognitive ability but also confers on them certain social advantages such as: divergent thinking, meta-linguistic awareness, problem-solving capabilities, and intercultural interactive skills. Also, Boroditsky (2011) suggested that different languages impact cognitive skills in different ways. Therefore it is instructive that parents encourage communication in more than one language as they interact with children at home.

Establish discipline and structure at home. Setting and enforcing the right structure at home helped the participants maintain a home environment that was conducive for learning. One of the participants claimed, "There is structure in my family. High expectations are set early in the lives of our kids and every family member knows what roles to fulfill in order for the child to meet expectations." There was support for this claim in literature. For example, Chua (2011) eulogized the authoritarian parenting practices in an Asian American family by referring to a mother as a tiger and the children as cubs. Chua stated "academic achievement reflects successful parenting" (p. 1). Lee (2014) agreed and noted that the structure in an Asian American family supports parenting practices which are more likely to produce "math whizzes" and "music prodigies" because the "Tiger Mother" (p. 38) knows how to use cultural formula for educational success.

Leverage community co-ethnic resources. Encourage family participation in community center activities such as religious festivities. Positive influence of community involvement was emphasized by Lee and Zhou (2013) who found that because Asian American students are able to access ethnic resources in their social environment, they have a competitive advantage that helps them achieve academically, regardless of the socioeconomic status of their families. Ethnic resources include after-school tutoring help, supplementary educational programs, and college preparation classes. Another factor, according to Lee (2012) is availability of non-tangible resources through ethnic networking, such as ethnic newspapers and informal co-ethnic forums that provide ethnic

group members information about school ranking, tutoring, school districts that have reputation for student-centered focus, and Advanced Placement classes.

Conclusion

Overall, this study concluded that the families of high-achieving students valued and communicated in more than one language at home. In addition, they indoctrinated their children with a high-achievement mindset from earlier on in their lives. It was hoped that this study has exposed strategies that families of other minority groups might find useful to help their children to achieve more. Also by identifying and exposing these strategies, schools may benefit by steering parent involvement efforts as mandated in Title I of the NCLB Act toward strategies that increase their overall effectiveness.

References

- Adamski, A. I. (2013). Parental involvement in schooling, classroom environment, and student outcomes. *Learning Environments Research, 16*(3), 315-328.
- Alvarez, L. (2012). Florida officials defend racial and ethnic learning goals. *New York Times*, p. A20.
- Andretta, J. R., Worrell, F. C., Mello, Z. R., Dixon, D. D., & Baik, S. H. (2013). Demographic differences in adolescents' time attitudes. *Journal of Adolescence, 36*, 289-301. doi:10.1016/j.adolescence.2012.11.005
- Boroditsky, L. (2011). How languages shape thought. *Scientific America, 304*(2), 62-65.
- Brown v. Board of Education of Topeka 347 (US Supreme Court, 1954)
- Chua, A. (2011). *Battle hymn of the tiger mother*. New York, NY: The Penguin Press.
- Creswell, J. W., (2013). *Qualitative inquiry and research design* (3rd ed.). Thousand Oaks, CA: Sage Publication.
- Crespo-Jimenez, M. (2011). *Patterns of latino parental involvement in middle school: Case studies of mexican, dominican and puerto rican families*. (Order No. 3475523, University of Connecticut). *ProQuest Dissertations and Theses*, 197.
- Cushner, K., McClelland, A., & Safford, P. (2006). *Human diversity in education: An integrative approach* (5th ed.). New York, NY: The McGraw-Hill Companies, Inc.
- Flores, A. (2007). Examining disparities in mathematics education: Achievement gap or opportunity gap? *High School Journal, 91*(1), 39-42.
- Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1999). Internalization within the family: The self-determination theory perspective. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 135-161). New York, NY: John Wiley.
- Grolnick, W. S., Price, C. E., Beiswenger, K. L., & Sauck, C. C. (2007). Evaluative pressure in mothers: Effects of situation, maternal, and child characteristics on autonomy supportive versus controlling behavior. *Developmental Psychology, 43*, 991-1002.
- Han, W. J. (2008). The academic trajectories of children of immigrants and their school environments. *Developmental Psychology, 44*(1), 1572-1590.

- Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement. Annual Synthesis* (ed474521). Washington, DC: U.S. Government Printing Office.
- Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental psychology*, 45(3), 740-763.
- Houtenville, A., & Conway, K. (2008). Parental effort, school resources, and student achievement. *Journal of Human Resources*, 43(2), 437-453.
- Hycener, R. H. (1999). Some guidelines for phenomenological analysis of interview data. In A. Bryman & R. G. Burgess (Eds.), *Qualitative research* (Vol. 3, pp. 143-164). London: Sage.
- Jimenez, T., & Horowitz, A. L. (2013). When white is just alright: How immigrants redefine achievement and reconfigure the ethnoracial hierarchy. *American Sociological Review*, 78(5), 849-871.
- Lee, J. (2014). Success frame and achievement paradox. *Race and Social Problems*, 6, 38-55.
- Lee, J., & Zhou, M. (2013). Frames of achievement and opportunity horizon. In Card, D., & Raphael, S. (Eds.) *Immigration, poverty, and socioeconomic inequalities* (pp. 206 – 231). New York, NY: Russell Sage Foundation.
- Matsumoto, D., & Juang, L. (2012). *Culture and psychology* (5th ed.). Belmont, CA: Wadsworth Cengage Learning.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publication.
- No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, §115, Stat. 1425 (2002). Retrieved from: www.ed.gov
- Pomerantz, E. M., & Moorman, E. A. (2009). The how, whom, and why of parents' involvement in children's academic lives: More is not always better. *Review of Educational Research*, 77(3), 373-410
- Shalash, S. (2013). Virginia adopts new method to measure students, drops AYP. *Daily Press*. Retrieved from <http://www.dailypress.com>
- Su, C., & Hynie, M. (2011). Effects of life stress, social support, and cultural norms on parenting styles among mainland Chinese, European Canadian, and Chinese Canadian immigrant mothers. *Journal of Cross-Cultural Psychology*, 42, 944-962.
- Sue, S., & Okazaki, S. (2009). Asian-American educational achievements: A phenomenon in search of explanation. *Asian American Journal of Psychology*, 5(1), 45-55.
- US Department of Education (2005). *The condition of education* (NCES Publication No. 2005-094). Washington, DC: U.S. Government Printing Office.
- Van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Walnut Creek, CA: Left Coast Press Inc.
- Van Manen, M. (1990). *Researching lived experience: Human science for action sensitive pedagogy*. Albany, NY: The State University of New York Press.

- Wing, J. (2007). Beyond black and white: the model minority myth and the invisibility of the Asian American student. *The Urban Review*, 39(4), 455-481.
- Worrell, F. (2014). Theories school psychologists should know: Culture and academic achievement [Supplemental material]. *Psychology in the Schools*, 51(4). doi:10.1002/pits.21756
- Yee, B. W., DeBaryshe, B. D., Yuen, S., Su, Y. K., & McCubbin, H. I. (2007). Asian American and Pacific Islander families: Resilience and life-span socialization in a cultural context. In Leong, F.t., Inman, A.G., Yang, L.H., Kinoshita, L, & Fu, M. (Eds.) *Handbook of Asian American Psychology* (pp. 69 – 103). Thousand Oaks, CA: Sage Publications.
- Yoder, J. R., & Lopez, A. (2013). Parent's perception of involvement in children's education: Findings from a qualitative study of public housing residents. *Child Adolesc Social Work Journal*, 30, 415-433. doi:10.1007/s10560-013-0298-0

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