

2016

Case Study of Teen Mother Perceptions of Their Influence on Preschoolers' Language Development

Mary Schmidt Duncan
Walden University

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Walden University

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Mary Duncan

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Walden University

2016

Abstract

Case Study of Teen Mothers' Perceptions of Their Influence
on Preschoolers' Language Development

Mary Schmidt Duncan

MA, Friends University, 2009

BS, Wichita State University, 1985

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Education

Walden University

May 2016

Abstract

Children born to teen mothers tend to score lower on language development assessments and to have school readiness delays. To support teen mothers and their children in improving language development, educators need information about mothers' daily interactions with their children and how they contribute to their children's language development. The purpose of this descriptive case study was to understand mothers' perceptions of how they influenced their children's language development through play, routines, and other informal interactions. Flavell, Vygotsky, and Bruner's views on how learners' construct knowledge informed the study. Research questions were focused on the mothers' perceptions regarding interactions during routines and during play and on the mothers' beliefs about how influential they were developing their children's language skills. Data were gathered through semistructured interviews, journals, and follow-up questions addressed in narratives or additional interviews. A combination of a priori and open coding was used to support inductive analysis. Participants believed that they influenced their children's development and wanted to increase what they know about overall development and specifically language development. They indicated that they did not have enough time for reading, that they used songs and chants frequently, and that participation in the study made them think more about the importance of conversations shared within activities. The results of this study may help teen mothers, their families, and those who provide education and support to teen mothers in mentoring groups, faith-based support groups, and alternative high schools. Social change will occur when young parents are supported in enhancing the lives of their children.

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Dedication

I dedicate this work to my family. I have appreciated the tremendous support from my husband, son, dad and mom, sister, and all my mentors.

Acknowledgments

I would like to thank my dissertation committee for all their guidance and support. Special thanks to my dissertation Chair Dr. Darragh Callahan along with committee members Dr. Sallie Jenkins and Dr. Christina Dawson. Your professional expertise has helped to make this dissertation what it is today. Thank you for your patience and hard work.

I want to thank God for knitting into me the perseverance to see this doctorate through to completion. I greatly appreciate the support I received from my husband and son. As well as all my mentors: Phillis, Jan, Ann, Lisa, Kaye, Kathy P., Kathy Z., Patty, and Blair. During the late nights that I attempted to write after working full time, your meals on occasion were a great time saver so that I could keep focused on my paper. Special thanks to my parents for providing the words of encouragement and support to see me through to the end.

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Chapter 1: Introduction to the Study

Many children born to teenage parents demonstrate significant academic and self-regulatory challenges by the time they reach their elementary school years. Researchers have observed cognitive and emotional delays by the age of three in this population, putting these children in a high-risk category for later academic difficulties (Noria, Borkowski, & Whitman, 2009). While the number of teen parents in the United States has been decreasing since the 1970s, there are still 41.5 births per 1,000 adolescents between 15 and 19 years of age (Lewin, Mitchell, & Ronzio, 2013). These mothers are less likely than their emerging adult and adult counterparts to complete high school, more likely to experience poverty, more likely to have additional children, and less likely to live with the child's biological father. In addition, adolescent and emerging adult parents reported more physical punishment, which researchers have associated with living below the poverty level (Lewin et al., 2013).

When studying teen parents who have never had the opportunity to establish their own full independent status, it is important to consider the age of their child during the teens' initial parenting years—a time that generally spans the child's infancy and toddler years. For example, when a child reaches his or her toddler years, the child is in Erikson's stage of autonomy. This stage can be particularly challenging for the teenage parent (Lewin et al., 2013). Self-regulation, an essential link to motivation and later academic success, is developed throughout the child's infancy, toddlerhood, and preschool years. For many teen parents, their ability to address this challenging stage of autonomy with their child is directly related to their own immaturity and understanding of child

development. All these factors contribute to create an environment where the child is at risk for a wide range of related challenges throughout life. While there are many studies available which address the development of children of adolescent parents, the particular concern of this study is the quality of verbal interactions between adolescent mother and child (Noria et al., 2009).

Background of the Study

According to Kaye (2014), there are 300,000 teen births each year. Children born to teen mothers are two times more likely to be abused and neglected. In Kansas, there were 90,341 teen births between 1991 to 2010 (April, 2014). Sons of teen mothers are two times more likely to end up in prison, while daughters of teen mothers tend to become teen mothers themselves (Why It Matters, n.d.). These findings indicate that, in general, well-being suffers in children of teenage mothers. These mothers tend not to finish school, tend not to seek prenatal care, have more babies with lower birth weight, and often live below poverty levels. Their children often score poorly on language skills, and often end up in the foster care system (Kaye, 2014). Many teen mothers do not seek prenatal care during their first trimester, and 33% of teen mothers smoke while pregnant, which may lead to lower birth weight. According to Kaye (2012), teen mothers have 14% more preterm births, 50% higher infant mortality, and 9.6 infant deaths per 1,000 babies born in 2008.

Teen mothers have conscious and unconscious reasons for becoming pregnant. According to Raphael-Leff (2012), these reasons include the desire to be an adult, create a new home, create a fantasy baby, recapture their own babyhood, create a fantasy

family, cheat death, not be lowly or have low self-esteem, or to save a relationship. Kaye (2014) shared that 88% of teen mothers do not end up saving the relation because they end up not getting married by the time the baby is born.

Teen mothers tend to have infants with lower birth weights, which increase the likelihood of health problems such as mental illness, cerebral palsy, blindness, deafness, respiratory problems, hyperactivity, and mental retardation (Dacan, n.d.). Coupled with that is a greater chance for infant deaths (Teenpregnancy.org). Kaye (2012) stated that this increased health risk for preterm infants accounted for \$26 billion to the U.S. taxpayer in 2005. In 2010, the average cost to taxpayers for a baby born in Kansas to a teen mother was \$1,726, a rate similar to other states.

Although children born to teen mothers tend to be smaller, mothers can still make a difference in the lives of their children. Responding to a gap in direct observation of the mother-child interaction of teen mothers, and seeking to better understand how teen mothers supported the language development of their four- to seven-month-old children, McGowan, et al. conducted a study that taught teen mothers language stimulation activities. Results showed that improvement took place in the child's expressive language. Specific strategies were not noted by the researchers regarding what the parents did to support their children's language development. Poor language outcomes were noted by Keown et al. (2001) regarding the children born to teen mothers as compared to those born to older mothers. This highlighted the importance of quality mother-child interaction to develop the child's language learning.

According to Humen, Manlove, and Moore (2005) and the National Campaign to Prevent Teen and Unplanned Pregnancy (2012), children born to teen mothers suffer when it comes to preparing their children for school. One of the consequences for the children was the fact that they have lower scores on measures of kindergarten readiness including the child's ability levels in math, reading, and vocabulary. This lack of ability leads to poor academic outcomes, which in turn are linked to economic hardships which are indicators of a higher likelihood for teen pregnancy.

Public assistance for teen mothers only provides enough to meet the bare essentials for teen-led households where 67% live well below the poverty level. Employment opportunities and attainment is complicated by the fact that 51% of teen mothers do not finish high school because of caring for their young child (National Campaign, 2012). Even if they are able to finish school, they are more likely to repeat a grade and to score lower on standardized tests (Teenpregnancy.org). Sixty-three percent of teen mothers receive some type of public assistance, while only 29% receive any additional type of outside monetary support. (National Campaign, 2012).

In their study of language development, Briceno, Feyter, and Winsler (2013) stated that further research could provide more details about parent-child interactions and was needed for establishing best practices for facilitating those interactions. Developing information and resources focused on conversations between mother and child would help support interventions for teen mothers whether they speak English or other languages. Parenting resources could provide teen mothers effective tools as they strive to develop their young child's language ability.

Rafferty, Griffin, and Lodise (2011) observed teen mothers engaging in a 10-minute play activity with their 14 month olds to examine how parenting behavior influences on language development. Older mothers who were in the study provided more support during playtime with their 14-month old which enhanced language outcomes later at 3 years of age. According to Rafferty et al., many teen mothers do not have the tools needed to enhance their children's language developmental skills needed for school success. However, as Fagan and Lee (2013) note, teen parents can enhance the learning process in their young child through cognitive interaction during play. According to Fagan and Lee, mothers may face a dilemma when it comes to their time and attention for play (2013). Fathers of the babies may demand the teen mother's attention, and thus the child receives less cognitive stimulation (Fagan & Lee, 2013).

In 2011, there were 120,000 teens living in foster care. Forty-eight percent of the teen girls in foster care had been pregnant at least once by the time they were 19 years old (Kaye, 2013). Sixty percent of the children in child welfare/foster care are children born from teen mothers (Kaye, 2013). Given these conditions, these children face a multitude of issues that may negatively impact their development. Between child welfare and foster care combined, the total cost to taxpayers is \$2.8 billion per year. Fifty to sixty percent of the teen mothers have had a history of sexual or physical abuse (National Campaign, 2012).

Authors have noted that gaps exist in literature regarding various aspects of mother-child engagement. McGowan et al. (2008) suggested that more direct observation of mother-child interaction was needed, and that the relationship between parent neglect

and language development needed to be examined. Briceno et al. (2013) stated that research was needed which focused on mother-child interactions and what took place during those interactions. According to Tare et al. (2010), more research is needed regarding conversation that take place between parent and child in informal settings. Furthermore, Tenenbaum and Leaper (2003) noted that more research was needed) pointed out gaps regarding how children benefit from scaffolding during a dialogic book reading. Lastly, both authors touched on the positive aspect of scaffolding experiences and ways parents could help in the learning process. Although Justice (2007) discussed Vygotsky's perspective in more depth, the other two discussed Vygotsky of the zone of proximal development (ZPD). Across these studies, the researchers emphasized the importance of parents' involvement in their children's education, and all noted that parent-child interaction time can be very beneficial.

There is little knowledge regarding how parents can contribute to children's literacy growth without the use of books (Justice, Kaderavek, Fan, Sofka, & Hunt, 2009). Concept development can be enhanced through picture books, but so can open-ended discussions between teen mothers and children during playtimes at a water table, for instance. Researchers have found that when questioning strategies were provided to teen mothers, they could use the strategies in their routine experiences as they engage with their young child. This dialog could help to influence the acquisition of knowledge and ultimately enhance language development of young children who are born to teen mothers.

In conclusion, as teen mothers come to understand that they can help to make a difference in their own child's language skills, they may want to know more about what they can do. Therefore, parent education is likely to improve outcomes for teen mothers as they learn ways to support their young child's language development.

Problem Statement

Children entering kindergarten who were born to teen mothers score far lower than their classmates in the areas of math, reading, and language skills (Suellentrop, 2010; National Campaign, 2012 & 2014). This language skill deprivation is a result of many factors. Teen mothers are often not as engaged as older mothers in their young child's life. They also often seem to lack understanding of how they can make a difference in helping to equip their young child for school and life success. As a result, the wellbeing of children of teen mothers needs to be addressed. Additional social impacts would benefit taxpayer's costs for the short and long term for a variety of educational services. Therefore, more research is needed to see what teen mother's perceptions are regarding their influence in their child's language ability to help break this recursive cycle.

Children who have early exposure to language development are better equipped to begin school. According to Pianta (2002), readiness can include exposure to general knowledge, social confidence, and language richness. Families can enhance language and literacy development during interaction time while children are young. During those times of engagement, parents can ask questions and provide new words, which can help children bridge what they know to what is unknown, which is a form of scaffolding.

According to Way (2005), scaffolding refers to the adult's ability to "keep the level of task directly within the child's zone of proximal development" which means, "slightly above the level of difficulty at which the child needs some adult assistance."

Child welfare systems strive to provide the necessary support to aid teen moms, and yet they often do not lead to positive outcomes regarding school preparation for impoverished children of teen mothers. As a result, new options need to be considered in order to build best practices that better support the teen mothers with the skills and techniques needed to effectively interact with their young children to build essential skills like language development. Little is known about teen mother-child interactions as they converse with their child to enhance language development; therefore, best practices need to be sought out to support teen mothers as they positively impact the learning of their children.

Little is known about parents' knowledge of how to extend and reinforce concepts to which young children aged 1½ - 5 years were exposed to in the research by Gregory and Rimm-Kaufman (2008). According to Kansas Enrichment Network (2010), more research is needed regarding the importance of family involvement and how to reinforce best practices for language development. Briceno et al. (2013) noted that teen mothers engage in less verbal interactions with their infants, and that more information is needed in the area of language stimulation and teen parenting. Interventions should be developed to identify best practices for stimulating language development in this population.

According to Leff (2012), play can be an important element to enhance parental language

stimulation. Therefore, in this study, I explored ways that teen mothers informally supported their young children's language development during play.

Purpose of the Study

The purpose of this case study was to understand mothers' perceptions of how they influenced their children's language development during informal ways (during play, routines, and other interactions). According to Dooley and Welch (2014), studies have shown the value of play. In this study, I attempted to broaden the knowledge base and understanding regarding teen mothers' use of vocabulary and ways to expand language usage with young children.

Research Questions

The following central research question guided this study: How do mothers who were parents while in the age of minority but are now part of the majority (18 and older) describe their perceptions regarding their influence on their child's language development?

Related Research Questions:

1. What beliefs do teen mothers who are now over 18 have about how to effectively support and expand the language development of their child?
2. How do teen mothers who are now over 18 describe their language interactions with their child during routine times of the day?
3. How do teen mothers who are now over 18 perceive their influence on their child's language during playtime activities?

4. How much of an impact do the teen mothers who are now over 18 feel they have on the quality of the child's language skills?

Conceptual Framework

The conceptual framework for this study was drawn from Vygotsky's (1986) theory of the ZPD, Bruner's (1983) work on scaffolding, Flavell's (1976) theory of cognition, and Dickinson and Tabor's (2001) work on literacy and the learning of new words. This study focused on the constructivist nature of how children build upon what they know. I observed the mothers' activity (or lack of) and scaffolding in light of the ideas of Vygotsky, Bruner, and Flavell. Vygotsky described the support provided by adults as a system that utilizes verbal cues, hand gestures, or prompts that help children complete tasks. As teen mothers provide prompts such as verbal cues during the play interactions to explain what is going on children can benefit with various language development play activities. Mothers can repeat back what the child says and expound more on the topics brought up by the child. Hand gestures can model for the child, for example, how to pour water, how to hold a cup, or picking up something that is slippery during a water play activity for example. As mothers illustrate the initial example, they provided the necessary prompts to scaffold for the children how they can do a water play activity.

Nature of the Study

In order to answer the research questions, I employed a descriptive case study design. The main rationale for selecting this design was based on the focus of the research questions and the bounded nature of this study (Merriam, 1998). In this research

I asked questions of “how” regarding a phenomenon where there was little existing knowledge. This particular research design allowed me to describe how the perceptions of mothers who were single parents when they were of minority age and their actions impacted the development of their child’s language through play and routine activities (Yin, 2003). Specifically, my central question focused on how mothers who were minors when they gave birth but are now 18 or older perceive their influence on their child’s language development. I analyzed descriptions the teen mothers provided of their interactions, the words that they used during play with their child in their home, and their perceptions of how this supported their child’s language development.

I used this case study approach to describe teen mothers’ perceptions regarding their influence on their young child’s language development through play, and how these perceptions connect to the actual interactions they had. I gathered several sources of information to ensure appropriate triangulation and to support thick and rich descriptions of evidence. I gathered input from the teen mother participants using journals and semistructured interviews. Further, I asked participants to include any language interactions that may have occurred either in isolation (self-talk) or with them. A colleague in the field of early childhood education followed an audit trail to lend to the evidence of quality.

The qualitative case study design was chosen because it enabled me to obtain thick and rich data from a few participants that I could use to answer the research questions in depth. I used purposeful sampling (Merriam, 1998) to select the participants. Selection criteria required that participants resided in one midwestern town, have children

under 5 years of age, and were minors when they gave birth but were 18 or older at the time of the study. According to Patton (2002), there is no exact rule that governs the sample size for a qualitative case study. After data that were gathered from the participants became repetitive, I felt saturation had been achieved.

The social implication from this research would be to develop useful parenting strategies that can enhance teen mother-child conversations in order to better prepare richer language development. I gathered data to assess the teen mothers' perceptions of their impact on the language development of their young child.

Definition of Terms

Teen mothers: Mothers who are teenagers between 14-18 years of age and who are pregnant or have given birth (Oswalt, Biasini, Wilson, & Mrug, 2009; Cox, Buman, Woods, Famakinwa, & Harris, 2012). The mothers involved in this study were teens when they gave birth, and were 18 years and older when the study occurred.

Zone of proximal development (ZPD): "The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86).

Scaffolding: The interactional guidance provided to a child within the ZPD (Neumann & Neumann, 2010).

Lexical integration: "The ability of a newly learned word to compete for recognition with its existing base word" (Henderson, Weighall, & Gaskell, 2013, p. 576).

Complementary learning systems framework (CLS): A conceptual framework that “proposes that new information is initially stored separately from existing knowledge and integrated over time” (Henderson et al., 2013, p. 573).

Assumptions

This qualitative case study included assumptions regarding the interviews, journals, and follow-up questions with each participant. I assumed that the participants answered willingly and honestly during the process, and that the journals the participants completed were true and not exaggerated accounts.

Delimitations

The scope of this study includes the interactions between and words spoken by teen mothers to their own children who were 5 years old or younger. I noted gender differences among the children, but generalized my findings based on the pool of available participants. I chose only six teen mother-child dyads. I chose not to include fathers in this study but just focus on the mothers. I also did not chose to include older mothers who had either been a teen mother or older when they had given birth to their first child. Because the focus was on the teen mothers’ perceptions, I did not include older mothers who may have a more mature perception.

Limitations

The small sample size is a limitation that limits the generalizability of the findings to a larger, more diverse population. However, the decision to limit participation allowed for a more in-depth look into the phenomenon being studied. Using a larger population may provide for wider application, but could compromise the quality of what was being

observed. In addition, my experience as a researcher may have been another limitation because the fact that I came with little experience. I was aware of this limitation and was diligent in my collection and analysis of data, and further sought to address this issue by using a peer debriefer to help me limit bias.

Because the teen mother participants did not know me, they might have been reluctant to share their deep, personal perceptions, thus contributing another potential limitation. Participants were advised about the voluntary nature of this research, and I assured them that they could withdraw at any time should they so choose without fear of any consequences. They were also assured in writing about the confidentiality of any personal identifying information.

Significance of the Study

Teen mothers have substantial challenges raising their child(ren) which can contribute to the child's delay in language readiness. My research addressed this issue by gathering perceptions of teen mothers who had become parents when they were minors but are now in the age of majority regarding their influence on their child's language development. While much is known about the difficulties teen mothers encounter, I found little information on strategies to address this problem in a practical manner.

This study contributes to the body of knowledge needed to address the problem of teen mothers' lack of knowledge regarding the benefits of mother-child interactions during play, and how these interactions help language development. More specifically, this study indicates that parents can support beginning literacy and the learning of new vocabulary words. With this information, teen mothers can be empowered to make a

difference in the language development of their children. This study is important because it demonstrates that mothers have a unique opportunity to introduce their children to terms, concepts, skills, and dispositions through shared experiences during playtime in the early childhood years.

By studying the specific dialog that takes place during informal play experiences, I learned more about ways that teen mothers support language foundations in early childhood. Understanding what they thought they were doing with their children in conjunction with descriptions of the actual activities can provide a better picture of any disconnect that may exist between perception and practice. Knowing this can help these parents and other professionals develop useful strategies to enhance language development during play.

Summary

Children entering kindergarten who were born to teen mothers score far lower than their classmates in math, reading, and language skills (Suellentrop, 2010; National Campaign, 2012). The purpose of this case study was to understand mothers' perceptions of how they influenced their children's language development during informal ways (during play, routines, and other interactions). Chapter 2 contains a review of current literature on this topic. I present the methodology for this study in more detail in Chapter 3. The implications for positive social change include a need for teen mothers to increase what they know about language development in order to support good parenting practices. Teen mothers who apply the information to their daily routines of family life

can build on their own children's natural curiosity and prepare for better school success (Hadzigeorgiou, 2001).

Chapter 2: Literature Review

My aim in this study was to identify strategies teen mothers used during routine times of the day that encouraged language development in their children during the early childhood years. Such strategies could help prepare their young children for better school success. This chapter includes a review of literature, which is organized around the following topics: life of a teen mother, educational outcomes for children of teen mothers, influence of child welfare on teen mothers and their children, future for teen mothers, interaction of teen mothers and their babies, parent scaffolding, language development for children of teen mothers, beginning literacy and the learning of new words, the contrast of fast-mapping and critical periods, and supportive networks around teen mothers.

Literature Review Strategy and Organization

I implemented several strategies to maintain the cohesiveness of this literature review. Specifically, I consulted a diverse range of databases including *Google Scholar*, *ERIC*, *SAGE*, *EBSCO Educational Research Complete*, *Thoreau*, and the catalogue of the local university library, and I searched for a wide range of key words including: *teen mothers*, *child welfare*, *child wellbeing*, *impoverished children*, *life of a teen mom*, *parent education*, *interaction*, *language development*, *teen moms and college*, *teen moms support network*, *parent response*, *parent participation*, *parent/child relationship*, *family involvement*, *words of encouragement*, *parent instruction*, *introducing a new concept*, *early childhood education*, *early literacy*, *loop of support*, *children museum*, *vocabulary development*, *describe to child*, *parent/child interaction time*, *parental influence*,

scaffolding of new information, building of knowledge, building of science concepts, science concepts and parent participation, Department of Education, National Campaign to Prevent Teen and Unplanned Pregnancy, teenpregnancy.org, zone of proximal development (ZPD), Jerome Bruner, John Flavell, cognition, Lev Vygotsky, scaffolding, family systems theory, fast mapping, critical periods, Susan Carney, Tabor, Patton, conceptual framework for areas on scaffolding and also case studies, dissertations, science concepts taught at home, science concepts reinforced at home, kindergarten readiness and U.S. ranking, math concepts or mathematical concepts and parent participation. To develop my conceptual framework and better understand scaffolding, I searched for scaffolding in conjunction with key words and Boolean phrases: case studies; dissertations; science concepts taught at home; science concepts reinforced at home; kindergarten readiness and U.S. ranking; math concepts or mathematical concepts and parent participation; science concepts and early childhood or toddler or preschool and parent/child in museums; parent/child interaction with related to things done with science; parent/child interaction with STEM components; what do parents know about science; how are science concepts introduced in school, or in preschool, or by parents, or by caregivers; science or math or language and early literacy. Further, in regards to conceptual framework, I searched for: scaffolding to preschool education; scaffolding EC Ed; Case studies dealing with parent/child interactions; case studies dealing with science concepts; case studies using journaling of info by parents or by individuals; case studies on interviewer on knowledge of science; and case study of audio-recording of conversations themes that were developed.

Additional searches at the Walden University Library included: *dissertations, award winning education on parent/child interaction and parent involvement in education/school*. While developing the research question, I search Google Scholar for the following: *how parents (caregivers, or teachers, or teachers of preschool children, or teachers of young children, or adults working with young children) teach science concepts; science concepts taught at home; and science concepts reinforced at home*. To focus on the social problem, I searched for the following topics: *STEM components required for jobs; science/math ability upon graduation; kindergarten readiness in area of science concepts, math concepts, and jobs requiring STEM components; and U.S. ranking with science concept knowledge*.

