

The Effect of Parent-Parent Social Capital on Children's Narrative Language

Undergraduate Research Thesis

Presented in Partial Fulfillment of the Requirements for Graduation with Honors
Research Distinction in Speech and Hearing Science in the Undergraduate Colleges of
The Ohio State University

By

Emily Kathryn Ankeney

The Ohio State University

May 2018

Thesis Committee

Dr. Monique T. Mills, Advisor

Mrs. Jennifer Brello

Dr. Sarah Hayford

Abstract

Parents' social class is positively related to children's academic and long-term health outcomes. Research that examines this relationship typically indexes social class with a gradational measure, such as parent education or family income. This method of determining social class does not fully account for all the resources that a child relies upon to produce language. Therefore, this study employs a relational measure to index social class, called social capital. Social capital resides in relationships of trust and shared expectations among parents, between parents and school staff, and between parents and children. This study analyzes the relationship between parent-parent social capital and the narrative language of their school-age children. Parent-parent social capital was measured through parents ($n = 43$) answering a survey that assessed the size of a parent's social network as well as shared expectations and levels of reciprocity among other parents. Their children ($n = 43$) generated a spoken narrative from a 5-picture sequence. The microstructure of the narrative samples was analyzed for sentence structure (MLU) and vocabulary diversity (NDW). Results revealed no statistically significant relationship between parent-parent social capital and either measures of children's narrative language. Implications of these findings are explored.

Acknowledgments

I am most grateful to my advisor, Dr. Monique T. Mills for her support and encouragement throughout the duration of this project. I would also like to thank the members of my undergraduate thesis committee, Mrs. Jennifer Brello and Dr. Sarah Hayford. Also thank you to fellow members of the CLA Lab—Khaled Affaneh, Ala Y. Omar, and Sara M. Roush—for their assistance with subject recruitment, data collection, and transcription, respectively. Lastly, I would like to thank The College of Arts and Sciences for funding this project and the Buckeye Language Network Lab for allowing us to use their facility for data collection.

Vita

May 2015.....Miamisburg High School

2015-Present.....Undergraduate Student, The Ohio State University

Fields of Study

Major Field: Speech and Hearing Science

Table of Contents

Abstract	ii
Acknowledgments.....	iii
Vita.....	iv
List of Tables	vii
List of Figures.....	viii
Introduction	9
Social Class Related Differences in Children’s Language Outcomes	9
Gradational Versus Relational Measures of Social Class	11
Social Capital Related Differences in Academic Success.....	12
Importance of Narrative Language in School-Age Children.....	14
The Current Study	15
Participants	15
Narrative Elicitation	16
Narrative Microstructure Measurements.....	16
Language Productivity.....	17
Lexical Diversity.....	17
Grammar	17
Inter-rater reliability	18
Social Capital Measurement	18
Statistical Analysis	18
Results	19
Discussion.....	21
Summary of results	22
Limitations.....	22
Future Directions.....	23

Conclusion	24
References	25
Appendix A. Intercorrelations of Parent-Parent Social Capital Survey Items	29

List of Tables

Table 1. Parent responses on social capital survey 20

List of Figures

Figure 1. Late for School, Gillman et al. (1980).....	16
Figure 2. Distribution of MLU Scores	20
Figure 3. Distribution of NDW Scores.....	20
Figure 4. Variation of NDW and MLU.....	21
Figure 5. Relationship Between NDW and Social Capital ($r=-.201$, $n=43$, $p=.10$).....	21
Figure 6. Relationship Between MLU and Social Capital ($r=-.097$, $n=43$, $p=.27$)	21

Introduction

Social Class Related Differences in Children's Language Outcomes

Parent social class is positively linked to children's language outcomes, including their vocabulary, grammar, and narrative development. Social class is a multifaceted variable that has many mechanisms by which it influences children's speech. Caregivers from a higher social class may have more time to interact with their children, which creates more opportunities for children to produce speech (Hoff, 2003). Higher social class parents may also have more knowledge about child development, which may passively impact the way that they direct speech to their children (Huttenlocher, Waterfall, Vasilyeva, Vevea, & Hedges, 2010). Additionally, a caregiver's exposure to higher education, such as college, may influence their child-directed speech. Parents with more education produce longer, more diverse utterances to their children (Hoff, 2003), which could explain a faster growth in child narrative development.

