

THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE

DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

The Home-to-School Connection: Family Cohesion and How it Impacts Connection to School

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SPRING 2023

A thesis
submitted in partial fulfillment
of the requirements
for a baccalaureate degree
in Human Development and Family Studies
with honors in Human Development and Family Studies

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ABSTRACT

The spheres of home and school are the two most important environments in a child's life. The connection between the two has been debated in human development research. This study aimed to dissect this relationship between children's feelings of cohesion in the home and connectedness at school. This study also was interested in the influence of the potential moderating factors of gender, grade, family socioeconomic status, and parent education level on the connection between the home and school environments. The data for this study came from both the student and parent baseline measures of the Student Wellness Study. From this data we ran ten regression models, each building on the last, with gender, grade, family SES, and parent education as moderators in separate models. We hypothesized that children who were more connected to their families would also feel more connected in school. Although we did not find significant results to support our hypothesis, there were trend-level findings that gave some support to our hypothesis. We also hypothesized the potential impact of covariates including gender, grade, socioeconomic status and parent education on the connection between the home and school environments. We also did not find any significant interactions with any of the moderators except for a marginally significant interaction with the moderator of parent education level. The homogeneity of the sample and the effect of the Covid-19 pandemic could be the reason we found these results.

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ACKNOWLEDGEMENTS

First, I would like to thank my Schreyer Honors College advisor Dr. Alyssa Gamaldo. I would also like to thank my thesis advisor Dr. Sunny Bai. Finally, I would like to thank Avery Chahl for her help in the process of writing my thesis.

Chapter 1

Introduction

The field of Human Development emphasizes the importance and influence of the family in a child's life. Particularly, the positive developmental impact of a positive family structure has been established as helping support children throughout their developmental trajectory (Fosco & Lydon-Staley, 2019; Johnson, 2010; Lindblom et al., 2017). In addition to the home environment being critical for positive development, the school environment has also been well established as an important predictor of child development. School Connectedness, a term coined by Carol Goodenow (1993), describes how children connect to different dimensions of school. Since Goodenow's creation of the measure, research has established the reaching impact of school on a child's development (Millings et al., 2012; Oberle et al., 2011; Klink et al., 2019). Gaps in the literature come in the connection between the home environment and the school environment, specifically with how this connection changes based on family socioeconomic resources. This paper aims to close the gaps pertaining not only to the impact of the home environment on the school environment, but how family and child variables can moderate the connection.

Family Cohesion Theory

For children in elementary school, still making sense of the world, social support matters. Support that comes from the cohesive family structure is vitally important to this developmental period and is linked to many positive outcomes (Johnson, 2010). Support is not the only variable

important to children's relationships with their family. Overall patterns of cohesion in the family unit and how well the family works together to achieve goals and maintain positive relationships are also critical (Fosco & Lydon-Staley, 2019). Positive family climate has been consistently associated with higher child self-regulation (Xia et al., 2016). Parents in cohesive families experience better marital adjustment, and less parental distress which highlights how positive parental relations and family climate are vital for a child's wellbeing at home (Lindblom et al., 2017).

This family cohesion is associated with improved outcomes for both children and adolescents. Feldman et al. (2018), demonstrated that cohesion in families improves their functioning in environments outside of the family. Adolescents in families with higher cohesion had a more positive mood, were more satisfied with life, and felt they had more meaning and purpose in life (Fosco & Lydon-Staley, 2019). This pattern has been seen to carry throughout childhood, adolescence, and into adulthood, with children from cohesive families growing up to have less aggressive and hyperactive behavior (Johnson, 2010). Cohesion is a factor which impacts young people from childhood through adolescence.

In contrast, conflict in the home has been shown to produce opposite effects. Marital conflict significantly predicted a change in children's emotional security overtime and was related to increased internalizing and externalizing behaviors in children (Cummings et al., 2012). Additionally, low levels of family cohesion combined with low levels of individual hope in children predicted higher levels of loneliness (Sharabi et al., 2012). This pattern begins early in children's lives. Shigeto et al. (2013) found that one-year-olds whose families lacked a sense

of togetherness showed less of a sense of self-control and self-regulation. There is evidence this pattern continues throughout the life course as well with Lin and Yi (2017) finding that low levels of family cohesion and/or declines in family cohesion over-time led to higher rates of deviance three years later. The pervasive theme in the family cohesion literature is the need for children to have a stable and predictable life at home for optimal development.

Generally, there is consensus that children's family cohesion and their connectedness to their family declines with time. However, some research has suggested that continued support can protect against this normative decline (Wang & Eccles, 2012). Johnson (2010) also showed that there is a combined effect of family structure and relationship quality over time that then predicts the individual's behavior. The extent of the compounding effect of family cohesion over time remains uncertain.

