

**EXAMINING OUTCOMES OF A PARENT
EDUCATION APPROACH TO
SPEECH THERAPY**

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SPEECH THERAPY

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Chapter I

Introduction

Background

Parenting is a challenging role and adults frequently receive minimal preparation for this demanding and significant position. Traditionally, child-rearing practices were passed down from experienced grandparents to new parents, and the information was based on individual experience, intuition, and luck. Since parents do not receive any formal training before having children, where do parents go to learn how to manage their children's growth and development? Where can parents find relevant information related to children's social, physical, emotional, and intellectual development and acquire effective parenting skills? Parent education offers a solution to this common question.

Initially, parent education programs specifically focused on increasing parent knowledge of child development and introducing effective parenting techniques. However, some confusion has been presented about the purpose of parent education programs. This stems from conceptual models that define parent education as one specific approach to parent participation in education programs or view it as one single aspect of parent support services in the community (Gorman & Butler, 1997).

The National Parenting Education Network (NPEN) has created a definition of parent education which will be used for this study. According to NPEN, parent education is "a process that involves the expansion of insights, understandings, and attitudes and the acquisition of knowledge and skills about the development of both parents and their

children and the relationship between them” (National Parent Education Network, 1999, Definition of parent education section, 1). This definition provides a clear focus on important goals and the processes for parental growth and change. The focus is on the education process, which takes advantage of the highly effective component of parent education to support parent growth.

For those who have studied child development, parental influence on child behavior has been of great interest. Furthermore, the role of parent education methods and ways that parent education may influence practically every component of parenting are receiving more attention. One must keep in mind that in order to effectively impact families through parent education, proven techniques must be implemented to achieve maximum results. One could presume that the outcomes of parent education programs will only be as valid as the information given and the manner in which the information is delivered.

The parenting role is ever-changing and must adapt over time; therefore, it is imperative that parent education programs continue to target that role and also adapt accordingly in order to effectively reach parents. For example, a speech and language pathologist traditionally meets regularly with a child to foster speech improvement in a particular area of articulation. However, some speech and language pathologists suspect that their role is far more effective when instructing parents on how to teach their children to improve certain speech problems. The parent education method not only encourages parents to take a more active role in improving their children’s speech, but also allows speech pathologists to reach a larger number of parents in a shorter amount of time than when using the individual therapy method.

Importance of Study

The goal of this study was to provide empirical data that supports or challenges a parent education program designed by speech and language pathologists. There is a growing recognition among funding agencies of the need to make programs accountable through setting goals, establishing outcomes, collecting data on the outcomes, and finally evaluating the results. The program under examination is somewhat controversial because it uses a parent education approach to teach specific speech skills, rather than teaching through individual therapy sessions with a speech pathologist.

Therefore, it was important to seek evidence supporting the efficacy of the curriculum. More specifically, this study answers several questions that many parent educators must consider when implementing a new program: Does this program, which employs a nontraditional approach to speech pathology, help parents feel more competent in their skills when assisting their children in making gains in their speech? What parental factors contribute to child outcomes? And, finally, are parents exiting the program with increased levels of appropriate expectations?

Purpose

The purpose of this study was to examine how parental competence and parental expectations were associated with changes in children's speech scores after the completion of a parent education program targeting specific speech problems of the participating children. The researcher examined how parental satisfaction with the chosen parent education program is related to changes in children's speech scores.

Hypotheses

The following hypotheses were examined in this study (See Figure 1 in

Appendix A):

Hypothesis One: After controlling for parental satisfaction with the parent education program, the level of parental competence will be positively associated with change in children's speech scores.

Hypothesis Two: After controlling for parental satisfaction with the parent education program, the level of appropriate parental expectations will be positively associated with change in children's speech scores.

Scope and Limitations

This study examined parents' levels of competence and expectations after attending a parent education class about speech and language development, and attempted to reveal any correlation between the two concepts and change in child outcomes. It is important to note that the results of this study may not be representative of all parents attending this particular program or other programs due to the limited number of participants. The low number of participants could cause a threat to variance, or generalizability of the results. Also, because there was a series of five sessions, parents' attendance patterns could have affected the outcomes of this study.

Another possible limitation is the use of a non-random sampling procedure. The participants of this study were enrolled in the program to address specific speech problem areas; therefore, a convenience sample was utilized. As a result, the subjects may not be representative of the greater population of parents of children enrolled in this program or even similar speech pathology programs.

Conceptualization

In this study, a number of terms were used that require explanation. Brief definitions of these terms follow:

1. Parental self-efficacy can be defined as “beliefs or judgments about one’s competency or ability to be successful in the parenting role” (Hess et al., 2004, p. 424).
2. Parental expectations refer to the expectancies or beliefs in which the parent holds for his or her child. For the present study, speech improvement as a result of the parent education program will be examined along with parental expectations to discover any possible correlation between the two concepts.
3. Parental satisfaction refers to how pleased each parent is with the overall quality of the parent education program.
4. Child outcomes refers to the amount of change measured in a child’s speech scores based on an articulation instrument administered by a speech pathologist before and after parents’ participation in the parent education program.

Chapter II

Literature Review

Theoretical Framework

As the knowledge base in the area of parent education has matured, the field of early intervention has shifted its focus from children, to a growing appreciation of the interaction between family, community, and broad societal factors and how they all affect child development (Shankoff & Philips, 2000). After more than a quarter century of remarkable growth in this area, the basic sciences of child development and neurobiology have created a common theory of change (Shankoff & Phillips, 2000). The essential characteristics for this framework are a culmination of theories about the process of human development. Theories range from the transactional model formulated by Sameroff and Chandler (1975) to the most current concepts of vulnerability and resilience applied to a wide variety of biological and environmental conditions by Rutter (2000), with many others in between (Shankoff & Phillips, 2000). Together these models create a basis that applies well across the diverse combination of policies and programs of childhood intervention in the United States (Shankoff & Phillips, 2000).

While there is no single theoretical or conceptual framework that exists as a foundation for parent education programs, several frameworks that vary widely in approach are presented by organizations (First & Way, 1995; Dwivedi, 1997; Shankoff & Philips, 2000). Among these theories are the family systems perspective, ecological

theory, and social cognitive theory. These theories are combined for this study to provide perspectives from family sciences as well as child development.

Before linking family systems perspective to this study, it is important to note that effective parent education programs are not only geared towards the attending parent and child, but also those other individuals who may have a large impact on that child. More specifically, according to family systems perspective, the behavior of each family member affects other family members in a unit. This theory examines the family as a whole within the context of the family environment and reflects the complexity of human relationships. A family systems perspective of parent education focuses on the functional aspects of the child's misbehavior for the family. However, family systems theory fails to separate the individual from the environment and focuses on child learning and behavior as occurring in the naturalistic setting (Roberts, 1994).

On the other hand, ecological theory has provided a framework for examining parents' perceptions of their needs. According to this theory, human development occurs as a result of interactions with the changing environment in which they live. More specifically, parenting involves experiences with other family members, and community organizations. This supports many parent education programs which aim at teaching individuals who will, in turn, positively impact the larger systems surrounding the family. Overall, Jacobson and Engelbrecht (2000) state that the family experience "consists of the totality of physical, biological, social, economic, political, aesthetic, and structural surroundings for human beings and the context for behavior and development" (p. 139). Because the family structure and environment varies widely, parent educators need to create and implement programs according to the specific needs of parents.