Walden librarians suggested also searching for the following phrases: *early childhood and parent involvement in science; kindergarten readiness; and math in preschool*. They also suggested searching EBSCO for: *STEM and jobs, and parent knowledge and science*. In addition, I followed up with a search in Thoreau for information on *Vygotsky, Flavell, and Bruner, along with cognition and scaffolding*.

After the initial URR review, the URR Committee member requested that I delve further into articles on teen mothers. Therefore, I added additional articles pertaining to, but not limited to the following: *life of a teen mother, child educational outcomes for children of teen mothers, child welfare on teen mothers and their children, future for teen mothers, interaction of teen mothers and their babies, parent scaffolding, language development for children of teen mothers, and beginning literacy and the learning of new words*.

Background

Young children are naturally curious and ready to learn. Opportunities for inquiry and exploration during the early years make it possible for young children to build a solid foundation that can support later classroom learning. Exploration and simple experiences provide opportunities to learn ways to answer questions and contribute to a sense of wonder for learning. There are a number of principles that can be implemented into daily routines to enhance a child's learning throughout the day. Teen mothers and primary caregivers can use concrete examples to develop language skills during the learning process.

Scaffolding is a process whereby adults, or more knowledgeable peers, work with children to bridge a child's existing knowledge to new knowledge in order to bring them to a higher level in their ZPD. According to Pape (2006), "through careful scaffolding [of information, children] engage in higher order thinking...pose questions, collect and interpret data, and reflect on their own thinking, thus engaging in scientific inquiry and abstract reasoning" (p. 31). Pape also discussed the fact that there is a gap in literature focused on how "[children] are encouraged to question and debate, and undertake carefully scaffolded hands-on investigation" (2008, p. 31). Scaffolding is an essential strategy for parents to use to help develop young children's knowledge and awareness of the world. The question may thus arise as what knowledge parents should help build, and how. According to Edwards (2011), there seems to be a lack of understanding in how to create environments that allow for scientific inquiry and promote higher-level questioning (O'Toole, 2008).

Recent literature has shown the need for more systematic research in the area of teen mother-child interactions which support language development (Haden, 2010). Benjamin (2010) looked at inquiry-based conversations at a children's museum. However, additional study is needed regarding elaborative conversation during parent-child interactions during the activities. Hadzigeorgiou (2001) had suggested that a better understanding of the words conveyed between the parent and child during routine play, could aid in the development of coaching scripts to aid parents who are not as equipped to teach their young children. This same format could be used by teachers in the elementary classroom or caregivers in daycare settings to teach language development to their students.

Life of a Teen Mother

In the United States, there were 750,000 teen moms between the ages of 15-19 (Bersch, 2008). The United States currently has the highest number of teen moms among the advanced industrialized nations (Bersch, 2008). Half of the girls in the foster care end up pregnant and are 2.2 times more likely to place their own child in foster care before they enter school. Teen mothers are more likely than their peers to experience poverty, physical and sexual abuse, school dropout, and placement in foster care, and are more likely to need welfare assistance (Suellentrop, 2010).

Many children born to teen parents need remedial support once they enter school which costs the taxpayers of our country a great deal. In 2010, taxpayers in Kansas paid \$101 million to cover related to teen births. Nationally, the total skyrockets to \$9.4 billion

each year. In Kansas over the last 20 years, there have been 90,341 teen births, which have cost Kansans \$2.5 billion dollars (Counting it Up, 2010).

Teen mothers may have unrealistic expectations when it comes to parenting. According to Lemonda, Shannon, and Spellmann (2002), teen mothers were not as accurate when asked to estimate activities for specific milestones regarding young children in the areas of language, play, motor, and social development. The teenage mothers underestimated all developmental abilities and suggested they would take place earlier than is developmentally appropriate for young children. The mothers were more accurate for the first year than the 2nd and 3rd years.

Not only does the teen mother have unrealistic expectations of parenting but they also have unrealistic understanding when experimenting with risky behavior. Teens who used drugs, alcohol, and cigarettes tended to experiment with sexual activity as well. Four out of ten students in high school shared that they had used marijuana and 72% used drugs and had unprotected sex (Teenpregnancy, n.d.). According to Teenpregnancy.org, one-third of the teens that used drugs and alcohol also reported that these factors influenced them to have sex.

Teenage girls may tend to have partners that are older, which presents them with a range of potential problems as they confront the demands of parenting. According to Ryan, Franzetta, Manlove, and Schelar (2008), older males may have a power edge, which causes an unequal dynamic for their female partner. Furthermore, younger girls are more likely to experience violence at a rate of four to six times greater once they become pregnant especially since many have relationships with older men. *Why It Matters*

reported that 50%-60% of teen mothers experienced physical and sexual abuse as children (Teenpregnancy.org).

The living arrangements for teen mothers do not always meet with facts the girls shared in a questionnaire given during the research conducted by Ng and Kaye (2012). The same authors reported that 88% of teen parents did not marry, while 42% of them choose to live together. By the time their child was five, 38% of those cohabitating couples were no longer living together. Sixteen percent lived with their parents. Living arrangements reviewed by race indicated that 68% of Caucasian teen moms, 56% of Hispanic teen moms, and 39% of African American teen moms lived with a partner.

Future for Teen Mothers

The future for teen mothers often includes significant additional hurdles. Some of the consequences for teen mothers include dropping out of school, becoming dependent on Medicaid and Children's Health Insurance Program (CHIP) programs, abuse, entering the foster care system, ending up in prison, and raising their child as a single parent. Thirty-eight percent of teen mothers who are in high school do not get a diploma. Furthermore, 63% are on public assistance the first year of the baby's life, and 67% are living in poverty (National Campaign, 2012). Teen mothers find it hard to balance work, childcare, and parenting, and often survival takes precedence over preparing the child. According to the National Campaign (2012), children born to teen mothers score the lowest on measures in the areas of math and reading. Similarly, Romagnoli and Wall (2012) shared that teen moms look at cognitive development play much differently than

do mothers in a middle class setting. In a home of poverty, there may be little time or energy left to read to children.

Child Educational Outcomes for Children of Teen Mothers

Impoverished teen mothers have a hard time prioritizing everything in order to make time to read to their children to help develop language skills. According to Whitson, Martinex, Ayala, and Kaufman (2011), teen mothers tend to be depressed and experience higher levels of parenting stress. With the higher levels of stress, teen mothers tend to lash out at their children physically which puts the child in a higher risk for maltreatment (Buckner, 2008; Mayers, Hager-Budny, & Palusci, 2011; Toth & Gravener, 2012, Scarborough, 2009; Whitson et al., 2011).

Scarborough (2009) stated that African American teen mothers tend to mistreat their boys more along with physical neglect, lower quality home environment, and higher incidence of special needs and out of home placements. Whitson et al. (2011) further stated that interventions could focus on supporting the teen mothers with parenting education. The support by others could also help enhance emotional well-being, enhance social support, and benefit the academic outcomes for their children.

As a single parent household, finances could be tight. Living in impoverished conditions infants tend to have fair to poor health (Kaye, 2012; Rafferty, Griffin, Lodise, 2011; Moore, Redd, Burkhauser, Mbwans, & Collins, 2009). According to Scarborough and McCrae (2009), teen mothers who are black, have fair to poor health and those living in poverty tend to be more apt to have young children with special needs, homes of less quality, physical and emotional neglect, and substantial maltreatment. One-fifth of the

boys have an individualized educational plan (IEP) and score low in language skills once they get to school (Scarborough et al., 2009). Although children with Hispanic descent tend to not have an IEP, they were investigated for physical and sexual abuse according to the same authors. Overall, infants in poverty who were later tested in school tend to have lower math and reading comprehension scores.

Mistry, Benner, Biesanz, Clark, and Howes (2010) shared that children living in poverty are exposed to higher social and family risks that affect their scores. Because of the fractured family unit, children in poverty tend to have a less secure attachment with their primary caregiver during the early years (Mistry et al., 2010). The same authors stated that the family risk affected the cognitive development and eventually the scores upon enrollment in early Head Start. The parents' lack of sensitivity and responsiveness during the mother-child interactions provided less intellectual stimulation during the formative years.

Of the children born to mothers who are teenagers, 60% will end up in foster care (Ng and Kaye, 2013). According to Dacan (n.d.), 30-60% of children in foster care suffer from chronic health conditions and/or special needs. Sadly, 48% of the girls who are in foster care have been pregnant at least once by the time they are 19 (Ng & Kaye, 2013). The authors shared that in 2011, there were 120,000 teens in foster care with 27,000 who aged out. In 2011, there were 408,000 children in foster care in the United States. If the teen mother was able to keep her child, the mother has a 30% less chance of obtaining a job. The same authors noted that the teen mother would be paid 7% less due to having the child.

Some teen mothers find themselves homeless with 25-40% of the young children under five (Perlman & Fantuzzo, 2010). During this time of housing transition, young children are not able to explore as much as those in their own home. Shelters may not be supplied with books and age-appropriate toys. With environments that lack the literacy component, homeless children struggle to develop their language and literacy skills to be successful in school (Perlman & Fantuzzo, 2010).

Whether homeless or not, teen mothers tend to be less verbal with their infants but more physical when it comes to punishment. According to Mayers, Hager-Budny, and Buckner (2008), teen mothers who received intervention in the area of responsiveness, availability, and directedness to their infant increased their interest as a mom with physical touch and emotional tone. The authors found that teen mother/child interaction could be improved. This also helped to improve the mothers' depression as well.

When teen mothers are depressed and stress is high, maltreatment of children can result. From 2003-2007, NCANDS shared that 1.2 million confirmed reports took place in 22 states, 177,568 children were under five (Troth and Gravener, 2012). When maltreatment takes place, young children develop negative attachments to their caregivers resulting in insecurity and disorganization. Intervention is needed to help this vulnerable population through university settings or community partners (Troth and Gravener, 2012).

Interventions were tried to help improve the interaction with babies. McGowan, Smith, Noria, Culpepper, Rohling, Borkowski, and Turner (2008) shared that language stimulation was taught to teen mothers who had infants aged 4-7 months. Mentor

volunteers were used to work with the mothers in a small group setting over an 8-month time period (McGowan et al., 2008). Pre/post tests indicated that improvement took place in the young child's expressive language development.

Conceptual Framework

The conceptual framework of this research is based on Vygotsky's (1986) ZPD, Bruner's (1983) ideas on scaffolding, and how these play an important part in young children's language development. The work of Dickinson and Tabors (2001) regarding beginning literacy and the learning of new words was addressed. The selected theorists provided the foundational underpinnings to present day literature.

Vygotsky

Unlike Piaget, who developed his theory around cognitive development, Vygotsky delved into children's development in the area of psychosocial constructivism. In other words, during the social interaction of learning, children put words to their experience. According to Vygotsky (1978), "The most significant moment in the course of intellectual development ...occurs when speech and practical activity... converge" (p. 24). As mentioned, children accomplish higher-level tasks by incorporating their hands, eyes, and voice in the learning process.

Children's speech also contributes to interpersonal development. Vygotsky (1978) shared that "internalization of social speech" is also helpful to the learning process. This private speech also contributes to the learning experience similar to the outwardly vocal social speech. Each experience plays an important role in psychosocial development.

Another contributing factor to children's intellectual development would be symbolic tools to aid in memory retention. Vygotsky (1978) reported that visual symbolic signs provide help in memory and attention and thus help in retention of past, present, and future events (p. 36-37). Furthermore, the development of the intentions and symbolic tools are helpful to remembering actions (Vygotsky, 1978, p. 37).

Benjamin and Wilkerson (2010) suggested that parents' detailed explanations as well as signage is another gap in literature. Through questioning strategies, parents can seek more inquiry-based learning situations with their children.

Zone of Proximal Development (ZPD). Another way for adults to enhance children's learning experience is by understanding Vygotsky's idea regarding ZPD. Vygotsky referred to the ZPD as the "area where the most fruitful learning can take place" (Maldonado, 2013, p. 1). Within this zone, children interact with adults (or more experienced peers) through verbal and visual problem solving interactions.

Bruner (1983) later coined the process of supporting children to their higher level within their ZPD as scaffolding. Vygotsky (1978) described the support provided by adults as a support system that utilizes verbal cues, hand gestures, or prompts that helps children complete tasks. This support system allows children to accomplish more than they can do without the added support.

The lower level of the ZPD is where children complete a task by themselves without any outside support. Vygotsky (1978) referred to this stage as the child's level that is already formed based on the completed cycle of development (p. 85). In other words, children do not need the assistance of an adult or more able peer to carry out

experiences. As the process becomes more difficult for children, they seek the assistance of adults or more able peers. If the task is above the child's ZPD, the assistance will not be lasting or effective.

Taylor (2013) shared a story about a 4-year-old Japanese student who helped a three-year-old student put a puzzle piece in the right spot. As the older child suggested that the younger child try to rotate the puzzle piece, the younger child discovered he could complete the puzzle. Taylor's example of the Japanese children provides an example of a more capable peer assisting through scaffolding. The older child provided just enough support, but not too much, to help the younger child accomplish the task.

As the problem solving skill becomes more difficult, the learning ability of children enters the zone where learning begins. Vygotsky proposed that the social interaction is helpful in developing the ZPD at this point of the learning process. As children watch others model the process, children can begin to imitate the process (Taylor, 2013, p. 88). It is through the social interactions that adult's bridge for children what they do not know to what they will eventually know.

During the learning process, adults use vocabulary words to explain. Christ, Wang, and Chiu (2011) stated that during book reading, adults can use new words as they read and question children to gauge understanding. Petty (2009) proposed that questions focus around categories of assessing, inquiring, and responding (AIR) to assess children's understanding. Haden (2010) further suggested that questioning strategies during book reading can help to develop science literacy. These authors have foundational concepts of Vygotsky (1978) and Bruner (1976) in their work.

During this imitation stage, children benefit from manipulating concrete objects. Vygotsky maintained that “concreteness is now seen as necessary and unavoidable” in order to develop the experiences needed to provide for abstract thinking (1978, p. 89). It is important when adults or abler peers role model for children. They employ the use of concrete objects as well as using appropriate vocabulary to describe the experience.

Through concrete experiences, children begin to internalize new information. Vygotsky (1978) argued that learning does not take place in stages but through experiences shared with others as they dialog during interactions. Children build their knowledge through shared experience and children internalize the processes.

According to Hanline, Milton, and Phelps (2010), children benefit from using concrete objects during block play. Books shared with the children help provide ideas for play. Children used the supplemental blocks and symbolic images to act out what had been read. The authors stated that block play helped children understand the symbols. According to Ee, Wong, and Aunio (2006), manipulatives enhanced the performance of young children in Singapore, Beijing, and Helsinki. The concrete materials were used in game type situations to help with the learning process.

Vygotsky suggested that learning does not take place in exact stages according to the age of children. Learning is not a set of exact steps. Furthermore, learning develops in a way that is not parallel to what needs to be learned. In other words, children’s stages of learning develop slower than the actual learning that is taking place (Vygotsky, 1978, p. 90). Vygotsky’s theory of the ZPD also incorporates play in the learning process in order to learn.

Play. Play is another important component to Vygotsky's theory of intellectual development. Whether children are at home or in a childcare setting, play is an important aspect to how children learn. Vygotsky (1978) proclaimed, "The influence of play on a child's development is enormous" (p. 96). He further shared that as children play, they begin to internalize the learning process and can repeat the learning over and over.

Not all young children internalize the same. For those children under three years of age, their internal understanding is not fully developed. After three years of age, children learn to deal with life through mental thought processes rather than just verbalizing everything aloud (Vygotsky, 1978, p. 96). Spoken or unspoken vocabulary words become an important part of the learning process for young children at this developmental level.

Learning is enhanced when vocabulary words are used by young children. When children are under three, the words are not separate from the objects. For example, when a child hears the word "clock" he or she looks around the room to the location of the clock. Vygotsky shared that when children see an object and hear the label for it, it aids in speech development (1978, p. 96).

Furthermore, as an object was described to children at a young age, the object was a specific thing in front of them that often demands action. For example, to an infant, a door in front of the child would be to open and close. The action was not separate from the word. However, the work was remembered through the concrete object. Internalization begins at the point where speech development was used (Vygotsky, 1978). In other words, young children cannot separate the two from each other. The concrete

object and the word provide a visual example that enhanced the mental process of understanding the word meaning.

Another important aspect of play would be that children see play as fun. During play, children enjoy the learning process. As they enjoy the process, they want to play more. During the toddler and preschool years, children learn that playing also has rules that can be attached to games. Vygotsky discussed that with dramatic play, for example, implicit and explicit rules are determined to which all the players must comply. If a child is a cat during the playtime, the child must remain and act like a cat. In order to enjoy the reward of play, they learn to submit to the rules needed in order to be part of the play (Vygotsky, 1978, p. 99). This process of rules becomes an important aspect learned during the symbolic play that can help prepare them for the school environment.

Play was essential to the development of learning. Vygotsky's ZPD was enhanced through play. He shared that children advance through the learning process as a result of the play process (Vygotsky, 1978, p. 103). He further shared that children tend to play at levels above their current learning as they experiment and role-play. Therefore, he viewed play as a leading development whereas Piaget thought that development led play.

During the play experience, children developed their interactive speech. Vygotsky posited that there are two types of speech: social speech/interactive speech and private speech. Social speech took place when children talked with adults and other children. Private speech took place when children talked to themselves as they problem solved a situation (Maldonado, 2013, p. 2). Although private speech took place aloud for young

children, this same thought process eventually was internalized. Both forms of speech were important for the development of the learning process.

Table 1

Does “ZPD Enhancements” work?

Play	Children developed through the learning process as a result of the play experienced.
Social Speech	Took place when children talked with adults and other children
Private Speech	Took place when children talked to themselves to problem solve

To clarify, Table 1 illustrates Vygotsky’s theory regarding the theory of cognitive development. Play functions as an important element of the learning process. Learning and development are not parallel but develop at different speeds. Social settings allow children to enhance verbal skills by learning vocabulary words. By conversing back and forth with an adult, adults bridge old information to new information.

During this process, adults and children talk through the use of social speech. As young children talk to themselves through thought processes, private speech takes place aloud. As the cognitive skills advance, children begin to think internally in order to problem solve. Through play and speech, Vygotsky suggested that learning takes place.

Scaffolding plays role in learning. Learning new information through the use of scaffolding takes on several strategies. Morrissey’s (2011) quantitative study defined *scaffolding* as “a term used to describe the range of responsive tutoring strategies—such as modeling, simplifying, maintaining interest and motivation, and marking features and discrepancies” (p. 352). Similarly, according to Lipscomb (2004), “scaffolding is actually

a bridge used to build upon what students already know to arrive at something they do not know, [and that] if scaffolding is properly administered, it acts as an enabler, not as a disabler” (p. 3). In other words, the adult and child head toward specific goals and communicate through problem solving questions.

As children began to understand more regarding new information, adults faded their support, so children took charge of their learning process. Furthermore, Neumann (2009) described scaffolding by saying bridges provided by others allowed children to achieve goals that would otherwise be beyond their reach (p. 313).

The same author further shared that scaffolding consists of modeling for students what needs to be done through providing verbal explanation, providing stimulating questions, and engaging in activities (Neumann, 2009). Morrissey (2011) also discussed uses of analogies. Analogies, shared by mothers, provide bridges for their young children. In other words, the bridge extends from something children know to new information provided by someone more able, thus building connections for understanding.

Others can provide scaffolding of information at either high or low levels of understanding in regards to the level of verbal support as the child transitions from dependence to independence (Justice, Sofka, & McGinty, 2007). The same authors shared regarding the importance of starting with large amounts of support, then moving towards a continuum of lower levels of support as children begin to master content. Other examples of support can be found as parents read storybooks and provide metaphors, and context along with real life experiences.

Brown and Remine (2004), in their quantitative research, shared that mother's involvement during pretend play had a positive effect to her young child's learning. Wang addressed facts regarding hand gestures and benefits provided through scaffolded learning. Brown referred to examples of mother's running dialog during pretend playtime that supported her blind child. As long as mothers participated during children's playtime, daughters stayed engaged with the activity. Both examples were ways that parents provided specific scaffolding to meet needs of particular children.

Informal scaffolding can be used during teachable moments, as parents question their children in order to find out what they know. Petty (2009) encouraged parents to develop memory abilities with their children by asking them questions, in order to help developmental tools to solve problems. The same author noted the importance of Vygotsky's ZPD theory. In the article, authors noted importance regarding participation directed by adults that provides assistance to aid children in learning social skills.

Petty (2009) had parents assess where children began with their understanding of a particular concept by asking questions. Through open-ended questions, parents built new knowledge by scaffolding with their young children. According to the same authors, adults could remember the acronyms A-I-R to indicate what could be expressed, and suggested questions as noted in Table 2.

Table 2

(AIR) Questions for Discussion

(AIR)	Questions to guide discussion:
Assess where the child is at:	“It appears that...?” “Why do you think...?”
Inquiry questions:	“What would happen if...?” “Why do you think...?”
Respond questions:	“So we agree that...” “What is the plan for the next time?” “When you feel ____, then try to ____, instead of ____.”

Teachers in classrooms use scaffolding to help build children’s knowledge, especially in areas of science concepts. Kerr, Beggs, and Murphy (2006) discussed the importance of categorization when explaining concepts to students. Mothers can also follow this example of explaining concepts to children in categories, as referred to by Kerr et al. (2006). This same article built on Bruner’s (1956) theory regarding how knowledge construction took place through categories by learners. After teachers had assessed where children were academically, teachers helped guide children so they could build their knowledge from that point.

According to Hammond, Muller, Carpendale, Bibok, and Finestone (2011), parents helped with scaffolding for children in the area of problem solving and the

development of executive function or higher mental processes. The authors further stated that play was a very important part of the development of executive function.

McMahon (2013) shared an example of how parents were able to scaffold information for their young children. If a child was born premature, developmental delays can take place. McMahon (2013) developed a series of parent training materials to help parents address abnormal tone, generalized weakness and other types of developmental delays. Through this parent training series, parents were empowered to care for their very young children so that the child could achieve their best outcomes. The Kaiser Permanente health care system had made parent training information accessible online (McMahon, 2013).

In summary, as adults recognized children's knowledge regarding particular concepts, adults could offer explanations regarding why, how, or when. Constructivists, Bruner (1983) and Flavell (1979), asserted the importance regarding teachers/parents understanding of where children were in terms of their understanding, in order to scaffold or build new knowledge from that point (Kerr, Beggs, & Murphy, 2006). As children were invited to participate in the learning process, adults began learning what stage children were at so as to build the confidence of learners. Scaffolding illustrated, in a natural way, the teaching process. Mothers scaffolded information all the time when they teach young children about the world around them.