Children from different socioeconomic status (SES) backgrounds develop vocabulary at different rates (Cycyk, Bitetti, & Hammer, 2015; Hoff, 2003; Huttenlocher et al., 2010). Toddlers from higher SES backgrounds develop productive vocabulary at a faster rate than do toddlers from lower SES backgrounds (Hoff, 2003). This aforementioned study also found that maternal language input was a mediating variable in the relationship between SES and child language outcomes. Higher SES mothers tended to

use longer utterances and more topic-continuing replies with their children than lower SES mothers. Huttenlocher et al. (2010) also found SES to be reliable predictor of toddlers' lexical diversity, or vocabulary breadth. Additionally, a recent study examined the relationship between low-income, bilingual, preschool-age children's vocabulary growth and mother depressive symptomology (Cycyk, Bitetti, & Hammer, 2015). Results indicated that the children's Spanish receptive vocabulary was negatively impacted by maternal depressive symptomology. Receptive vocabulary was measured using a standardized test for Spanish-speaking children (Dunn, Lugo, Padilla, & Dunn, 1986). However, Hoff (2003) and Huttenlocher et al. (2010) indexed children's vocabulary breath by measuring the variety of words the children produced in the story, or the number of different words (NDW).

There have also been findings that a child's grammar development is positively tied to social class. For example, one study found a significant difference in the rate that children from different SES groups master the production of complex sentence structures, or sentences with more than one clause (Vasilyeva, Waterfall, & Huttenlocher, 2008). Huttenlocher et al. (2010) also found that parental SES background was positively associated with children's grammar development, and the relationship was moderated by the caregiver's SES. Parents from higher SES backgrounds used more diverse syntactic structures than parents from lower SES backgrounds, which could account for a portion of the disparities in children's grammar growth rates. Syntactic development was indexed in the aforementioned studies using mean length of utterance (MLU)—average sentence length.

Furthermore, research has shown that children's narrative, or storytelling skills are also influenced by parent social class (Alt et al., 2015). Alt et al. (2015) examined the relationship between maternal education and bilingual, school-age children's narrative abilities. Results showed that SES was positively related to children's narrative abilities. This macrostructure of children's narrative abilities was examined using the Narrative Scoring Scheme, which provides information about a child's ability to coherently narrate. Several aspects the Narrative Scoring Scheme include the child's ability to identify main characters, the setting, and conflicts. Additionally, when analyzing the children's English narrative samples, there were differences in the children's grammatical and vocabulary development based on social class, such that MLU and NDW values were greater in children from higher SES groups.

Gradational Versus Relational Measures of Social Class

Social class in these prior studies was defined using gradational measures, such as parental education (Alt et al., 2015; Hoff, 2003; Vasilyeva et al., 2008), family income (Cycyk et al., 2015), or both (Hoff, 2013; Huttenlocher et al., 2010). However, these gradational models of social class do not fully account for the resources that children rely upon to competently produce language.

The social interactionist theory underpins this study, which emphasizes that children build their language competencies through interactions with caregivers (Peterson & McCabe, 1994). This could explain why differences in parents' child-directed speech is associated with differences in children's language development (Hoff, 2003; Huttenlocher et al., 2010; Vasilyeva et al., 2008). Therefore, different measures of social class, such as

parent-parent social capital, need to be examined to develop a more comprehensive understanding of the mechanisms that act upon children's language development. Prevention literature has also shown that caregiver language is a mediating factor between SES and child vocabulary development (Hoff, 2003; Huttenlocher et al., 2010). Thus, poor language outcomes may be prevented by understanding key aspects of parents' social networks that also affect their children. Other forms of social capital, such as parent-school social capital, or a parent's relationship with school staff (Valdez et al., 2013), may allow parents to assist their children, but those social ties do not necessarily provide children with more diverse language input.

Parent-parent social capital refers to the social network that a parent has access to, which includes the relationships of trust between parents of children who attend the same school, their mutual expectations, and their shared values (Coleman, 1988; Sampson et al., 1999). Parent-parent social capital is also beneficial for parents; a family's social network has implications for the parents' well-being. Single mothers are motivated to pursue social connections with other like-minded individuals to feel supported while raising children (Harman, 2013). Presumably, parents with strong relationships to other parents provide children with a wider range of communication partners, potentially strengthening the child's language skills.

