

The Role of Social and Emotional Skills and Supports for Hmong Student Achievement

By

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Abstract

Hmong students face challenges in their educational pathways and academic performance. Researchers have offered multiple explanations for these challenges; however, a positive perspective is available: social and emotional learning and developmental skills and supports. Over 8000 Minnesota Hmong students reported exceptionally high levels of developmental measures in Commitment to Learning, Positive Identity, and Social Competence. In addition, although they report relatively positive Family/Community Support, it is significantly less than the levels of support reported by non-Hmong students. These developmental skills and supports are associated with school grades and interact in informative ways with other student characteristics.

Keywords: Hmong Americans, Student Achievement, Social and Emotional Skills

The Role of Social and Emotional Skills and Supports for Hmong Student Achievement

The history of Hmong people spans centuries, with oral and archaeological evidence of their farming and nomadic histories across Asia. In modern times, their histories included important roles in political events worldwide, including relevant roles in World War II, Vietnam, and the long-lasting “secret war” in Laos from the mid-1960s ending in a peace treaty in 1973. When Hmong communities began escaping retribution for their roles in these conflicts, Hmong families were resettled throughout several developed countries such as the United States and France. Beginning in 1975, Hmong families started resettling in Minnesota, with the largest numbers arriving after the 1980 U.S. Refugee Act. An additional 5,000 Hmong people more recently arrived in Minnesota in 2004, when the last Thailand shelter was closed (Minnesota

Historical Society, 2017). As of the 2010 census, there were over 260,000 Hmong in the US, with more than 66,000 in Minnesota, largely located in Minneapolis and St. Paul (Twin Cities), the largest urban Hmong population in the US (Minnesota Historical Society, 2017). The 2015 American Community Survey estimates 71,483 Hmong in Minnesota, where 62% are US born and 40% are 17 years old or younger (U.S. Census, 2015). Nearly 18% of Hmong families live in poverty, compared to 6.3% statewide; 29.1% of Hmong children (under 18 years) live in poverty, compared to 13.1% of children statewide (US Census, 2015).

As in most states, educators, youth workers, and policy makers know little about the unique characteristics and well-being of Hmong youth. This lack of information is due to schools, the state, and the U.S. Department of Education classifying Hmong students as Asian, combining them with students from all Asian origins. Recently, the Minnesota Student Survey began allowing students to identify their Hmong heritage, making it possible to investigate Hmong students' perceptions of their own well-being, as well as their experiences in their schools, families, and communities.

Minnesota, similar to many states across the nation, is investing significant efforts in the development of social and emotional learning of students. These efforts are aligned with the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2017). The social and emotional aspects of youth development are skills that play significant roles in the success of students in school as well as later in careers and life (Benson, 2006; Bronfenbrenner, 1994). This includes focused efforts in the Twin Cities through the collective action efforts behind Generation Next to close achievement gaps and improve educational equity. Among the six goals of Generation Next (2017) is: "Every child is socially and emotionally equipped to learn by 8th grade." By supporting the development of these skills for all students, educators can create

environments that facilitate learning and positive development. The Minnesota Student Survey is an important tool to investigate the social and emotional characteristics of students and their perceptions of supports from teachers, schools, families, and communities. These are relevant components of positive youth development and important considerations for a growing Hmong community with a large youth population that has been relatively invisible.

Positive Youth Development

The current school accountability framework, the Every Student Succeeds Act (ESSA; S. 1177, 2015), is based on a very narrow definition of success. Academic achievement is not the only measure of student success or school quality. Standardized tests emphasize cognitive abilities, disregarding the fact that so called non-cognitive abilities, such as social and emotional learning (SEL), are important to the academic success of students (Haynes, Emmons, & Ben-Avie, 1997). SEL goes by many names, including soft skills, 21st century skills, and others, but they embody the social and emotional skills, behaviors, and values that individuals need to be successful in school, careers, and life in general. In addition, there are many frameworks that promote various constructs of SEL. The more general approach to positive youth development (PYD; Benson, Scales, Hamilton, & Sesma, 2006) promotes an asset orientation, in contrast to a deficit orientation of youth development.

Although SEL skills are not generally an explicit part of the curriculum (with the exception of early childhood education), classroom and school environments play a significant role in developing these skills. Safe and healthy school environments are critical for learning and development (Becker & Luthar, 2002; Benson et al., 2006; Bronfenbrenner, 1994; Cohen & Geier, 2010; Haynes et al., 1997; Hopson & Lee, 2011). There is consensus in the literature regarding the connections between SEL and academic development, such that “social, emotional

and cognitive competencies develop throughout our lives and are essential to success in our schools, workplaces, homes, and communities and allow individuals to contribute meaningfully to society” (Jones & Kahn, 2017, p. 7). In fact, “all students, regardless of their background, benefit from positive social and emotional development. At the same time, building nurturing, and integrating social, emotional, and academic development in pre-K-12 can be a part of achieving a more equitable society” (Jones & Kahn, 2017, p. 12).

The complex relations between academic and social environments and the learning and development of individuals are intertwined in spheres of the ecology of development (Bronfenbrenner, 1994). Spheres that have the strongest influences in the microsystem include the family and classroom, near in proximity to youth. Outer spheres include more external environments and the larger societal socio-cultural context which involves more indirect influence on the development of individuals. Theories on the associations between environmental contexts and youth development have been formulated in the context of typical white, middle-class students. Therefore, for individuals that are different than the typical student, the literature is limited (Rodriguez & Morrobel, 2004). Building on such theories, agents of change attempt to create environments that support the positive development of all youth.

PYD stems from a perspective where the focus is on developmental social and emotional skills that enable youth to thrive and be successful (Benson et al., 2006). Youth development researchers for far too long have focused on a deficit-oriented approach – learning what is wrong with youth – and such information limits our understanding of the healthy development of youth. PYD has a number of key principles that emerge from research, theory, and practice in positive psychology, and community-based youth development (Benson et al., 2006). These include:

1. Youth have an inherent capacity for positive development.

2. Positive development is enabled and enhanced through multiple relationships, contexts, and environments.
3. All youth benefit from these opportunities.
4. Community is a critical delivery system.
5. Youth, themselves, are major actors in their own development.

One of the salient features of PYD is that it emphasizes the positive aspects of youth (strengths and assets) and the context of interactions with environments and relationships contributing to youth development (Eccles & Gootman, 2002; Masten, 2014). Instead of focusing on deficits, the goal is to identify developmental skills and supports to use them in a way to promote healthy development within their communities. These developmental skills and supports can be used in any context to help youth succeed. Developmental skills are internal assets (Scales & Leffert, 2004) and in our work, including commitment to learning, positive identity, and social competence (defined in the methods section below). Developmental supports are external assets (Scales & Leffert, 2004) including empowerment, family/community support, and teacher/community support (defined in the methods section below). For example, in the context of sports, athletes tend to perceive higher levels of family support, teacher and community support, school safety, and school grades compared to non-athletes (Van Boekel, Bulut, Stanke, Zamora, Jang, Kang, & Nickodem, 2016). By participating in sports in school and in the community, athletes have a potential for a larger network of supports and this participation also is associated with higher school grades. Developmental supports promote confidence and skills, an important part of PYD (see the 5 Cs in Pittman, Irby, Tolman, Yohalem, & Ferber, 2003).