The most applicable theoretical framework for this particular study is Bandura's social cognitive theory. The behavioral model of parent education is centered on the perspective that all behavior is learned through social interactions with significant others. Furthermore, behavior is either reinforced by others or eliminated for lack of reinforcement. Parent education models from this approach attempt to teach parents specific skills. Bandura believes that through modeling a child cognitively represents the behavior of others and, in the case of parent education, will hopefully adopt the acceptable behavior as his own (1977). On the other hand, the child's misbehavior is a result of deficits in social learning or socialization rather than as personality or emotional disorders.

According to social cognitive theory, the parent is the main agent of socialization for the child and must be motivated to reeducate his or her child. The basic principles of this idea involve the parent defining a specific behavior, observing it, and then modifying or introducing reinforcement procedures and continuing to observe them. Then a parent is able to determine if the child's behavior has been affected by the reinforcement (Bandura, 1977). Many parent education programs use these principles as a means to teach parents to apply specific skills acquired during the program to a specific behavior exemplified by their child.

More specifically, according to Vasta (1992), Bandura provides a clear link between modeling and children's speech development (Bandura, 1992). Analyses of verbal transactions between parents and children reveal that "parents are active language teachers" perhaps because of the "greater attentional involvement of the children" (Vasta, 1992, p. 12) Young children are able to acquire new language skills from those patterns

modeled by parents, and then use them in their own speech. Vasta also emphasizes the importance of providing simplified language modeling which the child can comprehend (1992, p. 11). Children gain very little from modeled speech that is beyond their cognitive capabilities; therefore, like many language-centered parent education programs, the social cognitive theory suggests that parents focus on modeling one language skill at a time to make them more easily learnable.

To further support parent education programs, numerous researchers have demonstrated that parents can effectively manage the behavior of their children through the use of behavior management programs. However, the behavior model, as applied to parenting, does imply that the parent will actually implement specified behavioral procedures designed to achieve and evaluate predetermined goals. Although program leaders could assume that if parents take the initiative to attend the program then they clearly have a genuine concern for their child's behavior; therefore parents will dedicate the necessary amount of time needed for the successful implementation of certain techniques.

Finally, the social cognitive approach emphasizes empirical research in studying development, and focuses on the social and cognitive factors that influence development, such as parental competence and parental expectations (Bandura, 1986). Hence, Bandura's social cognitive theory is the foundation for conducting this evaluative study of a particular parent education program.

History of Parent Education

While parent education has existed for centuries as an informal passing of knowledge from one generation to the next, a more organized form came about at the turn

of the century in effort to help poor, immigrant families cope with the economic and social demands (Breakiron, 1997). At this time parent educators were simply attempting to help families adapt to the American culture. Most parent educators were given the title because they had successfully raised a child or were well-respected, extended family members.

It was not until the 1940s that parents were able to obtain well-researched information regarding child development from Arnold Gesell and his colleagues at the Yale Child Development Laboratory (Fine, 1980). He provided detailed information regarding the “physical and motor, social and personality development of the growing child” (Fine, 1980, p. 124). It is also important to note that around this time, Erik Erikson, Margaret Mead, and Jean Piaget each made significant contributions to the area of child development. Next, in the 1960s and 1970s, researchers made an effort to adapt the scientific principles of Skinnerian operant conditioning to the area of parent education (Fine, 1989). Fine also states that “this lead to a shift in emphasis away from the laboratory to the level of the individuals who control the consequences in the child’s environment (parents) was a logical progression of the application of the behavior modification principles” (Fine, 1980, p. 124).

Moving forward to contemporary parent education, loss of support from extended family, fluctuating economic conditions, and an increase in single-parent families have combined to make parenting more difficult than ever. Statistics on “child abuse and juvenile crime dramatize the difficulties of parenting in contemporary society” (Polster & Dangle, 1984, p. 5). In general, parents have less social support and more responsibility.

In spite of the social changes, society maintains the view that parents are the most influential individuals on their children's behavior (Polster & Dangle, 1984).

Evaluation of Parent Education Programs

An evaluation is essentially an effort to understand how well a program functions and the effects of a program, as well as to determine the merit and worth of that program. During the beginning stages of developing a parent training program, one must consider that intervention requires optimal use of evaluation tools in order to match parents' needs, interests, and learning preferences when programs are concerned. Therefore, it is imperative that a parent education program begins with a needs assessment. It seems logical to assume that the more tailored a program is to the audience's needs, then the more likely the parents are to participate and return for future sessions.

Also, an evaluation of a parent education program should focus on a number of key aspects. More specifically, Matthews and Hudson (2001) suggest that an evaluation should examine three elements. First, it should investigate whether or not the design of the program and implementation are based on sound theory and evidence of effectiveness. Second, it is also important to determine the extent to which the program objectives were met during the session. In other words, were the implementers able to consistently meet each goal during each meeting with parents? Finally, it is essential for programs to demonstrate the program's external validity, or the extent to which the skills that parents develop during training will apply to different situations, contexts, behaviors and children; and, how well are these skills maintained over time? These are all relevant characteristics that should be examined in or achieve an accurate assessment of a parent education program.

Matthews and Hudson (2001) also present guidelines for evaluating parent training programs that have been developed with the framework of the Context, Input, Process, Product (CIPP) model created by Stufflebeam (1983). These guidelines stress that components of a program evaluation should occur before, during, and immediately after implementation of a program. The researchers also recommend using several other different types of measures of parent and child behavioral outcomes as well.

According to Matthews and Hudson (2001), evaluations that follow the CIPP model should lead to ongoing improvement of the programs presented. Through evaluating context, specific objectives are periodically examined and modified to meet the current social needs and values related to parenting. This will, in turn, assist in meeting the needs of the children. Next, the input evaluation helps in the selection of appropriate skills that parents need to learn. Matthews and Hudson (2001) note that current research has demonstrated that training approaches may be extremely effective for some parents, but will not work for others. Therefore, research that compared a variety of methods should be reviewed for a particular population.

Process evaluation helps to identify certain factors that hinder the implementation of the program. That way, these factors can be considered and addressed before the next program. Finally, product evaluation tests whether or not the program was successful, which aspects were most helpful to parents, and what needs to be changed. This CIPP model allows program designers and implementers to learn from the evaluation and then revise and ultimately improve the program to become more effective. Overall, it is imperative that a comprehensive evaluation model is used for every parent training program (Jacobson & Engelbrecht, 2001).

Characteristics of Effective Parent Education Programs

An overall assumption underlying most parent education programs is that more knowledgeable, educated, and supported parents will be more prepared to foster their children's development. A substantial body of evidence supports the validity of this statement (Thomas, 1996; McBride & McBride, 1993; Meyers, 1993; Cowen, 2001). However, critics of parent education claim that by only providing parents with child development information and teaching basic skills, a program cannot impact deeper parental beliefs and perspectives (Thomas, 1996). Moreover, interest in parent development as an aim of parent education is based on the assumption that parents who have reached a deeper level in their own development are more equipped for dealing with understanding their role as a parent within their parent-child relationship (Thomas, 1996; Campbell & Palm, 2004).

Taking these assumptions into consideration, one can see how great of a challenge it is for programs to be consistently effective when faced with an ever-changing audience. According to current literature, programs which are most successful provide parents with information they can immediately apply to their parenting practices and convey the message that they are not alone in their struggles. By emphasizing principles of child development, parenting practices related to problems which parents experience, and confidence-building social support, these programs are moderately to largely successful in fostering the changes in which parents seek (Thomas, 1996).