Beginning Literacy and Learning New Words

Young children learn to produce new words rapidly around the first year of life starting at around 10 months and going up to 14 months of age. By the time children are two years old, they will have learned to say about 300 words. By the time they are five years old, children's vocabulary will have expanded to about 60,000 words (Horst, 2010, p. 339). Learning new words takes place throughout the day but comprehension of those words takes a little longer. According to Dickinson and Tabors (2001), language development was reinforced during toy playing, book reading, and eating time. Children began to develop their vocabulary from birth, and possibly, foundations for reading comprehension had already begun as well.

Literacy development begins in the home. According to Dickinson (2001), research had shown that conversations between mothers and children benefited when mothers took time to listen and respond back according to the needs and interests of their children (p. 259). According to Henderson, Weighall, and Gaskell (2013), young children learn words and their meanings that allow them to begin to develop a mental lexicon. The authors suggested that children needed repeated exposure to populate the sparse encoding that begins, as words are learned (Henderson et al., 2013). In day-to-day routines of life, mothers can provide consistency in conversations and thus provide literacy support on an ongoing basis (Dickinson, 2001).

Bruner (1983) stated that language takes two to develop through interaction. Through play, for example, children began to produce language as they engaged in conversations and games. Through eye-to-eye contact, mothers began a joint process of

introducing young children to items in their environment through routine interactions (Bruner, 1983, p. 70).

Parents should converse on a daily basis before the age of two, as children are learning language far before they produce language. Therefore, before the age of two, parents begin to model for children lexical content and phrases to substitute for gestures or sounds (Bruner, 1983, p. 41). Furthermore, pretend play helps children to experience in a repeated fashion words used in context. As words replace gestures, children are able to use them more specifically for requesting items.

Children in poverty may not have a language rich environment. Other studies show that children in poverty have as rich a language model until the age of 12 months. According to Oxford and Spieker (2006), there are predictors of preschool language development. The authors shared that in homes where there are teen mothers, they are not known for talking very much to their young child. Furthermore, many teen moms have low verbal skills themselves. Couple low verbal ability along with several other risk factors, and the home experience provides for a poor language learning setting.

Sylvestre and Merette (2008) shared that social influences help to develop language skills. In a study done with severely neglected children, language development was examined. When dealing with neglectful teen mothers in this study, intervention steps were targeted to increase language development for their children. Mothers were encouraged to be more sensitive towards their children along with being more available. Sylvestre et al. (2008) suggested that governmental policies be created to provide a

network where all are working in the same direction to improve the neglectful situations surrounding language development for impoverished children.

Keown, Woodward, and Field (2001) examined language development for children of teen mothers and compared them with mothers who were older. Children of teen mothers scored much lower on language comprehension and verbal language than did children of older mothers. Keown et al. (2001) shared that when mothers' verbal stimulation was low and their intrusiveness into the lives of the child was high, such as with children from poverty, poorer language skills resulted. Keown et al. (2001) shared in their findings that the mother child interaction time was very important for the language development of the child.

Book reading. Conversations are not the only way that mothers can add to the literacy development of their young children. Book reading provides new vocabulary words for mother and child conversations. According to Porche (in Dickinson and Tabor, 2001), children tested higher in kindergarten with better receptive vocabulary scores when mothers reported higher involvement in reading at home. The author also noted that family income positively affected children being read to, for example, the higher the income, the higher the children's scores in receptive vocabulary (p. 309).

Garlinghouse (n.d.) shared the importance of young moms having access to resources to enhance the learning of their young children. Three practices that Garlinghouse suggested for teen mothers to implement were: establish a regular bedtime, refrain from spanking, and read to your child. As reading takes place, talk together about what is happening in the story. Through talking together, children are able to enhance

their language development. The interaction enhances the whole child: physically, mentally, and emotionally.

According to Gonzalez, Pollard-Durodola, Simmons, Taylor, Davis, Fogarty, and Simmons (2013) the interaction time between adults and children helped vocabulary development. This interaction time provided opportunities for children to engage in conversations where they utilized new words in conversations. Their observational study looked at before, during, and after book reading with 100 children. Gonzalez et al. (2013) found that engaging children in meaningful conversation around book reading provided growth in literacy.

Although reading supports vocabulary development, there are ways that are more effective than others when it comes to book reading strategies. According to Tabors, Snow, and Dickinson (2001), parents can be taught to read more efficiently in order to gain the most benefit to receptive vocabulary development in young children (Dickinson & Tabors, 2001, p. 329). In other words, there is more to book reading than just reading the words on a page.

The key to book reading time is the communication that takes place between the mother and child. This communication time provides development of the dialog process expressed through new words. Expressive vocabulary can be developed during this time. According to Tabors, Roach, and Snow, the Home-School Study exemplified that children who came to kindergarten with higher-levels of literacy had been exposed to more interactions with adults. The children experienced more expressive opportunities while engaged in book reading with the adults (Dickinson and Tabors, 2001, p. 136).

When children are exposed to new words during book reading, it is reasonable to assume that they might not comprehend the meaning of the word at first. Tabor, Beals, and Weizman referred to these new words as *rare words* because the words have not been exposed to the child before, so they are considered rare (2001, p. 95). By using the (new) *rare word* in book reading, dinner conversation, or through toy playing, children become more familiar with examples of how the word is used in real life experiences.

Some researchers looked more specifically at how the books were read. According to Reese, Leyva, Sparks, and Grolnick (2010), low-income parents used elaborative reminiscing and dialogic reading in their quantitative study. Results noted that children's oral language was enhanced most using the elaborative reminiscing form of reading.

Furthermore, Silinskas, Lerkkanen, Tolvanen, Niemi, Poikkeus, and Nurmi (2012) researched parent storybook reading and its focus on informal and formal aspects to how books were read. As a result of the study, the authors measured children's word reading skills and fluency. The authors found that parents scored higher when they spent more time reading during the preschool years before school started. Parents who had children that scored lower in kindergarten spent more time reading to their child in first grade. In other words, parent's involvement in book reading switched.

Lonigan, Escamilla, and Strickland (n.d.) reviewed the Developing Early Literacy: Report of the National Early Literacy Panel (NELP) where studies were analyzed regarding parent supports that improve preliteracy development in young children. They found within this report that book reading with elaborated conversations

helps to equip young children better with language and literacy skills. Programs such as *Reading Is Fundamental* and *Reach Out and Read* have encouraged parent-child book reading.

Book reading can provide intervention strategies that enhance young children's literacy development. Through conversations during book reading, children are able to gain strength in both receptive and expressive language. Book reading is not the only intervention strategy that mothers can incorporate. During routine activities such as toy playing or mealtime conversation, activities provide opportunities for conversation to take place between mother and child and vocabulary development increases.

Toy playing. During *toy playing*, children can enhance their vocabulary while playing in a natural environment. During free play, children are able to ask questions, explore, and problem solve to find answers. Dialog between mother and child can allow for open-ended questions, and child-directed learning. Linder, Powers, and Stegelin (2011) followed a Reggio Emilia Approach to inspire the teaching of number concepts to young children. In this same article, Katz suggested using large projects that immerse children for weeks in many aspects of learning around the same theme (Linder et al., 2011). During playtime, children actively discovered with hands-on activities as they learned number words.

Classroom settings are not the only places children can learn new words in the area of mathematics. Park, Chae, and Boyd (2008) suggested that caregivers reinforce through reviewing various mathematical knowledge during playtime. Through the use of

wooden blocks, adults can use playtime to enhance math concepts. This could be done equally with other content areas such as science.

Researchers from Singapore, Beijing, and Helsinki desired to find out if there were gender differences as young children learned early math concepts. Ee, Wong, and Aunio (2006) used hands-on learning with manipulatives to focus on early numeric literacy. Fun games utilized concrete materials to exemplify early math concepts for young children.

In conclusion, routine times of the day can be used to learn new vocabulary words. Through toy playing, mothers can use gestures, role modeling, and questioning to enhance the interaction time with children. Mothers embedded the *rare words* during the play experience (Tabor et. al, 2001, p. 97). As children grapple with experiences during play, they are better equipped to gain understanding of rare words.

Family mealtime. During *family meals*, parents reinforced understanding of *rare words*, so children become more familiar with words associated with new experiences. As families sit together around the table, families may review what they did that day and associate objects with the new words (Tabor et al., 2001, p. 103).

Mealtimes can make a difference in supporting literacy development in young children. Snow and Beals (2006) provided data from 160 meal conversations with families from various ethnic backgrounds to assess if conversation enhance children's vocabulary. Research found that rare words could be used in context through informal conversations. The authors further stated: "mealtimes can be a powerful site for children's language development" (Snow et al., 2006, p. 64). In other words, teen

mothers can utilize the informal setting of mealtime to enhance their children's vocabulary.

During mealtime, modifiers can reinforce unfamiliar words children are exposed to by one of four categories: physical context, prior knowledge, social context, or semantic support. Physical context would be the use of a tangible object to illustrate an idea. Mother's reminder of previous experiences access prior knowledge that might help children to understand current experiences better. Social context may dictate cultural norms by which a family abides by in order to explain the basic origin or meaning of words. Semantic support provides verbal clues of what particular words mean. More difficult or rare words can be enhanced for young children during mealtime (Tabor et al., 2001, p. 103).

Tabor, Beals, and Weizman (2001) shared that there are other strategies parents can utilize, such as when taking their children to new environments. In other words, parents can make every effort to demonstrate, at the very least, all of the concrete items around them. If at a music store, it could be as simple as allowing children to try a few strings or tap a few drums to understand objects in their environment. If the family takes a trip to the beach, the mother could model words that are unique to that environment such as sand, water, and seagulls (Tabor et al., 2001, p. 109). Similarly, if the teen mother and her child are waiting in the lobby for services, they can engage in conversation while they sit.

Vygotsky influenced Reggio Emilia preschools in Italy through this same thought. Vygotsky illustrated the importance of discussion time during small group interactions

(Cadwell, 1997, p. 62). This discussion time was a central part of their cultural heritage. Children's involvement during the communication process helps to develop their thought process. The Reggio Emilia preschools have conversation as one of their main events when learning takes place.

Furthermore, small group discussion time allows adults and children time to examine issues more closely through discussion. Conversations then provide an opportunity for interaction and cooperation during the learning process. Children are naturally curious so the talking that takes place at various centers can provide a rich environment for higher level thinking skills and practice of problem solving skills (Cadwell, 1997, p. 62).

To maximize conversations, adults can prepare questions to ask in order to enhance the learning process. As one sets up a center in a classroom, questions can be thought through to share with children to stimulate conversation. Cadwell (1997) provided some suggested tips for conversations with young children. Table 3 includes some examples.

Table 3

Conversation Tips for Discussions

1. Prepare a list of questions ahead of time that would stimulate curiosity.
2. Create centers that are in quiet places to lessen distractions.
3. Arrange groups in such a way to encourage group participation that builds on verbal skills of classmates.
4. Prepare ways to document conversations.
5. Use your voice inflection to create an anticipation of wonder.
6. Flex with open-ended questions and flow with the conversation.
7. Review for children what has been shared so far.
8. As conversation increases, fade back and allow children to lead the conversation.
9. Laugh together and enjoy the conversation along with them.
10. Ask children to develop their ideas more that were discussed in previous days.

Vygotsky's theory further impacts early childhood classroom organization.

Vygotsky argued that play is a very important part of development. Around the age of three, imagination begins to take root in the minds of young children (Vygotsky, 1978, p. 129). Through play, children are able to advance their development. The author further stated that during social interaction, children develop skills, attitudes, and motivation aided by their teachers. Vygotsky held to the notion that play leads children's development.

The classroom provides opportunities where instruction can be shared to scaffold the children's ZPD. Through playtime, children build bridges from what is known to what is not known based on their learning experiences and guidance from peers and teachers (Vygotsky, 1978, p. 130).

In summary, *rare words* with which children are not familiar, can be reinforced during three main periods of time; playtime, mealtime, and book reading time. Caregivers can use various strategies in each of these times in order to provide concrete experiences where children gain a better understanding of what *rare words* mean.

Contrasted Theories on Vocabulary Development

With every theory, there are contrasting theories to consider. In regards to vocabulary development in young children, other theories considered could be fast mapping, and critical periods. That is the next area of focus for this literature review.

Fast mapping. Carey (2009), Dickinson (2001), and other authors described the process children go through learning new words with the utilization of fast mapping. *Fast mapping* is the beginning hypothesis of what a word might mean, not a full lexical representation (Horst et al., 2006; Carey, 2010). Not only are children learning new words, they are also learning the use of grammar, phonetics, and semantics. As a result, children's natural curiosity of their environment provides new information to learn.

Repeated words are key to learning. Through repetition, children are able to fill in the missing context to form a better understanding of new words. In other words, *fast mapping* provides a quick thought process of what words mean, based on children's beginning understanding. According to Horst (2013), children learn in a week's time

approximately three to four words as a result of having books read to them. Vouloumanos and Werker (2009) shared that young children can perform fast mapping for multiple things at the same time. In other words, through experiences or book reading, children fast map new words on a weekly basis.

Very young children develop their memory system through the labeling of objects. According to Wojcik (2013), children under 2 years of age encode labels to objects that are presented to them. Researchers used eye-tracking technology in order to note the specific object children focused on. From there, labels are introduced to help form lexicons in young children's memory. Accorded to Wojcik (2013), children map label, then they encode, consolidate, and retain the information in their memory.

By the age of six years old, children learned words at a rapid pace. Carey (1978) stated that children learn nine new words per day or approximately one new word per waking hour (p. 264). Carey (1978) described learning a new word in the following steps:

- Mapping new word in lexical domain—takes place fast or slow
- Missing features are added
- Haphazard examples are tried to see if they work

Other authors reported that fast mapping and word learning are separate. According to Horst, McMurray, and Samuelson (2010), children learn new words and fast map the understanding at two different times. Former researchers noted that new words and fast mapping take place at the same time (Carey, 1978; Swingley, 2010; Mather & Plunkett, 2009; Worjcik, 2013). According to Horst et al., (2010) word

learning is a slow incremental process. The results concluded that word learning and fast mapping are separate but related to developing vocabulary knowledge.

Typically developing children, as well as children identified with autism spectrum disorder (ASD), perform fast mapping during parent-child interactions. Walton and Ingersoll (2013) studied 29 children with or without ASD to find out their expressive and receptive fast-mapping skills. The same authors concluded that by 15-30 months, children were able to conduct receptive mapping but not expressive mapping. Expressive mapping took longer to develop. Children with ASD had a harder time fixating on the object that was being labeled due to their condition. Parents were encouraged to use simple verbal orienting cues to help their children with ASD gain attention and develop fast mapping skills (Walton et al., 2013).

Zone of proximal development. Vygotsky's ZPD provided foundational support from the current peer-reviewed journals cited. According to Neumann and Neumann (2009), parents' communication with their young children provided opportunities to develop emergent literacy skills. Parents documented what children learned and incorporated the use of writing skills during the process. Writing provided a multisensory approach to the learning process that allowed children to document what they were learning in their own words or through pictures. More evidence is needed to look at the interactions that take place between mothers and children as they scaffold early literacy skills for young children in the home and was the focus of my research.

Similarly, research involving interaction time in the preschool classroom could also address the benefits of Vygotsky's (1978) ZPD. According to Christ, Wang, and

Chiu (2011), teachers and children conversed after storybook reading as the teachers' role modeled dictation to support vocabulary development. Furthermore, through using repetition and questioning strategies, teachers engaged young learners after storybook reading as the students dictated to the teacher what they learned. The conversations allowed young children to work with rare words and to work with adults to gain a working knowledge of the new vocabulary.

Supportive Networks around Teen Mothers

Child welfare provides a safety net to support teen mothers and their children but it does not last forever. Although it provides a temporary support, there are other ways that can enhance the lives of teen mothers by fostering a supportive social network around them. According to Sodi (2012), teen mothers experience a negative impact to their social relationships and emotional life when they adjust to pregnancy and birth. Typically, their lifestyle changes with school and work as well. As a result, there needs to be various networks created to support teen mothers. This section addresses various programs available across the world as documented in peer-reviewed literature.

The reason we need to address this problem in the United States is because the US has the highest percentage of teen pregnancies and births in the industrialized nations. It is essential that strategies be identified that can be used by teen mothers. Teen mothers face the highest level of stresses along with many risk factors that negatively influence the child they are raising. Long (2009) further stated that due to the teen mothers' lack of parenting preparation, they attend to their children's needs not as consistently as an older

mother might. Furthermore, the teen mother tends to have with her child a disorganized attachment relationship, which has a negative correlation.

Chablani and Spinney (2011) shared that high-risk teen mothers need programs that are effective. The authors found that teens need programs that emphasize relationships and relentlessness like what a mentor could provide. Due to the fact that teen mothers may have been dealing with long-term unemployment, poverty, and government agencies are involved in their lives, all may lead to negative consequences for their children. A strong relationship with someone like a mentor could provide the positive much-needed support for a stable environment.

Some examples of support groups available across the world are shared in this section. The Young Mothers Support Group program is a place that teens can connect socially with other teen moms. With adults and other peers in the group, teen mothers interact through healthy relationships, as they are involved in the development and leading of the program. Although other adults and peers are in the group, the young teen mothers are the driving force behind the program.

Another mentoring network of support is called the Natural Mentoring Group. The goal of this group is to help build resilience in the teen moms as they support one another. Hurd and Zimmerman (2010) found that 93 teen moms provided a natural mentoring relationship with one another, which ended up providing less depressive symptoms and less anxiety for the teens. The authors further shared that there were long-term effects regarding the teen mothers' mental outcomes. Meeting with a mentor provided a healthy support system around the teen mother.

Bogat, Liang, and Dahn (2008) analyzed the three states of mentoring. As relationships begin to develop, there is a natural getting acquainted process that takes place. Mentees who come from impoverished circumstances may have a difficult time trusting their new mentor and as a result may tend to test them to find where they stand. During the next stage, the teen mother is overwhelmed after she gives birth. As a result, the teen mother may exert many demands on the mentor, which causes her to be overwhelmed. If disagreements are not discussed, then the relationship hits a cooling off period where they do not engage as frequently.

Although mentoring relationships can have difficulties, they can also provide what is needed for teen moms to survive. According to Swedish, Rothenberg, Fuchs, Rosenberg (2010), the Mothers of Mount Sinai (MOMS) program is a group where teen moms can learn parenting skills, job related skills, reproductive health information, and hear options for continuing education. One mother shared that “The confidence it gave me helped me to be a better parent and a better person and made me stronger” (Swedish et al., 2010). Another mother shared “I learned that life doesn’t end with one bad decision, the program kept me focused on my education and pushed me to do more” (Swedish et al., 2010).

Another component that could be added to a mentoring program for teen mothers could be one that has a religious and spiritual dimension to it. Bert (2010) focused on the influence of religiosity and spirituality and its effect on teen mothers and their children. The author provided positive results regarding those families that were involved in practicing their spiritual beliefs. With the mother’s involvement in religion, it not only

affected her in the area of social-emotional adjustment but also was instrumental on the teenaged children. The author further stated that the belief in a higher power provided a way for teen mothers to reduce stress and allowed them to achieve to their highest potential through college and security through financial means.

In conclusion, mentors can be very influential in the life of a teen mother. Teen mothers can also be a tremendous influence on the life of their young child. Currently more research is needed that looks at ways caregivers develop the environment at home for their child (Whitmarsh, 2011). Mothers can have a great impact on developing the speech, language, and communication (SLC) development. During the formative years, this interaction between mother and child enhances the cognitive skills and later educational success.

Furthermore, policy makers can make a positive difference by considering ways they can improve the success of teen mothers and their children. According to the National Campaign report (2014), policy makers can emphasize the importance regarding parents' interaction time during play with their child. Various community partners (such as employers, faith-based organizations, and community groups) can be encouraged to share information with teen moms on relationships, sex, and love (National Campaign, 2014). Community leaders can tackle some of the tough issues that impact their community such as poor health outcomes, increase attainment of school and college, lower involvement in welfare and foster care system, and provide skills for a competitive workforce.

Once mothers have an idea regarding what activity they would like to do, there are several ways they can support children's language learning during routine communication times. As parents converse with their children, they promote development of words around that particular concept. Mothers can provide book reading in numerous places around the house, in a comfortable rocker, or during routine times before bed (Lawson, 2012). As young children begin to develop interests in things, mothers can find ways to label items in their environment as well as describe the items in more depth and model how they work.

During interaction time, mothers can imitate back children's vocalizations or words used as they move the object. By restating the word, mothers can continue to expand with new words to describe objects in a more complex way. Through the dialog, mothers can ask questions like: who, what, when, where, why instead of just yes and no type answers. If mothers ask questions and no response is given, mothers can fill in the answer themselves thus modeling for the child what they were looking for.

Another important aspect would be to add words of encouragement into the mother/child conversation. According to Lawson (2012), mothers can use positive words to enhance conversations. As mothers play alongside their children, positive attention is provided and vocabulary skills are reinforced. Books and playtime provide mothers and young children time to reinforce new words through repeated dialog regarding the same objects.

Mothers can allow time to answer questions during everyday conversations. As mothers engage young children, mothers need to remember to allow time for children to

think of answers and respond. As mothers are imitating and expanding what children are saying, mothers also need to remember to ask the open-ended questions so as to keep allowing children to develop in their thought process and develop problem-solving skills. Mothers need to allow time for children to respond to higher level questioning strategies. According to Lawson (2010), children need to be given at least five seconds to respond to a question the mother presents. As children reflect on what the mother is asking, it takes time for children to formulate their thoughts into words.

Summary

This study provided a greater understanding of the words mothers use when introducing young children to new concepts through play. According to Edwards (2011), parents can provide support to children's learning of certain concepts. Haden (2010) shared that there needs to be more research done regarding how parents can support early inquiry during times of interaction. Benjamin (2010) referred to the need for more research focusing on the elaborative conversation during activities. Currently, there was little information found addressing teen mothers and how they talked with their child to promote language development. This gap was what I addressed as I focused on discovering words and strategies teen mothers used when conversing with their young children during play time so mothers could realize they can make a difference in the lives of their young children. The foundation for this research is laid by first examining the principles of scaffolding, zone of proximal develop, and introduction of rare words in context. During routine times of the day, children can learn new words and reinforce those being learned through storybook reading, mealtime, and playtime. The literature

review revealed the fact that teen mothers can make a difference and that they can include new words during routine times of the day. As children enjoy hands-on experiences during the learning process, strategies can be identified to help teen mothers build a stronger foundation with their children for concepts that schools can build on in the future. Teen mothers have an abundance of challenges, which can put their children at risk for falling behind their peers. This research focused on identifying effective scaffolding strategies, which can easily be adapted by teen mothers when interacting with their child. Teen mothers can have a unique opportunity to introduce their children to terms, concepts, skills, and dispositions through shared experiences when introduced and having experiences with such strategies. Chapter three provides information about the methodology used in this study. This builds on the information gathered in this literature review as an appropriate approach to this research.

Chapter 3: Research Method

The purpose of this case study was to understand mothers' perceptions of how they influenced their children's language development during informal ways (during play, routines, and other interactions). In this research, I was not interested in looking at a whole culture. Rather I sought to examine a few examples of a particular phenomenon in depth, and therefore decided to use a case study design.