Social Capital Related Differences in Academic Success

Similarly to a gradational measure of social class, social capital is also positively linked to children's academic success. This may be explained by parents utilizing their social networks to explicitly intervene in school conflicts to benefit their children. It may

also be explained by parents with more social capital having higher levels of intergenerational closure, or contact with more parents of their child's peers (Carbonaro, 1998). Parents with intergenerational closure have more knowledge on various aspects of their children's daily lives, giving them greater command to intervene when their child is experiencing deficits in various aspects (i.e. academic achievement, social participation, or teacher conflicts).

A study that used ethnographic data found that parents with higher incomes tended to have more social capital, which allowed them to help their children more than parents with lower levels of social capital (Horvat et al., 2003). Horvat et al. (2003) categorized parents of third and fourth-grade children based on family income. Results showed that working-class and poor parents tended to have fewer social ties to assist their children when compared to middle-class families. Conflicts for which parents intervened included contesting the school's curriculum, responding to inappropriate teacher behavior, and requesting their children to be placed in specific teachers' classrooms.

A literature review conducted by Dika & Singh (2002) also found that children's achievement test scores were positively related to parent social capital, which relied upon a parent's involvement at the school and parent expectations for children.

Lastly, Valdez, Mills, Bohling, & Kaplan (2013) found that social and behavioral functioning was related to social capital. This study employed an intervention method for low income families to promote parent-parent social capital at their child's school. The intervention was associated with increases in parent-parent social capital amongst Spanish-dominant speaking families. This was also associated with decreased social and behavioral

problems in children. Collectively, these studies suggest a positive relationship between gradational and relational measures of social class with parents of higher levels of social class possessing more social capital with school staff and other parents, allowing them greater control over their children's academic health and well-being.

Importance of Narrative Language in School-Age Children

Although there is research to illustrate that social capital is positively associated with academic outcomes, the relationship between parent-parent social capital and child language has not been comprehensively studied. Narrative language, in particular, is a foundational skill needed for children's academic success. It is important for school-age children to be able articulate their ideas in a coherent manner to succeed both academically and socially. Mastering narrative skills is a requirement of educational benchmarks. According to the Common Core Standards, children must "describe characters, settings, and major events in key detail," by first grade. By fourth grade, children must "describe a character's motivations, feelings, thoughts, and actions" (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010).

Narrative language skills provide insight to children's language competencies and function as a reliable predictor for children's academic success. A longitudinal study found that the quality of narratives in school-age children predicted the children's reading skills one year later (Reese, Suggate, Long, & Schaughency, 2009). Additionally, narrative language skills are also tied to children's writing competencies (Griffin, Hemphill, Camp, & Wolf, 2004). Griffin et al. (2004) found that preschoolers' narrative language skills at age five predicted their reading comprehension skills at age eight. Knowledge about how

social capital relates to narrative language will help education professionals and parents improve intervention methods and language instruction for school-age children who are at risk for academic underachievement.

The Current Study

This current study explores how children's language is associated with a relational measure of social class, called social capital. This captures the social network in which a child is situated. Parent-parent social capital refers to the trust between parents of children who attend the same school, their mutual expectations, and their shared values (Coleman, 1988).

Therefore, the present study posed the research question, "What are the effects of parent-parent social capital on school-age children's narrative language?" Given that Horvat et al. (2002) found a direct relationship between parent-parent social capital and children's academic outcomes, a positive relationship between parent-parent social capital and children's narrative language was expected in the current study.

Methods

Participants

Participants included 43 parent-child dyads with school-age children (ages 5-10 years). The dyads were recruited from the Center of Science and Industry (COSI), a children's museum in Columbus, Ohio. Parents who homeschooled their children were excluded from this research so that we could examine relationships between parents of children who attended the same school. Written parent consent and child assent were obtained before collecting data.

Narrative Elicitation

A 5-picture sequence from the Test of Narrative Language was used to elicit a story from the children (Gillam & Pearson, 2004). The “Late for School” picture sequence shown in Figure 1 was used in this study. Researchers elicited a narrative sample from the child by reading from a script, “I’m going to show you five pictures that go together to tell a story. I’d like you to look at them carefully, then tell me the story that goes with the pictures. Make your story as long and as complete as you can. You can start anytime you are ready.” Researchers then audio-recorded children’s narratives and transcribed the narrative sample with conventions for the Systematic Analysis of Language Transcripts program (SALT; Miller & Iglesias, 2012).



