



Despite the Odds: Factors Related to the Academic Success of First Grade Students From At-Risk Backgrounds

Rachel Bode, Ryan Gallagher, Elizabeth Vang,
and Aydin Yücesan Durgunoğlu, University of Minnesota Duluth

ABSTRACT

Research indicates that family income and linguistic background are related to students' academic achievement, as evidenced by the gaps in the academic achievement levels of children from families with high or low income, and children with English as their first or additional language. However, there are students who succeed despite these risk factors. In this qualitative study, we interviewed two cohorts of parents who had first-grade children doing well in school. Even with the limited sample size, there were some consistent patterns in the environments of these children, namely, warm parenting with boundaries; academic capital in the home; thoughtful guidance of activities at home; close-knit family; and positive experiences at school.

Introduction

Research shows that there are significant differences among the academic achievement levels of students as a function of their backgrounds, such as their ethnic, linguistic, and socioeconomic (SES) characteristics, and their parental education levels. This pattern is usually labeled as the “achievement gap,” a serious educational inequality. Carpenter, Ramirez, and Severn (2006) caution that instead of a single achievement gap, one should/can consider “gaps” and note that different background characteristics lead to achievement gaps of different magnitudes. One very important background to consider is the family income level. As Duncan and

Brook-Gunn (2000) summarized, the risk of repeating a grade and dropping out are two times higher for low-income children compared to their peers from homes with higher SES levels. In an analysis of large-scale data in the USA, Reardon (2011) discovered that the achievement gap as a function of SES is widening, and family income is now as strong a predictor of academic achievement as parental education. To give a more concrete example, in the USA, in the 1950s, the difference in test scores was about .60 standard deviations when comparing children from high- and low-income families, and now this gap has doubled (Duncan & Murnane, 2011; Reardon, 2011).

In another study, SES was the strongest predictor of academic achievement as well, even when the data were analyzed separately for white, African-American, and Latino students (Carpenter et al., 2006). This study also showed that being in an English as a Second Language program, implying a linguistic minority status, was another strong (negative) predictor. Carpenter and colleagues found that race itself was not as strong a predictor as these other variables. For all three race groups, parental involvement also appeared as a strong factor in achievement. These results lead to the question of why the family income matters.

In qualitative analyses of home environments that included time diaries, Philipps (2011) identified significant differences in home practices of high- and low-income families on factors such as how much time is spent with children, and how that time is spent. In a nutshell, high-income families have more time invested in their children and during that time provide varied activities, including a rich linguistic context. Burgess, Hecht, and Lonigan (2002) found that parental education and occupation alone explained some of the variance in letter-name knowledge of children. However, regardless of income and education levels, home literacy environments (operationalized as the “interactive” environment that included both the child’s and the parent’s book-reading and TV-watching habits) predicted many components of literacy such as oral language, word decoding, and phonological sensitivity. In other words, income seems to be a predictor specifically, because it is closely tied to the type of activities at home and thus, what is done at the home is the important component.

Although poverty and linguistic minority status constitute risk factors and predict low academic achievement (Duncan & Murnane, 2011; Ram & Hou, 2003), there are students who come from low-income households or have different home languages, and do succeed. Researchers have explored possible factors that might cause these children to beat the odds.

According to Milne and Plourde (2006), presence of educational materials, social support, time for homework and academic activities each day, availability of parents, limited amount of television watched, and preschool attendance are all factors that contribute to academic success for these children. Similarly, Zadeh, Farnia, and Ungerleider (2010) found in a Canadian study that home enrichment can offset risks related to low maternal education. It must be noted that around the globe maternal education is a stronger predictor of children's well-being and academic achievement (for a review see Levine, Levine, Schnell-Anzola, Rowe, & Dexter, 2012), but in this study we have asked about the educational levels of all adults in the home.

In the current study, our goal was to deepen our understanding of the environmental contexts of successful children. More specifically, the purpose was to identify the characteristics of these homes, so that this information then could be shared with other families and schools, to help all children succeed, regardless of their family backgrounds. In a qualitative study, we interviewed parents/guardians of first-grade children doing very well in school, and identified the common themes that were reported by these adults. First grade was selected as the focus of interest because that is when the most basic academic foundation, namely literacy, is established, later affecting all other academic achievements. However, it is not only educational activities at home that make a difference. Therefore, we have asked questions about the relationships between the child and the adults around that child, the support systems for the family, and the school experiences of both the adults and the children.