While designing the study, I considered using a phenomenological approach where the focus would on understand the experiences of teen mothers. The teen mother/child experience is a lived phenomenon, and my research included several interviews, journals, and narrative reflections. When selecting the research design, I took into account that a case study explores in depth an activity (such as those pertaining to language development) which are bounded by time (over 5 days). A phenomenological research identifies the essence of the human experience as described by the participant and would not fully answer my research question (Creswell, 2009). Instead, I used a case study design to observe six mother-child. I included narrative notation and description of what was taking place between the teen mother and child and focused specifically on the words that the mother spoke. After observing and recording interactions and conversations between mother and child and transcribing the information, I created themes. The themes helped me understand the interactions that took place while also helping me identify new vocabulary words that were used and reinforced. Small, purposeful samplings helped me illustrate the conversations that took place between mother and child and provide more rich, detailed data.

According to Patton (2002), case studies provide an opportunity to go into the situation or experience in-depth in order to gather details. Patton identifies three key steps to the case study process. First, the researcher gathers raw data about the person or environment based on interviews or observations. This was done with each of the mothers during the initial interview. Second, the data are organized into manageable files through the use of cross-validation of the findings through multiple means. Cross-validating is done through inductive analysis of the themes and categories. Last, the case study becomes a readable picture of a unique situation that is presented in themes. A case study approach was most effective for obtaining the rich and thick data I was seeking. By looking closely at the words used by mothers, I hoped to provide an in-depth understanding of how the six participants interacted with their young children and extended the verbal dialog in the conversation.

Young children in this age group are learning language and beginning to produce new words. This was the reason I chose the age group of children five years old and under. Their ability to produce vocabulary is a different skill than hearing and understanding vocabulary, and the introduction of new vocabulary is always important with young children. Mothers of young children can help provide and develop foundational vocabulary knowledge while the young children are in their care. Mothers can also ask more in depth questions to extend the learning process.

The theoretical framework that guided this study was based on the ideas of Flavell, Vygotsky, and Bruner. Each theorist has a specific focus: Flavell focused on cognition; Vygotsky theorized the zone of proximal development; and theorized

scaffolding play. These ideas are all key elements when considering how language is developed.

In summary, case study methodology is most closely aligned with what I wanted to accomplish with my research. I interviewed the six participants and asked them to complete journals reflecting on their influence on their child during play. I developed themes and categories based on the gathered data.

Role of the Researcher

My role in this research was to interview participants who were in the age of majority, but who had their first child when they were minors. I asked each participant to follow up the interviews over the subsequent five days by filling out a journal that detailed what she felt she had taught her child. In these journals, the participants kept accounts of play experiences in their home environment. I have no relationship with any of the participants. For their participation, I gave each participant a gift card and a series of activity books which I wrote called *Tools for motherhood: Activities for ages 0-5* (2008).

Play offers a time for children to gain knowledge and understanding about the elements they are working with. Play is a rich time for young children to engage and follow their curiosity. Teen mothers can build on the child's experience by engaging in questions, labeling the items they are playing with, and scaffolding learning for their young child.

Methodology

In this qualitative case study, I used face-to-face semistructured interviews, journals, and follow up questions with participants to find out their perceptions regarding their influence on their young child's language development. That is, I sought to understand what their initial perceptions were regarding their influence. I also sought to understand any transformations that may have taken place in participants' perceptions as their children grew.

My ultimate goal for the study was to find strategies that teen mothers used to extend their child's playtime conversation. Mother's noted these strategies in the journal descriptions as they reflected on the interactions they had had with their child during play. I used data analysis to identify the teen mothers' strategies to extend or reinforce the child's language development. After audiotaping the interviews, I transcribed each interaction. I also maintained written documentation about other relevant facts regarding the interview.

I provided follow-up questions to each of the six participants to gather their views about the interview experience. I used several sources of data (the audio tape analysis, interviews, an analysis of journals and the narrative reflections) for triangulation to insure an in-depth analysis that revealed ways that teen mothers support the language development of their young children. In addition to analyzing written descriptions and counting word frequencies, I also generated a summary of words used by the participants. The final results reflected the words participants remembered using in conversation while they described their playtime with their young child.

Participant Selection Logic

To recruit participants, I created flyers and placed them in various locations that young mothers frequent. In the flyers I explained that I was a college student who wanted to work with mothers who were 18 years of age or older, and who had had a young child that was 5 years of age or under. I further explained that I would like to interview the participant, have them fill out a journal, and finish with a final set of questions.

The criteria for participation were that the participants must have given birth when they were minors but were now in the age of majority, and now had a child 5 years of age or under. There were no criteria for relationship status, and the participants could be either single or married.

To reach data saturation, I determined that the goal sample size was six mother/child dyads from a medium-sized, Midwestern city. In qualitative research, saturation is the point at which additional participants do not provide any new information. Thus, when information garnered from participants is beginning to become redundant, that is usually an indication of saturation. Mason (2010) stated that using in-depth interviews requires fewer participants. In my interviews of six participants, redundancies took place indicating that saturation was reached. Therefore, I did not need to seek additional participants through the same recruitment procedure highlighted above.

Data Collection Procedures and Instrumentation

Once I heard back from mothers who were interested in participating, we found a time and day that worked to schedule the interview. The data collection procedure began

with a semistructured interview. I used the same questions for each of the semistructured interviews. After finishing the interview, I explained how to fill out the journals and the concluding reflections.

When beginning the interviews, I explained confidentiality practices and offered a brief description of the study. I also provided my phone number and email address to the participants if they had any further questions. When they left the interview, I gave them a book of activities they could use with their young child. After they filled out the journals and the reflection questions, they mailed everything back to me in a stamped, self-addressed manila envelope. The follow-up questions focused on when and if the mother realized when she was a minor that she could influence her young child's language development.

Creswell (2007) stated that the observer during the interview process is to "funnel the observations from the broad picture to a narrower one in time" (p. 139). In other words, there is a large assortment of things that can take place in the interview process, but it is the job of the observer to focus specifically on what is taking place as participants answer the questions. In the interviews for my study, I gave special attention to those things that the audiotape recorder was not able to collect.

After the interview, I provided a journal for the mother to use for the following five days. I explained how I would like for her to record conversations that she could recall which she had with her child where she felt she had taught them something.

After 5 days, I contacted the mothers through text messaging to see how they were doing. I reminded them to slip the journal into the manila envelope provided and

place it in the mail. Everything was placed in a manila envelope with the mother's confidential code number on the cover. The exit interview questions were attached to the end of the journal and sent back with the journals. Each mother shared her assessment of her participation with the study along with any comments she wanted to add.

Information gathered for this research was stored on my password protected computer. The audio-recordings from the interview took place on a high-quality audio recorder. All participants were coded so that names were not associated with the content. In conclusion, a matrix was constructed using a spreadsheet that recorded the collected data.

Discrepant Data

Attempts to find explanations that do not fit existing interpretations were undertaken to determine whether or not other evidence was flawed. Identification of discrepant data were important to identify as a part of the validity testing of the research findings and conflicting articles were shared where the conflicting data were noted.

Data Analysis Plan

After gathering sampling information from the six participants, the data analysis began. I looked at interview answers, narrative journal entries, and reflections. From there I began to develop a strategy to categorize the data with appropriate coding information. On separate sheets of paper, I began writing similar words on the same page, systematically going through each of the documents. From there, I looked for pages that had more written notations on them. Word analysis took place when the most common words used by parents were recognized through the development of categories based on

certain themes. The listing of categories and themes was done by hand. After the data had been collected, I used word text mapping so that I could see which words had a higher frequency of use. My goal was to connect the data to the applicable research question(s). I reviewed again the parent's self-documented journals to note what was shared. I had participants review my conclusions and give me their opinion regarding what I concluded. This also contributed to the level of quality of the study.

During the interview process, if by chance the mother became stressed in any way, I offered the name of a counselor, who was willing to help them cope with their distress. I would also contact my chair for further guidance on this if necessary. I was not anticipating any trauma taking place, but I wanted to cover all the bases

Issues of Trustworthiness

Trustworthiness of a research project is very important as one extends evidence of quality to the findings. According to Lincoln and Guba (1985), there needs to be a parallel of reliability, validity, and objectivity to the gathered data. After the mothers' conversations were typed into a word document, the information was shared with the mothers so they could make any edits to the document to verify that they are quoted correctly. Triangulation took place with the multiple instruments of an interview, transcriptions of audio-tapes, interview conversations, journals, and narrative reflections. There were prolonged contact with the participants, member checks with the content written about them, saturation, reflexivity, and participant review to check for accuracy. All this leads to credibility for the internal validity for it provided time for participants to reflect upon the accuracy of the data.

To add transferability for external validity several steps were put into place. Thick descriptions were provided as narration was added to the interview time that was being audio recorded. As the researcher provided detailed descriptions of the interview process, the goal was to provide sufficient detail so the findings could be recreated. There were thick descriptions that took place.

The meeting place for the face-to-face interviews was be a more private location in a private office either at a local community center or university so distractions were limited. Bathrooms were accessible to participants if they needed to use one. Specific factors regarding the exact steps each participant went through was noted so that each one was treated the same. With duplicate ways of gathering the information, this added to the dependability and reliability of the research results because of triangulation and an audit trail to establish accuracy.

Internal coherence was sought with the data by confirming the information with participants for accuracy. Sources of bias were noted. Analysis and synthesis were shared with my dissertation chair and committee to note an audit trail for when results were found. Furthermore, I took narrative notes and personal notes during the research process.

As a result of having a small sample size, I was able to go more in-depth with my participants. My goal was to provide various methods of collection so triangulation could occur. This led to stronger credibility.

Ethical Considerations

As a scholar practitioner, it was vitally important for me to I conduct research where I checked that all ethical concerns had been addressed. Before mother participants

began the research time, they signed a consent form. On it, I acknowledged the rights that my participants would have such as they could withdraw at any time, they would be the only one to have contact with their child, and the information I gathered would be confidential. I shared with my participants that I would keep the data I gathered for a period of five years, and then I would dispose of the research information.

Creswell (2007) stated that the participants are to have their identity protected and kept confidential. I had mothers and children labeled with general numbers or an alias. Although there were six participants, the researcher's job was to provide a composite picture of what took place in general rather than to single out individuals or use their name. In other words, more general information was to shared rather than specific details about one child or one mother.

Before any research took place, I sought Institutional Review Board (IRB) approval from Walden University. The IRB approval number (#09-10-15-0188880) for this research was provided when approval was granted.

Summary

In conclusion, I wanted to understand the perceptions of mothers who were teens when their children were born regarding their influence on their child's language development during play time, routine times, and the quality of those interactions. According to Whitmarsh (2011), there is both a qualitative and quantitative difference for children growing up in poverty in the area of exposure to language. Language skills are a key contributor to predict school success according to Whitmarsh (2011). Furthermore,

language rich environments are positively impacting language development as well as enhancing positive development in children.

Chapter 4: Results

The purpose of this case study was to understand mothers' perceptions of how they influenced their children's language development during informal ways (during play, routines, and other interactions). More specifically, the participants involved in this study were those who became mothers while minors but are now in the age of majority. Understanding what they think they were doing with their children and descriptions of the actual activities of what they did, or did not do, can provide a better picture of any disconnect that may exist between perception and actual practice. Knowing this can help these parents and other professionals develop useful strategies to enhance language development during play and daily routines.

I found significant information in the literature about the challenges these parents encounter as teen parents (Fagan, Lee, 2013; Mayers, Hager-Budny, Buckner, 2008; Keown, Woodward, Field, 2001; McGowan, Smith, Noria, Culpepper, Rohling, Borkowski, Turner, 2008; Moore, Redd, Burkhauser, Mbwana, and Collins, 2008; Sodi, 2012; Swedish, Rothenberg, Fuchs, Rosenberg, 2010; The National Campaign, 2014). However, I found little about useful strategies to address this problem (Chablani, Spinney, 2011; Dickinson, Joe, 2010; Whitmarsh, 2011). Looking at the perceptions of what these parents did with their children and what the actual activities were can provide a base for determining where and if a discrepancy exists between belief and practice in terms of influence on their child's language development.

I used the following central research question to guide this study: How do mothers who were parents while in the age of minority but are now part of the majority

(18 and older) describe their perceptions regarding their influence on their child's language development through play? The related research questions were as follows: What beliefs do teen mothers who are now over 18 have about how to effectively support and expand the language development of their child through play? How do teen mothers who are now over 18 describe their language interactions with their child during routine times of the day? How do teen mothers who are now over 18 perceive their influence on their child's language during playtime activities? How much of an impact do the teen mothers who are now over 18 feel they have on the quality of the child's language skills?

Chapter 4 includes the setting description, participant demographics, a description of the process for data collection, and the results. Also included is the data analysis explanation, which includes the categories and themes. The chapter concludes with a discussion of trustworthiness and the issue of discrepant data.

The Setting

This study was conducted in a medium-sized, midwestern town where approximately 127,215 people reside (U.S. Census, 2014). In 2010, 24.4% of the residents were 18 years of age or under, 76.2% were Caucasian, and 11.3% were African American (U.S. Census). Those individuals living below poverty level from 2009-2013 were 21.1%, and those graduating from high school were 88.4% (U.S. Census).

Demographics

The six participants included mothers who gave birth as minors but are now 18 years of age or older. Three of the mothers were Caucasian, one was Hispanic, and two were African American. All of their children but one were biracial. Table 4 shows that

there were six mother participants and 10 children involved in the study. Four participants had one child each, one mother had twin girls, and one mother had four children; six of the children in the study were female, and four were male. The average age of the children was 2.7 years old. The average age of the mother was 19.8 years old.

Table 4

Participants

	Mother's Age	Child's Gender	Child's Age
Donna	18	Girl	2 years old
Lisa	21	2 Boys, 2 Girls	5,3, and 1 years old, 2 months
Ann	19	Girl	10 months
Randy	19	Boy	11 months
Sally	21	Twin girls	4 years
Brandi	21	Boy	4 years

Donna finished high school at an alternative high school in a midwestern town and now works full time at a local preschool. Her mother-in-law came to her place to babysit the child. Donna is close to her mother and mother-in-law, and the baby's father. While in high school, Donna was involved in a youth program called YoungLives which provides a Christian support group for young mothers. She was mentored by one of the leaders. She just began working at a local preschool which, she stated, helps to guide her regarding things she teaches her daughter about language development.

Lisa was 21 years old and worked full time at a discount store. She and her live-in boyfriend had their own home with the four children. She has two boys and two girls. Her oldest is almost 5 and her youngest was a 2-month-old boy. She stated that she was involved in the lives of her four children and that "they are her life." She felt that by

continuously talking to her oldest daughter, asking her questions, and being involved in her daily chores, she had helped this child to be a good student. She felt that her 1-year-old was not talking as quickly as the oldest daughter had at the same age. While Lisa worked full time, her children spent time in daycare.

Ann was 19 years old and had a little girl that was 10 months old. She stated that she was a loving, encouraging mother who was very tuned in to the needs of her daughter. While Ann and her child played, she used various items to engage her daughter. For example, she said she would use items in the toy box, games that they invent to play together, or would engage in their environment with things like a fish aquarium at the doctor's office. She too was very involved in a Christian, faith-based group called YoungLives while she was in high school and was mentored by one of the leaders with whom she still had some contact. Ann was currently going to college at least two days a week, and would like to pursue a degree in Social Work. While she was in class or studying, her child was at daycare. Although her little girl was not part of her life plans, Ann shared that she cannot imagine life without her "little shadow."

Randy was 19 years old and had a son who was 11 months old. Randy shared how she met the basic needs of her son like food and clothing. She also drives three hours each weekend so they can see her family. She attends college and she and her son live alone with no other family members in town. After visiting her family each weekend, Randy and her child got back into the car to return to the college campus where they stayed. Randy was able to finish high school and hoped to finish college with a degree in nursing. She stated that her son spends 6-8 hours a day at daycare, and she was saddened

that she was not able to spend more time with him. She shared that she does not read books to him and that he has only one toy, a ball. Over the last few weeks, she realized that he knew what a ball was and that she could ask him to go get his ball and bring it back to her. Randy shared that she was eager to learn how she could do more with her child. She also felt she was not doing all she could to encourage language development. She expressed interest in having things she could listen to in the car to learn from.

Sally was 22 and had twins that were 4. When her girls were younger, she shared how she looked for ways to encourage them as they learned. For example, as they tried to shoot basketballs into a hoop, they would whine and say, "I can't do this." She said she would say to them, "We do not say 'I can't,' we just keep trying." She also shared, "I feel by encouraging them in ways, even as small as that, helps them realize they are capable if they do not give up." She shared that she looked for ways to weave in comments of encouragement and perseverance even with language development. Typically, she would not let the girls use her notepad, but she reported that one day at the doctor's office, one of the girls wanted to practice typing her name. She shared that the daughter was "very proud of herself because she started sounding out new words and figured them out herself." For a single woman raising two daughters, she felt she exemplified one who learned perseverance and a "can-do" attitude. Whether she was encouraging them with sports or language development, she felt she empowered her young daughters with the will to keep going. Sally went to school full time when the girls were younger. She works full time now as a teacher. The girls attended daycare full time and enjoyed their teachers and "idolized" them.

Brandi was 22 and had a son who was four. As he grew, she shared that she sought ways to describe the world around him. As they went for walks, Brandi said that she would describe the wildlife around them and what they were doing. She would explain that the geese were on top of the water and the fish were under the water. Squirrels that were scurrying along in the fall were gathering nuts for the winter. This led to her explanation about the different seasons “and how we are affected with different types of weather.”

Her son loved to watch sports, so Brandi would talk about the game, the coach, and the referee. She explained the referee’s job and why he threw the flag. She shared that the son would act out that he “was the announcer, announcing his and my [the mother’s] names and what teams we represented. After the lineup was announced he sang the national anthem.” The mother shared that her son not only learned about what things were labeled, but she stated that she took the time to explain many of the aspects he loved in the world of sports. Coincidentally, while she lived at home with her parents, she was able to complete an online teaching program. She stated that her parents were very involved in helping to encourage and support her as well as their grandson. In addition, when her child was an infant and toddler, she stayed at home during the day to care for her child so he would not have to “be raised by a babysitter.”

Data Collection Process

Once the Walden Institutional Review Board (IRB) granted approval (#09-10-15-0188880) for the study to occur, I began the data collection process. I distributed flyers inviting parents to participate to an alternative high school, inner city high school,

community center, and local university. The flyer included information about the purpose of the study, eligibility requirements, and participant requirements. The request was for mothers who were now in the age of majority, but had their first child when they were minors. The flyer also included a short description of what was expected of participants, what they would receive, and where interviews would take place. It included my contact information including my name, phone number, and email address. Mothers who were interested and eligible for the study contacted me, and we coordinated dates and times that we could meet.

My goal, which I met, was to recruit at least six participants. These six participants had a total of ten children who were born when these mothers were in their teens. Whether these parents were married or single was not a criterion for participation. If saturation was not accomplished after all data were gathered, I planned to recruit additional participants. However, this was not the case, as adequate information was obtained from the six participants to answer the research questions.

I garnered information from semistructured interviews, journals, and narrative reflections. Prior to retrieving any of this information, I explained issues of confidentiality and provided a clear description of the study. Participants were given my personal telephone number if they had any questions or concerns. They were also informed that they could withdraw from the study at any time with no consequences.

Interview Process

The interview process began with the initial interview questions and protocol. Each interview lasted approximately 50 minutes. Beginning with each interview, I shared

the procedure that would be followed, asked if they had any questions, and then had each participant sign a letter of consent. When the interview was done, I explained about the journal requirement and documentation request. Each was to write about times she felt she taught her child something and/or influenced the child's language development. Two mothers sent pictures of their child doing the activities they described. Copies of the pictures were going to be included in the Appendix section but each picture had a full face shot of the child so they were not included.

Interviews

The individual interviews were fact-to-face and consisted of questions developed in order to answer the four research questions. Interview responses from each of the participants were audio recorded, typed up within one week, and returned to them for verification and feedback. The responses were kept confidential in order to provide an opportunity for mothers to be open and honest about their thoughts.

Journal Comments Shared by Mothers

Journals were the second data source for this study. During the first face-to-face interview, mothers were given copies of the six page journals as well as instructions regarding how to fill it out. Each mother wrote down activities they did with their young child. If possible, note any dates, times, or pictures of what was done. If the mother would like to share more, they could include extra sheets of paper. Lastly, they were thanked for helping to educate the world on how mothers perceive they influence their child's language development. Each mother filled out all five of the days in their journals.

Follow-up Interviews

At the end of the research, a follow-up set of 18 questions was used. The goal was to ask the questions after the mothers had completed filling out their journals. Most of the mothers completed written narrative responses. I interviewed two of the mothers, going through the questions with them, and I recorded the answers and typed up the transcripts.

Organization of the Data

A spreadsheet organized the data collection process. Information about the initial interviews, signed consent forms, journals, interview notes, gift cards, and books shared was noted. Separate folders were used for storage in order to maintain strict organization of the information. All appropriate information was recorded on my home computer and password protected. Pseudonyms were assigned to each of the mothers with their journals, transcripts, and narratives. Table 5 describes how the data were aligned to the four research questions. Table 5 is included in Appendix H.

Findings

Data from the interviews, journals, and reflective narratives provided ample information to answer the research questions. Findings surrounding each research question will be addressed in this section. Level 1 data analysis for category construction involved the initial interview, journal comments, and follow-up reflections. Maxwell (2005) stated the steps involved in qualitative data analysis. Initially, I read the interview transcripts, journal notations, and follow transcripts or narratives. The first time all sources are read, the researcher should begin to jot down initial ideas for categories and relationships (p. 96). The same author stressed that the main categorizing deals with the

coding of the qualitative research into broader themes and issues. The categories that the researcher develops becomes like “bins” where the data were sorted (p.97). When the researcher attempts to connect the dissected data into similarities that is one way of analyzing the data. Another way would be to discover what connects the information into a comprehensive whole so that it can better answer the four research questions being asked. This is what took place in the next sections. Mothers’ comments were used to answer each of my research questions.

Research question #1 asked, “What beliefs do adult mothers have about how to effectively support and expand the language development of their child through play?” All of the mothers indicated that they supported their child’s language development during playtimes. However, the extent of this was not clear as their answers were brief, not always descriptive, and often reflected a focus on “teaching” their child which can imply a more direct interaction with an agenda on the part of the mother. For example, while Donna stated that she read books to her daughter all the time before and after birth and sang nursery rhymes and finger plays as well, she also felt she taught her daughter every day. Lisa shared that her oldest daughter was very smart and does well at school. She felt that her continuous talking to her, asking her questions, and involvement in her daily chores had helped this child to be a good student. She shared that “I think I am the reason she talks really good at almost five”.

In addition, several of the mothers included comments that did not really relate to the question at hand or were vague about the specifics. For example, while answering what impact she believed she had on her child’s language during play, Donna stated that

the involved father was kind and patient with his daughter and that both parents and grandmothers have an active role in the child's life. Brandi, in answer to this question, talked about when her child was an infant and toddler that she didn't want a babysitter to raise her child – she wanted to raise him so she stayed home with him during the day, while taking online classes, and then had her parents watch her child in the evenings. She also talked about how she worked on her associate's degree she did many things with her son but it was difficult for her remember exactly what these things were.