Figure 1. Late for School, Gillman et al. (1980)

Narrative Microstructure Measurements

Four microstructural measures of language were used to describe the narrative language samples: total number of utterances (TNU), total number of words (TNW), number of different words (NDW), and mean length of utterance (MLU). These measures were automatically produced by SALT software (Miller & Iglesias, 2008) and the utterances were divided into communication-units (c-units). This method of segmenting c-

units is widely accepted because the syntax-based rules of segmentation provide more consistency than segmenting utterances based on the speaker's pauses (Miller, Andriacchi, & Nockerts, 2016, p. 36). C-units contain a main clause (i.e. "The boy woke up"), and all of its dependent clauses (i.e. "The boy woke up and got out of bed") (Loban, 1976).

Language Productivity

TNU and TNW are measures of children's language productivity. TNU is calculated by summing the total number of the utterances the child produced during the narrative elicitation and includes repeated words.

Lexical Diversity

NDW measures vocabulary diversity and the redundancy of the child's vocabulary. It is calculated by adding up all the different root words the child used during the narrative elicitation.

Grammar

MLU is a measure of syntactic development, or grammar and tells us about the average length of the child's sentences. MLU is calculated by dividing the number of morphemes by the number of utterances. For example, the word "running" has 2 morphemes: the root word "run," and the present progressive ending "-ing."

MLU and NDW were the only measures included in the statistical analyses because they control for the length of the narrative sample. Prior research has shown that school-age children show differences on these microstructural measures relative to their grade or age (Miller et al., 2016; Mills, 2015).

Inter-rater reliability

Narrative samples were transcribed using SALT conventions (Miller & Iglesias, 2008). In order to determine inter-rater reliability, transcripts from five randomly selected parent-child dyads (11%) were transcribed by a second researcher. Inter-rater reliability was calculated using Krippendorph's Alpha (Krippendorff, 2011). Values were $\alpha=.987$ for agreement on total number of words and $\alpha=.942$ for agreement on total number of bound morphemes.

Social Capital Measurement

A social capital survey that has been previously validated was utilized in this present study (Valdez et al., 2013). Parents were administered the survey electronically via Qualtrics to assess the quantity and quality of relationships that parents had with other parents at their child's school. The size of the parent social network was explored by asking how many other parents at the child's school the parent knew (0 to 6 parents). Other questions explored reciprocity and shared expectations amongst parents. These seven items were measured on a 7-point Likert scale which ranged from strongly agree to strongly disagree. A factor analysis was conducted to establish internal reliability and reflected that parent-parent social capital questions hung together as one latent structure. Therefore, we were able to create a composite score of the parent-parent items on the social capital survey. Appendix A displays intercorrelations among parent-parent social capital survey items.

Statistical Analysis

A Pearson product-moment correlation was used to determine the relationship between the composite parent-parent social capital score and length-controlled measures

of children's language (e.g. NDW and MLU). The strength of the relationship between the two variables were interpreted as following: *small* ($r=.10-.29$); *medium* ($r=.30-.49$); and *large* ($r=.50-1.0$).

Results

A preliminary analysis was conducted for each language variable to ensure that the data were normally distributed. Visual inspection indicated that both MLU and NDW were right-skewed toward lower values, and these are displayed in figures 2 and 3. The ranges for participants' MLUs fell between [4.33-13.00] and NDW fell between [2.67-8.20]. These results are similar to studies that examined NDW and MLU in school-age children. Other studies indicated that MLU ranges fell between [4.02-11.50] and NDW ranges fell between [3.59-4.93] (Ebert & Scott, 2014; Mills, 2015). Figure 4 shows the variance for each language variable, MLU and NDW. Overall, children performed better on vocabulary than grammar and both variables contain lots of variation. This is likely an effect of the wide age range, spanning from 5 to 10 years old.

A simple linear regression was calculated to predict child language measures based on parent-parent social capital. Preliminary inspections were performed to ensure no violation of the normality, linearity, and homoscedasticity. Table 1 shows the average values for parent responses to each of the social capital items. Figures 5 and 6 show the regressions between parent-parent social capital and the narrative language measures. The figures indicate there was no statistically significant relationship between parent-parent social capital and NDW ($r = -.201, n = 43, p = .10$) nor parent-parent social capital and

MLU ($r = -.097, n = 43, p = .27$). Parent-parent social capital is not a significant predictor of children's narrative language.