In PYD research and practice, attending to race, ethnicity, and diverse communities are important in efforts to improve equity and reduce academic disparities. PYD literatures provide strong support for the general population, but there is limited evidence in the contexts of some ethnic groups, especially those with smaller populations. Hmong youth, in particular, are a relatively invisible community. They are depicted at the extremes of a binary lens (Ngo & Lee, 2007), either being the studious model minority or being a gang member. Although their numbers are very small compared to the national population, there are some communities where Hmong youth make up a large portion of the student body. For example, in Minnesota, after English and Spanish, Hmong is the next most common language spoken in households.

As described earlier, the Hmong have been in the US for over 40 years. In Minnesota, they constitute 1.3% of the total population. One reason Hmong youth are a relatively invisible community is because they are typically included as part of the larger Asian community. Within the Minnesota Asian population, which is 4.4% of the total, the Hmong are the largest group making up nearly 30% in 2015 (U.S. Census). Achievement results typically are not reported for ethnic groups within Asian communities. In a special study of MN academic achievement based on home language in 2011, with the exception of the Karen from Burma, Hmong students had the lowest percentage of reading and mathematics proficiency, 47% and 37% respectively, compared to 66% and 55% for all Asian students, and 81% and 63% for White students (Council on Asian Pacific Minnesotans, 2012).

Due to the limited information available on Hmong students, they are treated similarly to other bilingual students, which is not appropriate because their background and cultures are unique (Vang, 2005). Standardized programs designed for English Language Learners typically do not work well for Hmong students and lead Hmong students to develop compensation

strategies to meet their end goals of good grades, which affects their ability to reach their learning potential (Marshall, 1998). Marshall (1998) believes that certain schemata types (linguistic, content, and formal learning and instructional strategies) are missing during the learning process for Hmong students. For example, when a folktale is told in Hmong, students are familiar with the language, the subject matter context, and the manner of presentation, which supports deeper understanding. During the learning process in school, there is a possibility that not all three of these schemata types are familiar, which leads to compensation strategies (short cuts students adopt to manage learning in unfamiliar contexts). Compensation strategies do not allow Hmong students to fully grasp the concepts or be able to generalize to other contexts. Marshall uses a Hmong culture-specific approach tailored around the three schemata types to show that a paradigm shift is needed to help Hmong students be academically successful in the US educational system. This approach has three steps: (a) incorporate interpersonal elements and a curriculum related to learners' experiences and communities, (b) include both individual and cooperative elements in the learning process, and (c) create activities focusing on the process of doing the activity rather than on the language or the subject-matter content involved.

In general, the lack of specific knowledge on the education and development of Hmong youth becomes a roadblock to improving the success of Hmong youth because educators do not know how to help Hmong students reach their learning potential. Studies to improve the external environments of Hmong youth are helpful, but according to Bronfenbrenner (1994), internal environments have the strongest association with youth development and this is what is lacking in the literature for Hmong youth. Along with new approaches to educating Hmong youth, greater attention to developmental skills and supports as components of SEL could promote greater academic and social success for Hmong youth. However, the empirical evidence

regarding the hypothesized associations between PYD and student success is quite limited in the extant literature. This leads to our primary research questions in the exploration of developmental skills and supports of Hmong students in public schools, in an effort to expand our knowledge base in this arena:

1. How do developmental skills and supports for Hmong students compare to their peers?
2. Which developmental skills and supports are associated with school academic performance of Hmong students?
3. How are developmental skills and supports affected by other characteristics of Hmong students?

Methods

Data Source

The data come from the 2013 and 2016 Minnesota Student Survey (MSS, for more details, see <http://education.state.mn.us/MDE/dse/health/mss>). The MSS was designed by the Minnesota Departments of Education, Health, Human Services, and Public Safety, and is administered every three years to 5th, 8th, 9th, and 11th grade students primarily from public schools. The purpose of the survey is to monitor important trends in students' habits, experiences, and beliefs about positive and risky behaviors. Students completed the survey anonymously on a computer or using a paper-and-pencil version. The MSS interagency team provided the researchers full access to the survey database to perform a secondary data analysis, as part of a larger program of research investigating the ecologies of positive youth development (Rodriguez, 2017).

Participants

In total, 68% of Minnesota students in the sampled grades participated in 2013 and 2016 (Minnesota Department of Health, 2017), including over 330,000 students. The first part of the current study consists of 280,855 students that were attending a school district with at least one student that selected their race as Asian and ethnicity as Hmong. In this selected sample, 50% was female, with 25% from fifth grade, 26% from eighth grade, 27% from ninth grade, and 22% from eleventh grade. The racial and ethnic backgrounds of the students consisted of American Indian (5%), Asian/Pacific Islanders (4%), African American (6%), White (67%), Latino (9%), Somali (2%), Hmong (3%), and multiracial (5%). This includes 8012 Hmong students. The regression analyses are restricted to 4554 Hmong students in secondary schools with complete information; this excludes 5th grade students as questions about college aspirations were not included in the elementary school version of the survey.

Measures

Using student responses from the MSS items, six measures were created. Measures of developmental skills included Commitment to Learning, Positive Identity, and Social Competence. *Commitment to Learning* includes items regarding student engagement in class, preparation for learning, time spent on homework, being achievement oriented and valuing the role of being a student—generally caring about school. *Positive Identity* includes having a sense of control of one’s life, feeling good about self and future, dealing well with disappointment and life’s challenges, and thinking about one’s purpose in life. *Social Competence* embodies the abilities to say no to dangerous/unhealthy things, build friendships, express feelings appropriately, resist bad influences, resolve conflicts without violence, accept differences in others, and recognize the needs and feelings of others.

Measures of developmental supports included Empowerment, Family/Community Support, and Teacher/School Support. *Empowerment* includes having a sense of safety at home, at school, and in the neighborhood; feeling valued; being included in family roles; and having responsibilities. *Family/Community Support* involves being able to talk with mothers (if available) and feeling cared for by parents, other adult relatives, friends, adults at school, and adults in the community. Finally, *Teacher/School Support* includes the perception that adults at school treat students fairly and listen to students; that students feel cared for by teachers at school.

Search Institute (2013) provided three of these measures (Positive Identity, Social Competence, and Empowerment, as measured in the Developmental Asset Profile) to the state for inclusion in the MSS. The other measures were developed based on the principles of the developmental asset framework of Search Institute using existing items in the MSS (Benson, 1990, 2002, 2006). Confirmatory factor analyses employing Mplus (Version 7; Muthén & Muthén, 2012) provided evidence of adequate fit such that each measure was unidimensional and independent of other measures. Model fit indices for the developmental skills included CFI of .92, TLI of .91, and RMSEA of .08; and for developmental supports included CFI of .89, TLI of .87, and RMSEA of .13. The developmental skills were correlated from .57 to .85; the developmental supports were correlated from .63 to .77. Given the fact that these measures are short (ranging from 6 to 8 items), these results were quite positive (Brown, 2015; Kline, 2011).