Based on prior research, there is a significant disagreement over the impact of gender on family cohesion. Some have suggested that there are no gender differences in the impact of family climate on children's other relationships (Chen et al., 2021). Cummings and colleagues (2012) similarly found that gender did not impact the associations between conflict in the home and maladjustment. However, in another study, Wang and Eccles (2012) found that boys had lower levels of subjective valuing of relationships and that these gender differences increased over time. Similarly, it was found that boys reported a decreased positive mood on days with high conflict while the association was not significant for girls (Fosco & Lydon-Staley, 2019). In support of these findings, Park et al. (2013) found that Asian and Latino men were more

sensitive to family relationships. Research on the influence of gender on family cohesion continues to be ambivalent and thus requires further examination to determine its true influence.

School Connectedness Theory

Children spend most of their time away from their families in school, therefore school has an important impact on the wellbeing and development of the child. Carol Goodenow (1993) coined the term “school connectedness” and further defined this measure through the creation of the Psychological Sense of School Membership Scale. This scale was the first of its kind to highlight the complex experience children have in schools and look at the many different elements in children’s school experience. Some important variables addressed in this scale include support from teachers and staff, friendships and respect from peers, and the sense of conformity to school norms (Goodenow, 1993). School connectedness, as a concept, is purposefully broad to encompass the interplay of relationships, learning, and development which occurs in school.

Further research on school connectedness, shows its impact on many aspects of children’s lives ranging from emotional, to social, to academic variables. Higher levels of school connectedness were negatively correlated with symptoms of low mood (Millings et al., 2012). A strong sense of belonging in school was additionally found to relate positively to life satisfaction, a key component of happiness in adolescence (Oberle et al., 2011). In a prospective study, school connectedness scores predicted future depression scores, and for girls also predicted future anxiety scores (Shochet et al., 2006). In a longitudinal analysis, this finding held true with

higher levels of school connectedness at the first time point significantly predicting lower depressive symptoms at the six months later (Klink et al., 2019). Beyond emotional measures, children's connection to school has also been seen to impact their social skills. In and colleagues (2019) found that social skills and school connectedness were bidirectionally related.

Additionally, higher levels of school connectedness are associated with fewer subsequent conduct problems (Loukas et al., 2009). There was also a decrease in children's aggressive behaviors seen when children were more connected to school, and specifically when there were lower levels of teacher-child conflict (Doumen et al., 2008). Past research consistently shows that school connectedness is an important element of children's wellbeing both within and outside of the school setting.

The connection between school connectedness and academic achievement is one of the most well researched connections in the literature. In an international study of connectedness to school, Lam and associates (2012) found that engagement in school significantly predicted academic performance. School attachment, commitment and cohesion all also predicted a higher GPA (Stewart, 2008). It has also been suggested that this relationship is bidirectional with Tobia and colleagues (2019) finding that school wellbeing was positively influenced by learning skills and higher grades. This research shows the need for children to be connected in schools to increase optimal outcomes.

Much of the disagreement in the school connectedness research is of the impact of gender as a moderator. Loukas and colleagues (2009) found their model of school connectedness and

conduct problems was equivalent across genders. Klink and colleagues (2019) supported this finding and found no significant gender differences either. Most who have found differences in the genders show females as more connected to school than males. Girls have shown a higher gratification from school and higher school wellbeing than boys (Tobia, 2019). Girls also were cited as having better academic performance and being more engaged in school (Lam et al., 2012). However, a similar study from In et al. (2019), found that the impacts of school connectedness on life satisfaction was stronger for boys than girls. The extent to which gender plays a role in school experience is still unclear, but findings that have shown gender differences suggest girls have an easier time connecting to school.

The Connection from School to Home

It is well established that there is an interconnectivity between the home and school environments (Flook & Fuligni, 2008). Parents and family environment play a large role in children's socialization, experiences in school, and academic outcomes. Overall family cohesion has been shown to impact children in school through a spillover effect (Timmons & Margolin, 2015). A spillover effect describes the pathways of transmission between two sub-systems in a child's life (Timmons & Margolin, 2015). Those who experience more challenges at school are more likely to come from families with lower levels of cohesion (Mayfield & Fosco, 2021). A study by Dotterer and colleagues (2008), found more conflict in a child's life resulted in lower grades. Longitudinally, this trend held up with children who grew up in cohesive families displaying more learning behaviors at the start of elementary school and better math scores by second grade (Niehues et al., 2021). In a study of daily conflict in the family and the impact on

school, conflict at home was significantly associated with same-day school problems (Timmons & Margolin, 2015). Similarly, Chung and Fuligni (2011), found family conflict and peer conflict co-occur, and that conflict in one setting leads to higher conflict in the other. When looking at how this conflict impact youth in the long-term, Flook and Fuligni (2008) found more family stress in 9th grade predicted more academic adjustment problems at the end of high school. Additional support for this longitudinal impact between home and school comes from Gregory and Rimm-Kaufmann (2008) who found that supportive and scaffolding learning experiences in kindergarten between mother and child led to increased likelihood of graduating high school. The connection between family cohesion and school experiences has been well established in both longitudinal and daily contexts.