Sally was 22 and had twins that were four years of age. When her girls were younger, she reported that she looked for ways to encourage them as they learned. For example, as they tried to shoot basketballs into a hoop they would whine and say: "I can't do this." She said she would say to them that "We do not say 'I can't,' we just keep trying." She also shared, "I feel by encouraging them in ways, even as small as that, helps them realize they are capable if they do not give up." She looked for ways to weave in comments of encouragement and perseverance even with language development. However, she was unable to articulate other specific playtime activities in which rich language occurred.

Randy stated that she met the basic needs of her son, like food and clothing. She also drives three hours each weekend so they can see her family on the weekends. She shared that she does not read books to him and that he has only one toy, which was a ball. Over the last few weeks, she realized that he knew what a ball was and that she could ask him to go get his ball and bring it back to her. This mother related her perception of her shortcomings in terms of play and language modeling or enhancement but shared that she

was eager to learn how she could do more with her child. She also felt she was not doing all she could to encourage language development. She would love to have things she could listen to in the car to learn from. What was interesting to note, though, was that her descriptions of playtime and language support were not very different from what the other mothers were doing with their children. In answer to research question 1, mothers' perceptions were that they did support their child's language through playtime activities with their child. The one exception to this was Randy who very explicitly stated she did not do well in this area.

Research question #2 asked, "How do adult mothers describe their language interactions with their child during routine times of the day?" There was a range of ideas that mothers shared about how they describe their language interactions with their child that took place during routine times of the day.

For example, Donna shared that her routine times of the day where language interactions took place was during meal time, after day care, and during bath time. When her child pointed to a tractor in the field and said car Donna said she laughed and then explained to her child that that was not a car but a tractor. Other ways Donna described language interactions during routine times of the day occurred while they sang songs and did finger plays together while changing diapers. The mother shared that "we sing songs every day!" Donna also taught her daughter holiday words, which were being talked about at her preschool such as pumpkin, Halloween, trick or treat, or kitty cat. This particular conversation with the holiday words took place after dinner while they rested in the living room at night.

Lisa described their language interactions, which took place around meal times. Lisa would not allow her children (4 children 5 years old and under) just to point to what they wanted, she had them to use the words. She shared that with several children vying for her attention she needed them to use their words and speak up. For example the 2 year old would ask for juice, snacks, or cookies when he was hungry. Lisa was able to have language interactions right after preschool with her oldest daughter before the others came home from daycare. On occasion, if the oldest daughter was learning her colors at school, then Lisa would try to reinforce the colors on their drive home. With the three other children still at daycare, this alone time after preschool gave Lisa more time to focus on her oldest daughter. The other three did not have the extra alone time with the mother. The second and third children spent more time together talking and playing. Lisa commented that child three (who was her second daughter) was not as smart as daughter number one. She shared that the younger daughter did not have as good of a vocabulary as her first born and was quite behind.

Ann described that their language interactions focused on what her daughter was interested in during the day when she was not at college and her daughter was not in daycare, which was 7 hours a day at least twice per week. For example, on one occasion a flock of birds flew by and the child pointed to the birds. The mother would say “birdies, those are birdies.” If the child pointed at flowers or things on the TV, she would try to remember to say what the objects were or describe them to the child. She shared that of course she did not know for sure if that was really what she wanted as she pointed to the object but she was just guessing. If Ann felt her child took an interest in something, then

she would talk about what the child was interested in. She shared that she let the child take the lead on what she wanted to know about and the mother would follow her lead regarding the child's interest. This would take place on the mornings after breakfast when Ann did not have to go to school.

Randy did not have very many examples of language interactions to describe. She did share that she insisted that her child use words to ask for things, for example, "when he wants his bottle I make him ask for it in words." She did share that she sang to him songs that she made up to keep him entertained while changing his diapers. She said she was very busy with school so she did not take the time to play much with him and he played well on his own. He really did not ask for much from her she said. She had a lot of homework to do so she would put him to bed early because he was tired from playing at daycare.

Sally described their routine time for language interaction was during the car ride home after picking the twins up from daycare. Sally would ask how their day went and with whom they played. The twins would describe what took place that day at school. While in the car on occasion, Sally would point out signs like McDonalds and Walmart and the girls would know what the signs said. During book reading time, watching movies, or playing sports, Sally would try to engage the twins with questions. She shared that twins entertain themselves a lot which allowed her time to do her homework or work. They are very independent. She stated that they don't seem to ask for help much or seem to need her. She said it is different having twins because they pretty much did things on their own.

Brandi described language interactions which focused on asking questions about sporting events that the child watched during sports events they attended. The grandfather was an athletic coach so they went to watch many of the games. Sports were a topic the son was very interested in so the mother used the sports topic to develop language skills. The mother and son had language interactions while talking at sports events, while watching football on TV, or playing sports together. During the conversation, Brandi labeled the different parts of the sporting event such as the referee, the flag, or the score board. She would share that the son was picking up new words all the time and as a result she felt she needed to watch closely what she said so she would be a good influence on her son. Furthermore, if the mother and son went on a walk on occasion, she took time to describe things that they saw while they were on a walk or by the lake. She shared an example of how she pointed out the animals, people, and trees at the lake and how the different seasons affected them.

While these mothers all varied on their interpretation of how they described language interactions with their child during routine times of the day, they all used different times of the day to build their child's language development. The routine times as well as spur-of-the-moment interactions were after breakfast, during diaper changes, while watching movies, while playing blocks, playing sports, reading books, traveling in the car, grocery shopping, or cooking in the kitchen.

Developing a child's vocabulary can be done during the early years while the child is still home with their mother. Brandi shared that the mother is the child's first and most important teacher. This statement aligned with what Whitmarsh (2011) shared

regarding “parental influence in infancy is [and how it is] crucial and also that interactive parenting, especially in infancy, may have a protective effect for disadvantaged moms” (p. 285). Randy shared that she knew that she could be doing more to encourage her child’s language development but she did not know what to do other than read to him. Although mothers shared a few examples that took place during routine times of the day, there were not many activities that were done consistently at these times. There was a lack of structure with focused activities done on a routine basis.

Research question #3 asked, “How do adult mothers perceive their influence on their child’s language during playtime activities?” All mothers indicated that they had influenced their child’s language during playtime activities. Once again the extent of their influence was not clear as their answers were brief, not always descriptive, and comments were made that reflected that other individuals who influenced as well. For example, when Donna was asked the question if she felt she influenced her child’s language development, she responded enthusiastically, “Definitely, all the time!” Donna offered an example of how she perceived that she influenced the learning of new words with her daughter. She shared that she had her daughter glue cut-out silhouettes of cats and pumpkins to learn words associated with a holiday. The gluing aspect of the activity was perceived as an influence on the child’s language development, which could have been but she was unable to articulate examples. Sally and Brandi also expressed they were “a huge influence on their [child’s] language development” and “a tremendous influence on my son’s language development.” Yet, when Sally was asked for specific examples she

shared she could not think of any they had done lately. Brandi likewise shared that she does not focus on new words because he learned them at school.

Lisa, Brandi, and Ann perceived they influenced their child's language during playtime with statements like "I am the main influence," "my parents and I influence," and "I have an impact", respectively. Lisa and Brandi shared that other people have an influence too. Lisa has a sister and Grandmother that influenced the children. Brandi stated that her parents also influenced her son with language development. However, Ann shared that her mother taught her child some new words but since she (Ann) spent the most time with her child, "I do it the most."

Randy on the other hand gave credit to her grandmother who influenced her child's playtime activities. She shared that when her son was in the grandmother's Sunday school class, he began walking for the first time to the grandmother when she asked him to "come." Randy stated that her only language during playtime centered on the one toy ball that he had. But most words her child used were focused around his bottle or food.

In addition, the children of Lisa and Randy were exposed to two languages. Lisa and her extended family speak both English and Spanish. Lisa shared that she had just recently taught her children how to count in Spanish. Randy shared that her son's daycare provider, who he is with 6-8 hours a day, was bilingual and spoke mainly in Spanish. Randy does not speak Spanish so she does not reinforce that language in her home to her son.

Up to this point, Lisa has not had a focused effort of reinforcing language development in her home. She shared that when she was asked to write down the activities in the journal, she became conscious of what she was doing. To that point, she shared “I think I am doing all I can do” as she strives to care for her four young children.

Donna, Ann, and Sally shared that they had an impact on the quality of their child’s language development. Similarly, Lisa and Brandi shared they are the reason for their child’s achievement. Lisa stated, “I think I am the reason she talks really good at almost 5.” Brandi stated, “I definitely feel it is not the norm but I have an early childhood background that helps.” Although each mother shared of the quality of their impact, there were few details supporting this.

In answer to research question 3, mother’s perceptions were that they did influence their child’s language during playtime activities. Once again, Randy, was the exception who felt she could be doing more and credited her grandmother with the milestone advancements her child made.

Research question #4 asked, “How much of an impact do mothers feel they have on the quality of the child’s language development?” By the end of the study, all six of the mothers felt they made a difference, taught their child things, and influenced their child’s language development although at the beginning of the study only five of the six mothers felt they did. Two examples of mothers who felt they made a difference provided the follow reasons. Ann felt she impacted the quality of her child’s language development because “I [she] spent the most time with her.” Similarly, Donna claimed that the quality was influenced because “I answer her millions of questions.” So the mothers perceived

that the quality of their child's language development was impacted because of quantity of time and number of questions answered.

Brandi and Lisa explained the impact of quality of their child's language development was influenced by others as well as themselves. For example, Brandi shared that her parents also contributed. She shared "Most of his [her child's] words come from us. We did watch a lot of Vege-Tales videos. He picked up words from the videos" too. Brandi stated that the impact and quality of her child's language development was influenced by the grandparents as well as the video. Similarly, Lisa perceived that others also impacted the quality of her children's language development. Those individuals she felt also contributed were the father, grandmother, aunt, and her child's school. So Brandi and Lisa perceived that the quality of their child's language development was impacted by other family members as well as videos.

Interestingly enough, two other mothers gave credit to the quality and impact of language development to their child's teacher. Sally shared that the quality was based on not only the importance she made by using the right words, but also because of "their teachers at daycare or preschool. They definitely look up to their teachers a lot."

Likewise, Randy shared that the daycare provider had an impact on her child because "she is teaching him Spanish." Randy looks to others to teach her child whether that be the daycare provider who speaks Spanish or the grandmother who encouraged her child to walk for the first time when she said "come." Randy was quick to note her shortcoming and that teachers fill the gap but she also explained that she would like to learn how to improve her impact on the quality of her child's language development.

Although the mothers all perceived they impacted the quality of their child's language development as well as "make a difference in what their child learns," the perceptions did not always align with the actions they described they used to impact the language development of their child. Table 5 illustrated the themes and categories regarding the beliefs mothers have about how they effectively supported and expanded the language development of their child through play. The mothers shared that they first of all used an activity to reinforce their verbal interaction. Secondly, mothers talked with their child with the use of words but without the use of any activities to encourage conversation. Lastly, questions were used during their conversation to enhance language development.

Table 5
Categories from the Mothers' Follow-up Data

Question	Themes	Categories
Q1	Conversation with Activity	Play with ABC letters Play with numbers Play peek-a-boo Read books Play with baby dolls Feed baby dolls Walked at park, lake, trails Counted steps on the stairs Retrieves ball Plays Legos Watch movies Play sports Make believe play Sing songs Listen to songs
	Conversation without activity	Raise her up in the air Talk together Say healthy words since they listen Say stop when needed Talk together in the car At the grocery store While working in kitchen Playing silly games to make each other laugh
	Conversation with questions	"Do you have an 'a'?" "How many legs does it have?" "Does it have eyes?"

Table 6 illustrates additional questions asked and the responses from the mothers. Table 6 is found in the Appendix section under *Appendix G: Results of the Follow-up Questions*.

Young children are naturally curious and ready to learn. Opportunities for inquiry and exploration during the early years make it possible for young children to build a solid foundation that can support later classroom learning. Through exploration, simple experiences provide opportunities to learn ways to answer questions and improve the wonder for learning. Children can acquire principles that can be implemented into daily

routines to enhance learning throughout the day. Teen mothers and primary caregivers can use concrete examples to develop language skills during the learning process.

Evidence of Quality

According to Patton (2002), triangulation was important “to capture and report multiple perceptions rather than seek a singular truth.” Therefore careful steps were used to include interviews, journals, and narrative reflections from the mothers and my research notes. Peer reviewer interpretations of the data provided added to the validity and consistency of the findings. This also helped mitigate bias on my part. The peer reviewer studied the transcribed notes and provided his own interpretations of the codes and analyzed themes. His feedback provided interpretations which were compared with my findings. Because of a smaller population to study, the six mothers allowed for thick, rich data, which were collected and used in the context of the case.

Conclusion

The purpose of this qualitative case study was to develop an in-depth description and analysis of language that these mothers used when interacting with their child(ren) through play, routine times and the perception of the quality. Careful attention focused on whether or not mothers thought they had influenced their child’s language development. This section provided the findings of this qualitative case study based on the perceptions of the mothers who were teen mothers when giving birth but are now in the age of majority. In this section, the process I used for collecting and coding my data were described as well as the themes identified.

The findings of chapter 4 will be discussed more in-depth in chapter 5. Social change implications will also be addressed regarding topics needed for further study. My reflections on the research and final comments are part of the conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

Child well-being indicators show that children born to teen mothers are more likely to have health issues, be maltreated, lack play experiences, be taken from the home for a time, and lack the proper nutrition that combined may contribute to low school readiness (Bersch, 2008; Fagan & Lee, 2013; Keown, Woodward, & Field, 2001; Mayers, Hager-Budny, & Buckner, 2008; McGowan et al., 2008; Moore, Redd, Burkhauser, Mbwana, & Collins, 2009; Ng & Kaye, 2012; Suellentrop, 2010). I sought to understand the mothers' perceptions related to the ways in which they influenced language development in their child. In Chapter 5, I will provide a summary of the findings, interpretations of the data, a description social change implications, recommendations for future study, my reflections, and a conclusion.

Summary of the Findings

One of the findings in this study was that teen mothers do not have time to read to their children during routine times of the day to enhance their language development. Romagnoli and Wall (2012) found that teen mothers spend much of their time trying to maintain their welfare benefits, work, and keep their child in childcare. They noted that "there is not much time left to read to their child" (p. 282). The data indicated that the mothers in my study did not have a routine time of day devoted to reading to their child. A mother may read here or there but, nothing indicated that this was done on a consistent basis. As one mother put it, "I am doing the best I can [with my four children]." The same authors further found that cognitive development plays a much different role in impoverished teen mothers' households than in the households of middle class mothers. I

found a similar dynamic in my study. For instance, Randy shared that she does not read to her 11 month old son and does not own any books. Perlman and Fantuzzo (2010) shared that an environment rich with literacy promotes language competencies, and that language skills in the early years are predictive of literacy success once they are in school. If, like Randy's home, the environment has literacy limitations, then the child may be left without the language competencies he or she needs for school success.

Another finding of the study was that teen mothers experience significant lifestyle changes that alter their lives. Ann shared that her daughter was certainly not something she had wanted or planned, and Randy shared that she had wanted to give her child up for adoption, but the baby's father did not. Both mothers had dreams of going to college and becoming a social worker and a nurse, but those plans were severely altered as a result of having their children at a young age. Ann shared how fortunate she was to have a mentor from a faith-based group come into her life and provide the social networking support she needed, which resonated with Sodi and Sodi's (2012) findings that interventions that aim at fostering supportive social networks are highly recommended for teen mothers. Significant lifestyle changes resultant from teen parenthood can contribute to emotional problems, but mentors (such as the LifeWorks case managers) can help teen mothers create a balance in their life by promoting education, parenting, health, housing, basic life skills support, and someone to talk to (Scarborough, Lewis, & Kulkarni, 2010).

The third finding of the study was that many teen mothers need to increase what they know about language development. Lisa shared that she was doing all she could with her four children but she knew that she could be doing more. Randy stated that she

knew she was not doing all that she could do to help develop her child's language capacities. As a matter of fact, she was interested in learning about what more she could do. Whitson, Martinex, Ayala, and Kaufman (2011) have identified the risk of negative outcomes for both the teen mother and the child. The authors found that interventions that provide parenting education in conjunction with a focus on the emotional well-being and social support for teen mothers are most effective. In a study of a parenting intervention that focused on language stimulation, McGowan et al. (2008) found that mothers who were teamed up with a mentor and attended parenting classes for 8 months improved the expressive language of their children. My data indicated that the mothers would like to have help learning more ways to help their child strengthen their language skills through podcasts, books, texting, and musical/art activities.

Interpretation of Findings

The central research question focused on the perceptions of mothers who became parents while in the age of minority, but are now in the age of majority (18 and older). With it, I sought to elicit their perceptions regarding their influence on their child's language development through play. The data pointed to the fact that participants felt that they made a significant contribution during play to their child's language development. This was reflected in Lisa's response when she said, "I think I am the reason she talks really good at almost 5." Similarly on a scale from 1 to 5, with 5 being the highest score, Brandi referred to herself as a 5 regarding her influence with her child.

Vygotsky, Bruner, and Flavell have been noted for their work on literacy and the learning of new words, as I described in the conceptual framework for this study.

Vygotsky focused on the theory of ZPD, Bruner (1983) worked on scaffolding, and Flavell (1976) focused on cognition. Each theorist focused on the constructivist nature of how children build upon what they know. Vygotsky described the support provided by adults with the use of verbal cues, hand gestures, or prompts that help children complete a task.

When they know what to do, teen mothers can provide verbal cues, repeat back what child said, use hand gestures, role model, and illustrate the initial example as originally described by Vygotsky. The data I gathered from the interviews, journals, and follow-up questions showed that mothers were more interested in adult-directed commands rather than child directed learning when interactions took place around play. For example, Randy asked for her son to say “bottle” or “fridge.” She also told him to go get the “ball.” These situations did not use repeating back or hand gestures to support language development. Lemoda, Shannon, and Spellmann (2002) shared that low-income teen mother’s lack knowledge about their child’s development, something evident in Randy’s interactions with her son. At 11 months, Randy’s child could do more than fetch a ball and yet, she was not aware of how to or what more to ask of him. The same authors shared that teen mothers tend to underestimate the onset of all developmental abilities. This fact held true with the data gathered with Randy.

Research Question 1

Research Question 1 asked, “What beliefs do teen mothers who are now over 18 have about how to effectively support and expand the language development of their child? The theme that emerged with the highest number of responses was that

conversation took place while undertaking an activity. The activities described by the mothers were conducted at home or in the car, both used and did not use props, and were sometimes educationally focused. For the activities done at home, the mother was often trying to multitask since she was the sole care provider.

Ng and Kaye (2012) have argued that to improve child well-being, families need to be strengthened so that mothers have the support systems around them. The same authors shared that 88% of the teen mothers were not married to the birth father. Living arrangements reviewed by race indicated that 68% of Caucasian teen moms, 56% of Hispanic teen moms, and 39% of African American teen moms lived with a partner. Five of the six participants in my study lived on their own. On the weekends, Randy drove home from college to be with her family. Lisa with four children had a live in boyfriend. Ng and Kaye (2012) shared that children who lived without fathers are three times more likely to live in poverty as well as experience sex at a younger age.

Keown, Woodward, and Field (2001) shared that children of teen mothers scored lower in kindergarten readiness scores than those mothers who were older. The authors found that these lower scores resulted from the lack of mothers' verbal stimulation and their intrusiveness. Lisa shared that her oldest daughter who was almost 5 talked well. She also shared that her two middle children played together consistently, and that the third child who was another girl did not talk as well as the oldest. The oldest daughter had the mother's verbal stimulation but the second daughter did not because she had the verbal influence of her 3-year-old brother.

The early years are so vital for mother/child interactions. During this intimate interaction, mothers described, labeled, or pointed out new vocabulary words their children learned. Because the responses were limited and focused more on close ended questions (i.e., child pointing to a tractor to which mother responded “that is a tractor...”; labeling sports’ terms; reviewing abcs; etc.), findings in this study reinforced findings in the literature that verbal stimulation was limited even though the perceptions of most of the mother’s in this study did not believe this to be true.

A second theme noted was regarding conversations that took place without the use of an activity as noted in Table 5 in Chapter 4. Mothers shared that they would simply converse with their child as they were in the car, at the grocery store, working in the kitchen, or playing silly games to make each other laugh. Briceno, Feyter, and Winsler (2013) encouraged mothers to interact to improve child outcomes but did not list specific things they could do. The data gathered provided some insight into limited activities that teen mothers do with their young child. This information extended the literature with more specific things that mothers used to converse with their little ones as they played without using any type of toy or activity.

Another theme noted that mothers shared conversations with questions. Questioning strategies were most noted during outdoor interactions for example, when the mothers took their children to the zoo. Conversations at the zoo centered on what they saw. If the child was looking at something outside, the mother tried to explain what it was. She would ask, “How many feet does it have?” “Does it have eyes?” The questioning strategies that were used were very closed ended. Roper (2009) described

about the difficult life of a baby born to a teen parent. During the early years, the teen mother and child lack communication. Briceno, Feyter, and Winsler (2013) further stated that limited parental language stimulation can lead to delays in the child's language development and cognitive development.

The next theme from mothers was the suggestion of doing an activity with their child without conversation. Randy shared that one morning her son was very clingy with her so they just sat and held each other for a long time. He was only 11 months old so he was not able to put into words what he was feeling. But the mother was able to pick up on nonverbal clues regarding what he needed. As a result, the mother described that they held each other while just standing still before he decided he wanted to get down. The mother had shared that her son had never wanted to be held like that before but she stated that he obviously appeared to need it. This form of nonverbal communication has not been spelled out in literature regarding how a mother would pick up on such cues shared by the child. Although they were communicating, it was not done with spoken words. This particular example suggested a positive example of how powerful non-verbal communication can be between a mother and her child. On the other hand, negative examples could also be suggested for example showing dissatisfaction with the child just because he or she is a burden for the mother's life (e.g. an interference to her teenage years). These can be very damaging non-verbal messages—not that these were present but the issue is an important one.

On that same note, Roper (2009) discussed the fact that a teen mother lives in a highly social world with family and friends but lacked the necessary warm contact. Lisa,

who had four young children, shared that she is trying to do the best she can but she is very busy trying to hold down a job and keep everything up that needs to be done. She shared there was not much time for warm interaction with her children.

The next most common response from mothers was a form of undesirable language development behavior. Most of the examples regarding less than positive experiences took place inside the home. Randy shared that she never read to her child. This mother's behavior goes along with what the literature shared about the lack of time teen mothers have to read to their children. Although books are highly beneficial for building language development, the data indicates that it is not a priority in the life of a teen mother. Perlman and Fantuzzo (2010) shared that a literacy rich home promotes exposure to print materials like books. Randy did not own a book. The authors further stated that children's ability to gain access to printed materials during the early years is a predictor of later literacy success in school.

Another theme described by mothers was a comment regarding what helped them learn language development activities they could do with their child. Two mothers shared that they were attending college and the text books from class helped them learn language development activities. Other mothers shared that mentors helped them.