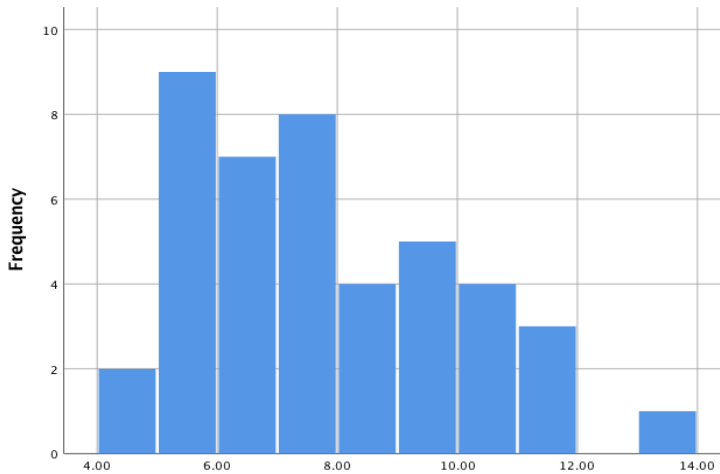


Figure 2. Distribution of MLU Scores

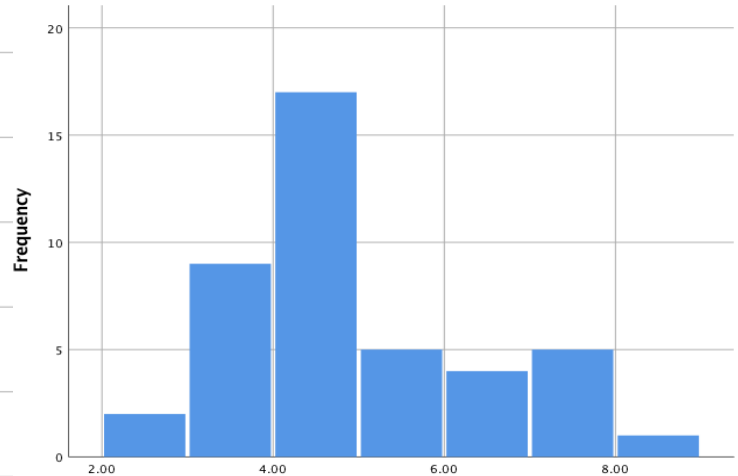


Figure 3. Distribution of NDW Scores

Table 1. Parent responses on social capital survey.

	<u>Mean</u>	<u>Std. Deviation</u>	<u>N</u>
Parents help me.	4.33	1.85	43
Parents listen to my problems.	3.60	1.88	43
Parents invite me.	2.93	1.70	43
I help other parents.	4.09	2.00	43
I listen to other parents.	3.36	1.80	42
I invite other parents.	3.05	1.80	43
Other parents share my expectations.	3.05	1.56	43
How many parents of child's friends do you know?	5.12	1.98	43

Note. Responses ranged from 1=strongly agree and 7= strongly disagree. A mean of 4 indicates that on average, parents neither agreed nor disagreed with statement. For the number of parents known, 0 parents=1. Therefore, a mean of 5.12 indicates that on average, parents knew 4.12 other parents.