Effective parent education programs are responsive to the unique needs of parents and entail an interaction between parent characteristics, program resources, and outcomes (Jacobson & Engelbrecht, 2000; Matthews & Hudson, 2001). If these needs are met, then

programs have the potential to have a strong impact on participants. In fact, knowledge alone can temporarily but significantly reduce disruptive parenting behavior (McKenry et al., 1999). Furthermore, evaluative data suggests that by the end of training, parents indicate an increased awareness of their children's point of view, and changes in how they react with their spouse around children (McKenry et al., 1999). These are all desirable characteristics of parents that can potentially be achieved through effective parent training.

Impacting Children through Parent Education Programs

A substantial body of evidence suggests that parents have a significant influence upon the behavior of their children, particularly on their intellectual and academic achievement (Feng & Fine, 2000; Fine, 1980; Fine, 1989; Polster & Dangle, 1984; Roberts, 1994). More specifically, parent-based intervention programs prove that working with parents is an effective method for increasing a child's intellectual development (Fine, 1981; Fine, 1989). It is crucial to note that the effectiveness of the skills acquired as a result of the parent education program will not be impacted by the number of primary caregivers attending each session. This is because most parents who take advantage of the available resources to benefit their child are usually genuinely concerned and motivated to help their children or to teach another caregiver the techniques learned in the classes.

While it is helpful for both parents to attend a given program, each program is designed to meet specific needs of a particular family. While most programs are not parent-specific, that is, geared toward only mothers or fathers, those which are parent-specific vary greatly. Following is a breakdown of how programs designed for mothers

differ from those geared toward fathers. While the research regarding parent education specifically for fathers is more prolific than for mothers, it is important to keep in mind that most research involving an evaluation of a parent education program had samples that consisted primarily of mothers. Therefore, it was far easier to find explicit information concerning effective strategies for programs targeting fathers.

Parent Education for Mothers

Health and education professionals emphasized parental responsibility for improving their children's early development; however, this information is highly gendered, specifically targeting a female audience. The absence of emphasis on father involvement suggests that "women are the 'natural' recipients of this advice" (Vincent & Warren, 1998, p. 180). This information teaches women what is expected of them as educators of their children.

Currently, the aim of parent education for women is personal enrichment, but a type that also aims at benefiting society (Finch, 1984; Vincent & Warren, 1998). Women want to benefit "personally from learning new skills, gaining a certificate and enjoying themselves, while at the same time learning new activities and techniques" to each of their children (Vincent & Warren, 1998, p. 184). In fact, those who prepared classes for women suggest that attaining a certificate was an important motivator because it served as tangible evidence of their accomplishments (Vincent & Warren, 1998).

Most parent education programs for women have been primarily concerned with the domestic life of women in the mothering role. This has only added to the perception of women at home, whose boundaries stop at the front door or perhaps even at the school gate (Vincent & Warren, 1998). Mary Hughes (1993) suggests that women attending

parent education courses usually feel guilty about being absent from their children and domestic responsibilities. However, those mothers who knew that they were learning techniques that would directly impact their children felt relief from the guilt dilemma. Therefore, it is important that mothers clearly understand the impact that the parent education class will have on their children, and not just on themselves.

In support of this, most parent education programs today strive to provide a nonjudgmental, supportive environment. Mothers prefer programs guided by the idea of helping women achieve autonomy, while recognizing the fact that their everyday lives remain embedded in the family (Vincent & Warren, 1998). Current programs also “explicitly state their goals in terms of empowering women through a personal supportive orientation that takes the particularities of each woman’s situation into account” (Vincent & Warren, 1998, p. 184).

Parent Education for Fathers

On the other hand, an important factor in a movement toward family-centered early childhood programs is the role of fathers; however, this group is often overlooked. Fathers who take an active role as parent can have a positive influence on all aspects of their children’s lives. Evidence from previous studies of fathers’ contributions to their children’s development shows that fathers can actually enhance the child’s internal control and cognitive development (McBride & McBride, 1993), help form sex-role identification, and encourage more positive psychosocial adjustment (Meyers, 1993). Furthermore, children utilize their fathers as a base for exploration and a source of security; in turn, securely attached children demonstrate a more positive affect and perform well in problem solving situations (Meyers, 1993). Although fathers can play

these crucial roles, many of them fail to do so because they do not or cannot participate in child-rearing activities. Consequently, many of these fathers find themselves unprepared to assume an active parenting role; therefore, they have little knowledge of typical child development and awareness of appropriate parenting practices (McBride & McBride, 1993; Meyers, 1993).

Because there are few parent education programs created specially for fathers, empirical research evaluating such programs is scarce (McBride & McBride, 1993; Meyers, 1993). However, the existing research indicates that fathers' participation in these programs can improve their parental competence with their infants, increase positive attachment behaviors (Meyers, 1993), and increase levels of satisfaction with their new family roles (McBride & McBride, 1993).

Overall, while these findings are helpful and encouraging, more information is needed. McBride & McBride (1993) suggest that future programs need to be evaluated based on the following issues: participation (e.g., who, when, how); the effects that participation had on families; the possibility of negative aspects participation (e.g., increased stress, marital tension, jealousy); and the long term effects of participation in the program. As parent educators and researchers explore ways to increase mother and father involvement through intervention programs, it is imperative that thorough evaluations are conducted in order to improve future programs.

Parental Competence and Child Outcomes

As previously mentioned, the purpose of this study is to examine how parental competence and parental expectations are associated with children's speech scores after the completion of a parent education program targeting specific problems of the

participating children. Therefore, it is necessary to review literature that links parental competence and child outcomes. Parental competence can be defined as “beliefs or judgments about one’s competency or ability to be successful in the parenting role” (Hess et al., 2004, p. 424). According to Bandura’s ideas regarding self-efficacy, when a person perceives herself as highly effective in a given role, one will put forth great effort to fulfill the challenges necessary for successfully carrying out a particular role. In contrast, an individual with low levels of self-efficacy is likely to exert less effort, or possibly give up, even though success is potentially attainable. In application to the parenting role, the higher a parent’s level of self-efficacy, the more likely he or she is to put forth the effort to meet the minimum standards of that role, and possibly exceed his or her own expectations.

It is important for parents to feel competent in their ability to be a good parent, because these perceptions of their parenting skills have important consequences for their child’s development. Those parents who believe they are effective parents are also more likely to “persevere in the face of challenges, and this is likely to be advantageous in challenging situations, such as dealing with a temperamentally difficult child or a child whose behavior is difficult to interpret because she signals poorly due to compromised health status, prematurity, or developmental delay” (Hess et al., 2004, p. 425). Furthermore, when these signaling problems occur, parents and children can actually foster inefficacy in each other as a result of a communication barrier (Hess et al., 2004).

Those families headed by incompetent parents pass along ineffective problem-solving skills from one generation to the next (Polster & Dangle, 1984). Therefore, one could speculate that an incompetent, or less effective, parent may not be as successful at

teaching her child a particular skill, as would a parent with higher levels of parental self-efficacy. In addition, incompetent parents are most likely to be generally dissatisfied with their own children, regardless of whether or not they are competent individuals. These children are at great risk for developing future life problems; therefore, supporting the importance of parent education programs which address parental levels of self-efficacy.

Relationship between Parental Expectations and Child Outcomes

It is apparent that a parent's expectations for his or her child's development are an important means by which parents influence children's self-concept as well as their academic behaviors (Parsons & Ruble, 1977; Thompson et al., 1988). Research suggests that the variability of impact of parent education programs aimed at teaching parents to teach their children suggests that different child outcomes may be a result of differences in parental expectations (Kolobe, 2004; Schaefer, 1991). However, few studies actually assess the linkage between parental expectations and child outcomes.