Methods

There were two cohorts in this study, hereafter called Cohort 1 and Cohort 2. In Cohort 1, the parents/guardians were recruited from two charter schools in a Midwestern city in the United States. The school administration sent letters to parents/guardians of the 40 first-grade children who performed in the top 25% on the reading section of the standardized test (MAPS) given in that school. In that letter, the parents were also asked to self-report their household income, the number of people living in the home, and language spoken in the home. Of the 40 letters, 28 were returned to school (70% return rate). The parent responses indicated that of the 28 responses, only nine were eligible to be included in our study because their income level met the federal poverty guidelines. This ratio clearly illustrates that only a few children with a low socioeconomic status (SES) were represented in the subset of children who were doing well in reading.

Of the nine eligible families, five agreed to be interviewed (55% participation). The data reported as Cohort 1 are from these families. All five had female students enrolled in first grade. Two children were American Indian and one child had one Latino parent. The interviews took place either in the homes or in a public space depending on the wishes of the parents/guardians. The quotes below labeled as Interviews #1-5 are from this first cohort.

In the second cohort, there was a special focus on a linguistic minority group, namely Hmong parents living in the United States. The Hmong people, originally from South East Asia, are a large minority group in Minnesota who came to the U.S. immediately after the Vietnam War (Lee & Pfeifer, 2000). The Hmong aided the U.S. in the guerilla warfare and in turn, were offered an alliance and acceptance in the U.S. The largest population of the Hmong people are in California (approximately 65,000 in year 2000), Minnesota (approximately 42,000) and Wisconsin (approximately 34,000). Given that Minnesota has the second largest population of Hmong people that is continuing to grow rapidly, this minority group was of interest. The Hmong people, just like any other group of immigrants, face many risks when it comes to educational attainment. As one of the newer minority groups, the Hmong face the risks of falling behind academically because of the language barrier, and having a written language that is relatively new (late 19th century) compared to other languages. The Hmong also face cultural risks as well, when some parents worrying about losing their children to the “American culture,” may want to hold their children back from achieving academically.

The participants in the second cohort were recruited through communication with members of the Hmong community and identifying schools that mainly enroll low SES students in that community. The recruitment process involved parents contacting the researcher if they were interested in participating and have met the following three requirements: (1) Have a child in first grade who is doing well in school; (2) At least one parent is Hmong; and (3) Their income is below poverty level. Interested parents called the researcher, and decided on the time and place for the interview. As in Cohort 1, the study took place either in homes or in a public space as requested by the participants. In Cohort 2, there were five parents who agreed to participate and the sample had four girls and one boy. The quotes below labeled as Interviews #6-10 are from this second cohort.

Materials

Adult survey: Parents/guardians were interviewed using a semi-structured questionnaire based on a study done by Milne and Plourde (2006). All parents/guardians were asked an identical set of questions and if needed, certain responses were expanded upon for clarification. Cohort 2 had additional questions about their proficiencies in Hmong and English and their daily use of these two languages. The interviews were audiotaped and later transcribed in Cohort 1, and were written during the interview in Cohort 2.

The questionnaire started with items asking about the child's family, and participation in preschool, kindergarten, and after-school programs. The questions that followed were about what a typical weekday and weekend look like, types of activities at home, amount of TV watching, playing electronic games, and reading books. There were also questions about the relationship between the parent/guardian and the child, what the child thinks about school, parent/guardian's own experiences with school, and the parents' expectations for the child. Family and community support were also topics of question. We ended by asking the parents/guardians for their recommendations and suggestions for other parents to help their children do well in school.

Child test: If parents approved, their child completed the Woodcock Reading Mastery Test (word identification section) and Peabody Picture Vocabulary Test (PPVT) to verify that they had advanced literacy and language skills helping them do well in school.

Results

Child Data

Two children in Cohort 1 were tested with the PPVT and Woodcock Reading Mastery Test to verify their academic levels. Both of the children had vocabulary skills at or a little beyond their age level, and were reading at a second grade level. The remaining three children could not be tested, but since the school had already checked their standardized scores and selected them accordingly, this was not a problem. However, all five children in Cohort 2 completed the Woodcock test because we did not have the standardized test information from their schools to indicate academic levels. These first graders in Cohort 2 had word identification scores that ranged from grade equivalencies of 2.2 to 3.9. These data verified the parental reports that the children are doing very well in school.