There are several mentoring programs in literature that have provided effective intervention strategies for mothers who had given birth while minors (Harris, Franklin, 2009; Coyne, Langstrom, Lichtenstein, D'Onofrio, 2013; Klaw, 2008; Xie, Harville, Madkour, 2014; Eshbaugh, 2011; Leerlooijer, Bos, Ruiters, Reeuwijk, Rijdsdijk, Nshakra, & Kok, 2013). Other supportive networks are available for teen mothers that provide

intervention support (Cox, Buman, Woods, Famakinwa, Harris, 2012; McDonald, Conrad, Fairtlough, Fletcher, Green, Moore, Lepps, McDonald, Conrad, Fairtlough, Fletcher, Green, Moore, Lepps, 2009; Cardaci, 2011; Whitmarsh, 2011). The literature provided documentation that mentor support provided ways to enhance language development through various group intervention strategies.

Research Question 2

Research question two asked “How do adult mothers describe their language interactions with their child during routine times of the day?” A theme that surfaces was regarding language development activities centered on the times of their day that were routine. The routine times as well as other times included meal time, after day care, every morning, every afternoon, watching movies, playing sports, playing with blocks, during book reading, during bath time, traveling in the car or grocery shopping. This aligned with Garlinghouse’s (Volume XIII) statement regarding three common practices that can be taught to mothers to incorporate into a daily routine to develop language skills. According to the same author, those activities can consistently be added into the day at bedtime and reading to the child. The literature did not provide very many specific examples so these data were extended to the current literature.

Another theme mothers described centered on what children talk about. Donna provided an example of her child when she pointed out a tractor in a field and called it a car. The child applied her knowledge of vehicles (cars) to something that met her car hypothesis. The mother responded that it was not a car but a tractor. Whether or not this

was clear to the child is unknown as the mother did not include an explanation. Donna just made the statement and moved on to what they were doing next.

Donna talked about the fact that her child enjoyed singing the song that included the days of the week, which she learned in preschool. The mother shared that after her child taught her the song, she would sing along. Lastly, several mothers commented that they would not let their young child just point to objects. They wanted the child to say the actual word of the object such as bottle, food, or snack.

A third theme described what mothers shared regarding new words that the child learned. An example of new words taught by a mother was shared by Ann. Mother shared that after her daughter blew a kiss, she had her daughter say the words “I *yove* you.” These were both new words and hand motions the mother had taught. Donna shared new words she taught her child. She focused on words used in the upcoming holiday with words such as pumpkin, Halloween, trick or treat, or kitty cats. Mistry, Benner, Biesanz, Clark, and Howes (2010) stated that families who face higher levels of difficulty, they experienced lower levels of cognitive stimulation in parent-child interactions. Donna who is raising her daughter alone, is trying to include new holiday words but several of them are abstract concepts the child may have difficulty understanding since she is not quite two.

Another theme mothers shared were comments regarding how the mother described how she joined in to their child’s play experience. Donna and Sally shared how they read together with their little ones and talked about the pictures. This would align with what is available in literature. Perlman and Fantuzzo (2010) shared that children’s

development in literacy and language skills during the preschool years is predictive of later success in the early elementary years in literacy. Burgess (2009) stated that shared reading was the most common literacy activity done at home. Although Donna and Sally did use book reading the data indicated it was not on a regular basis and was not a practice the other mothers accomplished.

The last theme mothers shared were regarding the language interactions their child had with other people. The mothers shared that there were several people that helped to influence their children with language development other than themselves. Those individuals were grandparents, great grandparents, mothers, birth fathers, aunts, and teachers. Roper (2009) shared that teen parents are highly social with their extended family but lack the appropriate contact with their child.

Research Question 3

Research question three stated, “How do adult mothers perceive their influence on their child’s language during playtime activities?” A theme that surfaced regarded how the mothers felt they influenced their child’s language development. Lisa felt that she “was the main influence to her oldest daughter talking so well.” Sally felt she was a huge influence on her child’s language development. Brandi felt she “made a tremendous influence on her son’s language development.” Randy shared that she “did not feel she was making a difference” and that she was interested to learn what she could do. When the study began, five of the six mothers felt they made a difference. Yet when the data were gathered with examples, the facts did not reflect tremendous language development

support. Mothers in their own minds felt they were making a “tremendous difference.”

Yet the data indicated only slight examples.

A second theme shared comments regarding focused support provided by the teen mother. One mother of 4 who was 21 shared that although she was not doing much, she felt she was doing all she could right now. Scarborough, Lewis, and Kulkarni (2010) shared about the importance of empowering the teen mother so she can identify personal goals she would like to accomplish. The authors stated that this empowerment allows for brain development through goal setting activities where she can complete more specifically what she wants to accomplish. Lisa may say she is doing all she can, but through goal setting, she could accomplish so much more.

Research Question 4

Research question four asked, “How much of an impact do the adult mothers feel they have on the quality of the child’s language skills?” By the end of the study, all 100% shared a score of 5, which was the highest regarding their perception of their impact. Lemonda et al. (2002) shared that teen mothers’ lack knowledge about domains of child development. So although they may not provide very much support for language development, they perceive they are doing a “tremendous” job as stated by Brandi.

The second related question asked, what did you find valuable about your experience. Some of the responses were Lisa shared that her children were her world. Leff (2012) described reasons for becoming parents. Ann shared about the reason she loves to teach her daughter. Ann shared regarding the teaching of her daughter, “It is all

in the reward of her response to what I am asking. Her learning and her picking up different things.”

The third question was do you feel you make a difference. By the end of the study, 100% of the mothers felt they made a difference. This was new knowledge especially with the use of a percentage. The data indicated a new response from the mothers. The mothers all responded that they all perceived they made a difference.

The fourth most common question was, “Do you feel you can teach your child things?” All of the mothers perceived they taught their children things by the end of the research.

The fifth question was “Do you feel you influence your child’s language development? All perceived they influenced their child’s language development by the end of the research.

The sixth question was, “I now feel I can make a difference in what my child learns?” Once again all of the mothers felt they now make a difference. The initial response from the mothers at the beginning of the research stated that five of the six mothers felt they made an impact. By the end of the study all of the mothers felt they now make a difference. As mothers took time to journal what they did, they began to become aware of the importance of enhancing language development activities, adding more opportunities to interact with their child each day.

Based on the findings of this research, specific strategies were surfaced by the parents, although there were limited details, which mothers used to interact and enhance language development. They tried various activities and they felt their children learned.

Mothers sporadically interjected some limited language development opportunities. The data indicated that the majority of teen mothers in this study perceived they make a tremendous difference in their child's language development. Yet when asked for examples, limited examples were provided.

Lastly, the conceptual framework for this qualitative case study was drawn from Vygotsky's (1986) theory of the ZPD, Bruner's (1983) work on scaffolding, Flavell's (1976) theory on cognition, and Dickinson and Tabor's (2001) work on literacy and the learning of new words. This study focused on the constructivist nature of how children build upon what they know especially in the area of language development. The mother/child interaction holds an important component to the development of what children learn in this area. Children born to teen mothers demonstrate significant academic and self-regulatory challenges by the time they reach elementary school. But through this research it was suggested that mothers who were teens when they gave birth could learn new ways to provide beneficial verbal interaction between themselves and their children. The research indicated that there are obvious deficiencies in how teenage mothers support language development of their child. If appropriate support and resources were available, these mothers could greatly improve their impact.

Recommendations for Action

From the analysis and interpretation of the findings for this study several recommendations for action appeared. Teen mothers, as well as those who work with teen mothers, could benefit from what is shared in this study. Those individuals will be named as well in this section.

The first recommendation is for parenting curriculum be created for teen mothers. Through participation in the parenting classes, mothers could learn specific activities they could do to support their child's language development. McGowan et al (2008) asserted that teen mothers who participated in parenting intervention groups to learn language stimulation activities with mentors resulted in improvements in the children with their expressive language. Whitson et al. (2011) stated that teen mothers experience a myriad of negative outcomes. If mothers were provided parenting education, they would gain knowledge in how they could help their child. As Randy put it, she knows that she is not doing all she can but she is eager to learn what to do and how to do it. Therefore, mothers could be taught how to incorporate language development into routine times of the day through parenting classes or workshops.

Whitson et al. (2011) stated that with teen mothers having a more restricted social support system, babies have a higher risk for maltreatment. The authors further stated that by providing social support through parenting education, children's academic outcomes were better.

Parent preparation courses could be offered at the hospital right before birth similar to Lamaze classes. As this study demonstrated, conversations can be enhanced during the following times of the day: grocery store, cooking in the kitchen, bath time, Sunday school, on walks, in the car, while watching movies, eating, playing with toys like blocks, Legos, colors, numbers, games, and balls. Mothers could also sing or do nursery rhymes while cleaning up the kitchen or changing diapers. They could also

include conversations at the lake or zoo, and play “I spy” while in the car running errands and pointing things out in route with her child

Mothers who attend alternative high schools could have parenting classes provided for them. Teachers that work at alternative high schools or schools where teen mothers attend could benefit from hearing and reinforcing what has been shared. Articles can be written on suggestions for mothers to try in magazines or newsletters that could be emailed to the students. Some mothers even suggested that they receive ideas through texts so they could continue to learn. This information can also be shared in parenting magazines as well. The information could also be share in a home economics class or with those who mentor teen mothers.

The second recommendation is that teen mothers could be encouraged to do is to read books to their children. The data indicated all six mothers agreed that book reading was a good way to enhance language development. But, not everyone practiced reading to their child(ren). According to Perlman and Fantuzzo (2010), literacy success in elementary school could be predicted from their language abilities in preschool. So encouraging book reading to develop their language abilities would benefit the child. Before teen mothers left the hospital, they could be signed up to receive books by mail to read to their child.

The third recommendation could be to create a text messages for teen mothers which shares questioning strategies they could use to help support open-ended conversations. The data indicated that the majority of the mothers preferred text messages or podcasts. Roper (2009) described difficulty teen mothers had with their children with

communication. Through the use of a text messages, mothers could receive weekly reminders regarding questioning strategies. This high-tech method could provide teen mothers tools to support language development in their child(ren).

Mothers could also be taught in these text messages how to describe things in their child's world. Lisa and Brandi both asked questions about the animals they saw at the zoo. Instead of asking closed-ended questions that are answered with just one word, mothers could ask more open-ended ones to support language development. She could learn to describe and label the item that interests the child and have the child repeat back what she labeled the items. As the child repeated back what she said, she could agree with the child that they are saying it correctly. They can talk about the toys, point out things in the grocery store, park, lake, zoo, inside or even outside the house that has a certain color or shape. Nursery rhymes could also be texted so mothers could sing them as they dress the child, or drive in the car. Any of these songs could be sung while they were traveling around town.

The fourth recommendation could be to encourage mentoring programs to implement best-practices based on what data revealed. A mentoring relationship for a teen mother helps her to cope with daily demands those being the tragedies, triumphs, and disappointments (Harris & Franklin,2009; Leerlooijer, Bos, Ruitter, Reeuwijk, Rijdsijk, Nshakra, & Kok, 2013; McDonald, Conrad, Fairtlough, Fletcher, Green, Moore, & Lepps, 2009; Sylvestre & Merette, 2008). By talking with a mentor mothers have support to talk through problems they have, develop a positive self-talk, and figure out strategies to deal with their conflict.

Through this support system, teen mothers have someone to ask questions like: “Who to go to for insurance, or how an individual could get their electricity turned on. A mentor is one a teen mother could turn to for encouragement to finish a project, do a task, or face a difficult situation. They can learn goal setting skills, have someone to be accountable to, and learn procedural self-talk. Ann and Donna both stated that they benefitted from having a mentor who was outside their immediate family.

Recommendations for Further Study

Further study is needed in the following areas. The first topic that may require more research is the area of fathers’ perceptions of their influence as they extend and support their child’s language development. Ng and Kaye (2013) stated that 88% of teen mothers were not married to the child’s father. The same authors further stated that 50% visited at least once per week. It would be useful to know what kind of language support they offered during visits with their child.

Another topic for possible future research could be creating a mentoring curriculum for teen mothers. Future research could find out what topics provided the greatest benefit. A questionnaire could be generated to assess teen mothers’ opinions regarding the kinds of topics they would like covered in a mentoring curriculum. For example, the mothers could desire to hear topics such as potty training or discipline. Perhaps a longitudinal study could analyze the long term benefits of a mentor in the life of a teen mother as well as the child well-being indicators.

Future research could also look into a program that could provide routine weekly text messages to teen mothers. A questionnaire would need to be created to find out

topics of interest. From there a website could have the details regarding how teen mothers could become part of the weekly recordings. This could also be created as a cell phone app teen mothers could download onto their phone.

The issue of nonverbal communication was surfaced during this research. Understanding how large of an impact this may have in the lives of teen mothers and their children could reveal a powerful influence on the child's overall development.

Implications for Social Change

This qualitative case study provided implications for social change in terms of tangible improvements to teen mothers, communities, cities, and states. In society, this information may inform those who work in mentoring groups, faith-based support groups, and alternative high schools. These individuals may find it helpful in creating a mentoring curriculum or workshops geared towards teen mothers in order to create best practices. At the workshop or mentoring classrooms, teen mothers could learn activities they could do and questioning strategies they could implement in conversations with their child.

This study may also provide direction for scheduling options in alternative high schools for teen mothers. Perhaps parenting classes could be provided during the teen's school day. She could learn specific activities like questioning strategies, labeling the child's environment, or the importance of reading to her child. Play is important in the life of the child as well as book reading. Both concepts can be taught and reinforced in parenting classes.

This study contributed to the body of knowledge needed to address the problem of teen mothers' lack of knowledge regarding the benefits of mother-child interactions during play and routine times and how it supports language development. According to the current body of literature, children born to teen mothers score lower on cognitive, knowledge, and language development compared to older mothers (Moore, Redd, Burkhauser, Mbwana, and Collins, [2008]; Fagan, Lee, [2013]; Mayers, Hager-Budny, Buckner, [2008]; McGowan, Smith, Noria, Culpepper, Rohling, Borkowski, Turner, [2008]; Keown, Woodward, Field, [2001]). Based on the information gathered in this research, there is a positive relationship between mothers and the impact they perceived they could make with their child's language development.

This study is important to the future educational needs of young children. Mothers who were teens when they gave birth have a unique opportunity to introduce their children to terms, concepts, skills, and dispositions through shared experiences during playtime and routine times of the day. The data indicated that the support that was most beneficial to children by their mothers is conversation within an activity. This allows the mother to extend the child's language during the activity.

According to Eshbaugh (2011), perceptions of teen mothers should be examined. The information found could be beneficial to social workers and interventionists. The same author shared that the teen mothers' perceptions would be helpful to college instructors, employers, voters, and taxpayers. According to the author, by understanding where the teen mother is coming from, it will help their own biases and result in less

scolding which alienates the teenagers and ultimately the child they seek to help (Eshbaugh, 2011).

This research addressed the issue of gathering perceptions of mothers who were teens when they gave birth but now are the age of majority about their influence on their child's language development. Practical strategies were shared by the mothers regarding what they did to enhance language development with their children. What is important to note, however, was that their perceptions were not supported by their descriptions.

Reflections of the Researcher

The purpose of this case study was to understand mothers' perceptions of how they influenced their children's language development during informal ways (during play, routines, and other interactions). A qualitative case study was selected to answer the four research questions. I used interviews, journals, and follow-up narratives to collect my data.

Lisa shared that it is not quantity that matters but quality. I would say that it takes both quantity of time with ones' child as well as quality of open-ended communication between mother and child. Brandi shared that the mother is the first and most important teacher. Therefore, if the goal is to have children better prepared for the classroom and success in schools, it is necessary to support the teen mothers regarding ways to expand and support language development.

The findings in this study shed light on the importance of mother/child interactions and the conversations that they share. I understand that mothers have a lot of demands to take care of which include employment, the home environment, and the

child. But one of the very important areas they need focused attention on is the raising of their child. Simple book reading, talking in the car, and bed time routines all help to establish solid foundations for language skill learning in the life of the child and developing their language skills. I was surprised that each mother thought of herself as an exceptional mother although the data collected did not always lend to that conclusion. I was amazed though how some mothers were able to juggle the raising of their child, living in poverty, and still put themselves through school. To me, that suggested strong resilience on the part of the mother.

I was very thankful for the warm response I received from the mothers and our various times of getting together. I appreciated their willingness to be involved. I had thought that the mother may be embarrassed to talk about her situation but I was pleased with the fact that the mother appeared very open and honest regarding all aspects to her pregnancy and birth. One mother shared that although she had not planned on having a child, she can't imagine life without her. Another mother also shared that she had wanted to give the child up for adoption but the father did not. Now she cannot imagine the thought of not having the "child to deal with."

Conclusion

Child well-being indicators show that children born to teen mothers score lower on language development, lack proper nutrition, and are more likely to have health issues, be maltreated, lack play experiences, and be removed for periods from the home. These factors may contribute to low school readiness. The gap though exists in research in the

area of mothers' perceptions of their influence of their child's language development through play and routine times of the day.

This qualitative case study provided an in-depth description and analysis of language interactions that were used when mothers and their children were playing. Conversations were documented taking place various times of the day. This study was an important addition to research because it provided specific examples regarding when conversations took place, their locations, and the specific topics. This study revealed the details regarding how teen mothers added in conversations. Also as the mothers created journals regarding teaching opportunities in their child's life, the mothers began to see that they actually did teach their child things each day. Although 5 of the 6 mothers felt they made a difference, by the end of the study all 6 mothers felt they "now made a difference" in their young child's language development.

References

- Ainsworth, M. D., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist*, *46*(4), 333-341. doi:10.1037/0003-066X.46.4.333
- Al-Sahab, B., Heifetz, M., Tamim, H., Bohr, Y., & Connolly, J. (2011). Prevalence and characteristics of teen motherhood in Canada. *Maternal Child Health Journal*, *16*, 228-234.
- Amato, P. R., & Kane, J. B. (2011). Life-course pathways and the psychosocial adjustment of young adult women. *Journal of Marriage and Family*, *73*, 279-295. doi:10.1111/j.1741-3737.2010.00804.x
- Arnold, R., & N. Colburn. (2005). "Oh, what a smart baby: What you need to know about children's brain development." *School Library Journal*, *51*, 37.
- Belfield, C. R., & Levin, H. M. (2003). Educational contracts for parents. *The School Administrator*, 22-27.
- Belsky, J. M. (2007). Are there long-term effects of early child care? *Child Development*, *78*(2), 681-701. doi:10.1111/j.1467-8624.2007.01021.x
- Berk, L. E. (2004). *Developmental psychology: Development through the lifespan*. Boston, MA: Allyn & Bacon.
- Bert, S. C., (2009). The influence of religiosity and spirituality on adolescent mothers and their teenage children. *Young Adolescence*, *40*, 72-84.
- Blumenfeld, R. S., & Ranganat, C. (2007). Prefrontal cortex and long-term memory encoding: An integrative review of findings from neuropsychology and

- neuroimaging. *The Neuroscientist*, 13(3), 280-291. doi:10.1177/1073858407299290
- Boeree, C. G. (2006). *Personality theories: Jean Piaget 1896-1980*. Retrieved from <http://webpace.ship.edu/cgboer/piaget.html>
- Bogat, G. A., Liang, B., & Dahn, R. M. (2008). Stages of mentoring: An analysis of an intervention for pregnant and parenting adolescents. *Child Adolescent Social Work Journal*, 25, 325-341.
- Bond, T. (2008). Cognitive development and school readiness. *Encyclopedia of educational psychology*. (pp. 163-165). Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412963848.n43
- Bowlby, J. (1955). The growth of independence in the young child. *The Journal of the Royal Society for the Promotion of Health*, 76, 587-591. doi:10.1177/146642405507600912
- Bowlby, J. (1988). Developmental psychiatry comes of age. *The American Journal of Psychiatry*, 145, 1-10. <http://dx.doi.org/10.1037/0033-295x.100.4.674>
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York, N.Y.: Routledge.
- Breheny, M., & Stephens, C. (2010). Youth or disadvantage? The construction of teenage mothers in medical journals. *Culture, Health & Sexuality*, 12(3), 307-322. doi:10.1080/1369050903513234

- Briceno, A. C., Feyter, J. J., & Winsler, A. (2013). The school readiness of children born to low-income, adolescent Latinas in Miami. *American Journal of Orthopsychiatry*, 83(23), 430-442. doi:10.1111/ajop.12021
- Brown, P. M., & Remine, M.D. (2004). Building pretend play skills in toddlers with and without hearing loss: Maternal scaffolding styles. *Deafness and Education International*, 6(3), 129-153. doi:10.1179/146431504790450546
- Bruner, J. (1960). *The process of education*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1966a). *Toward a theory of instruction*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1966b). *Studies in cognitive growth*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1983). *Child's talk: Learning to use language*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1997). *The culture of education*. Cambridge, MA: Harvard University Press.
- Burgess, S. R. (2011). Home literacy environments (HLEs) provided to very young children. *Early Child Development and Care*, 181(4), 445-462. doi:10.1080/03004430903450284
- Burr, V. (2003). Constructivism. *Encyclopedia of Social Science Research Methods*. Retrieved from <http://sage-ereference.com/view/socialscience/n165.xml>
- Cardaci, R. (2011). A case study of teen parenting. *International Journal of Nursing Terminologies and Classifications*, 22(1), 40-43. doi:10.1111/j.1744-618X.2010.01176.x

- Carin, A. A., Bass, J. E., & Contant, T. L. (2005). *Teaching science as inquiry*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Carpendale, J., Müller, U., & Bibok, M. (2008). Piaget's theory of cognitive development. *Encyclopedia of educational psychology*, 799-805. Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412963848.n215
- Chablani, A., & Spinney, E. R. (2011). Engaging high-risk young mothers into effective programming: The importance of relationships and relentlessness. *Journal of Family Social Work*, 14, 369-383. doi:10.1080/10522158.2011.588544
- Cherney, I.D. (2008). The effects of active learning on students' memories for course content. *Active Learning in Higher Education*, 9, 152. doi:10.1177/1469787408090841
- Cole, M., & Wertsch, J. V. (n.d.). Beyond the individual-social antimony in discussions of Piaget and Vygotsky. Retrieved from: <http://webpages.charter.net/schmolzel/vygotsky/colewertsch.html>>
- Colker, L.J. E. (2008). Twelve characteristics of effective early childhood teachers. *Young Children*, 3, 68-72.
- Cornelius, M.D., Goldschmide, L., Willford, J.A., Leech, S.L., Larkb, C., & Day, N.L. (2009). Body size and intelligence in 6-year-olds: Are offspring of teenage mothers at risk? *Maternity Child Health*, 13, 847-856.