Earl Schaefer states that parental expectations are "significantly correlated with parent education and with child intelligence test scores and teacher ratings of child competence" (1991, p. 240). Therefore, while values, beliefs, and expectations are clearly related to the competence of adults, which in turn impacts their competence as educators of their children, it seems logical that parental expectations would also directly impact child outcomes.

Parental Satisfaction with Program and Child Outcomes

After a rather extensive review of the literature related to this study, the researcher was unsuccessful in locating any research linking parental satisfaction with a parent

education program to child outcomes therefore, revealing a gap in the literature. While data has been gathered regarding both variables, no clear correlation was presented in the reviewed literature.

Need for Evaluation of Parent Education Programs

There is a growing recognition among funding agencies of the need to make programs accountable, which involves goal setting, establishing outcomes, collecting data on those outcomes, and finally evaluating the results. Program evaluation is facilitated by collecting and using data on development or process. However, there are many methods and instruments for accomplishing this task. Separate from fiscal accountability, an argument can be made on ethical grounds that program providers working with families should be able to prove that positive outcomes have been achieved with a particular program; and, they should demonstrate that no damage has been caused to the family (Matthews & Hudson, 2001). However, while a great deal of information about parent education is available, knowledge regarding the outcomes of specific parent education programs seems to be relatively limited (First & Way, 1995; Veale et al., 2002). Positive outcomes cannot simply be assumed when parents participate in an intervention program, therefore, stressing the importance and need for some form of evaluation to be conducted for each widely used program.

Current studies suggest using a qualitative research approach in order to a) take a comprehensive look at the environment being studied, b) gain new insights and hypotheses, c) allow hypotheses or theories developed to be grounded in observational data gathered in a naturalistic setting, and finally, d) prevent the researcher from

overlooking phenomena that do not fit initial expectations because the observer does not start with specific hypotheses (First, 1995).

To achieve this, multiple measures are necessary to accommodate for diversity among participants of the parent education program (Veale, 2002). Often, data collection methods are flawed in that they often do not accurately measure or account for the wide variety of backgrounds from which these families originate. Therefore, an appropriate, cost effective combination of quantitative data collection methods should be used for this particular study.

Summary

Parenting is an ever-changing process that is heavily influenced by the parent, the child, the family system, as well as the environment. However, the key to maximum positive levels of functioning as a family is to strengthen and adapt parenting skills. Parent education geared toward both mothers and fathers is becoming increasingly important in the effort to understand each area of child development. In order to effectively achieve this level of awareness, parent educators must consider multiple factors when developing a parent education program.

Moreover, these programs must be evaluated and reevaluated to ensure that they are accomplishing the common goal of effectively meeting the needs of children and their families. Perhaps the most important aspect of evaluating any aspect of a parent education program is recognizing that each program is unique and must be assessed differently according to the program goals and objectives. Furthermore, parents' needs as well as the educators' interests must be considered before measuring any outcomes of parent education programs.

Chapter III

Methodology

Participants

Participation in this study was offered to all parents who attended and completed the Speech Therapy Group provided by the Tulsa City-County Health Department during the fall of 2004 and winter of 2005. The participants were primary caregivers of the children. To qualify for the Speech Therapy Group, their child exhibited a mild to severe delay assessed by one of the two Speech and Language Pathologists (SLP). While multiple caregivers were welcome to attend the Speech Therapy Group with each child, data was collected from the primary caregiver who attended the five-week program most regularly. There were approximately 50 families that attended the four sessions held during the fall of 2004 and winter of 2005, all of which was extended the opportunity to participate in this study, with 27 participating.

The Speech Therapy Group. The five-session, 1.5 hour per session program was developed by and is implemented by two speech and language pathologists at the Tulsa City County Health Department in Oklahoma. The program was created out of a need to reach multiple families with speech-delayed children; therefore, a parent education model was utilized to develop a class that teaches speech skills to parents.

During the first session, the family was given a folder filled with handouts for each session, which corresponded to the flipchart of diagrams and key points used by the

speech and language pathologists (See Appendix B). They were also provided with a copy of their child's initial speech scores on the Goldman-Fristoe 2 Test of Articulation (Goldman & Fristoe, 2000). From this assessment the speech and language pathologists derived a specific speech goal for each child, which was the focus for all five sessions. During the first session the parents learned ways to begin working with their children including effective strategies for teaching speech, the typical development of speech, auditory discrimination, and characteristics of speech sounds. Furthermore, one important aspect of this program is the interaction between parent and child that took place during the last thirty minutes of each session. This time allowed parents to practice the new skills acquired through games and activities while in the presence of the SLPs.

During the second session, after reviewing the first session, the level of difficulty increased as parents learned how to teach their children to use their target sounds in certain words. However, not all children were ready to move to this next step, so parents were given criteria used to determine if their child was prepared for the skills acquired in that session. Next, during the third session, parents learned how to encourage their children to combine words together to make phrases using their target sounds. This particular session incorporated information regarding child behavior and applied it to speech development. More specifically, parents learned about reasoning, rewards, setting boundaries, and proper instruction for speech development.

The fourth session of the Speech Therapy Group taught parents how to encourage their children to use the specific sound in a simple sentence. This could be achieved by using several different strategies including imitation, use of carrier phrases, and stimulation. These strategies are later explained in detail using handouts and flipcharts,

which were also employed in previous sessions. Finally, during the fifth session, the SLPs reviewed all previous sessions and allowed parents to brainstorm new activities that spark communication. The overall goal of this activity was to incorporate speech into children's everyday activities. All of these techniques ultimately lead to the goal of speech therapy, which is to make correct speech become automatic.

Instruments

In addition to an articulation instrument administered to the children by one of the SLPs, a demographic form and three questionnaires were utilized to collect the data for this study (See Appendix C for questionnaires).

Demographic information. A demographic questionnaire, designed by the researcher, was used to collect personal information regarding the participants and their families. Information gathered on the demographic questionnaire included age and sex of the child and the parent, parents' income level, ethnicity, marital status, educational level, employment status, and their relationship to the child attending the program.

Articulation. As a part of the child's speech and language evaluation, the Goldman-Fristoe 2 Test of Articulation was administered as a screening device to determine if the child had a severe enough speech delay to attend the program (Goldman & Fristoe, 2000). Then the Goldman-Fristoe 2 Test of Articulation was used as a post-test measure during a private meeting with each parent and one SLP at a pre-arranged appointment within one month after the conclusion of the program. The articulation test data was used to determine the amount of change in the child's scores before and after attending the program. For the purposes of this study the raw scores were examined, as it equals the total number of articulation errors. The raw scores from the pre- and posttests

were recorded and compared to determine the degree of change in a child's speech scores. The Goldman-Fristoe 2 Test of Articulation provides information about a child's articulation ability by sampling both spontaneous and imitative sound production. Examinees responded to picture plates and verbal cues from the examiner with single-word answers that demonstrate common speech sounds. The Supplemental Norms Booklet allows organizations to set their own cutoff criteria as to who qualifies for services based on developmental data. The alpha reliabilities for the Goldman-Fristoe 2 are mostly in the .90s. They range from .92 to .98 for females and from .85 to .96 for males. The median reliability is .96 for females and .94 for males.