Parent support and monitoring are two main dimensions that have been shown to create an effective and positive connection between school and home. This process operates cyclically as parent involvement serves to increase child achievement which then improves child motivation. As parents recognize child success and motivation, they are further encouraged to continue their involvement in their child's schooling (Hayakawa et al., 2013). Parent support has a significant positive impact on academic achievement and self-concept (Chohan et al., 2010). Children who have supportive and authoritative parents were seen to have lower levels of anxiety over math (Macmull & Ashkenazi, 2019). In a study of mother's stimulation of learning at home, those who participated more frequently in learning with their child had children who received better teacher ratings of self-control, social skills, and approach to learning (Baker & Rimm-Kaufman, 2014). In contrast, when students perceived a decline in support, their GPAs also declined (Niehaus, 2012). Support can also look like parents being involved with their

child's school. Generally, parental involvement is positively associated with school adjustment (Simons- Morton & Aria, 2003). When children's parents attend school functions, children in pre-k were seen to have fewer problem behaviors, after controlling for children's entry level skills (Serpell & Mashburn, 2012). This finding has held true in middle childhood as well, with parent involvement leading to improved academic achievement (Hayakawa et al., 2013).

Parental monitoring positively predicted school engagement, and higher parental monitoring significantly increased the positive relation between family cohesion and school engagement (Annuziata, 2006). Parent monitoring and support have consistently emerged as the dimension to which the connection from home to school may operate.

Similar to research on school connectedness, the gender differences in the connection between home and school have been debated in the literature with very little consensus. While boys and girls have similar sized social networks in school, at home, girls cite their family as supports more often than boys (Cotterell, 1992). The opposite findings are stated in research by Jose and colleagues (2012), where they found boys were reporting higher levels of family cohesion and females reporting higher levels of peer connectedness. There is some consensus that boys experience more conflict both with their parents (Dotterer et al., 2008), and in school, demonstrated by more disciplinary referrals (Niehaus et al., 2012). There is also an equally strong body of research that shows no gender differences. Rice and colleagues (2008) found that gender did not moderate any effects in their model of school connectedness, perceived social competence and behavioral control. On the daily level, Timmons and Margolin (2015) also found no differences between boys and girls in their mean daily levels of conflict and mood. Additionally, in a home-to-school spillover model, Flook and Fuligni (2008) found that gender

did not moderate the spillover and there were also no gender differences on the daily level. The impact of gender in the connection between home and school remains a questionable moderator and requires more research to draw proper conclusions.

In the current study, grade is a factor used to group participants into general developmental levels. School connectedness research pertaining to developmental differences, most often looks at the longitudinal changes and variation in school connectedness (Niehaus et al., 2012). This study aims to expand the research on school connectedness variation by looking at cross sectional differences between various developmental levels through the grouping of grade.

The Influence of Socioeconomic Status and Parent Education

Research has begun to touch on the impact of parent demographic characteristics in studies of children's family relations. Many of the studies on school connectedness and family cohesion look at the impact of child variables, such as mood. Fewer, however, touch on other variables outside of the child's control and how these can also impact their experiences both at home and in school. Parent education and family socioeconomic status are two such variables which potentially could influence children's relationships at home, in school, and may also influence the connection between the two environments.

Family socioeconomic status (SES) impacts resources of a family, and in many cases also influences a child's accessibility to high quality schools. However, research has suggested that it

is the individual-level perceptions of SES that impact children more than the actual SES itself (Stewart, 2008). Higher SES has been associated with increases in positive family climate (Xia et al., 2016). In the school setting, Stewart (2008) found that family SES was significantly and positively related to GPA. When looking at the connection between home and school, it was found that family income was not significantly associated with family conflict or school problems (Timmons & Margolin, 2015). However, similar research found being from a home below the poverty line increased risk for depression which then impacted school and parent connectedness (Eugene, 2021). Moreover, Sampasa-Kanyinga and Hamilton (2016) found subjective SES has a moderating role on the association between psychological distress and school connectedness in adolescents. It remains unclear whether SES impacts the child more at home or in school and whether SES operates as a moderator of the connection between the two. This study aims to examine the way family SES impacts the individual both at school and at home.

Generally, there is some agreement that parent education does impact the child, and that children with more educated parents tend to have better outcomes. Children whose mothers had fewer years of education were rated by teachers as having greater levels of problem behaviors (Serpell & Mashburn, 2012). With academic achievement, children were seen to have higher grades when they came from families with more education (Dotterer et al., 2008). Further, Mastekaasa and Birkelund (2022) found of the various predictors of child attainment, the strongest was parent education with significant predictive power in the child's education and outcomes. Similarly, in a study of Finnish families, researchers found parental education mattered more than parent income in influencing child attainment (Ernola et al., 2016). Beyond

education outcomes, those with more educated parents were also more likely to report a closeness with their mother and father (Hardway & Fuligni, 2006). Other studies have found while parent education did not predict academic adjustment, lower levels of parent education was associated with higher levels of family stress (Flook & Fuligni, 2008). Contrary to most of this limited research, Timmons and Margolin found parent education was not significantly associated with family conflict or school problems (Timmons & Margolin, 2015). On the whole, parent education appears to have effects that reach into many dimensions of children's lives. However, more research on the effect of parent education on the association between family cohesion and school connectedness is needed.