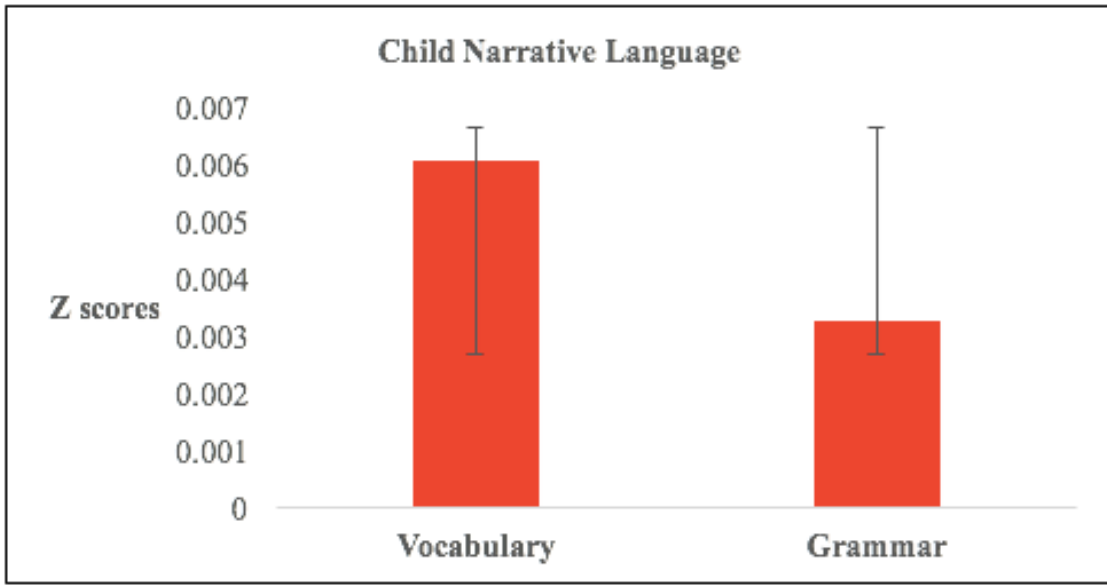


Figure 4. Variation of NDW and MLU

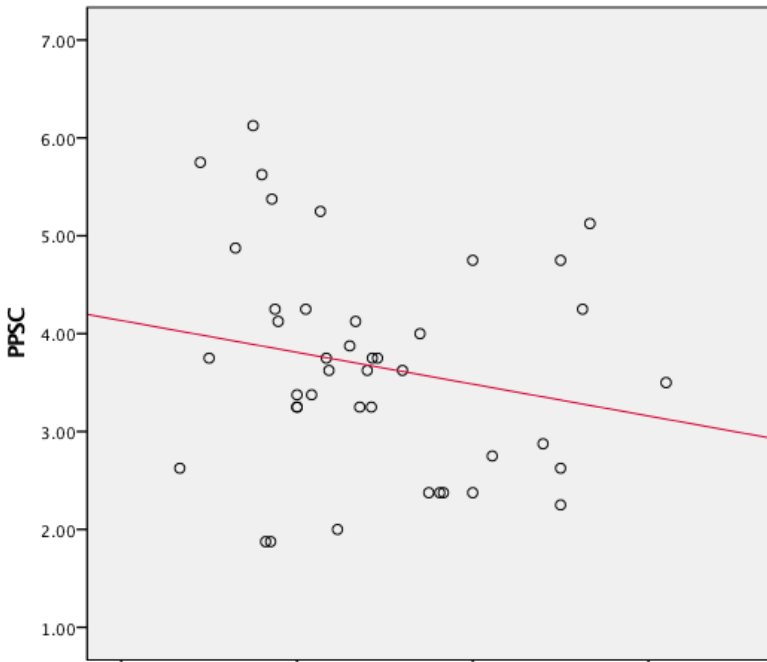


Figure 5. Relationship Between NDW and Social Capital ($r=-.201, n=43, p=.10$)

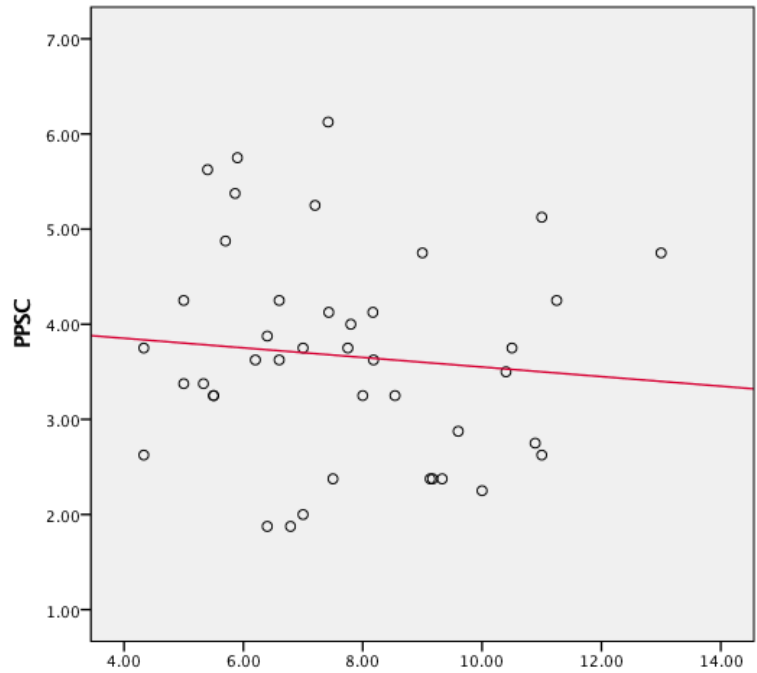


Figure 6. 1 Relationship Between MLU and Social Capital ($r=-.097, n=43, p=.27$)