Adult Data

To analyze the data, we followed three steps. First, the interview transcripts were organized in a Microsoft Excel file. Each column in the table was dedicated to a single question on the survey and each row had the actual answers given by a parent/guardian. This table enabled us to simultaneously examine all the answers given by all adults to a particular question. In the second step, we identified the basic ideas/approaches in each answer. In the third step, we grouped the specific ideas into more general themes. A consistent theme was defined as the one that appeared across all the participants. In addition to checking for the appearance of a theme in all 10 interviews, there was also the search for counterexamples to reach data stability. Counterexamples helped us identify inconsistencies to a theme and we did not include themes that were not similar across at least eight participants. Because all families answered the same questions, the responses could be easily compared for similarities and differences. In a few instances, the theme could be found in another question of the survey, for example, in the very last question which asked the parents/guardians what recommendations they had for other parents. Across the 10 families, some very consistent patterns emerged:

1) Warm parenting with boundaries.

This theme had several subcomponents and reflected Baumrind's (1967, 1968) classical definition of authoritative parenting:

- (a) Parent has a close relationship with the child and is responsive to the child, talks about many things with the child [The number by the quote indicates the participant number, with interviews #1-5 from Cohort 1, and interviews #6-10 from Cohort 2]
- "We watch their activities and we talk pretty openly about everything. If she asks me a question I always find the answer for her." #3
 - "Be there for your child. Listen to them. Love them. If they have a problem, tell them how to solve it. Work with them." #2
 - "I am her mother and I can say, like friends. We are very close. We talk, read, and try writing together. We talk about what she wants to be when she grows up and what she did at school that day or she likes talking to me about clothes. It is a lot of random stuff though." #6
- (b) Parent recognizes the child's potential and has high expectations
- "She is also very social which helps her at school because other kids provide positive reinforcement." #5
 - "She is naturally driven, she likes to do well. She is very responsible, she is always

on top of what needs to get done, I do very little. She lets me know what needs to be done." #4

- "I would expect her to get at least a bachelor's degree." #4
 - "A lot of what is helping her [do well in first grade] is that she is intelligent." #1
 - "I want her to try and obtain her Ph.D... Doesn't matter in what." #7
- Only one parent aspired lower:
- "As long as he finishes high school." #10

(c) Values, own culture, and language are emphasized

- "At home we teach her Ojibwa." #2
- "If it's powwow season we go to powwows together." #1
- "I tell her stories in Hmong and the kind of life my parents lived back in Laos and Thailand." #6

(d) Family goes on outings

- "She has a library card at the public library and [we go] probably two times a month. We go to the children's museum, the zoo; we've been to the aquarium, the depot. During the summer they go on all of these field trips every single day [and] during the winter maybe once a month." #5
- "My brother and I take them to the library and we go pretty often since I am a homemaker." #8.

(e) Family provides discipline and clear boundaries

- "I'm very disciplinarian for today's standards. No is no. For bad attitude there is consequences." #4
- "Guidance and discipline [is important]. They need to know what is wrong and to do what is right. I see that being huge...more than the educational part." #2

2) Academic capital in the home.

(a) Parental Education

At least one guardian has a college degree in Cohort 1, and both parents/guardians have at least a high school degree in Cohort 2.

(b) Many children's books in the house

In Cohort 1, families reported having 100+ books. In Cohort 2, the number of reported books was smaller but still ranged from 15-70.

(c) Started reading to the child at a very young age

- “I started reading to her right from the beginning because she had that older sibling.” #5
- “I read to her when she was younger, like a baby, but now not so much anymore.” #6.
- “Yes, I do read to her and I’ve read to her since she was probably like one. That’s when children start to understand some of what you are reading to them.” #7.

3) Child and adult Hmong proficiency (cohort 2 only).

All mothers reported Good to Very Good English reading, writing, and speaking levels. Their Hmong proficiencies were Good to Very Good in speaking and understanding the language, but in terms of reading and writing, there was some variability among the mothers. Some were proficient and others weak in Hmong reading and writing.

Mothers reported that their children had Good to Very Good understanding of spoken Hmong, but their speaking, reading, and writing skills were limited despite the fact that in the homes, Hmong was spoken, especially with grandparents.

- “They hear Hmong every day because her grandparents, my in-laws live with us.” #8
 - “No Hmong books, but she loves watching Hmong movies, she understands the movies better than I do sometimes! She also loves the dramas in the Hmong movies.” #8
- One exception was the child whose parents were divorced and he was no longer hearing Hmong as much because he was living with his non-Hmong parent.
- “(Not surrounded) by Hmong speakers, now that we’re divorced.” #10.

4) Thoughtful guidance of activities at home.