Chapter 2

Current Study

This study aims to examine how children's feelings of cohesion with their families is associated with school connectedness. Research questions are as followed:

1. Are children's levels of family cohesion associated with their feelings of connectedness to school?
 - a. Hypothesis 1A: *When children feel more connected to their family, they will feel more connected to school.*
2. Do the proposed connections differ by gender, grade, family socioeconomic status (SES) and parent education?
 - a. Hypothesis 2A: *Girls will show a stronger association between family cohesion and school connectedness than boys.*
 - b. Hypothesis 2B: *Younger children will show a stronger association between family cohesion and school connectedness, and so the proposed connection is hypothesized to be stronger for younger students.*
 - c. Hypothesis 2C: *Families with higher SES will have children who show a stronger association between family cohesion and school connectedness.*
 - d. Hypothesis 2D: *Parents who are more educated will have children show a stronger association between family cohesion and school connectedness.*

Chapter 3

Methods

Participants

The data for this study originated from The Student Wellness Study, a larger study on student wellbeing and social emotional learning conducted in a rural elementary school. There were thirteen classrooms, each with an average of 18.07 students in the school. The 90 participants in the current study were in second (31%), third (26%), fourth (22%) and fifth grade (21%; Table 1). Forty-eight percent of participants identified as male, 49% identified as female and 3% of participants identified as non-binary. Eighty-four percent of the sample indicated that they lived in one home while 16% indicated that they lived in two homes. Ninety-nine percent of participants in the current study identified themselves as White. Sixty-one percent of the children came from one 2-parent homes. Sixteen percent spent time in two different one-parent homes during the week, and 23% lived with only one parent. Primary caregivers (87% mothers, 13% fathers) completed the parent questionnaire. Parents were given paper surveys to return to school which asked them about their life with their child and other demographic information. When asked about family socioeconomic status, no caregivers reported that they were poor, and no caregiver reported that they were affluent. Most of the caregivers (86%) described themselves as middle class and 14%, working class. When caregivers were asked about their education level, no parents reported that they did not finish high school. Most of the parents reported that they had a four-year degree from a college (39%) or had a graduate or professional degree (32%). See Table 1 for details on participant characteristics.

Procedures

The data for this study came from the first wave of The Student Wellness Study which began in November of 2020 and ended in May 2021. The current study used the results of the baseline survey which was administered to students on their school computers in November of 2020. Students' parents also completed paper surveys in November 2020.

Measures

School Connectedness

Student baseline included three questions pertaining to school connectedness, adapted from the National Longitudinal Study of Adolescent to Adult (Moody & Bearman, 2002). The student baseline included three questions pertaining to school connectedness, prefaced with the statement "How strongly do you agree or disagree with the following statements?" The three statements included: "I feel close to the people at this school," "I am happy to be at this school," and "I feel like I am a part of this school." Students rated each of these statements on a Likert-type scale from 1 to 7, 1 being "strongly agree" and 7 being "strongly disagree". The items were reverse coded so that higher numbers indicated greater levels of connectedness. The internal reliability of the scale was high, with Cronbach's alpha = .84.

Family Cohesion

The student baseline also included three questions about family cohesion, adapted from the Family Environment Scale (Moos & Moos, 1976). The three statements were prefaced with, "please tell us about your family in this home". and included: "family members really help and

support each other,” “there is a feeling of togetherness in our family,” and “we really get along well with each other.” Item scores ranged from 1 being “very untrue” to 4 being “very true,” the scores were then averaged. Students who indicated that they lived in two homes (14% of the sample) completed this set of questions twice, once for each home and all six of their scores were averaged. The internal reliability was high in the current study, Cronbach’s $\alpha = .64$.

Family SES

Family SES was self-reported by parents. Parents responded to the question, “which social class group do you identify with?” They were given the answers choices of, “poor”, coded as 1, “working class”, coded as 2, “middle class”, coded as 3, and “affluent”, coded as 4.

Parent Education

Parent education level was also self-reported by parents. Parents responded to the question, “What is the highest level of education you completed?” Parents were given the choices of “did not finish high school”, coded as 1, “high school graduate”, coded as 2, “some college, but did not finish a four-year degree”, coded as 3, “associate degree”, coded as 4, “four-year degree from college”, coded as 5, and “attended graduate or professional school after college”, coded as 6.

Grade

Participants self-reported their grade in response to the question “What grade are you in school?” by typing it in a text-response box. Their answers were then standardized into a number response. Answers ranged from 2, for second grade, to 5, for fifth grade.