The measures were then scored using the partial credit Rasch model in Winsteps (Version 3.92; Linacre, 2016). The partial credit Rasch model allows each item to have its own structure (given the ordinal nature of the response scales) and places persons and items onto the same scale. The Rasch reliabilities of these measures were also adequate: Commitment to Learning

(.70), Positive Identity (.79), Social Competence (.79), Empowerment (.72), Family/Community Support (.71), and Teacher/School Support (.85). Although measurement users typically desire score reliabilities of .80 as a minimum for making decisions about individuals, measures with score reliabilities as low as .60 can be quite informative for groups larger than 100 (Thorndike & Thorndike-Christ, 2010, p. 140).

Aside from analyses of the developmental skills and supports, their overall levels and disparities comparing students across racial/ethnic communities, students' self-reported school grades from the MSS are examined. The grade variable was obtained from a single question asking students about the grade they receive most often in school. This variable is treated as a continuous variable ranging from 0 to 4, as a proxy to a grade point average.

Analysis

To examine differences on each measure across groups of students, a standardized metric was selected, since each measure has its own scale. Standardized mean differences (Cohen's d ; the group mean score minus the state mean score divided by the state standard deviation) were estimated to examine differences in each measure across student groups, based on the full sample of 280,855 students attending a school with at least one Hmong student (including 8012 Hmong students). When the standardized mean difference is positive, it indicates the group has a higher score than the state average (or reference group), in standard deviations. For example, a $d = 0.50$ indicates the group has an average score one-half standard deviation higher than the state average.

Multiple linear regression was used to examine the associations of the developmental skills and supports with school grades. Scores from each of these variables were standardized for the regression, so that the regression coefficients can be interpreted in terms of the number of

standard deviations change in grades due to one standard deviation change in the developmental skill or support. In addition to examining the main effects of the developmental skills and supports, interactions with several student characteristics were explored to estimate the extent to which the effects of developmental skills and supports depend on student characteristics. The student characteristics included in the regression model were sex (female, coded as female = 1, male = 0), receiving free or reduced price lunch (FRL, coded as FRL = 1, non-FRL = 0), skipping a full day of school in the last 30 days (skip, coded as skip = 1, non-skip = 0), and aspiring to attend a four-year college or university after high school (college, coded as college = 1, non-college = 0). Each of these student characteristics was entered in the regression as dichotomous (not standardized), to produce regression coefficients that indicate the additional effect of the group membership. For example, if the coefficient for female was 0.20, this indicates that females have school grades that are 0.20 standard deviations higher than males. The base model regressed school grades on each developmental skill (Commitment to Learning [CtL], Positive Identity [PI], and Social Competence [SC]) and developmental support (Empowerment [EM], Family/Community Support [FCS], and Teacher/School Support [TSS]):

$$Grades = \beta_0 + \beta_1 Ctl + \beta_2 PI + \beta_3 SC + \beta_4 EM + \beta_5 FCS + \beta_6 TSS + e$$

After this first model was estimated, student characteristics, *X*, were added into the model individually, as well as the interaction of the group variable and each of the developmental skills and supports. This resulted in four models, each including one student characteristic *X* (female, frl, skip, and college):

$$Grades = \beta_0 + \beta_1 Ctl + \beta_2 PI + \beta_3 SC + \beta_4 EM + \beta_5 FCS + \beta_6 TSS + \beta_7 X + \beta_8 (CtL \times X) + \beta_9 (PI \times X) + \beta_{10} (SC \times X) + \beta_{11} (EM \times X) + \beta_{12} (FCS \times X) + \beta_{13} (TSS \times X) + e$$

Finally, a full model was estimated including all six developmental skills and supports, four student characteristics, and all two-way interactions between skills/supports and student characteristics. Each model was examined to evaluate the extent to which variability in school grades is related to each unique combination of development skills/supports and student characteristics.

Results

Hmong Student Characteristics

In total, 8012 Hmong students who identified as Asian (and not multiracial) completed the MSS in 2013 and 2016. Survey participants were spread across grades (23% fifth, 23% eighth, 27% ninth, 27% eleventh grade). About 71% of all Hmong students reported to be living with both their biological mother and father, whereas 6% were living with neither biological parent. Approximately 51% were male, 8% were receiving special education services (have an IEP), and 73% were receiving free or reduced-price lunch at school (a much higher rate than the 27% of all non-Hmong students). Nearly 17% had changed schools at least once since the beginning of the school year and 19% skipped a full day of school within the last 30 days before taking the survey. About 34% reported to be receiving mostly As, 41% mostly Bs, 15% mostly Cs, 3% mostly Ds, and 2% mostly Fs or incompletes in their classes. As for future aspirations, 69% of Hmong students planned to go to a four-year college or university. Table 1 contains a summary of the characteristics of the 4554 Hmong students used in the regression models; the percent of Hmong students who were male (50%), receiving FRL (74%), and with college aspirations (71%), was similar to the full Hmong student sample.

In Minnesota, including Hmong and non-Hmong students, students overall report high and positive levels of Commitment to Learning, Positive Identity, and Social Competence, as

well as high and positive levels of Empowerment, Family/Community Support, and Teacher/School Support (Table 1). The scale for each measure was centered at 10, which corresponds to the neutral position or the middle of the response scale on the items in each measure. This indicates that scores above 10 are positive or where students report that the characteristic is more like them than not, and scores below 10 are more negative or where students report that the characteristic is less like them. The mean score of each measure is above 10 for Hmong and non-Hmong students. Hmong students report exceptionally high levels of Commitment to Learning ($M = 12.4$, 1.6 standard deviations above 10), Empowerment ($M = 11.8$, 1.1 standard deviations above 10), and Teacher/School Support ($M = 11.6$, 0.9 standard deviations above 10). This cannot be overstated: Hmong students report high levels of developmental skills and supports on average. However, there are disparities comparing Hmong students to students of other racial/ethnic backgrounds, with a fair amount of variation within Hmong students as well.

There were also small differences in these measures between male and female Hmong students. The only measures where differences were greater than 0.10 standard deviations was Commitment to Learning (female students were 0.24 standard deviations higher than males) and Positive Identity (male students were 0.19 standard deviations higher than females). In addition, female Hmong students reported higher grades (0.36 standard deviations higher) than male students (3.1 compared to 2.9 grade points). The differences in the other measures were negligible.