Discussion

Summary of results

This study aimed to determine whether a relationship between parent-parent social capital and school-age children's narrative language existed. Microstructural narrative language was assessed using descriptive language measures produced by SALT (Miller & Iglesias, 2008), which were MLU and NDW. Results did not support a statistically significant relationship between parent-parent social capital and children's narrative skills. Although the children's narrative language performances were skewed towards lower values, the children's language measurements fell within normal limits (Ebert & Scott, 2014; Mills, 2015).

Limitations

There were factors that limited our findings. First, this study did not include measures of specialized vocabulary (e.g. rare words or internal-state vocabulary). These measures may be more sensitive to social capital than NDW or MLU. Prior research has shown that rare vocabulary and internal-state words can distinguish gifted school-age children from their typically-developing peers (Mills, Mahurin-Smith, & Steele, 2017). These dialect-neutral measures may also reveal differences in children with different amounts of relational social capital. However, the variables chosen in the current study were used in prior studies examining how parent social class related with child language.

Second, the sample size ($n=43$ parent-child dyads) was too small to do more complex statistical analyses. Lastly, this study did not utilize a measure of narrative macrostructure, such as the Narrative Scoring Scheme, that was used in Alt et al. (2016).

Future Directions

Of the two variables explored in the current study, NDW appears to be the most promising based on a visual inspection of the regression line. Alt et al. (2016) also found SES was most strongly correlated with NDW, so future studies should continue to explore NDW as a social-capital-sensitive language variable.

Future studies should also include a larger sample of parent-child dyads so that mediating variables, such as zip code as an index of SES, can be explored. The data from this study showed a wide spread of median incomes [\$24.7k-\$105.7k] and poverty rates [3.4%-43.4%] by zip code. Moderating variables, such as birth order, could also be explored with a larger sample size. Both Hoff (2003) and Huttenlocher et al. (2010) found that birth order moderated the relationship between SES and children language development.

Lastly, social capital should be framed as a moderating variable that acts upon the relationship between gradational measures of social class and children language outcomes. This could allow researchers to examine how children with different amounts of social capital respond to narrative intervention. It may also reveal that social capital is a way to identify children who are at risk of academic underachievement.

Conclusion

Evidence from this study did not support the relationship between length-controlled measures of school-age children's narrative language (NDW and MLU) and parent-parent social capital. This suggests that parent-parent social capital may not be a factor that contributes to the language development gap found in children from different levels of social class. Research should continue to investigate the factors that are associated with gaps in children's narrative language to minimize disparities in children's academic success. Social capital provides a different way to look at environmental effects on children's narrative language, but gradational measures of social class appear to be more sensitive to language than relationship measures. It is reasonable to continue using gradational measures to explore the relationship between social class and language.

References

- Alt, M., Arizmendi, G. D., & DiLallo, J. N. (2016). The Role of Socioeconomic Status in the Narrative Story Retells of School-Aged English Language Learners. *Language, Speech, and Hearing Services in Schools, 47*, 313-323.
- Carbonaro, W. J. (1998). A Little Help from My Friend's Parents: Intergenerational Closure and Educational Outcomes. *Sociology Of Education, 71*, 295-313.
- Coleman, J.S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95-S120.
- Cycyk, L.M., Bitetti, D. & Hammer, C.S. (2015). Maternal depressive symptomatology, social support, and language development of bilingual preschoolers from low-income backgrounds. *American Journal of Speech Language Pathology, 24*, 411-425.
- Deborah Ghate and Neal Hazel, Parenting in Poor Environments: Stress, Support and Copin, Jessica Kinglsey Publishers, London. (2004). *Journal of Social Policy, 33*, 332.
- Dika, S. L., & Singh, K. (2002). Applications of Social Capital in Educational Literature: A Critical Synthesis. *Review of Educational Research, 72*, 31-60.
- Dunn, L. M., Lugo, D. E., Padilla, E. R., & Dunn, L. M. (1986). *Test de Vocabulario en Imágenes Peabody*. San Antonio, TX: Pearson.