Parental Competence. The Parental Sense of Competence Scale (PSOC), created by Gibaud-Wallston & Wandersman (1978), was used to measure each parent's perceived sense of competence in parenting (See Appendix ?). This instrument contains two scales, Skill-Knowledge and Value-Comforting also referred to as Efficacy and Satisfaction. The PSOC is a 17-item self-report Likert-type scale developed as a specific measure of self-esteem in the parenting situation. Each item is answered on a 6-point scale ranging from *strongly disagree* (6) to *strongly agree* (1). Scoring for items 1, 6, 7, 10, 11, 13, 15, and 17 is reversed so that, for all items, higher scores indicate greater levels of parental competence. Gibaud-Wallston and Wandersman (1978) reported alpha coefficients of .82 and .70 for the Satisfaction and Efficacy scales, respectively. Reliability for the current sample was $\alpha = .95$.

Parental Expectations. The Knowledge Inventory of Development and Behavior: Infancy to School-age (KIDS), created by Fulton and Anderson (1986), will be used to assess primary caregivers' levels of child development knowledge. The KIDS is

composed of 48 items, which describe specific characteristics of children from infancy to school-age. For each characteristic listed on the instrument, the participant will be asked to select the age at which that behavior is typically demonstrated. Five scores are obtained through the KIDS including the total score, infancy subscale score, toddler subscale score, preschool subscale score, and the school-age subscale score. These categories of scores have alpha coefficients ranging from .64 to .83. Reliability for the current sample was $\alpha = .70$.

Satisfaction with Program. A program evaluation form created by Pei Feng and Mark Fine (2000) was given to all participants and contains 35 questions that were broken down into five different sections. These sections include “general impressions of the program, perceived impact of the program, demographic information about the participants, and additional comments about the program” (p. 9). However, this study employed only the first two sections of the instrument to capture a sense of parents’ overall level of satisfaction.

The first section regarding one’s general impression of the parent education program contains five questions asking information about how long they waited to attend the program, the length of the program, quality of the visual aides, and appropriateness of the date and time of the program. Next, eighteen questions will be asked regarding the participants’ perceived impact of the program. The parents will be asked to rate how much they agree or disagree (1 = strongly disagree, 5 = strongly agree) with each statement. The statements in the section address the parents’ satisfaction with the overall program, location, effectiveness of the instructors, and helpfulness of the program. Reliability for the current sample was $\alpha = .92$.

Procedures

The Tulsa City-County Health Department was contacted concerning the need to evaluate a parent education program. Two certified SLPs expressed an interest for evaluative data for a new program they developed. After carefully reviewing the program, discussing this study with one of the SLPs, and deciding which constructs would be examined, the researcher decided it would be best to seek evaluative data from parents who participated in the program sessions held during the fall of 2004 and winter of 2005. This helped the researcher to maximize the sample size and provide more generalizable results.

Now that a description of the participants and an overview of the program have been provided, the procedures will now be discussed. A total of 48 participants from fall 2004 and winter of 2005 were mailed a packet of information after the completion of the final group session and the child's posttest on the Goldman-Fristoe II, and included the following: a cover letter (See Appendix D) briefly describing the study, a consent form (See Appendix E) for participation in the study, a demographic questionnaire, a release form for the Goldman-Fristoe II Test of Articulation pre- and posttest scores, the Parenting Sense of Competence Scale, Knowledge of Infant Development and Behavior, and a program evaluation questionnaire. The packets were addressed and mailed by one of the SLPs to ensure confidentiality. Finally, along with these materials, the researcher enclosed a self-addressed, stamped envelope to facilitate a fast and efficient response. If the family chose to participate, then the signed consent form, release forms, and completed questionnaires were returned. However, if the family did not choose to participate, then no action was taken.

Hypotheses

The following hypotheses were examined in this study (See Figure 1 in Appendix A):

Hypothesis One: After controlling for parental satisfaction with the parent education program, the level of parental competence will be positively associated with change in children's speech scores.

Hypothesis Two: After controlling for parental satisfaction with the parent education program, the level of appropriate parental expectations will be positively associated with change in children's speech scores.

Chapter IV

Findings

The overall purpose of this study was to examine the outcomes of a parent education approach to speech therapy. More specifically, the study examines the relation between parental competence and change in children's speech scores, and parental expectations and change in children's speech scores.

Methods of Analysis

A correlational design was utilized to examine the relation between parental competence, parental expectations, and change in children's speech scores while controlling for program satisfaction. Analyses utilized all 27 valid cases.

To test the first hypothesis, the researcher ran a partial correlation between a composite variable of the summed 16 items on the PSOC and a composite variable representing the change in raw scores on the Goldman-Fristoe II Test of Articulation. The composite variable for the Goldman-Fristoe was computed by subtracting the raw scores, or number of speech errors, from the pretest and subtracting the raw score from the posttest. The second hypothesis was also tested by running a partial correlation between the composite variable consisting of all 48 items of the KIDS instrument and the composite variable representing the change in raw scores on the Goldman-Fristoe II Test of Articulation. Significance levels are based on a one-tailed test where $p < .05$ exemplifies a significant statistical correlation. In addition to the partial correlations, means, standard deviations, reliability alphas and frequency distributions were calculated

for the PSOC, KIDS, Program Satisfaction Questionnaire, and Goldman-Fristoe II Test of Articulation (see Tables 1-6 in Appendix F).

Descriptive Analyses

The final study sample was 27 valid cases consisting of 21 boys (77.78%) and 6 girls (22.22%). The children ranged in age from 24-83 months, with most children falling between 34-38 months of age. Most children in this study were Caucasian (88.87%), while having 3.7% Native American, 3.7% Asian, and 3.7% Multiethnic (See Table 7).

The primary caregivers consisted of 25 mothers, one father, and one grandmother with legal guardianship who ranged in age from 22 to 63 years old, with the majority of parents falling between 31-40 years of age (See Table 8). Of these parents, 92.5% were Caucasian and 7.41% were Native American. When asked about employment status, 37% of parents reported working full-time, 40.74% work part-time, and 22% were unemployed. Furthermore, 18.5% of parents had a master's or doctorate degree, 48.2% graduated college, 18.5% attended some college courses, 11% completed up to the 12th grade, and 1% completed up to the 11th grade. Finally, there was a wide range in responses regarding monthly household income. Monthly family income ranged from the \$0-499 category to the \$4500-4999 with most families making between \$3500-3999 per month.

Quantitative Analysis

Hypothesis 1. After performing a partial correlation on the parent education program, the level of parental competence will be positively associated with change in children's speech scores. Data suggested that as levels of parental competence increase,

children experience greater gains in speech development. In other words, analysis showed a statistically significant association ($r = .444$, $p = .01$) between levels of parental competence and change in children's speech scores (See Table 9).

Hypothesis 2. After performing a partial correlation on the parent education program, the level of appropriate parental expectations will be positively associated with change in children's speech scores. The data revealed that as levels of appropriate parental expectations increases, children's gains in speech development also increase. While the association ($r = .223$, $p = .14$) is not strong, it approaches statistical significance (See Table 10).

Inter-domain Correlations

In addition to the four previously described correlations directly related to the study hypotheses, one additional correlation is worth noting. The scores on the PSOC and KIDS were found to be related ($r = .248$, $p = .137$) as the association approached statistical significance. In other words, as the parents' scores on the PSOC increased, their scores on the KIDS also increased.

Chapter V

Discussion

The focus of this study was to examine the outcomes of a nontraditional approach to speech therapy and to reveal any relation between child development components and children's speech scores. Data was collected from families who attended the parent education group during the fall of 2004 winter of 2005 at an Oklahoma health department by using four instruments to measure the following: children's speech scores, levels of parental competence, levels of appropriate parental expectations, and levels of parental satisfaction with the program.