Disparities in Developmental Skills & Supports

Figures 1-7 illustrate the standardized mean differences in developmental skills and supports for each racial and ethnic group, compared to the state average. These contain the entire

sample of 8012 Hmong students. For example, in Figure 1, American Indian students are about 0.23 standard deviations below the state average on Commitment to Learning, whereas Hmong students are slightly above the state average ($d = 0.11$). American Indian students and Hmong students have perceived lower developmental skills and supports compared to the other groups across most measures (Figures 1-7). Hmong students have the lowest perceived Empowerment ($d = -0.34$), Positive Identity ($d = -.22$), and Family/Community Support ($d = -.49$) among all racial/ethnic groups. The only developmental skill where Hmong students are above average is Commitment to Learning, which is consistent with the strong belief in the Hmong community that education is the way to a better socioeconomic future (Vang, 2005).

Explaining Variation in School Grades

Because of the large sample (the 4,554 Hmong students included in the regression analyses), very small regression coefficients can be statistically significant, but not of practical significance. Only interaction coefficients that were statistically significant ($p < .05$) and of a magnitude of 0.10 standard deviations or greater are discussed here and presented in Table 2. The Skip characteristic (skipped school in the last 30 days) was not significant, nor were its interaction terms, so it was removed and is not discussed here). Based on the final model where grades were regressed on developmental skills and supports, student characteristics, and their interactions, a number of interesting results were found. This model also explained significantly more variation than the models examining one student characteristic at a time; the model with only developmental skills and supports accounted for 10% of the variance in school grades, whereas the model including student characteristics (sex, FRL, and college aspirations) accounted for 17% of the variance (Table 2).

Female Hmong students tend to report higher school grades, over one-quarter standard deviation higher (0.29), all else equal. The two major factors in explaining variation in school grades including Commitment to Learning (0.36) and College Aspirations (0.33) depended on student characteristics (significant interactions). These associations can be interpreted in the following way. The association between Commitment to Learning and school grades depends on College Aspirations (-0.15 interaction), such that the combination of the two are a powerful predictor of school grades ($0.36 + 0.33 - 0.15 = 0.54$). A one SD increase in Commitment to Learning and having College Aspirations is associated with 0.54 SD increase in school grades. In addition, the effect of College Aspirations depends on Family/Community Support (0.11), where greater support increases the association between College Aspirations and school grades (having greater family and community support and holding college aspirations in combination is associated with even higher school grades). Finally, the association between Family/Community Support depends on FRL status (-0.11), where participation in FRL reduces the association between Family/Community Support and school grades (family and community support has less association with school grades for students participating in FRL, potentially due to lower family income). These interactions are consistent with expectations.

Profiles of Developmental Skills & Supports Given Students Characteristics

Four additional figures were created in the interest of exploring these student characteristics. To summarize the overall differences between Hmong and non-Hmong students, standardized mean differences were estimated and illustrated in Figure 8. Hmong students report slightly higher Commitment to Learning than non-Hmong students and much lower levels of Empowerment and Family/Community Support (Figure 8).

Figures 9 to 11 illustrate differences between three student characteristics within Hmong students only. Each figure illustrates the standardized mean difference between those with the characteristic and those without. Hmong female students compared to male students (Figure 9) report higher Commitment to Learning ($d = 0.24$) and higher grades ($d = 0.36$). Differences on other measures were negligible. Differences between Hmong students receiving FRL and those not receiving FRL (Figure 10) are negligible. Hmong students with college aspirations compared to those without such aspirations (Figure 11) report higher Commitment to Learning ($d = 0.39$) and much higher school grades ($d = 0.52$). In general, Hmong students with college aspirations reported higher levels of all developmental skills and supports.

Discussion

Although the academic outcome statistics (including standardized test scores, high school graduation rates, and college graduation enrollment and completion rates) are not positive for Hmong students compared to other groups, Hmong students report to have positive and strong levels of Commitment to Learning, Positive Identity, and Social Competence. Some have argued that adapting to the culture of the US educational system was never explicitly taught in schools or community organizations, but was expected, leading Hmong students to create a means-to-an-end strategy in their education (Marshall, 1998). This indirect self-reliant approach to understanding and succeeding in school limits success. Although developmental skills and supports are more subtle and non-academic by nature, such characteristics may be what are needed to help Hmong youth succeed in school, careers, and beyond. Compared to most of their non-Hmong peers and the state average, aside from Commitment to Learning, Hmong students are lower on other developmental skills and supports. Particularly striking is the fact that Hmong

students report significantly lower Family/Community Support compared to other groups (one-half standard deviation lower).

From a personal perspective, Hmong parents seem especially involved in their children's education, wanting high educational outcomes for their children. But the MSS measure of support does not capture the perspective of parents. It focuses on the perceptions of students regarding the level of support and care they receive from their families and communities. Perhaps, the challenge lies in the difference between the ability or ways parents support their children from the way students desire to be supported. In the past, Hmong students were placed in classes that fulfilled minimum graduation requirements and to prepare them for the workforce. This often resulted in limiting parental confidence in their ability to support their children with academics and school work as they grow older (Vang, 2004, 2005), recognizing that many parents were not educated in the US. This institutional challenge produced a generation of low educational attainment, which provides some insights to the lower perceived parental and family support from Hmong students. That is not to say that Hmong families are not involved in their child's education (Lee & Green, 2008), but from Figure 5, parents and the community are not supporting Hmong youth in the way these students desire – at the very least, Hmong students report lower levels of Family/Community Support than do non-Hmong students.

Researchers have reported that Hmong parents perceive their responsibilities to their children's education as limited to the basic needs of food, shelter, clothing, and financial support (Lee & Green, 2008). Students may see these needs as basic necessities and take them for granted, but parents see them as important ways to support their children's education. Perhaps Hmong student perceptions of less Family/Community Support is not just due to their own expectations of greater support, but also the result of parents' limited abilities to provide direct

academic support, as well as differences in expectations and goals. Additionally, others have found that Hmong students see family support more in terms of cultural support than academic support (Xiong, 2012; Xiong & Lam, 2013). As the generational experiences of Hmong communities continue to expand over time, this disparity may change. As Hmong youth born and raised in Minnesota (or in the US) become parents, they may take on different parenting styles and roles regarding the support of their children. It may be that Hmong communities are at a transition point in the history of Minnesota Hmong families. Perhaps Hmong elders and communities have goals to retain long-held traditions, whereas Hmong youth also face the challenge to fit in school and multiple communities and be Hmong Americans (although what this means likely varies not only within specific communities but across regions of the US).

Beyond Family/Community Support, other developmental skills and supports, with the exception of Commitment to Learning, are also perceived by Hmong students to be lower than the state average and in some cases the lowest relative to other ethnic groups. These developmental skills appear to present some challenge for Hmong students. The skills of Positive Identity and Social Competence and the support of Empowerment are not academic and might be expected to be achieved outside of school; however, they can be developed through culturally-relevant curriculum (e.g., class presentations or lessons on Hmong/US historical relations). In any case, these findings indicate that Hmong students have room to grow and develop in these important ways.