Gender

Participants reported their gender in response to a multiple-choice question that stated, “I am a:” and then provided three responses, one of three responses: boy, girl and something else fits better. Gender was dummy coded with boys as the reference group.

Data Analysis

The first step in the analysis process was to calculate the descriptives for all the key variables (see Table 2). Next, we tested Pearson and Spearman Rho correlations for all the key variables (see Table 3). Finally, we conducted regression models. We conducted ten separate models with gender, grade, family SES, and parent education as moderators in separate models. We tested a regression model with family cohesion as the predictor variable and school connectedness as the outcome variable. Second, we added the following covariates: family socioeconomic status, parent education level, grade, and gender. Third, we conducted four regression models, each testing family cohesion, a moderator variable (i.e., SES, parent education level, grade and gender), and the interaction term between family cohesion and the moderator variable as predictors. Fourth, we conducted four moderator models with the inclusion

of covariates. Family cohesion, grade, SES, and parent education level were mean-centered for the analysis. Gender was dummy coded with boys as the reference group.

Chapter 4

Results

First, we conducted Pearson and Spearman Rho correlations. From this, it was seen that parent education and family SES were correlated to each other in the Pearson correlation analysis ($r = 0.22, p = 0.05$). Parents with higher levels of education tended to report higher family SES. Additionally, school connectedness and family cohesion were significantly correlated in the Spearman Rho analysis ($r = 0.27, p = 0.01$). Higher levels of school connectedness were significantly associated with higher reported family cohesion. There were no other significant correlations. Next, we conducted a regression analysis to test the first research question: is family cohesion associated with their feelings of connectedness to school? As shown in Table 4, family cohesion and school connectedness were related at trend level ($B=0.33, SE=0.19, p = 0.085$). Students who reported higher levels of family cohesion reported higher levels of school connectedness. However, the inclusion of covariates in the regression model made this association not significant ($B = 0.31, SE = 0.20, p = 0.122$). The covariates, grade, gender, family SES, and parent education were not significantly related to school connectedness (see Table 4). Our hypothesis had some support with family cohesion and school connectedness related at the trend level.

Next, we examined gender as a moderator between family cohesion and school connectedness. We found the interaction between family cohesion and gender was not significant

(girls, $B = -0.60$, $SE = 0.39$, $p = 0.129$; non-binary, $B = 0.20$, $SE = 1.03$, $p = 0.846$) (see Table 5).

The interaction between family cohesion and gender was also not significant (girls, $B = -0.66$, $SE = 0.40$, $p = 0.101$; non-binary, $B = 0.03$, $SE = 1.12$, $p = 0.98$) (see Table 5) when controlling for covariates. Our hypothesis that girls would feel more connected was not supported by the data.

Next, we examined grade as a moderator between family cohesion and school connectedness. We found the interaction between home connectedness and grade was not significant ($B = -0.01$, $SE = 0.18$, $p = .938$) (see Table 6). We ran the model again and included covariates. The interaction between family cohesion and grade was not significant ($B = -.02$, $SE = 0.18$, $p = .912$) when controlling for covariates (see Table 6). Our hypothesis that younger children would feel more connected was not supported by the data.

Next, we examined family SES as a moderator between family cohesion and school connectedness. We found the interaction between family cohesion and family SES was not significant ($B = -0.88$, $SE = 0.61$, $p = 0.148$) (see Table 7). We ran the model again and included covariates. The interaction between family cohesion and SES was not significant ($B = -0.86$, $SE = 0.70$, $p = 0.138$) when controlling for covariates (see Table 7). Our hypothesis that children coming from higher SES families would feel more connected was not supported by the data.

Our final model tested parent education level as a moderator between family cohesion and school connectedness. We found the interaction between family cohesion and parent education was not significant ($B = -0.34$, $SE = 0.16$, $p = 0.150$) (see Table 8). However, the interaction term was marginally significant in the model including covariates ($B = -0.29$, $SE =$

0.16, $p = 0.079$) (see Table 8). Next, we examined simple slopes at high (+1 SD) and low (-1 SD) levels of parent education (see Figure 1). At low levels of parent education, family cohesion was associated with school connectedness; wherein, those that came from more cohesive families were reporting higher school connectedness ($B = 0.67, p = 0.016$). For those coming from families with parents of a higher education level, there was no association between family cohesion and school connectedness.

Chapter 5

Discussion

This study examined the association between family cohesion and school connectedness in 2nd to 5th graders in a rural elementary school. We also tested moderation by child gender, child grade level, family SES, and parent education. We found that family cohesion was marginally associated with school connectedness at trend level. There was also trend level interaction between family cohesion and parent education when controlling for gender, grade, socioeconomic status. Specifically, among families with parents having lower levels of education, higher reports of family cohesion were associated with higher reported school connectedness. However, there was no association between family cohesion and school connectedness among families with parents having higher levels of education.