Summary of Results

The current study examined the levels of parental competence and parental expectations and their association with change in children's speech scores. The results showed a statistically significant relation between parental competence and child outcomes ($r = .4442$, $p = .01$). However, no other statistically significant results related to the study hypotheses were revealed.

Comparison to Past Research

Due to the statistically significant association found between levels of parental competence and change in children's speech scores, it is evident that parents' perceptions of their parenting skills have important consequences for their child's development. Similarly, in a 2004 study, Hess et al. found that parents who believe they are effective parents are also more likely to persevere in challenging situations, such as development

delays. Furthermore, Hess et al. suggested that when parents feel incompetent in their parenting skills and abilities, they may actually foster inefficacy in their children as well (2004). Therefore, the findings of this study are consistent with those of the Hess et al. study.

While the association between appropriate parental expectations and child outcomes in this study was not statistically significant, past research suggests that they are, in fact, related. Research by Kolobe (2004) and Schaefer (1991) suggests that the impact of parent education programs aimed at teaching parents to teach their children suggests that different child outcomes may be a result of differences in parental expectations. However, neither of these studies actually assesses the linkage between parental expectations and child outcomes.

Perhaps the association between parental expectations and child outcomes found in this study, although statistically insignificant, would be stronger if the KIDS had not been the final questionnaire in the packet proceeding the consent form, release form, PSOC, and parent satisfaction questionnaire. In addition, the 48-item KIDS instrument measuring parental expectations was quite lengthy which may have caused parents to become apathetic about the quality of their responses. Overall, the results of this study regarding the association between parental expectations and child outcomes are inconsistent with past research, which causes the researcher to postulate that an external factor could be influencing the accuracy of the responses.

Limitations

The results of this study may not be representative of all parents and children attending this particular program or other similar programs due to the limited number of

participants. Although 60 consent forms were sent to past participants of the Speech Therapy Group, only 29 responded and only 27 cases were considered valid. The researcher suspects that the method of mailing packets to parents, rather than asking for consent face-to-face resulted in a lower response rate.

Another limitation to this study is the generalizability of the results. Due to the relatively low variance in ethnicity, age, education, and socioeconomic status the results of this study may not be applicable to a broader sample or population for that matter. Furthermore, those parents who chose to participate may be more invested in the program and more involved in their children's development than parents who chose not to participate. Overall, a larger sample size with a more diverse group of children and parents would be recommended for future studies analyzing parent education programs.

Another possible limitation is the use of a non-random sampling procedure. Since a convenience sample was utilized the subjects may not be representative of the greater population of parents of children enrolled in this program or even similar speech therapy programs. Finally, it should be mentioned that the participants of this particular study were highly satisfied with the Speech Therapy Program. Very little variance was found in the scores on the Program Satisfaction Questionnaire. Furthermore, it was quite evident that the SLPs had formed a significantly strong with each family throughout the pretest, the five-session program, and the posttest. Nearly half of the returned packets had additional comments written throughout the questionnaires praising the program, its affects on the relationships with their children, and the SLPs. Therefore, while this qualitative data supports the quantitative analyses, it could affect the generalizability of

the study. If parents attended a similar program with different SLPs they may not be as satisfied with the program or its impact on their family.

Implications for Future Research

Since little research is published in the area of parent education approaches to speech therapy, especially concerning the impact of parental factors on child outcomes, more studies in this area are needed to further explain this association. Because this study was limited in its ability to be generalized to other populations, additional research should sample participants with more socioeconomic, geographical, and cultural variance. Results from other programs could vary significantly and could contribute to a better understanding of the association between parental factors and child outcomes of families attending a parent education program. Perhaps conducting a pre-and posttest to measure parental levels of competence and expectations would provide a more in-depth examination of the level of impact the program has on families.

Further Considerations

Clearly there is a possibility that children improve in their speech development when they are learning from parents who are trained by SLPs and who feel competent in their ability to teach such skills. Therefore, if more generalizable results are found through research in this area, then perhaps the method of empowering parents and increasing their levels of competence through parent education could have positive implications for children. Furthermore, if association between parental competence and child outcomes lies true for speech therapy, maybe one could find the same association in programs targeting other realms of child development.

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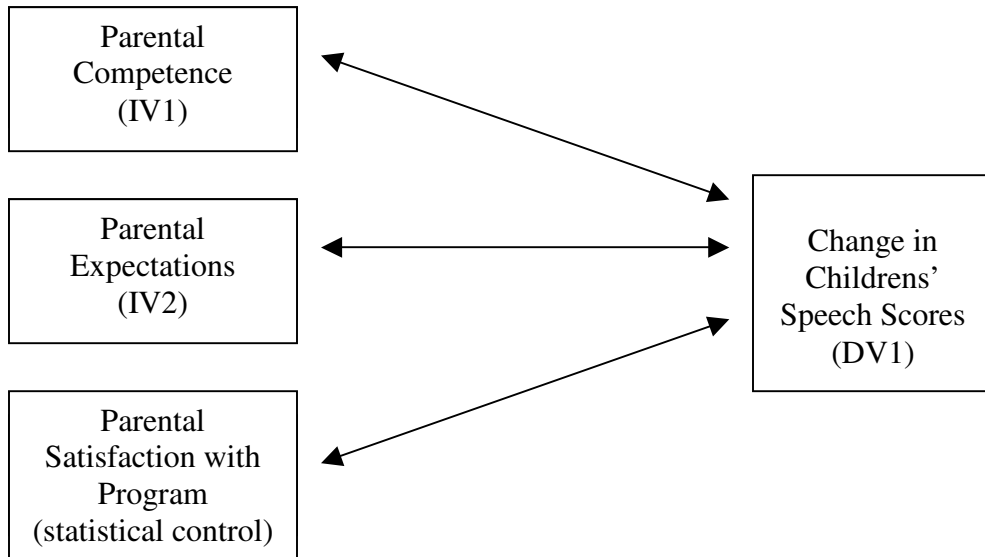
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APPENDICES

APPENDIX A

Figure 1: Hypotheses

Figure 1: Hypotheses



APPENDIX B

Speech Therapy Group Materials

Speech Class #1

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CHARACTERISTICS OF SPEECH SOUNDS

For each speech sound, circle the correct answer for each category: voice, placement, articulators