Beside the cultural challenges, there are reports of structural and institutional challenges (Ngo & Lee, 2007). Being stuck in a low mathematics track throughout school will affect students' math ability development and the potential students can reach when they reach high school. Having schools initiate an approach similar to those suggested by Marshall (1998) would

mitigate this issue because it would allow educators to accommodate their students and obtain more accurate measures of student abilities. This would allow for the opportunity to place students on the correct track for educational progress. The analyses in this study are correlational, but suggest important connections between developmental skills and supports and school grades. This re-emphasizes the importance of SEL in school contexts (Jones & Kahn, 2017). Because of the cultural approach of Hmong parents to leave the education of their children to the experts in schools (Ngo & Lee, 2007; Vang, 2004), it would also be helpful for schools to strategically educate and engage Hmong families and the community on the academic experiences of their children. This might allow families and communities to better support Hmong students on their academic progress, building stronger connections across these two important spheres of influence in Hmong youth development (Bronfenbrenner, 1994).

Implications for Policy and Practice

The knowledge gained from this study can be useful. Results from this study suggest that some developmental skills play an important role in their positive association with school grades, as reported by Hmong students. This study also suggests that Hmong students perceive that they are not getting the development supports that they need compared to their peers. There are also unique interactions with some student characteristics, in that the association between developmental skills and supports and school grades depends on FRL status and college aspirations. A first step might be to informing educators and youth workers who work with Hmong students about the developmental skills and supports of Hmong students (to know where they are at in these respects). With access to this information, strategies can be tailored to the students to improve the developmental skills and supports they need for academic progress. Profiles of students in different racial/ethnic groups on these measures of developmental skills

and supports have been seen as powerful sources of information for tailoring approaches to students from diverse communities (St. Paul Public Schools staff, personal communication, March 21, 2018).

Additionally, a significant and important disparity between Hmong and non-Hmong students was evident – Hmong students reported a significantly lower level of Family/Community Support. This is an area where educators, youth workers, and community organizations can play a helping role. Helping parents learn about how the educational system works would also be beneficial to Hmong students. Parents also can learn new ways to best support their children and have a better understanding of how to help their students navigate the educational system. But again, these specific approaches would be best informed through more qualitative research efforts to identify ways to appropriately tailor such approaches to Hmong communities.

As Minnesota (and most other states) continue to explore how to encompass elements of SEL in school-wide improvement efforts, it seems clear that those efforts should recognize the variety of ways elements of SEL function in diverse communities. This suggests developing state and school-wide policies around the implementation of SEL in ways that tailor such approaches to specific community needs and preferences. And, given the significant differences in Asian and Hmong student experiences and perceptions around the developmental skills and supports explored in this study, it continues to be critical to acknowledge the diversity within Asian communities and in particular, the unique characteristics of Hmong students and families.

Limitations

This research relied on secondary data analyses. The survey was not designed explicitly to provide theory-based measures of developmental skills and supports or social and emotional

learning associated with Hmong students. These measures could be more accurately developed and culturally tailored. Because Minnesota is home to Hmong families who arrived in several waves over the past four decades, information about English language learner status or generational (refugee) status would have been helpful. Clustering by when families arrived in the US likely would have accounted for additional variation in our models. Furthermore, even though the survey is administered every three years, because it is anonymous, it is not possible to link student responses over time. Having the ability to track and do student-level longitudinal analyses would provide for stronger evidence to support our understanding of the development of these particular skills and supports over time.

Further Research Considerations

It may be possible to consider a cohort model for analysis of Hmong student responses over time. If each year the survey is taken is considered as a cohort and assume the groups stay relatively similar, students can be followed from 5th to 8th grade and 8th to 11th grade between 2013 and 2016; and with the future 2019 administration, a single cohort can be followed from 5th (2013) to 8th (2016) to 11th grade (2019). Modeling the sample as a cohort in a longitudinal manner might provide unique perspectives on how the cohort has progressed throughout their school life. If there were indications that the developmental skills and supports changed over this time, it might be of interest to see if there were an impact on school grades and post-high school aspirations. It would also be useful to see if a single cohort of Hmong students feel the same about their developmental skills and supports over time. In addition to future research with this rich dataset, designing a specific qualitative study to further investigate how parents and their children would like to give and receive support could bridge the gap between Hmong parents and Hmong youth.

With these measures of developmental skills and supports, educators, youth workers, and policy makers have the tools to provide relevant information in planning efforts to help Hmong students develop relevant skills and supports. Instead of only considering accountability-based educational outcomes, focusing holistically on students with these developmental skills and supports will result in motivating effective learners and successful Hmong students and a system that is better suited to meet the needs of diverse students.

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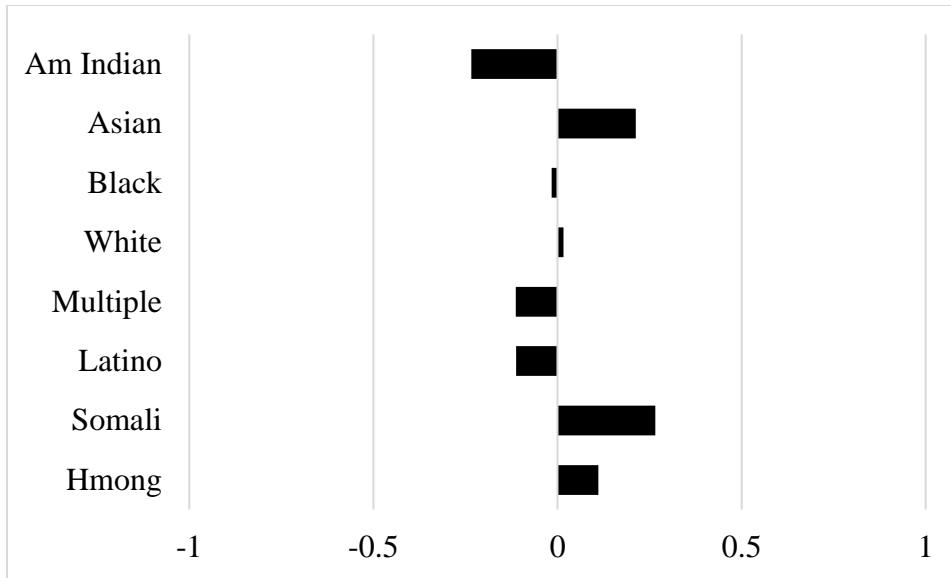


Figure 1. Commitment to Learning standardized mean differences from state average.