Family cohesion was marginally associated with school connectedness, as predicted by our hypothesis. This finding is consistent with much of the literature that has found a consistent connection between the two environments in a child's life. This finding is consistent with that of Flook and Fuligni (2008) which found links between family functioning and school success. Timmons and Margolin (2015) had similar findings and found that children experience spillover between the family and school domains and reverse with school and family. This finding also is consistent with findings that individuals with more challenges at school most often come from homes with lower levels of family cohesion (Mayfield & Fosco, 2021). This suggests that the home and school domains in children's lives are in fact connected. These studies all looked at

linkages on the daily level, but the current study found linkages at the person level where a child who reported high levels of cohesion also reported high levels of connectedness.

We found that at low levels of parent education, family cohesion was associated with school connectedness, while at high levels of parent education, family cohesion was not associated with school connectedness. This is an interesting finding given the past research that have looked at how parent education level plays into school connectedness. Findings from Mastekaasa & Birkelund (2022), Ernola et al. (2016), and Hardway and Fuligni (2006) all found parent education level is associated with children's connectedness and success in school and those with parents of a higher education level had a stronger connection to school. Other findings from Timmons and Margolin (2015) found no influence of parent education level on school connectedness. This also contrasts with the current study which found significant results only from those with parents of lower education levels. This could indicate that family cohesion is a bigger contributing factor to levels of school connectedness specifically for children whose parents have a lower level of education. This could indicate that children who have parents with a lower education level are more sensitive to the cohesion of their family at home and how it can then impact their connectedness to school.

Contrary to the hypothesis, we did not find evidence of moderation by child gender, grade, and family SES. This contrasts much of the literature that has found associations between home life on life at school. There are a few considerations we should note in the interpretations of our null findings. One of the biggest limitations of the study is the homogeneity of the sample. The sample was predominantly white with only one of the participants identifying

themselves as non-white. This non representative sample limits our study generalizability. There were other demographic similarities of the sample beyond race that limit generalizability. Namely, the majority of the parents identified their families as middle class, and over half of the parents in the study received at least a college education. Additionally, when looking at children's responses to survey questions, we saw that most of the students were highly connected to both their home and school environments. There were very few overall-disconnected students, which additionally limits the generalizability of results.

When considering the results of the present study, we must consider the impact of the Covid-19 Pandemic on the participants. The baseline surveys were administered in November of 2020 during the first school year back in person. Students and parents were making it to school while trying to manage living during peak times of the pandemic. During this time, children were returning to school after a period of prolonged absence due to the pandemic. It is possible because of this, that the children returning to school may have felt a profound connection to school being that they had not felt connected to the people in their school for months due to socially-distant learning at home. This element could play into the homogeneity that we saw in the responses of the sample.

Another important consideration in looking at these results is the accuracy of children's self-reports and their ability to adequately monitor their own mental states. In an early study of children's self- understanding, Damon and Hart (1986) found an "orderly change in self-concept during childhood and adolescence" (p. 115). This change could suggest that the narrow ages of the children in the study created limitations in the variability in the ability to monitor their own

self-concepts and mental states. It is important to acknowledge that the children in the study may not have had the fully developed ability to analyze their inner states. Children and adolescents have been found to have improved fluency of mental-state reasoning as they age (Hayward et al., 2018). Children, as they age, become better at providing explanations for their social behavior (Hayward et al., 2018). The limited age range in the study makes it hard to see the full range of developmental ability in children to self-report their feelings and experiences.

This study gives some important insights into where research can go from here. First, future research should consider the composition of the sample and should ensure a sample that is representative of the population as a whole. It may be helpful to sample from various schools from different areas such as rural, urban, and suburban areas. Another helpful consideration is to look at places where there are a lot of children that are suspected to be disconnected from school. One of the major issues with the present sample was the fact that most of the children in the sample felt highly connected. Seeking out disconnected children could help give more insight into those who are struggling. Additionally, giving children time to adjust to life after the pandemic would help give more accurate insight into their current experiences with school. Finally, it might be helpful to consider widening the sample to include both children and also pre-adolescents and adolescents as well. Considering a broader age range would help give more insight into some of the developmental changes that influence young people's ability to self-report. Nonetheless, the study suggested that school connectedness was associated with family cohesion, and particularly showed the increased influence of parent education level. This highlights the importance of making sure children have a cohesive family structure in order to be better connected to school.