- Covino, J.K. (2002). Mind matters: What brain-based research means for educators and for the future of math, language arts, foreign language, the arts and special education. *District Administration, 2*, 25-27.
- Cooper, S. (2009). Howard Gardner: Multiple Intelligences. Theories of Learning in Educational Psychology. Retrieved from <http://www.lifecircles-inc.com/Learningtheories/Gardner.html>
- Cowan, K.W., & Cipriani, S. (2009). Developing inquiry through analogy. *Young Children, 11*, 62-67.
- Cox, J.E., Buman, M.P., Woods, E.R., Famakinwa, O., & Harris, S.K. (2012). Evaluation of raising adolescent families together program: A medical home for adolescent mothers and their children. *American Journal of Public Health, 102*(10) 1879-1885. doi:10.2105/AJPH.2012.300766
- Coyne, C.A., Langstrom, N., Lichtenstein, P. & D'Onofrio, B.M. (2013). The association between teenage motherhood and poor offspring outcomes: A national cohort study across 30 years. *Twin Research and Human Genetics, 16*(3), 679-689. doi:10.1017/thg.2013.23
- Craik, F.I.M., & Lockhart, R.S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior, 11*, 671-684. doi:10.1016/S0022-5371(72)80001-X
- Craik, F.I.M., & Lockhart, R.S. (2008). Levels of processing and Zinchenko's approach to memory research. *Journal of Russian and East European Psychology, 46*(6), 52-60. doi:10.2753/RPO1061-0405460605

- Crawford, E.O., Heaton, E.T., Heslop, K., & Kixmiller, K. (2009). Science learning at home involving families. *Young Children, 11*, 39-41.
- Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: SAGE Publications.
- Dacan, N. (n.d). National survey of child and adolescent well-being: special health care needs among children in child welfare.
http://www.acf.hhs.gov/programs/opre/abuse_neglect/nscaw/
- Dalla, R.L., Hagen, S.B., Jareske, B.K., & Sukup, J.L. (2009). Examining the lives of Navajo Native American teenage mothers in context: A 12- to 15-Year follow-up. *Family Relations, 58*, 148-161. doi:10.1111/j.17413729.2008.00543.x
- Derlan, C.L., Umana, A.J., Toomey, R.B., Updegraff, K.A., & Jahromi, L.B. (2015). Person-Environment Fit: Everyday Conflict and Coparenting conflict in Mexican-Origin Teen Mother families. *Cultural Diversity and Ethnic Minority Psychology, 21*(1), 136-145. <http://dx.doi.org/10.1037/a0037069>
- Deaton, C.M., Deaton, B.E., & Leland, K. (2010). Interactive reflective logs: Opening up science notebooks to peer and teacher feedback. *Science and Children, 11*, 44-48.
- DeVries, R. (2008). Piaget and Vygotsky: Theory and practice in early education. *21st century education: A reference handbook*, 184-194. doi:10.4135/9781412964012.n20

- Dickinson, K.K., & Tabors, P.O. (2001). *Beginning literacy with language: Young children learning at home and school*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Dickinson, P., & Joe, T., (2010). Strengthening young mothers: A qualitative evaluation of a pilot support group program. *Youth Studies Australia*, 29(1), 35-44.
- Distefano, C. A. (2007). Development and validation of a behavioral screener for preschool-age children. *Journal of Emotional and Behavioral Disorders*, 15(2), 93-102.
- Dooley, C.M., & Welch, M.M. (2014). Nature of interactions among young children and adult caregivers in a children's museum. *Early Childhood Education Journal*, 42, 125-132. doi:10.1007/s10643-013-0601-x
- Duncan, M. S. (2008). *Tools for Motherhood*. Self-published. Topeka, Kansas.
- Ee, J., Wong, K.Y., & Aunio, P. (2006). Numeracy of young children in Singapore, Beijing & Helsinki. *Early Childhood Education Journal*, 33(5), 3325-332. doi:10.1007/s10643-006-0088-9
- Eshbaugh, E.M. (2008). Teen mothers: Marriage, cohabitation, and educational achievement. *Journal of Family Social Work* 11(1), 3-16. doi:10.1080/10522150802007162
- Eshbaugh, E.M. (2011). College students' positivity toward teen mothers. *Journal of Family Social Work*, 14, 237-246. doi:10.1080/10522158.2011.571541

- Estes, D. (2005). Metacognition. *Encyclopedia of Human Development*. Retrieved from [http://sage-ereference.com /view /humandevlopment /n408.xml](http://sage-ereference.com/view/humandevlopment/n408.xml)
- Fagan, J., & Lee, Y. (2013). Explaining the association between adolescent parenting and preschoolers' school readiness: A risk perspective. *Journal of Community Psychology, 41*(6), 692-708. doi:10.1002/jcop.21565
- Falkenberg, T. (2011). Knowing mathematics-for-teaching: The case of planning learning activities. *Problems of Education in the 21st Century, 35*, 58-69. <http://home.cc.umanitoba.ca/~falkenbe/>
- Fantuzzo, J.W., Perlman, S.M., & Dobbins, E.K. (2011). Types and timing of child maltreatment and early school success: A population-based investigation. *Children and Youth Services Review, 33*, 1404-1411. doi:10.1016/j.chilyouth.2011.04.010
- Feeney, S. (2009). NAECTE position statement: Introduction to the NAECTE position statement on early childhood teacher certification. *Journal of Early Childhood Teacher Education 30*, 186-187. doi:10.1080/10901020902996716
- Fiala, C.L. & Sheridan, S.M. (2003). Parent involvement and reading: Using curriculum-based measurement to assess the effects of paired reading. *Psychology in the Schools, 40*(6), 613–626. doi:10.1002/pits.10128
- Flavell, J.H. (1976). *Metacognitive aspects of problem solving. The Nature of Intelligence, 12*, 231-235.

- Flavell, J.H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906-911.
<http://dx.doi.org/10.1037/0003-066X.34.10.906>
- Flavell, J.H. (2000). Development of children's knowledge about the mental world. *International Journal of Behavioral Development*, 24(1), 15-23.
<http://www.tandf.co.uk/journals/pp/001650254.html>
- Futris, T.G., Nielsen, R.B., & Olmstead, S.B. (2010). No degree, no job: Adolescent mothers' perceptions of the impact that adolescent fathers' human capital has on paternal financial and social capital. *Child Adolescent Social Work Journal*, 27, 1-20.
- Gabriel, J. (2001). Getting ready for school: Pencils, notebook, positive attitude. Brain connection Newsletter. Retrieved from <http://www.brainconnection.com>.
- Gallagher, K.C. (2005). Brain research and early childhood development: A PRIMER for developmentally appropriate practice. *Young Children*, 7, 12-20.
- Gardner, H. (1983). *Frames of mind*. New York, NY: Basic Books.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York, NY: Basic books.
- Gardner, H., (1995). Reflections on MI: Myths and messages. *Phi Delta Kappan*, 77(3), 200-209. doi:10.2307/1585978
- Gardner, H. (1999). *Intelligence reframed: Multiple intelligences for the 21st century*. New York, NY: Basic Books.
- Geist, K. (2008). Do re mi, 1-2-3 that's how easy math can be: Using music to

support emergent mathematics. *Young Children*, 3, 20-24.

Genetic Epistemology (J. Piaget). (n.d.). TIP: Theories. Retrieved from <http://tip.psychology.org/piaget.html>

Glen, N.J., & Dotger, S. (2009). Elementary teacher's use of language to label and interpret science concepts. *Journal of Elementary Science Education*, 21(4), 71-82.

Gordon, L.M. (2005). *Encyclopedia of Human Development*. Retrieved from <http://sage-reference.com/view/humandevlopment/n274.xml>

Gottfried, A. (2008). Home environment and academic intrinsic motivation. *Encyclopedia of educational psychology*, 486-491. Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412963848.n131

Gredler, M. (2010). Vygotsky, Lev (1896–1934). *Encyclopedia of educational reform and dissent*, 928-929. Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412957403.n450

Guidubaldi, J., & DeZolt, D. (1991). Assessment and diagnostic services for pre-kindergarten children. *Psychology and Behavioral Sciences Collection Database*, 26(1). <http://www.jstor.org/stable/42868991>

Hachey, A.C., & Butler, D.L. (2009). Science education through gardening and nature-based play. *Young Children*, 11, 42-49.

Hadzigeorgiou, Y. (2001). The role of wonder and 'romance' in early childhood science education. *International Journal of Early Years Education*, 9(1), 63-69. doi:10.1080/713670677

- Hammond, S.I., Muller, U., Carpendale, J.I.M., & Liebermann-Finestone, D.P. (2012). The effects of parental scaffolding on preschoolers' executive function. *Developmental Psychology, 48*(1), 271-281. <http://dx.doi.org/10.1037/a0025519>
- Hanline, M.F., Milton, S., & Philps, P.C. (2010). The relationship between preschool block play and reading and math's abilities in early elementary school: A longitudinal study of children with and without disabilities. *Early Child Development and Care, 180*(8), 1005-1017. doi:10.1080/03004430802671171
- Harper, S., Boggan, M.K., & Tucker, C. (2008). Using children's literature to teach math. *Southeastern Teacher Education Journal, 1*(1), 77-83. doi:10.1111/jcal.12067
- Harris, M.B., & Franklin, C. (2009). Helping adolescent mothers to achieve in school: An evaluation of the taking charge group intervention. *Children and Schools, 31*(1), 27-34. doi:10.1093/cs/31.1.27
- Hendrick, A.S., & Young, S. (2013). Working the 'spaces' between policy and practice: The contributions offered by resilience theory and action research. *Child & Family Social Work, 18*, 179-188. doi:10.1111/j.1365-2011.00819x
- Herron, J. (2010). An evolution of mathematical beliefs: A case study of three pre-k teachers. *Journal of Early Childhood Teacher Education, 31*, 360-372. doi:10.1080/10901027.2010.523771

- Hogan, J., & Casella, C. (2005). Piaget, Jean. *Encyclopedia of applied developmental Science*, 830-834. Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412950565.n320
- Hurd, N.M., & Zimmerman, M.A. (2010). Natural mentoring relationships among adolescent mothers: A study of resilience. *Journal of Research on Adolescence*, 20(3), 789-809. doi:10.1111/j.1532-7795.2010.00660.x
- Husenits, K.J. (2005). Child Rearing. *Encyclopedia of Human Development*. Retrieved from http://sage-ereference.com/humandevlopment/Article_n123.html.
- Ijalba, E. (2015). Effectiveness of a parent-implemented language and literacy intervention in the home language. *Child Language Teaching and Therapy*, 31(2), 207-220. doi:10.1177/0265659014548519
- Ireton, H. (1994). The child development chart: In screening and parent education. *Behavior Science Systems*, Minneapolis, MN.
- Jeynes, W.H. (2003). A meta-analysis the effects of parental involvement on minority children's academic achievement. *Education and Urban Society*, 35(2), 202-218. doi:10.1177/0013124502239392
- Johnson, M.H. (2003). Neuroscience perspectives: Development of human brain functions. *Society of Biological Psychiatry*, 54, 1312-1316. doi:10.1016/S0006-(03)00426-8
- Jung, H.Y., & Reifel, S. (2011). Promoting children's communication: A kindergarten teacher's conception and practice of effective mathematics instruction. *Journal of*

Research in Childhood Education, 25, 194-221.doi:10.1080/02568543.2011.555496

Justice, L. M., Sofka, A.E., & McGinty, A. (2007). Targets, techniques, and treatment contexts in emergent literacy intervention. *Seminars in Speech and Language*, 28(1), 14-24.doi:10.1055/s-2007-967926

Katz, L.G. (2003). *State of the Art of Early Childhood Education*. Lecture presented May 20, 2003, at the University of Louisiana, Lafayette, LA.

Kaye, K. (2012). Why it matters: Teen childbearing and infant health. *The National Campaign to Prevent Teen and Unplanned Pregnancy*, 10, 1-6.

Kervin, L. (2016). Powerful and playful literacy learning with digital technologies. *Australian Journal of Language and Literacy*, 39(1), 64-73.

Keown, L.J., Woodward, L.J., & Field, J. (2001). Language development of pre-school children born to teenage mothers. *Infant and Child Development*, 10, 129-145.doi:10.1002/icd.282

Kerr, K., Beggs, J., & Murphy, C. (2006). Comparing children's and student teachers ideas about science concepts. *Irish Educational Studies*, 25(3), 289-302.doi:10.1080/03323310600913732

Kim, Y.Y., Roh, A.Y., & Namgoong, Y., Jo, H.J., Lee, J.M. & Kwon, J.S. (2009). Cortical network dynamics during source memory retrieval: Current density imaging with individual MRI. *Wiley InterScience*, 30, 78-91.doi:10.1002/hbm.20487

- Klaw, E. (2008). Understanding urban adolescent mothers' visions of the future in terms of possible selves. *Journal of Human Behavior in the Social Environment, 18*(4), 441-461. doi:10.1080/10911350802486767
- Klinker, J.F. (2006). Brain research and practice. Retrieved from <http://sage-reference.com/view/edleadership/n51.xml>
- Krammer, C. (2010). Play school movement. *Encyclopedia of educational reform and dissent*. (pp. 713-714). Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412957403.n344
- Kostos, K., & Shin, E. (2010). Using math journals to enhance second graders' communication of mathematical thinking. *Early Childhood Education Journal, 38*, 223-231. doi:10.1007/s10643-010-039-4
- Lamb, M.E. (2004). Attachment, child-parent. *Encyclopedia of Applied Developmental Science*. SAGE Publications. Retrieved from: http://www.sage-reference.com/applieddevscience/Article_n51.html
- Lancaster, L. (2003). Moving into literacy: How it all begins. *Handbook of Early Childhood Literacy*. SAGE Publications. Retrieved from http://sage-reference.com/hdbk_earlyliteracy/Article_n12.html.
- Lane, K.L., & Phillips, L. (2007). Teacher and parent expectations of preschooler's behavior: Social skills necessary for success. *Topics in Early Childhood Special Education, 27*(2), 86-97. doi:10.1177/02711214070270020401
- Larson, A.M. (2010). Cross system comparisons of children in treatment foster care: Using agency data to study cross-system child outcomes. *Children*

and Youth Services Review 32, 89-97. doi:10.1016/j.childyouth.2009

.07.014

Leerlooijer, J.N., Bos, A.E., Ruiter, R.A., Reeuwijk, M.A., Rijdsdijk, L.E.,

Nshakira, N., & Kok, G. (2013). *BMC Public Health*, 13, 1-15.

<http://www.biomedcentral.com/1471-2458/13/816>.

Leff, J. (2012). Terrible twos and terrible teens: The importance of play. *Journal*

of Infant, Child, and Adolescent Psychotherapy, 1, 299-315. doi:10.1080

/15289168.2012.732841

Lemche, E., Kreppner, J.M., Joraschky, P., & Dlann-Delius, G. (2007). Attachment

organization and the early development of internal state language: A longitudinal perspective. *International Journal of Behavioral Development*, 31, 252-

262. doi:10.1177/0165025407076438

Lemonda, C.S., Shannon, J., & Spellmann, M. (2002). Low-income adolescent

mothers' knowledge about domains of child development. *Infant Mental Health Journal*, 23(1-2), 88-103. doi:10.1002/imhj.10006

Lenroot, R.K., Schmitt, J.E., Ordaz, S.J., Wallace, G.L., Neale, M.C., Lerch, J.P.,

Kendler, K.S., Evans, A.C., & Giedd, J.N. (2007). Differences in genetic and environmental influences on the human cerebral cortex associated with

development during childhood and adolescence. *Wiley InnerScience*, 27, 163-174.

doi:10.1002/hbm.20494

Lewin, A., Mitchell, S.J., & Hodgkinson, S. (2011). Parental nurturance and the

mental health and parenting of urban African American adolescent

mothers. *Journal of Family Social Work*, 14, 311-325. doi:10.1080/10522158.2011.587177

Lewin, A., Mitchell, S.J., & Ronzio, C.R. (2013). Developmental differences in parenting behavior: comparing adolescent, emerging adult, and adult mothers. *Merrill-Palmer Quarterly*, 59(1), 23-49. doi:10.1353 /mpq.2014.0003

Lev Semyonovich Vygotsky (1896-1934) Russian Psychologist. (n.d.). Human Intelligence: Lev Semyonovich Vygotsky. Retrieved from <http://www.indiana.edu/~intell/vygotsky.shtml>

Linder, S.M., Powers-Costello, B., & Stegelin, D.A. (2011). Mathematics in early childhood: Research-based rationale and practical strategies. *Early Childhood Education Journal*, 39, 29-37. doi:10.1007/s10643-010-0437-6

Linder, S.M. (2011). The facilitator's role in elementary mathematics professional development. *Mathematics Teacher Education and Development*, 13(2), 44-66. ISSN-1442-3901

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.

Long, M.S. (2009). Disorganized attachment relationships in infants of adolescent mothers and factors that may augment positive outcomes. *Adolescence*, 44(175), 621-633.

- Lowrey, K. (2010). Developmentally appropriate practice. *Encyclopedia of educational reform and dissent*, 269-271. Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412957403.n118
- Lynch, R. G. (2005). Preschool pays: High-quality early education would save billions. *American Educator*, 26-35.
- Maldonado, N. (2008). Vygotsky and language learning. In J. Gonzalez (Ed.), *Encyclopedia of Bilingual Education*, 900-904. Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412963985.n342
- Mantzicopoulos, P. (2004). I am really good at puzzles, but I don't get asked to play with others: Age, gender, and ethnic differences in Head Start children's self-perceptions of competence. *The Journal Of Genetic Psychology*, 51-65. doi:1.3200/GNTP.165.1.51-66
- Manso, J.M., Baamonde, M.E., Alonso, M.B., & Barona, E.G. (2010). Pragmatic language development and educational style in neglected children. *Children and Youth Services Review*, 32, 1028-1034. doi:10.1016/j.childyouth.2010.04.008
- Markova, G., & Legerstee, M. (2008). How infants come to learn about the minds of others. *Zero to Three*, 5, 2008.
- Mantzicopoulos, P.H., & Samarapungavan, A. (2009). Reading, writing, and conducting inquiry about science in kindergarten. *NAEYC: Young Children*, 11, 32-38.
- Mayers, H.A., Budny, M.H., & Buckner, E.B., (2008). The chances for children teen parent-infant project: Results of a pilot intervention for teen mothers

- and their infants in inner city high schools. *Infant Mental Health Journal*, 29(4), 320-342. doi:10.1002/imhj.20182
- McCracken, J. B. (2005). *So many goodbyes: Helping young children start school*. Washington, DC: NAEYC.
- McDonal, L., Conrad, T., Fairtlough, A., Fletcher, J., Green, L., Moore, L., & Lepps, B. An evaluation of a group work intervention for teenage mothers and their families. *Child and Family Social Work*, 14, 45-57. doi:10.1111/j.13665-22006.2008.00580.x
- McGowan, M.W., Smith, L.E., Noria, C.W., Culpepper, C., Rohling, J.L., Borkowski, J.G., & Turner, L.A. (2008). Intervening with at-risk mothers: Supporting infant language development. *Child Adolescent Social Work Journal*, 25, 245-254.
- McKay, R. (2008). Multiple Intelligences. *Encyclopedia of Educational Psychology*. Retrieved on October 20, 2011 from <http://sage-ereference.com/view/educationalpsychology/n189.xml>
- McMahon, S.E. (2013). Enhancing motor development in infants and toddlers: A multidisciplinary process for creating parent education materials. *Newborn & Infant Nursing Reviews*, 13, 35-41. doi:10.1053/j.nainr.2012.12.001
- Meyers, E.M. (2010). Cognitive authority in everyday life: From small worlds to virtual worlds. *Knowledge Quest*, 38(3), 48-51.
- Missall, K. A. (2007). Examination of the predictive validity of

preschool early literacy skills. *School Psychology Review*, 433-452.doi:10.1038/nature05874

Mistry, R.S., Benner, A.D., Biesanz, J.C., Clark, S.L., & Howes, C. (2010).

Family and social risk, and parental investments during the early childhood years as predictors of low-income children's school readiness outcomes. *Early Childhood Research Quarterly* 25, 432-449.doi:10.1016/j.ecresq.2010.01.002

Molfese, V.J. (2006). Alphabetic skills in preschool: A preliminary study of letter

naming and letter writing. *Developmental Neuropsychology*, 29, 5-19.doi:10.1207/s15326942dn2901_2

Mollborn, S., & Blalock, C. (2012). Consequences of teen parents' child-care

arrangements for mothers and children. *Journal of Marriage and Family*, 74, 846-865.doi:10.1111/j.1741-3737.2012.00988.x

Molnar, A., & Hertenstein, M. (2005). Piaget, Jean (1896-1980). *Encyclopedia of*

human development, 1008-1009. Thousand Oaks, CA: SAGE Publications, Inc.doi:10.4135/9781412952484.n486

Moore, K.A., Redd, Z., Burkhauser, M., Mbwana, K., & Collins, A. (2009).

Children in poverty: Trends, consequences, and policy options. *Child Research Brief*, 11, 1-12.

Moses, L. J. (2005). Flavell, John (1928-). *Encyclopedia of Human Development*.

Retrieved on October 19, 2011 from <http://sage-ereference.com/view/humandevlopment/n262.xml>

- NAEYC Position Statement regarding early childhood mathematics: Promoting good beginnings. Retrieved from http://www.naeyc.org/resources/position_statements/positions_intro.htm
- Neumann, M.M., & Neumann, D.L. (2009). The scaffolding of emergent literacy skills in the home environment: A case study. *Early Childhood Education Journal*, 36, 313-319. doi:10.1007/s10643-008-0291-y
- Ng, A.S., & Kaye, K. (2013). Why it matters: Teen childbearing and child welfare. *The National Campaign to Prevent Teen and Unplanned Pregnancy*, 5, 1-5.
- Noria, C.W., Borkowski, J.G., & Whitman, T.L. (2009). Parental influences on self-regulation and achievement in children with adolescent mothers. *European Journal of Developmental Psychology*, 6(6), 722-745. doi:10.1080/17405620801969734
- Norris, D.G. (2006). Principles of magnetic resonance assessment of brain function. *Journal Magn Reson Imag* 23, 794-807. doi:10.1002/jmri.20587
- Norris, J., Howell, E., Wydeven, M., & Connell, M.K., (2009). Working with teen moms. *MCN*, 34(5), 308-315. doi:10.1097/01.NMC.0000360424.52228.dc
- O'Connell, R.F. (2008). Early childhood education: Curriculum and programs. *21st century education: A reference handbook*, 388-396. Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412964012.n42
- Ogu, U. (2009). Investigating rocks and sand: Addressing multiple learning styles through an inquiry-based approach. *Beyond the Journal*, 3, 1-10.

- O'Shaughnessy, E.S., Berl, M.M., Moore, E.N., & Gaillard, W.D. (2008). Pediatric functional magnetic resonance imaging (fMRI): Issues and applications. *Journal of Child Neurology, 23*, 791-801. doi:10.1177/088373807313047
- Oswalt, K.L., Biasini, F.J., Wilson, L.L., & Mrug, S. (2009). Outcomes of a massage intervention on teen mothers: A pilot study. *Continuing Nursing Education Series, 35*(5), 284-317.
- Oxford, M., & Spieker, S. (2006). Preschool language development among children of adolescent mothers. *Applied Developmental Psychology, 27*, 165-182. doi:10.1016/j.appdev.2005.12.013.
- Palusci, V.J. (2011). Risk factors and services for child maltreatment among infants and young children. *Children and Youth Services Review 33*, 1374-1382. doi:10.1016/j.chilyouth.2011.04.025
- Papamicheal, E., Pillai, R., & Yoong, W. (2009). Children having children: Outcome of extreme teenage pregnancies (13-15 years). *Acta Obstetrica et Gynecologica, 88*, 1284-1287. doi:10.3109/00016340903229427.
- Perlman, S., & Fantuzzo, J. (2010). Timing and influence of early experiences of child maltreatment and homelessness on children's educational well-being. *Children and Youth Services Review, 32*, 874-883. doi:10.1016/j.chilyouth.2010.02.007
- Perry, B., Dockett, S., & Harley, E. (2007). Preschool educator's sustained professional development in young children's mathematics learning. *Mathematics Teacher Education and Development, 8*, 117-134.