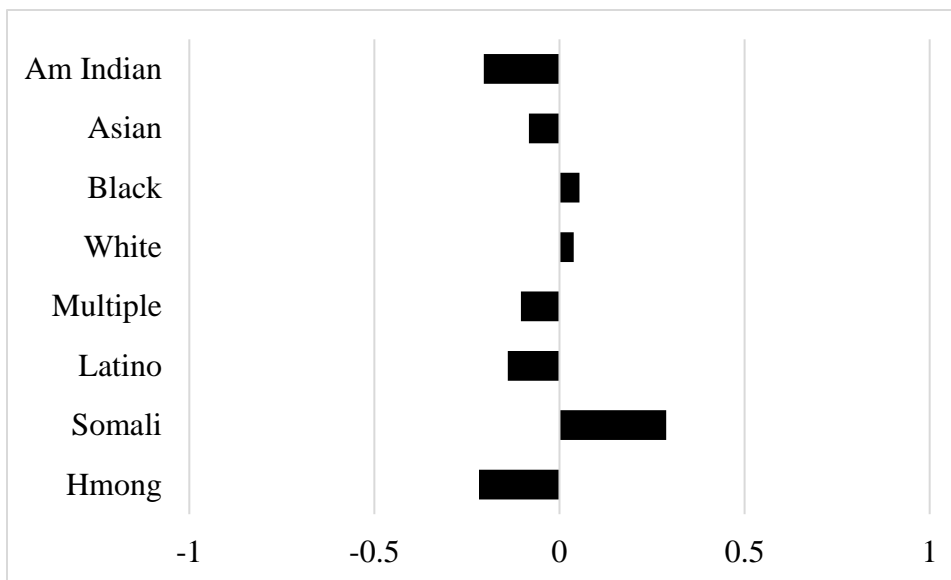


Figure 2. Positive Identity standardized mean differences from state average.

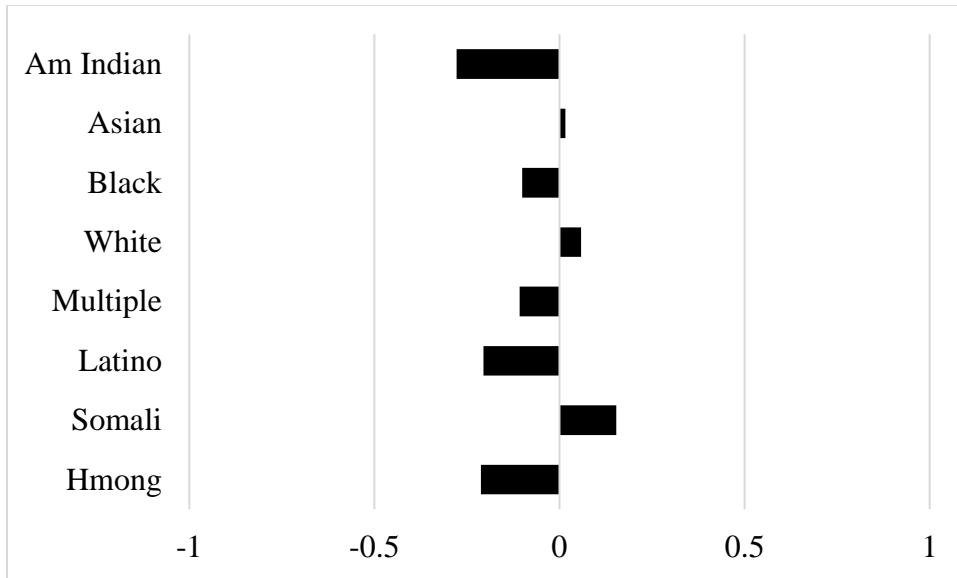


Figure 3. Social Competence standardized mean differences from state average.

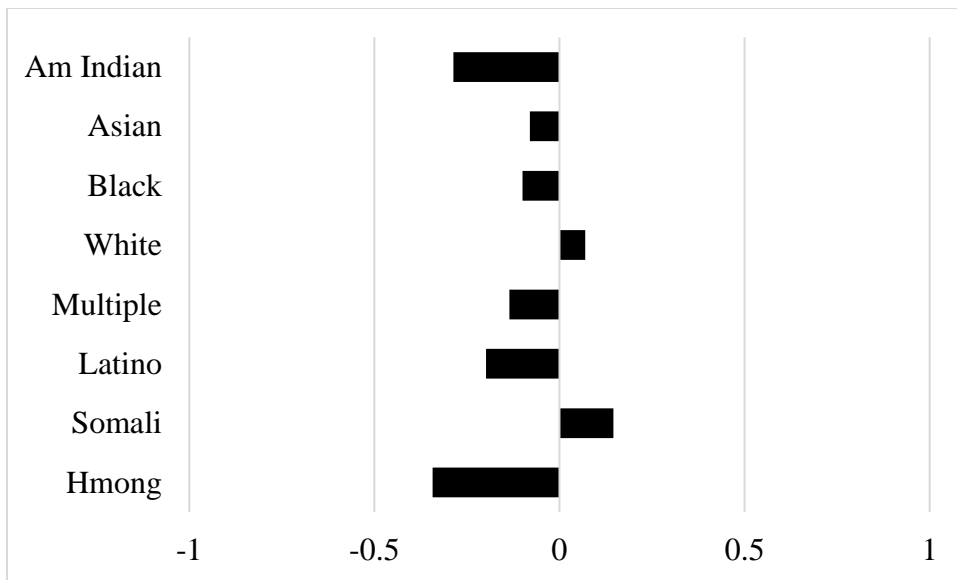


Figure 4. Empowerment standardized mean differences from state average.

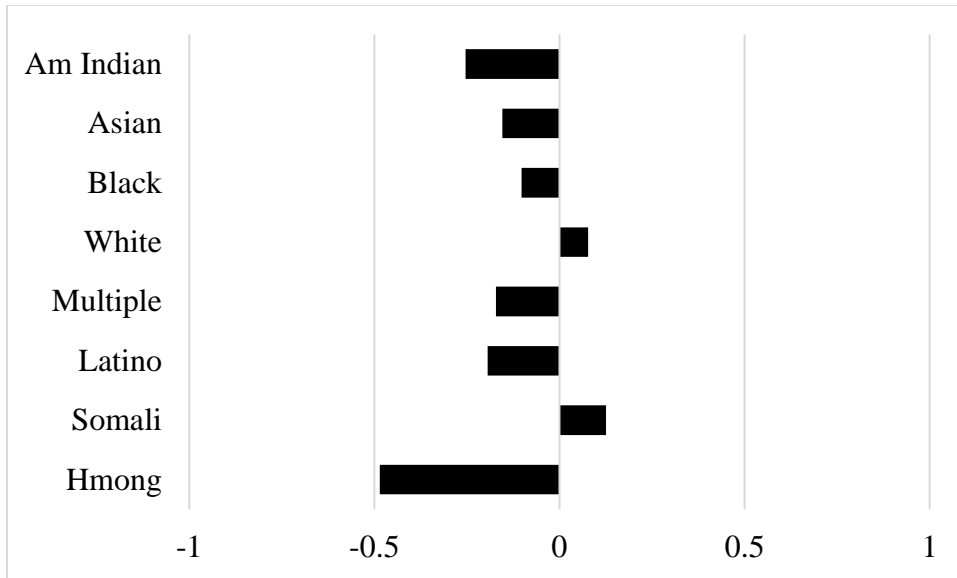


Figure 5. Family/Community Support standardized mean differences from state average.