SOUND	USE VOICE?		FRONT or BACK?		LIPS	TEETH	TONGUE	SOUNDS LIKE
P	YES	<input checked="" type="radio"/> NO	<input checked="" type="radio"/> FRONT	BACK	<input checked="" type="radio"/> LIPS	TEETH	TONGUE	"ph"
M	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	<input checked="" type="radio"/> LIPS	TEETH	TONGUE	"mmm"
N	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"nnn"
W	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	<input checked="" type="radio"/> LIPS	TEETH	TONGUE	"wuh"
H	YES	<input checked="" type="radio"/> NO	FRONT	<input checked="" type="radio"/> BACK	LIPS	TEETH	TONGUE	"hhh"
B	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	<input checked="" type="radio"/> LIPS	TEETH	TONGUE	"buh"
G	<input checked="" type="radio"/> YES	NO	FRONT	<input checked="" type="radio"/> BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"guh"
K	YES	<input checked="" type="radio"/> NO	FRONT	<input checked="" type="radio"/> BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"kh"
F	YES	<input checked="" type="radio"/> NO	<input checked="" type="radio"/> FRONT	BACK	<input checked="" type="radio"/> LIPS	<input checked="" type="radio"/> TEETH	TONGUE	"fff" or "fh"
D	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"duh"
NG	<input checked="" type="radio"/> YES	NO	FRONT	<input checked="" type="radio"/> BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"ing"
Y	<input checked="" type="radio"/> YES	NO	FRONT	<input checked="" type="radio"/> BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"yuh"
T	YES	<input checked="" type="radio"/> NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"t" (not "tee")
SH	YES	<input checked="" type="radio"/> NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"sh"
CH	YES	<input checked="" type="radio"/> NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"ch"
L	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"ll" or "luh"
R	<input checked="" type="radio"/> YES	NO	FRONT	<input checked="" type="radio"/> BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"rr" or "ruh"
J	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"juh"
TH (VOICED)	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	<input checked="" type="radio"/> TEETH	<input checked="" type="radio"/> TONGUE	"th" or "thuh"
V	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	<input checked="" type="radio"/> LIPS	<input checked="" type="radio"/> TEETH	TONGUE	"vv" or "vuh"
S	YES	<input checked="" type="radio"/> NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"sss"
Z	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	TEETH	<input checked="" type="radio"/> TONGUE	"zzz"
TH (UNVOICED)	YES	<input checked="" type="radio"/> NO	<input checked="" type="radio"/> FRONT	BACK	LIPS	<input checked="" type="radio"/> TEETH	<input checked="" type="radio"/> TONGUE	"th"

WORKING WITH YOUR CHILD

1. Practice for short times ranging from five to twenty minutes.
2. Make the practice fun by using a game or activity.
3. Praise the child for attempting to make the sound even if it is wrong.
4. Gradually increase speech requirements during practice.
5. Decrease how much you help them with your hands and increase explanation.
6. Remember the more you practice, the better your child will become at saying his sound correctly.
7. Imitating what someone says is easier than saying the sound without hearing it first.
8. Practice time should have the following pattern: practice the sound goal, take a turn at the activity, repeat throughout session.
9. Emphasize and point out the sound in daily activities.
10. Use rewarding activities to encourage the child to participate.
11. Start session on an easy task, increase to a more difficult task and end on an easy task.

FUN IDEAS FOR HOME PRACTICE

What to do:

- 1) Look for any activity where you and your child can take turns!
- 2) Look for ways to increase turn-taking with activities
- 3) Provide a reward at the end of the activity for working with you.

GAMES

- ❖ Candyland
- ❖ Bingo
- ❖ Memory
- ❖ Hi-Ho Cherrio
- ❖ Go Fish
- ❖ Old Maid
- ❖ Chutes and Ladders
- ❖ Puzzles
- ❖ Tic-Tac-Toe
- ❖ Homemade games
 - Generic game board or file folder game
 - Fishing game (made with a dowel rod with a string and magnet on the end; put a paperclip on pictures and fish for them)
- ❖ Bowling game
- ❖ Treasure hunt (tape pictures around the house and use a flashlight to look for them; name the picture when you find it)
- ❖ Sound bags (put several objects or pictures with your child's sound in a bag; pull the objects out and have the child name the object when they pull it out)
- ❖ Blocks (the child gets a block each time he says the sound or word)

CRAFTS

- ❖ Gluing objects to paper (noodles, paper scraps, pictures, buttons)
- ❖ Color or paint by number
- ❖ Necklace or bracelet (string macaroni or beads)
- ❖ Painting, cutting, coloring, gluing, stamping

ON THE GO

- ❖ Help your child look for items with the child's sound to point out in the environment
- ❖ Cooking, bathing, eating, reading books

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CLASS 1 SUMMARY

My child's sound goal: _____

At home this week, I am supposed to:

- Work on the sound by itself.
- Have my child listen for his sound.
- Point out objects in the environment with my child's sound.

Other homework: _____

The next class date is: _____

Questions to ask at the next class: _____

CLASS EVALUATION

I LIKED....

I DIDN'T LIKE....

I SUGGEST....

I HAVE QUESTIONS ABOUT....

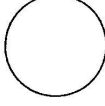
Speech Class #2

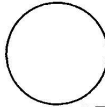
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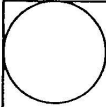
HOW TO TEACH SPEECH

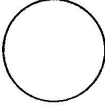
Number the circles in the order in which you teach speech.


"furry dog"
(Sound in a phrase)


"Dog"
(Sound in a word)

Look, Mom! It's a furry dog! I wish I had a dog."
(Sound in conversation) 


"d"
(Sound by itself)

"I see a furry dog."
(Sound in sentences) 

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CASE STUDY

Sam is a 3 year-old boy. Sam has a loving family with two siblings. However, you have noticed Sam has difficulties communicating with adults and other children. The following is a conversation between Sam and his friend:

FRIEND:	"Sam, what are you eating?"
SAM:	"A tookie"
FRIEND:	"I see what you are drinking!"
SAM:	"Yeah, ilk. I wuv tookies and ilk."