(a) Spend time doing homework and educational activities at home

- “We end up usually reading 30-40 minutes a night.” #5
- “She’ll read to me or I’ll read to her.” #1
- “My children and I have a daily routine. I wake up, get dressed, and cook breakfast. I wake up my children, help them shower, get dressed, and ready for the day. I make them eat breakfast and make sure they catch the bus on time. Sometimes I will drop them off. Once they get home from school, the first thing I do is have my children take out their homework and I’ll help with homework. Then I get dinner

ready around 5 or 6. After dinner, I have my kids read for at least 30 minutes, I let them watch TV for about half an hour to an hour before bed then it is time for bed and a bedtime story. Every weekday but weekends it is more relaxed." #7.

(b) Some limit TV and electronic use

In Cohort 1, there were stricter limits on TV watching as compared to Cohort 2. In Cohort 2, three families reported more than two hours of TV.

- "...45 minutes a day if that. When she was younger she would watch educational channels." #2
- "I don't like them watching TV. I let them watch movies but not TV." #1
- "During the weekday, she watches about a half hour to an hour of TV but during weekends I would say about two hours per day. She is on my iPad a lot playing games so she does not watch much TV." #7

5) Close-knit family.

(a) At least two adults live in the home and are involved in raising the child, but can be of different configurations. One child was being raised by her grandparents, another had a stepparent.

(b) Little time spent with friends, but more with relatives especially in Cohort 2

- "(extended family) is very much a part of her life. They always celebrate with us and constantly come over to our house to visit us and the kids." #7.

(c) Older siblings serving as role models

Except for one child, all children had older sibling(s)

- "Her older sister helps her [do well in first grade]. She teaches her things." #3
- "Her father and her grandparents but especially her older siblings because they have helped a lot with helping her in school." #6

6) Positive experiences in school.

(a) Enjoying school

Except for two children whose parents reported that the child is "neutral" about school, all eight parents/guardians reported that their children enjoyed school and all reported that their children are interested in school.

- "She enjoys every part of school." Interview #2

(b) Parents/guardians value school and stay in touch with the school

Except for one child who was homeschooled, parents reported that they like their child's school and attend conferences and other activities regularly.

- "My kids don't miss school unless it's a snow day or they are really sick and usually I call or email the teacher for the homework assignment or if one of the twins isn't sick, I make sure she gets the homework for the other twin. I go to parent teacher conferences, open houses, dances, school song performances. A lot of the stuff they always do." #9.
- "She only misses school if she is sick or something is happening with her mom." [This child's mother was on assisted living because of serious medical issues and the child was being raised by her grandparents.] #2
- "If she misses school it's primarily because of her asthma and allergies. If she misses, we have her catch up when they get back. We attended conferences, scholastic book fairs, plays, movie nights, basketball games. We come to everything because they don't want to miss out. We talk with her teacher and come to observe classroom at least three times at the beginning of the year. After that I just talk to them through phone or email and sometimes I volunteer for outings." #4

Discussion

Despite the small and limited sample, some consistent themes emerged from the parent interviews, thus suggesting factors that enable low SES and language minority children to succeed in school. The patterns replicate previous work and reiterate the importance of warm and responsive parenting, providing an enriching environment, valuing school, appreciating the child's potential, and forming high expectations. These are factors that have been identified in other research as supporting the academic achievement of children (Burgess et al., 2002; Milne, & Plourde, 2006; Philipps, 2011; Zadeh et al., 2010). However, interestingly, attending preschool or after-school programs were not consistent themes in our sample.

Overall, these interviews provide a window to what the families of successful children are doing at home. In our study, these parents/guardians are conscious and deliberate about their practices at home, and are able to articulate them clearly. They are quite warm and responsive but set clear boundaries. They also provide a linguistically rich environment with daily, fluid conversations, discussions, and academic support. They started reading to their child at a young age and continue to read with them daily.

Since these parents and guardians are cognizant of what helps their children, schools could consider using these families as a resource in their efforts to reach parents, and to build stronger home support for all students.

Studies should be conducted in the future with larger sample sizes to confirm the trends suggested by this study. Having a broad range of ethnicities, cultures, and languages represented would make the study more generalizable. In addition, more comprehensive measures could be used to determine the academic level of the child. One limitation of the study is that The Woodcock Reading Mastery Test and PPVT measure only specific areas of academic ability. Although vocabulary and word recognition proficiencies are closely related to literacy development, in future studies, a wider range of academic ability (e.g., math) should be measured. We also recognize that some of our themes do not have clear-cut structures. For example, “warm parenting with boundaries” covers an array of parental responses. It does not refer to one type of parental response, but includes some evidence of both closeness with the child and some discipline.