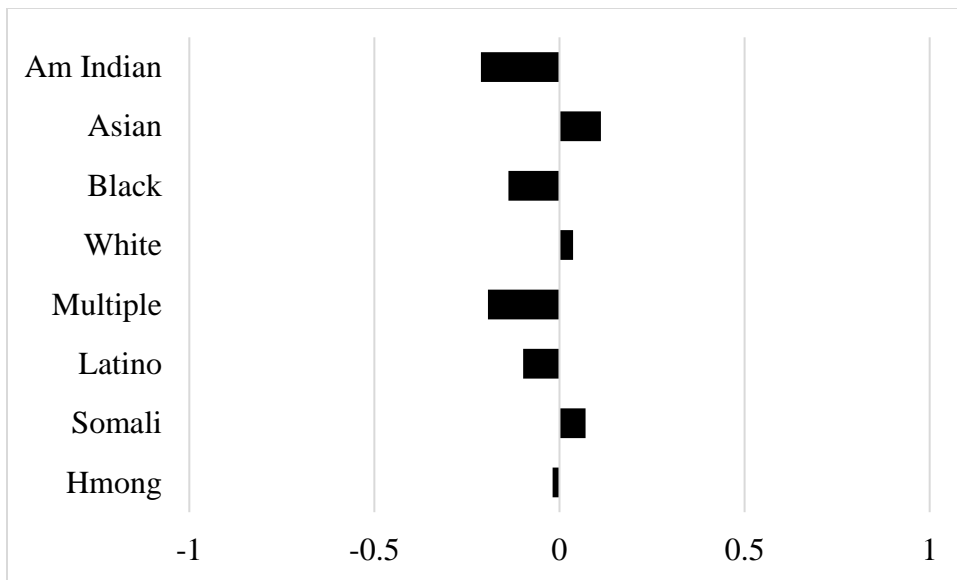


Figure 6. Teacher/School Support standardized mean differences from state average.

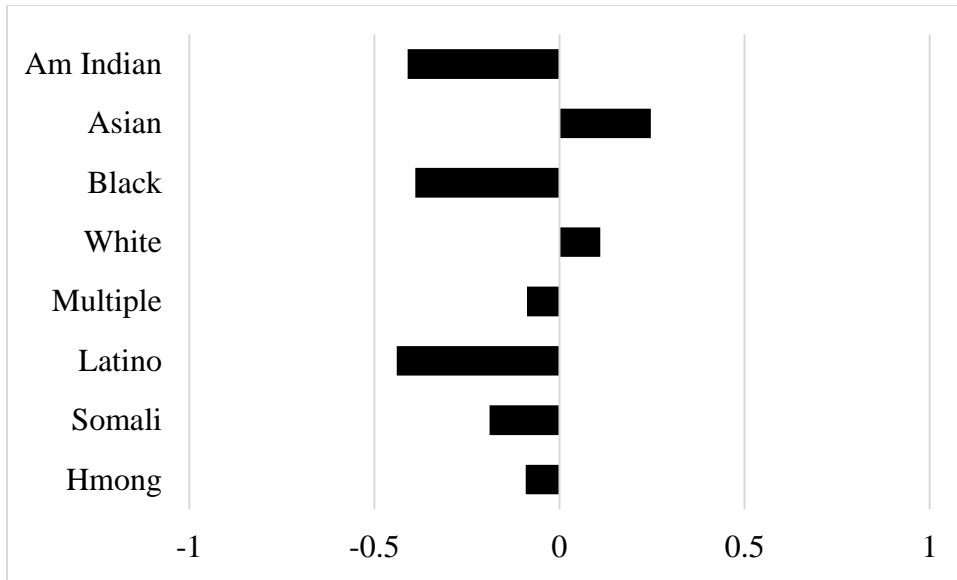


Figure 7. Grades standardized mean differences from state average.

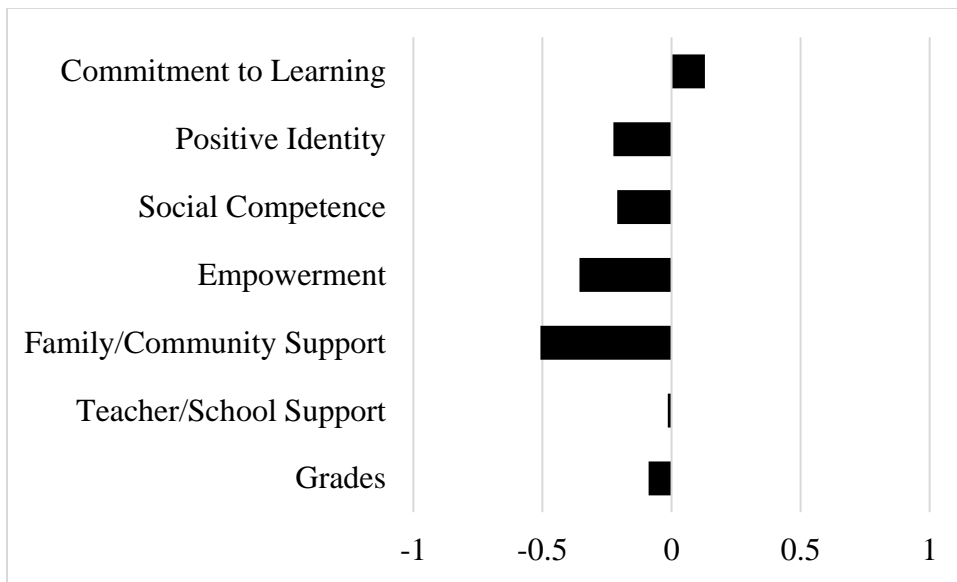


Figure 8. Developmental skills and supports standardized mean differences of Hmong students compared to non-Hmong students.

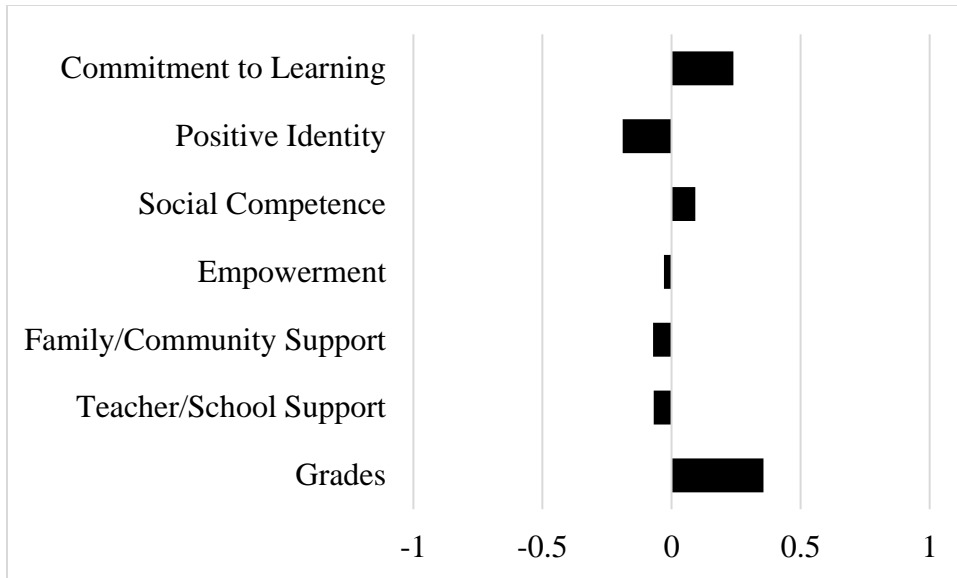


Figure 9. Developmental skills and supports standardized mean differences of female (50%) compared to male (50%) Hmong students.