- Petersen, S., & Wittmer, D. (2008). Relationship-based infant care. *Young Children*, 5, 40-42.
- Peterson, R., & Felton-Collins, V. (1986). *The Piaget handbook for teachers and parents: Children in the age of discovery, preschool-third grade*. New York: Teachers College Press.
- Petty, K. (2009). Using guided participation to support young children's social development. *Young Children*, 7, 80-85.
- Piaget, J. (1952). *The origins of intelligence in children*. New York: The Norton Library.
- Piaget, J. (1965). *The child's conception of number*. New York: Norton Library.
- Piaget, J. (1973). *The child's conception of the world*. Great Britain: Granada Publishing Limited.
- Piaget, J. (1981). *The Psychology of Intelligence*. Totowa, New Jersey: Littlefield, Adams and Co.
- Plucker, J. (2007). Jean Piaget. Retrieved from: <http://www.indiana.edu/~intell/piaget.shtml>.
- Pianta, R. (2002). School Readiness: A focus on children, families, communities, and Schools. *The Informed Educator Series*, 1-12.
- Pritchard, A. (2009). *Ways of learning*, 2nd edition. Retrieved from EBSCO Publishing: eBook Collection.
- Ponsford, R. (2011). Consumption, resilience and respectability amongst young mothers in Bristol. *Journal of Youth Studies*, 14(5), 541-560. doi:10.1080/13676261.2011.559217

- Proctor-Weber, Z. (2005). Intelligence. *Encyclopedia of anthropology*. SAGE Publications. Retrieved on May 1, 2010, from http://www.sage-reference.com/anthropology/Article_n477.html.
- Radin, N. (1972). Three degrees of maternal involvement in a preschool program: Impact on mothers and children. *Child Development*, 43(4), 1355-1364. doi:10.2307/1127521
- Rafferty, Y., Griffin, K.W., & Lodise, M. (2011). Adolescent motherhood and developmental outcomes of children in early head start: The influence of maternal parenting behaviors, well-being, and risk factors within the family setting. *American Journal of Orthopsychiatry*, 81(2), 228-245. doi:10.1111/j.1939-0025.2011.01092.x
- Rolfe, A. (2008). You've got to grow up when you've got a kid': Marginalized young women's accounts of motherhood. *Journal of Community & Applied Social Psychology Journal Community Applied Social Psychology*, 18, 299-314. doi:10.1002/casp.925
- Romagnoli, A. & Wall, G. (2012). "I know I'm a good mom." Young, low-income mothers' experiences with risk perception, intensive parenting ideology and parenting education programmes. *Health, Risk, and Society*, 14(3), 273-289. doi:10.1080/13698575.2012.662634
- Roper, F. (2009). Riding the rollercoaster: An infant observation of a teenage couple and their baby. *Infant Observation*, 12(3), 283-294. doi:10.1080/137980303303656

- Roos, S. A. (2006). Young children's God concepts: Influences of attachment and religious socialization in a family and school context. *Religious Education, 101*(1), 84-103. doi:10.1080/00344080500460743
- Rouse, H.L., & Fantuzzo, J.W. (2008). Multiple risks and educational well-being: A population-based investigation of threats to early school success. *Early Childhood Research Quarterly, 24*, 1-14. doi:10.1016/j.jecresq.2008.12.001
- Rosnov, D., & Roberts, M.C. (2005). Encyclopedia of human development. Sage reference online. Retrieved on May 8, 2010, from http://www.sage-reference.com/humandevelopment/Article_n349.html
- Rossmann, M. (n.d.). From Freud to Brazelton: 100 Years of child & parenting development theories. *Learning Zone Express*, p. 1-38.
- Ruban, L.M. & Cantu, C.A. (2005). Multiple Intelligences. *Encyclopedia of Human Development*. Retrieved from <http://sage-reference.com/view/humandevelopment/n424.xml>
- Rudd, L.C., Lambert, M.C., Satterwhite, M., & Smith, C.H. (2009). Professional development + coaching = enhanced teaching: Increasing usage of math mediated language in preschool classrooms. *Early Childhood Education Journal, 37*, 63-69. doi:10.1007/s10643-009-0320-5
- Rury, J.L. (2008). *Encyclopedia of the Social and Cultural Foundations of Education*. Retrieved from <http://sage-reference.com/view/foundations/n141.xml>
- Ryan, S., Franzetta, K., Manlove, J.S., & Schelar, E. (2008). Older sexual partners during adolescence: Links to reproductive health outcomes in young

- adulthood. *Perspectives on Sexual and Reproductive Health*, 40(1), 17-26. doi:10.1363/4001708
- Sackes, M., Trundle, K.C., & Flevores, L.M. (2009). Using children's literature to teach standard-based science concepts in early years. *Early Childhood Education Journal*, 36, 415-422. doi:10.1007/s10643.009-0304-5
- Salkind, N. J. (Ed.). (2005). *Encyclopedia of human development*. Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412952484
- Scarborough, A.A., & McCrae, J.S. (2010). School-age special education outcomes of infants and toddlers investigated for maltreatment. *Children and Youth Services Review*, 32, 80-88. doi:10.1016/j.childyouth.2009.07.015
- Scarborough, M.K., Lewis, C.M., & Kulkarni, S. (2011). Enhancing adolescent brain development through goal-setting activities. *Social Work*, 55(3), 276-278.
- Scarinci, N., Rose, T., Webb, K., & Pee, J. (2015). Impacts of an in-service education program on promoting language development in young children: A pilot study with early childhood educators. *Child Language Teaching and Therapy*, 31(1), 37-51. doi:10.1177/0265659014537508
- Seider, S. (2009). Multiple Intelligences. *Encyclopedia of Giftedness, Creativity, and Talent*. Retrieved from <http://sage-ereference.com/view /giftedness/n260.xml>

- Sheats, K. (2013). Culturally relevant factors and the young parenthood program. *American Journal of Public Health, 103*(4), 1-3.doi:10.2105/10AJPH.2012.301193
- Sodi, E., & Sodi, T., (2012). Quality of daily life with teenage motherhood. *Journal of Psychology in Africa, 22*(3), 429-434.doi:10.1080/14330237.2012.10820550
- Short-Term Memory. (n.d.). Retrieved from <http://www.simplypsychology.pwp.blueyonder.co.uk/short-term-memory.html>
- Skinner, B.F. (1964). Behaviorism at fifty. *Behaviorism and phenomenology: Contrasting bases for modern psychology, 79-97*. Chicago, IL: University of Chicago Press.
- Social Development Theory (L. Vygotsky). (n.d.). TIP: Theories. Retrieved from: <http://tip.psychology.org/vygotsky.html>.
- Sousa, D.A. (2006). *How the brain learns*. Thousand Oaks, CA: Sage Publications, Ltd.
- Stewart, M.T. (2006). Theories of Literacy. *Encyclopedia of Educational Leadership and Administration*. Received from http://sage-ereference.com.ezp.waldenulibrary.org/edleadership/Print_n347.html
- Suellentrop, K. (2010). The costs and consequences of teen childbearing. *The National Campaign to Prevent Teen and Unplanned Pregnancy, 1-17*.doi:10.1371 /journal.pone.0024658
- Swanson, H.L. (2005). Memory. *Encyclopedia of School Psychology*. Retrieved from <http://sage-ereference.com/view/schoolpsychology /n172.xml>

- Swedish, K.A., Rothenberg, A., Fuchs, K., & Rosenberg, G. (2010). Successful life navigation by former participants in a group for pregnant and parenting teens. *Vulnerable Children and Youth Studies, 5*(4), 310-321. doi:10.1080/17450128.2010.507806
- Sylvestre, A., & Merette, C. (2010). Language delay in severely neglected children: A cumulative or specific effect of risk factors? *Child Abuse & Neglect, 34*, 414-428. doi:10.1016/j.chiabu.2009.10.003
- Tsao, Y.L. (2007). Using guided play to enhance children's conversation, creativity, and competence in literacy. *Journal of Special Education, 128*(3), 515-520.
- n.a. (2011). Jerome Bruner: Constructivism and discovery learning. *Theories of Learning in Educational Psychology*. Retrieved from <http://www.lifecircles-inc.com/Learntheories/constructivism/bruner.html>
- Toth, S.L., & Gravener, J. (2012). Review: Bridging research and practice: Relational interventions for maltreated children. *Journal for all professionals working with children and young people, 17*(3), 131-138. doi:10.1111/j.1475-3588.2011.00638.x
- The National Campaign to Prevent Teen and Unplanned Pregnancy, (n.d.). Why it Matters: Teen pregnancy, substance use, and other risky behavior. www.teenpregnancy.org, 1-2.
- The National Campaign to Prevent Teen and Unplanned Pregnancy, (n.d.). Why it matters: Teen pregnancy and overall child well-being. www.teenpregnancy.org, 1-2.

- The National Campaign to Prevent Teen and Unplanned Pregnancy, (April, 2014). Counting it up: The public costs of teen childbearing in Kansas in 2010, 4, 1-2.
- The National Campaign to Prevent Teen and Unplanned Pregnancy (April, 2014). *Counting it up: What policymakers can do*, 4, 1-2. <http://www.TheNationalCampaign.org> .
- Thornton, J.S., Crim, C.L., & Hawkins, J. (2009). The impact of an ongoing professional development program on prekindergarten teachers' mathematics practices. *Journal of Early Childhood Teacher Education* 30, 150-161.doi:10.1080/10901020902885745
- Towers, J. (2010). Learning to teach mathematics through inquiry: A focus on the relationship between describing and enacting inquiry-oriented teaching. *Journal of Math Teacher Education*, 13, 243-263.
- Tsamir, P., Tirosh, D., & Levenson, E. (2011). Windows to early childhood mathematics teacher education. *Journal of Math Teacher Education*, 14, 89-92.doi:10.1007/s10847-011-9174-z
- Tselfes, V., & Paroussi, A. (2009). Science and theatre education: A cross-disciplinary approach of scientific ideas addressed to student teachers of early childhood education. *Science and Education*, 18, 1115-1134.doi.101007/s11191-008-91582
- Tsujimoto, S. (2008). The prefrontal cortex: Functional neural development during early childhood. *The Neuroscientist*, 14, 345-358.doi:10.1177/1073858408316002
- Valencia, S. W. (1997). Authentic classroom assessment of early reading: Alternatives to

standardized tests. *Preventing School Failure*, 41(2), 63-70. doi:10.1080/10459889709603270

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, Massachusetts: Harvard University Press.

Vygotsky's Theory of Social Development. (n.d.). Retrieved from <http://www.simplypsychology.pwp.blueyonder.co.uk/vygotsky.html>.

Vygotsky, L. (1986). *Thought and language*. Cambridge, Massachusetts: The Massachusetts Institute of Technology.

Wang, X., Bernas, R., & Eberhard, P. (2001). Effects of teachers' verbal oral non-verbal scaffolding on everyday classroom performances of students with Downs Syndrome. *International Journal of Early Years Education*, 9(1), 71-80. doi:10.1080/0966976-125651

Warnes J., & Daiches, A. (2011). Rebuilding after the storm: Stories of young motherhood. *Narrative Inquiry*, 21(1), 109-129. doi:10.1075/ni.21.1.06war

Waterhouse, L. (2005). *Educational Psychologist*, 41(4), 227-232. doi:10.1207/s15326985Sep4104_5

Whitmarsh, J. (2011). Out of the mouth of babes: First-time disadvantaged mothers and their perceptions of infant communication. *International Journal of Early Years Education*, 19(3-4), 283-296. [Http://dx.doi.org/10.1080/09669769.2011.642255](http://dx.doi.org/10.1080/09669769.2011.642255)

- Whitson, M.L., Martinez, A., Ayala, C., & Kaufman, J.S. (2011). Predictors of parenting and infant outcomes for impoverished adolescent parents. *Journal of Family Social Work, 14*, 284-297. doi:10.1080/10522158.2011.587173
- Wilson, B.J. (2006). Cognitive Development. *Encyclopedia of Children, Adolescents, and the Media*. Retrieved from [http://sage-ereference.com /view/childmedia/n88.xml](http://sage-ereference.com/view/childmedia/n88.xml)
- Wood, D., Bruner, J.S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Psychology and Psychiatry, 17*(2), 89-100. doi:10.1080/101522158.2011.587173
- Xie, Y., Harville, E.W., & Madkour, A.S. (2014). Academic performance, educational aspiration and birth outcomes among adolescent mothers: A national longitudinal study. *BC Pregnancy and Childbirth, 14*(3). doi:10.1186/1471-2393-14-3
- Yardley, E. (2008). Teenage mothers' experiences of stigma. *Journal of Youth studies, 11*(6), 61-684. doi:10.1080/13676260802392940
- Zone of Proximal Development. (n.d.). Retrieved from <http://www.simplypsychology.pwp.blueyonder.co.k?Zone-of-Proximal-Development.html>.

Appendix A: Information to Share with Mothers

You are invited to participate in a research study that explores mothers' perceptions regarding their influence on their child's language development during play time. This will be the information that I will share about the study so that participants can decide whether they would like to participate. This study is being conducted by Mary Duncan, who is a doctoral student at Walden University. (IRB approval #09-10-15-0188880).

Background Information:

The purpose of this case study is to understand mothers' perceptions of how they influenced their children's language development during informal ways (during play, routines, and other interactions). Are there any strategies that when you were a teen mother under the age of 18 you used as you played with your child? How did the conversation you had reinforce your child's language development?

Procedures:

If you agree to be in this study, you will be asked to do the following:

1. Participate in an interview
2. Participate in a phone call to follow up on the interview
3. You will receive a journal so you can record specific conversations that you remembered took place with your child during play?
4. I will give the mothers free books for their participation.
5. Audio tapes will be transcribed and you as a mother will have an opportunity to read over all that was typed up so that you can edit or revise what is written.

6. Included with your journal will be a comment page where you can share a written narrative regarding your involvement in this research.

Voluntary Nature of the Study:

You will be reminded that your participation in this study is strictly voluntary. Your decision will be respected regarding whether or not you want to be in this study. If initially you decide to participate, you may still be free to withdraw at any time in the process. During the process, if there is a time when you feel you would like to skip or not be a part you are free to do so.

Confidentiality:

All information gathered for this research will be kept private. Research records will be kept in a locked file where only the researcher has access. All information is kept confidential and member names or anything else that could identify participants will be kept confidential.

Compensation:

Each mother participant will receive a free book, as a result of being a part of the observation as well as a \$10 gift card.

Risk and Benefits of Being in the Study:

There are no risks in participating in this study. There are no benefits in this study other than receiving a free book at the end and a \$10 gift card. However, the early childhood community could better understand the supports mothers could make in their young child's life, as a result, of the participation of mothers who were minors when their child

was born. In other words, you could teach others what you do. As a former teen mom you could help to make a positive difference in our city, state, and country.

Contacts and Questions:

If you have any questions, you may contact me via email at mary.duncan@waldenu.edu or by phone at XXXXX. If you want to talk to anyone at the University about your rights as a participant, you may contact Walden University at 1-800-925-3368 extension 312-1210.

You will receive a copy of this form for your own records.

Statement of Consent:

I have read the above information, addressed any questions I have, and I feel I have enough information to make a decision about whether to be involved. Therefore, I will sign below which says I agree to participate.

Printed Name of Participant _____

Date of Consent _____

Participant's Written Signature _____

Researcher's Written Signature _____

Appendix B: Confidentiality Agreement

During my research work on this case study of teen mothers' perceptions regarding supports they can provide to their young child to help with language development, I will have access to confidential information. I acknowledge that I will keep the information private and protect the rights of my participants.

By signing this agreement, I agree that:

- I will not discuss with family or friends.
- I agree to properly dispose of information upon agreed upon standards.
- I will not discuss confidential information where others can hear even if participant names are not used.
- I will not make or disperse copies of information.
- I will only use a locked pass code protected computer or will store in a locked file cabinet.

By signing this document, I agree to comply with the terms listed above.

Printed name: _____

Signature: _____

Date: _____

Appendix C: Interview

Interview

Interviewer:

Interviewee:

Date: Time of Interview:

Place:

1. Do you and your child play together during the day? If so, what kinds of things do you play with together? RQ1, RQ2
2. Do you find that you talk with your child? If so, what kinds of things do you talk about? RQ2
3. Who do you feel teaches your child new words and helps to label things in their environment? RQ2, RQ3, RQ4
4. On a scale from 1 to 5 with 5 having the highest influence and 1 being the lowest: How much of an impact do you feel you have on the quality of your child's language development?
RQ3, RQ4
5. Do you ever point out new words or objects of things around you and tell them what it is?
Can you give me an example? RQ2, RQ3, RQ4
6. What are some new words you have shared lately with your young child? RQ1, RQ2, RQ3, RQ4

Appendix D: Interview Protocol

**I will ask the questions during the interview. This will be very helpful for me to better understand how the mother feels and her experiences as a teen mother. Thank you ahead of time for sharing your thoughts.*

1. I usually talk to my child during the time they are playing.
 - a. Yes
 - b. No
 - c. Not really

2. I like to join in with my child when they are playing.
 - a. Yes
 - b. No
 - c. Not really

(Mark the one that best answers your experience).

3. How do you as a mother join in with your child's play experience?
 - I am in the same room as my child.
 - I am in the same room as my child but I am usually on my cell phone with my friends.
 - I sit down next to my child but just watch.
 - I enjoy playing with my child.
 - My child doesn't want me to play.
 - I am usually busy doing other things while they play.

4. During a time when I played with my child, I did the following...
 - I usually do not play with my child.
 - I did not know what to say so I just watched them play.
 - I talked with my child about what he was playing.

5. When playing with your child, how did you join in with your child's play experience?
 - I listened to them but usually did not know how to join into the play experience.
 - I had one of the toys and made similar movements or noises.
 - I talked with them about what they were doing.

6. Do you feel you make a difference in what your child learns?
 - a. Yes
 - b. No
 - c. Not really

7. Do you feel you can teach your child things?
 - a. Yes
 - b. No
 - c. Not really

8. Do you feel you influence your child's language development?
 - a. Yes
 - b. No
 - c. They learn from their teacher
 - d. Not really

9. Who do you learn from about how to raise your child? (Circle all that apply).
 - a. Teacher
 - b. Youth Worker
 - c. Social Worker
 - d. Friends
 - e. Mother
 - f. If other please name: _____

10. If you were to learn new ideas about how to encourage your child's language development, you would like to receive the information by: (Circle all that apply).
 - a. Email
 - b. Text
 - c. Website
 - d. Webinar
 - e. Podcast

(Thank you for participating in this interview. The information you share will be kept confidential).

Appendix E: Journal for Mothers**My Journal****Learning Times with Mom**

Mom's Name _____ Date Due for Journal _____

*Royalty Free Graphics

Get Started: Each mother will write down activities they do each day with their young child. Please note the time of day, what took place, and if possible some of the things that were said. List as many activities that apply. Add more sheets of paper if needed. Did

your child make anything as a result of what you did? Please include that as well. Thank you again for being involved in this exciting international research project. You are helping to educate the world on what Teen Mothers do to help teach language development to their young child.

Day 1 Date _____ **Time of Day** _____

Please share what took place, what was said, and what you did.



Day 2 Date _____ **Time of Day** _____
Please share what took place, what was said, and what you did.



Day 3 Date _____ **Time of Day** _____
Please share what took place, what was said, and what you did.



Day 4 Date _____ **Time of Day** _____
Please share what took place, what was said, and what you did.



Day 5 Date _____ **Time of Day** _____
Please share what took place, what was said, and what you did.



Appendix F: Follow-up Questions

Appendix F: Follow-up Interview or Narrative with Teen Mothers after Journal Entries

*These questions were addressed in narrative reflections the teen mothers completed after they did journal entries, except two were interviewed on the phone.

Research Questions:

1. How do you as a mother join in with your child's play experiences?
2. How do you encourage your child to talk during your play experience?

Focused Reflection Questions:

1. Please describe how you feel you influence your child's language development.
2. What parts did you find valuable from your experience?
3. How did you feel about the support you could provide in language development during play?
4. How often do you sit down and play with your child?
5. What other things do you do when you spend time in a conversation with your child?
6. What tools help you support your child's play and conversation i.e. books, toys, driving around in a car or riding on a bus?
7. What groups, individuals, computer based information, or organizations are you able to learn from regarding ways to support your young child's learning?

8. Could you share a little more of what you are looking for regarding parenting materials? Can you give me an example?
9. As a parent, what kinds of activities would you like to have to help you learn more about ways to help your child strengthen their language skills?
10. How would you like to receive activities and ideas: by email, text, website, webinar, or podcast?
11. I like to join in with my child when they are playing.
 - a. Yes
 - b. No
12. I now feel I can make a difference in what my child learns.
 - a. Yes
 - b. No
 - c. Not really
13. I feel I can teach my child things.
 - a. Yes
 - b. No
 - c. Not really
14. I feel I influence my child's language development.
 - a. Yes
 - b. No
 - c. Not really
 - d. They learn from their teacher

The teen mothers' responses will remain confidential. I will thank them in advance for their responses and for taking part in this research.

1. *Are there any other comments from the interview that you would like to share that were not included?*

2. *Please share any thoughts or feelings you may have as a teen mother regarding how you personally extend your child's learning in your home.*

3. *Please share any other thoughts you may have regarding your future support to your child in grade school, middle school, and high school.*

4. *What would you like to have that could assist you to reinforce your child's language development? Please provide some specific examples.*

Appendix G: Results of the Follow-up Questions

Table 6

Results of the Follow-up

Questions and Statements stated:	Responses:
I usually talk to my child during the time they are playing?	Yes – 5 Not really – 1
I like to join in with my child when they are playing?	Yes – 5 Not really – 1
How do you as a mother join in with your child's play experience?	Same room as child -3 Enjoy playing with child – 3 Busy doing other things – 1
During a time when I played with my child, I did the following...	I don't play with my child – 1 I talked with my child about what he or she was playing – 5 When playing with my child, how did you join in with your child's play experience?
When playing with my child, how did you join in with your child's play experience?	Did not know how to join in -1 I talked with my child about what he or she was playing – 5
Do you feel you make a difference in what your child learns?	Yes – 6
Do you feel you can teach your child things?	Yes – 6
Do you feel you influence your child's language development?	Yes – 6
Who do you learn from about how to raise your child?	Friends – Mother – 5 Other: Grandparents, textbooks, family, aunt, teach myself, dad, friends of family, growing up around church, Head Start experience
If you were to learn new ideas about how to encourage your child's language development, you would like to receive the information by: (Circle all that apply)	Email – 3 Text – 4 Website – 3 Podcast - 1