Tables and Figures

Figure 1: *Two-Way Interaction of Parent Education on School Connectedness*

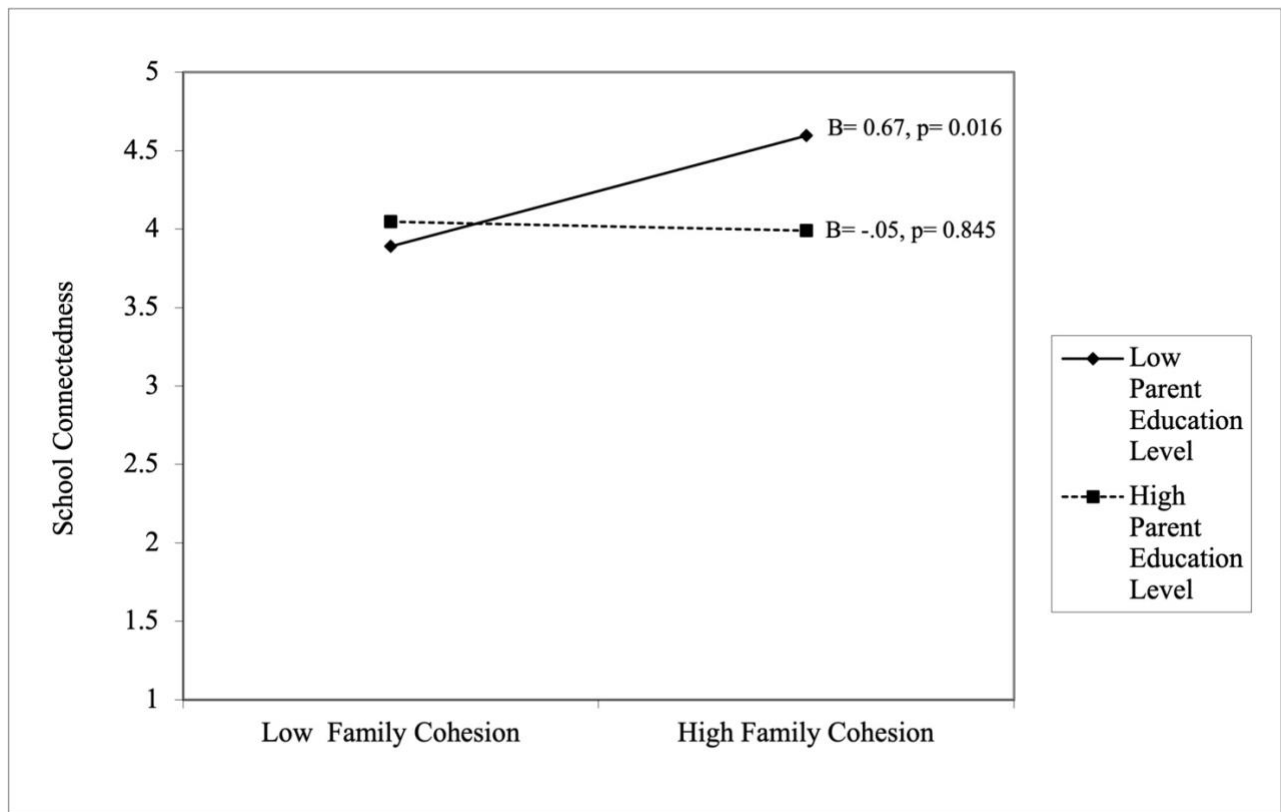


Table 1: Demographics

	<i>n</i>	%
Grade		
2nd	28	31%
3rd	23	26%
4th	20	22%
5th	19	21%
Gender Identity		
Boy	43	48%
Girl	44	49%
Non-binary	3	3%
Race		
White	89	99%
Nonwhite	1	1%
Home Composition		
Lives in One Home	76	84%
Lives in Two Homes	14	16%
Socioeconomic Status		
Poor	0	0%
Working Class	12	13%
Working and Middle Class	1	1%
Middle Class	77	86%
Affluent	0	0%
Highest Parent Education		
Did not Finish High School	0	0%
High School Graduate	5	6%
Some College	9	10%
Some College and an Associates Degree	1	1%
Associate Degree	11	12%
Four- Year Degree	35	39%
Graduate or Professional School	29	32%

Table 2: *Descriptives Table*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
School Connectedness					
Composite	90	5.84	1.46	1	7
Family Cohesion					
Composite	90	3.41	0.53	1.67	4
Parent Variables					
Family SES	90	2.86	0.34	2	3
Parent Education	90	4.82	1.16	2	6
Grade	90	3.33	1.13	2	5

Table 3: *Correlation Table*

Variable	1	2	3	4	5
1. Home Cohesion	1	0.18	0.03	0.10	-0.10
2. School Connectedness	0.27*	1	0.09	-0.01	0.04
3. Family SES	0.06	0.10	1	0.22*	0.15
4. Parent Education	0.07	0.07	0.17	1	0.07
5. Grade	-0.09	-0.01	0.14	0.08	1

Note. Upper diagonal indicate Pearson correlations, bottom diagonal indicate Spearman correlations.