- Ebert, E. K., & Scott, C. M. (2014). Relationships between narrative language samples and norm-referenced test scores in language assessments of school-age children. *Language, Speech, and Hearing Services in Schools, 45*, 337-50.
- Gillam, R. B., & Pearson, N. (2004). *Test of narrative language*. Austin, TX: Pro-Ed.
- Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language, 24 (71)*, 123-147.
- Harman, V. (2013). Social capital and the informal support networks of lone white mothers of mixed-parentage children. *Ethnic and Racial Studies, 36*, 8, 1323-1341.
- Hoff, E. (2003). The specificity of environmental influence: Socioeconomic status affects early vocabulary development via maternal speech. *Child Development, 74*, 1368-1378.
- Horvat, E. M. N., Weininger, E. B., & Lareau, A. (2003). From Social Ties to Social Capital: Class Differences in the Relations between Schools and Parent Networks. *American Educational Research Journal, 40*, 319-351.
- Huttenlocher, J., Waterfall, H., Vasilyeva, M., & Vevea, J. (2010). Sources of variability in children's language growth. *Cognitive Psychology, 61*, 343-365.
- Krippendorff, K. (2011). Computing Krippendorff's Alpha-Reliability. Retrieved from https://repository.upenn.edu/asc_papers/43.

- Loban, W. (1976). *Language development: Kindergarten through grade twelve*. Urbana, IL: National Council of Teachers of English.
- Miller, J. & Iglesias, A. (2012). Systematic Analysis of Language Transcripts (SALT), Research Version 2012 [Computer Software]. Middleton, WI: SALT Software, LLC.
- Miller, J. F., Andriacchi, K., & Nockerts, A. (2016). Chapter 3: Transcribing Language Samples. In *Assessing Language Production Using SALT Software* (pp. 31-43). Middleton, WI: SALT Software, LLC.
- Mills, M.T. (2015). The effects of visual stimuli on the spoken narrative performance of school- age African American children. *Language, Speech, and Hearing Services in Schools, 46*, 337- 351.
- Mills, M. T., Mahurin-Smith, J., & Steele, S. C. (2017). Does Rare Vocabulary Use Distinguish Giftedness From Typical Development? A Study of School-Age African American Narrators. *American Journal of Speech-Language Pathology, 26*, 511-523.
- National Governors Association Center for Best Practices, C. o. (2010). *Common Core State Standards for Speaking and Listening Skills of Second Graders*. Retrieved from Common Core State Standards Initiative: <http://www.corestandards.org/the-standards>.

- Peterson, C. & McCabe, A. (1994). A social interactionist account of developing decontextualized narrative skill. *Developmental Psychology*, *30*, 937–948.
- Reese, E., Leyva, D., Sparks, A., & Grolnick, W. (2010). Maternal elaborative reminiscing increases low- income children’s narrative skills relative to dialogic reading. *Early Education and Development*, *21*, 318-342.
- Sampson, R. J., Morenoff, J. D., & Earls, F. (1999). Beyond social capital: Spatial dynamics of collective efficacy for children. *American Sociological Review*, *64*(5), 633–660.
- Vailyeva, M., Waterfall, H., & Huttenlocher, J. (2008). Emergence of syntax: Commonalities an differences across children. *Developmental Science*, *11*, 84-97.
- Valdez, C.R., Mills, M.T., Bohlig, A.J., & Kaplan, D. (2013). The role of parental language acculturation in the formation of social capital: Differential effects on high-risk children. *Child Psychiatry & Human Development*, *44*, 334-350.

Appendix A. Intercorrelations of Parent-Parent Social Capital Survey Items

	Parents help me	Parents listen to my problems	Parents invite me	I help other parents	I listen to other parents	I invite other parents	Other parents share my expectations	How many parents of your child 's friends do you know?
Parents help me		.669	.456	.836	.616	.416	.450	-.492
Parents listen to my problems			.611	.638	.881	.379	.657	-.564
Parents invite me				.501	.618	.758	.308	-.629
I help other parents					.748	.582	.373	-.539
I listen to other parents						.496	.524	-.581
I invite other parents							.229	-.650
Other parents share my expectations								-.404