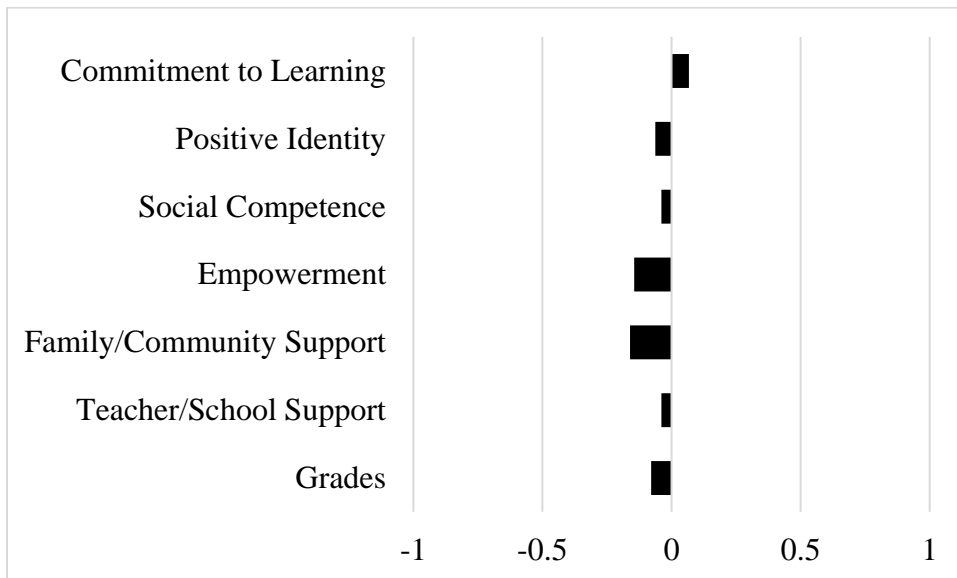


Figure 10. Developmental skills and supports standardized mean differences of Hmong students who receive free/reduced price lunch (72%) compared to those who do not (28%).

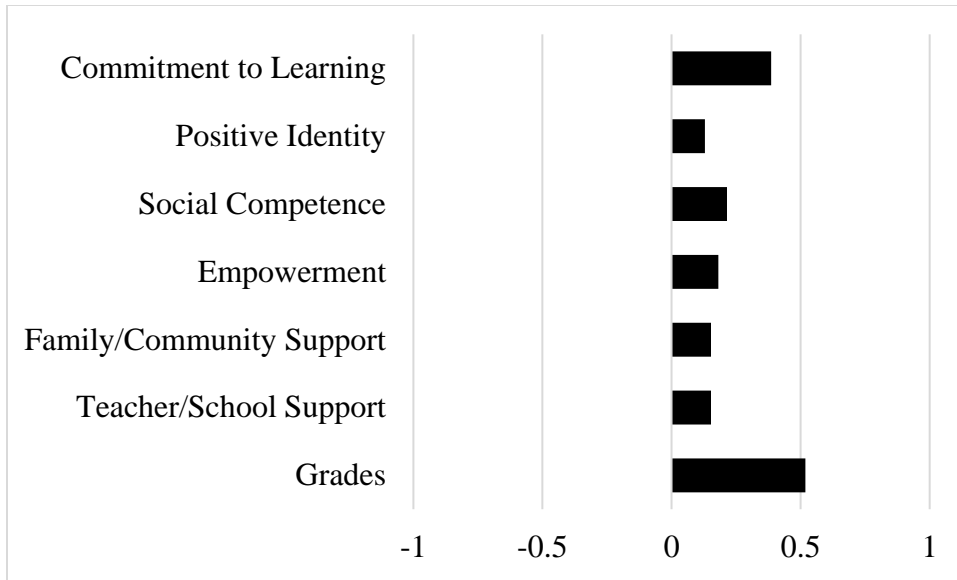


Figure 11. Developmental skills and supports standardized mean differences of Hmong students who aspire to go to a four-year college (65%) compared to those who do not (35%).

Table 1

Summary Statistics Including Means and Standard Deviations of Regression-Modeled Variables for Hmong and Non-Hmong Students

Measure	Hmong students		Non-Hmong students	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Commitment to Learning	12.4	1.5	12.1	1.5
Positive Identity	10.8	1.6	11.1	1.9
Social Competence	11.1	1.3	11.4	1.7
Empowerment	11.8	1.6	12.4	1.9
Family/Community Support	11.2	1.5	12.2	1.8
Teacher/School Support	11.6	1.9	11.7	2.2
Free-reduced lunch	.74		.26	
Gender	.50		.50	
College	.71		.73	

Note. Hmong student $n = 4554$ and non-Hmong student $n = 179284$.

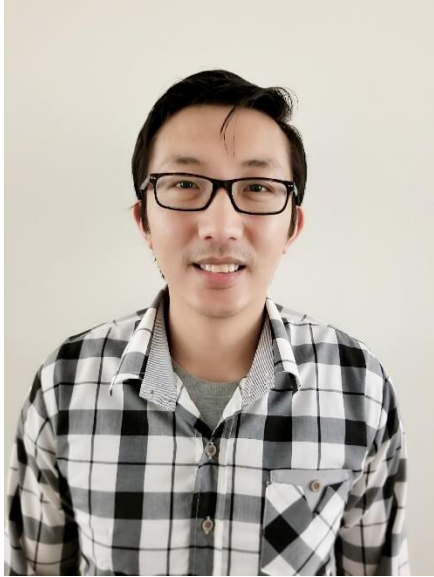
Table 2

Summary of Regression of School Grades on Developmental Skills and Supports and Student Characteristics

Variable	Final model	Sequential R^2
Intercept	-0.28	
Commitment to learning	0.36*	
Positive identity	0.06	
Social competence	0.08	
Empowerment	-0.05	
Family/community support	0.007	
Teacher/school support	0.007	.10
Female	0.29	.13
Free/reduced lunch	-0.11	.14
College aspirations	0.33*	
CtL×college	-0.15*	
FCS×free/reduced lunch	-0.11*	
FCS×college	0.11*	.17

Note. Coefficients are standardized. Only statistically significant interactions of magnitude 0.10 or greater between developmental skills/supports and student characteristics are reported above.

* $p < .05$.



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