We would like to end this discussion with a caveat. Although we focused on what the families were doing to support their children, and to ensure their academic success, this does NOT mean that the achievement gap can be resolved only if the parents were to adopt the right approaches at home. We should also consider the broader societal picture. Reducing the income disparity in the society, one of the main reasons for the achievement gap, can help all parents have the necessary educational foundations, time, and resources to help their children. We hope for the days when the odds against the children are minimized, and all children thrive and succeed.

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References

- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75, 43–88.
- Baumrind, D. (1968). Authoritarian vs. authoritative parental control. *Adolescence*, 3, 255–272.
- Burgess, S.R., Hecht, S.A., & Lonigan, C.J. (2002). Relations of the home literacy environment (HLE) to the development of reading-related abilities: A one-year longitudinal study. *Reading Research Quarterly*, 37, 408–426.
- Carpenter, D., Ramirez, A., & Severn, L. (2006). Gap or gaps: Challenging the singular definition of the achievement gap. *Education and Urban Society*, 39, 113–127.
- Duncan, G., & Brook-Gunn, J. (2000). Family poverty, welfare reform, child development. *Child Development* 71, 1, 188–196.
- Duncan, G., & Murnane, R. (2011). Introduction: The American Dream Then and Now. In R. Murnane & G. Duncan (Eds.), *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children* (pp. 3–23). New York: Russell Sage Foundation Press.
- Lee, S., & Pfeifer, M. (2000). Hmong population, demographic, socioeconomic, and educational trends in the 2000 Census. *Hmong National Development* (pp. 1–51)
- Levine, R., Levine, S., Schnell-Anzola, B., Rowe, M., & Dexter, E. (2012). *Literacy and mothering: How women's schooling changes the lives of the world's children*. New York: Oxford University Press.
- Milne, A., & Plourde, L.A. (2006). Factors of low-SES household: What aids academic achievement? *Journal of Instructional Psychology*, 33(3), 183–193.
- Philipps, M. (2011). Parenting, time use and disparities in academic achievement. In R. Murnane & G. Duncan (Eds.), *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children*. (pp. 207–228). New York: Russell Sage Foundation Press.
- Ram, B., & Hou, F. (2003). Changes in family structure and child outcome: Roles of economic and familial resources. *Policy Studies Journal*, 31, 309–330.
- Reardon, S.F. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. In R. Murnane & G. Duncan (Eds.), *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children* (pp. 91–116). New York: Russell Sage Foundation Press.
- Zadeh, Z.Y., Farnia, F., & Ungerleider, C. (2010). How home enrichment mediates the relationship between maternal education and children's achievement in reading and math. *Early Education and Development*, 21(4), 596–594.



Rachel Bode graduated from the University of Minnesota Duluth with a Bachelor of Arts in Sociology and a Bachelor of Applied Science in Psychology. She is currently in her first year of the Counseling and Student Personnel Psychology Master's program at the University of Minnesota Twin Cities. She plans to complete the School Counseling track, and prior to graduation, to work at the high school level. She enjoys advising students of all levels, from K-12 to post-secondary.



Ryan Gallagher graduated from the University of Minnesota Duluth with a Bachelor of Applied Science in Psychology with a minor in Hispanic studies. Ryan is currently attending the University of Notre Dame's graduate teaching program known as the Alliance for Catholic Education Service through teaching program. Through the program, he currently teaches fourth grade in a local Catholic school in Southwest Chicago. He plans to graduate in 2015 and to continue to teach at the elementary school level.



Elizabeth Vang was born and raised in Minneapolis, MN. She went to public schools until 8th grade, and then enrolled in a charter school, which is now called Hmong College Prep Academy, a place for Hmong and other students to feel safe and to graduate on time with the right credits needed to get into college. After graduating in the top 15% of her class, she started attending University of Minnesota Duluth, majoring in Sociology. She is currently finishing her internship at a shelter in Duluth and will be moving back to the Twin Cities to continue working there.



Aydin Yücesan Durgunoğlu is a Distinguished Global Professor and interim Department Head in the Psychology department at the University of Minnesota Duluth. She has a Ph.D. in Cognitive Psychology from Purdue University, and conducts research on literacy development of adults as well as children. She compares literacy development across different languages, and also studies cognitive and cultural aspects of bilingualism. She is one of the creators of an adult literacy program in Turkey that has now reached about 200,000 people.