*. Correlation is significant at the 0.05 level (2-tailed)

Table 4:*Associations between Family Cohesion and School Connectedness with and without Covariates*

	Model A (no covariates)			Model B (covariates)		
	B	SE	p	B	SE	p
Home Cohesion	0.33	0.19	0.085	0.31	0.20	0.122
Female	--	--	--	0.92	0.21	0.656
Nonbinary	--	--	--	-0.53	0.58	0.363
Grade	--	--	--	0.04	0.09	0.658
SES	--	--	--	0.20	0.31	0.507
Parent Education	--	--	--	-0.05	0.09	0.619

Table 5:*Gender Moderation of the Association between Family Cohesion and School Connectedness*

	Model A (no covariates)			Model B (covariates)		
	B	SE	p	B	SE	p
Home Cohesion	0.55	0.27	0.041	0.60	0.27	0.03
Female	0.09	0.20	0.664	0.11	0.21	0.604
Nonbinary	-0.38	0.70	0.586	-0.40	0.72	0.583
Female x Family Cohesion	-0.60	0.39	0.129	-0.66	0.40	0.101
Non-binary x Family Cohesion	0.20	1.03	0.846	0.03	1.12	0.98
Grade	--	--	--	0.24	0.32	0.456
SES	--	--	--	0.06	0.09	0.542
Parent Education	--	--	--	-0.05	0.09	0.624

Table 6:*Grade Moderation of the Association between Family Cohesion and School Connectedness*

	Model A (no covariates)			Model B (covariates)		
	B	SE	p	B	SE	p
Home Cohesion	0.34	0.20	0.085	0.32	0.20	0.117
Female	--	--	--	0.10	0.21	0.642
Nonbinary	--	--	--	-0.55	0.59	0.348
Grade	0.05	0.09	0.606	0.04	0.09	0.639
Grade x Family Cohesion	-0.01	0.18	0.938	-0.06	0.19	0.761
SES	--	--	--	0.21	0.31	0.496
Parent Education	--	--	--	-0.04	0.09	0.643

Table 7:*Family SES Moderation of the Association between Family Cohesion and School Connectedness*

	Model A (no covariates)			Model B (covariates)		
	B	SE	p	B	SE	p
Home Cohesion	0.34	0.19	0.075	0.33	0.20	0.096
Female	--	--	--	0.13	0.21	0.542
Nonbinary	--	--	--	-0.23	0.63	0.717
Grade	--	--	--	0.06	0.09	0.525
SES	0.21	0.29	0.464	0.18	0.31	0.552
SES x Family Cohesion	-0.88	0.61	0.148	-0.86	0.70	0.220
Parent Education	--	--	--	-0.02	0.09	0.851

Table 8:

Parent Education Moderation of the Association between Family Cohesion and School Connectedness

	Model A (no covariates)			Model B (covariates)		
	B	SE	p	B	SE	p
Home Cohesion	0.33	0.19	0.082	0.31	0.19	0.116
Female	--	--	--	0.11	0.20	0.606
Nonbinary	--	--	--	-0.62	0.57	0.281
Grade	--	--	--	0.06	0.09	0.484
SES	--	--	--	0.34	0.31	0.282
Parent Education	-0.05	0.09	0.588	-0.10	0.09	0.304
Parent Education x Family Cohesion	-0.23	0.16	0.15	-0.31	0.16	0.061

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<https://doi.org/10.1037/fam0000141>

ACADEMIC VITA

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Education

2019- present

B.S. with Honors in Human Development and Family Studies
Anticipated Graduation: May 2023

2021- present

B.S. in Early Childhood and Elementary Education
Anticipated Graduation: May 2024

Pennsylvania State University, State College, PA

Research Interests

My primary research interest is in the social-emotional learning of children ages 3-5. I am interested in the development of children's emotional understanding and emotional regulation. I am additionally interested in the way young children relate to each other and build social relationships. I am interested in creating effective social-emotional programming for pre-literate children. With this, I am interested in the long-term developmental effects of interventions targeting social- emotional understanding.

Scholarships

2022

Lord Academic Excellence Scholarship
Smith Scholarship in Health and Human Development

2021

Schreyer Honors College Academic Excellence Scholarship
Smith Scholarship in Health and Human Development

2020

Schreyer Honors College Academic Excellence Scholarship
Smith Scholarship in Health and Human Development

2019

Schreyer Honors College Academic Excellence Scholarship
Smith Home Economic Scholarship
Smith Scholarship in Health and Human Development

Awards and Honors

2022

Evan Pugh Scholar Senior Award
Dean's List

2021

The President Sparks Award
Dean's List

2020

The President's Freshman Award

Dean's List

Awarded Internship at Vista Autism Services, cancelled due to Covid-19

2019

National Honors Society

Smith Book Award

Springfield Township Rotary Service Above Self Award

STEA Memorial Award

DAR Good Citizen Award

Service

2019 Extended School Year Camp Volunteer Internship Coordinator

2017-2018 Volunteer at the Kinney Center for Autism

2016-2018 Extended School Year Camp Volunteer

Important Courses Taken

HDFS 311: Intervention and Prevention

HDFS 312: Research Methods in Human Development

HDFS 239: Adolescent Development

HDFS 300: Ethics in Human Development

HDFS 315: Family Development

HDFS 418: Family Relationships

HDFS 429: Advanced Child Development

HDFS 430: Experience in Preschool

HDFS 433: Emerging Adulthood