QUESTIONS

1. What sounds are wrong in Sam's speech?

2. For Sam's age, should you be concerned about the sounds he is saying wrong? (Circle correct answer.)

YES

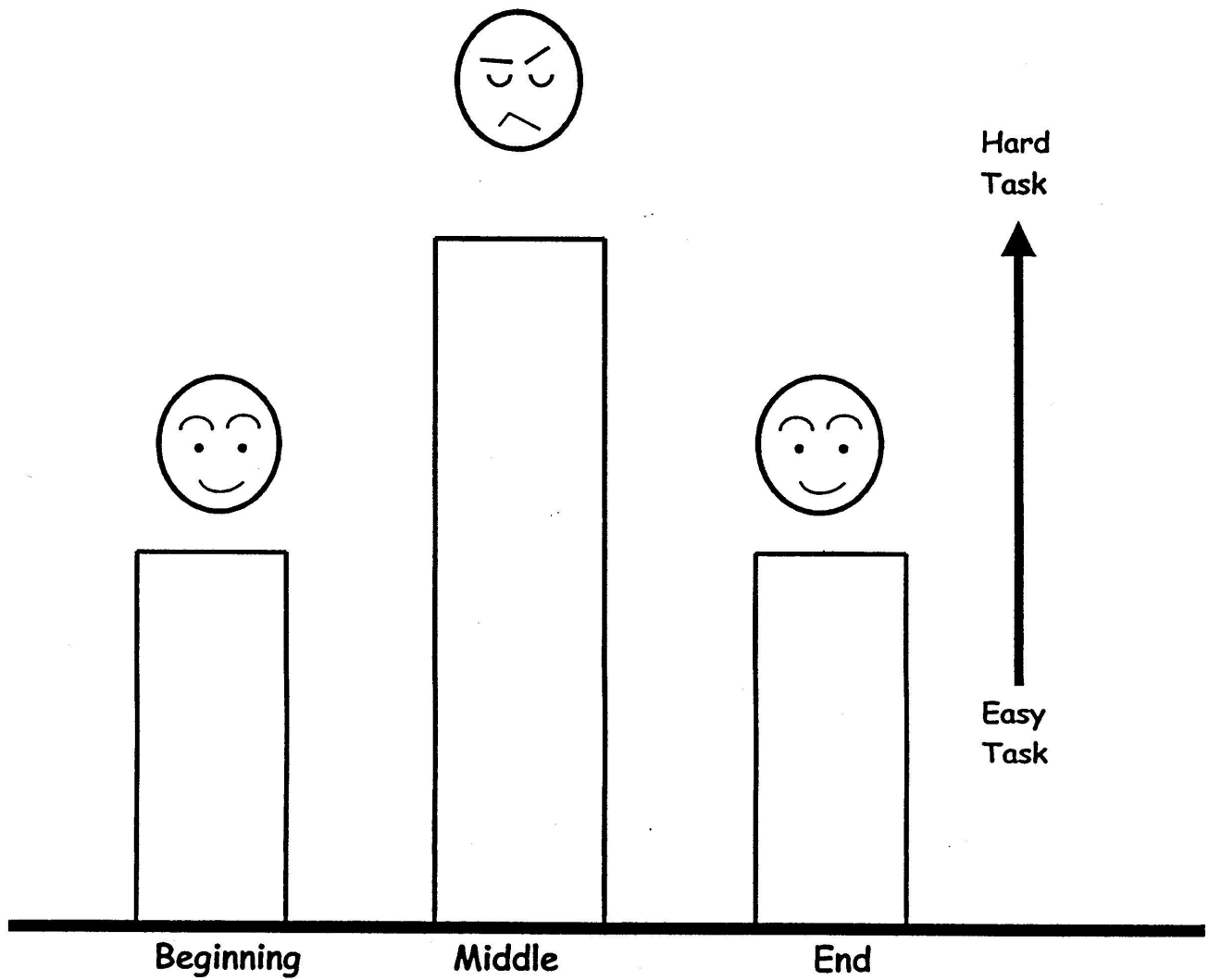
NO

3. What sound should you help Sam with first? _____

2nd sound to work on: _____

3rd sound to work on: _____

THERAPY SESSION



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Speech Class #3

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REVIEW GAME
CLASS 3



1. After you determine what sound to teach your child, what is the first step of the therapy process?
 - A. Saying the sound in a word
 - B. Saying the sound by itself
 - C. Correct your child in conversation
 - D. Saying the sound in sentences

2. If a child could not say any of the following sounds, which should you work on first?
 - A. r
 - B. m
 - C. k
 - D. choose the sound that bugs you most

3. What is the correct order for teaching a sound in words?
 - A. End of the word, Middle of the word, Beginning of the word
 - B. Middle of the word, Beginning of the word, End of the word
 - C. Beginning of the word, Middle of the word, End of the word
 - D. Beginning of the word, End of the word, Middle of the word

4. What is the correct order of speech therapy?
 - A. Conversation, Sentences, Words, Sound by itself
 - B. Sound by itself, Word, Sentences, Conversation
 - C. Sentences, Syllable, Sound by itself
 - D. Syllable, Sound by itself, Conversation

5. Which of the following sounds use the voice?

A. d	F. f
B. g	G. t
C. k	H. p
D. s	I. b
E. r	J. z



INCREASING DIFFICULTY IN THE THERAPY PROCESS

INCREASING DIFFICULTY

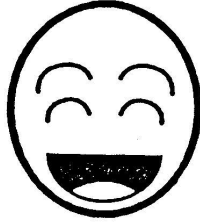
After your child has begun to say his sound correctly in words most of the time, the next step is to make it more difficult, as the goal is to eventually use the sound correctly in conversation. A step between using the sound in words and using the sound in conversation is to use it in phrases. The precision of sequencing muscular movements of the tongue, lips, and jaw is made more complicated with each step of therapy. Using the sound in a phrase helps the child transition from words to conversation easier by slowly increasing difficulty. At this point, do not concentrate on any other sound your child says wrong.

RATE OF SPEECH

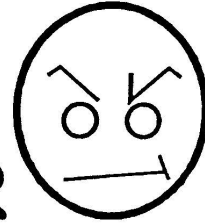
We know that increased rate of speech increases the number of speech sound errors. In other words, the faster a person talks, the more difficult they are to understand. During speech therapy, it is important that you model words for your child at a slow but natural rate. This will help emphasize the correct way to pronounce the sound and will give your child more opportunities to hear the sound in running speech. As adults, we sometimes talk so quickly that word endings are not clearly heard. (For example, we may say, "I'm gonna be runnin' some errands today.") In addition, children process information more slowly than adults. Therefore, it is imperative that your child be given every opportunity to hear clear speech from their model - you! It is in a child's nature to become excited. When this happens, expect for the child to forget about using his sound correctly. Try to avoid frustrating your child by continuously asking him to slow down. Just model a slower rate for your child as best you can.

MAKING LEARNED SPEECH SOUND NATURAL

When your child is learning to speak more clearly, it is helpful to over-emphasize the correct way to say a sound. However, as your child progresses, we need to help that "over-emphasizing" sound more natural. You can help by using your voice to model a less-emphasized version of the sound. This will be an easy way to help your child's speech transition to sound more natural.



BEHAVIOR



1. REASON

It is important to have a reason for practicing speech. Your reason is to make your child's speech more clear. However, your child may have a different idea! Your child's reason may be to play a game. Keep this in mind when practicing at home. It is important to make speech practice time fun for your child so that it is a positive experience.

2. REWARD

Build in a reward for working on speech, such as candy, reading a book, playing at the park, etc. Your child deserves a reward for practicing his speech. Even if your child has not made progress, but is working hard, it is important to reward his efforts!

3. SET BOUNDARIES

It is important to set limits for your child's behavior from the beginning. Your child should know what you expect of him before beginning home practice. When you first start, you may only expect him to sit for two minutes and play the game, especially if your child is not used to "sit down" type of activities. However, as your child progresses, you may expect him to sit for ten minutes and play a game, practicing his speech sound between turns.

4. TELL, DON'T ASK

Remember if you ask your child a question such as, "Can you say cookie?", he has the option to answer, "No." To avoid giving that option, *tell* the child what you want him to do; don't *ask* him if he can.



POINTS TO REMEMBER



Only focus on the SOUND you are working on, and only in that POSITION.



There are many METHODS to teach speech. This is just the best method for groups.



PARENTS make the difference, so keep practicing! If your child receives speech therapy from another Speech-Language Pathologist, ask for homework you can do with your child.



Address BEHAVIOR now. Let your child know what you expect and set limits. This will make practicing speech easier.



CLASS 3 SUMMARY

My child's sound goal: _____

At home this week, I am supposed to:

- Continue working on the sound by itself.
- Continue working on the sound in a word.
- My child is correctly saying the sound in a word, so I will work on the sound in a phrase.

Other homework: _____

The next class date is: _____

Questions to ask at the next class: _____

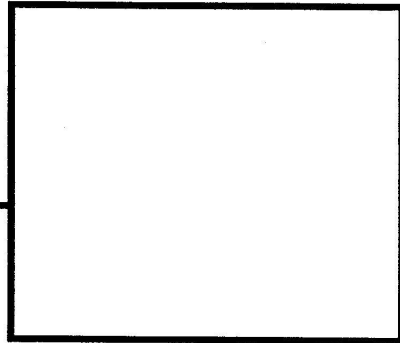
PHRASE LEVEL WORKSHEET

In the first box of each row, write a word that is easy for your child to say. In the second box, glue a picture containing your child's speech sound.

This should make a phrase (such as: brown dog, my duck, open door, etc.)



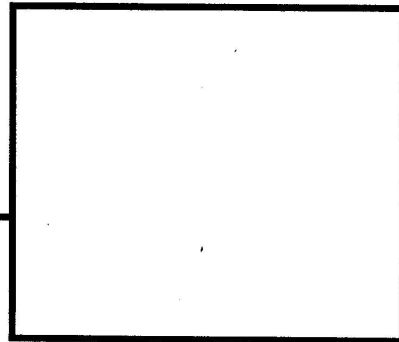
word



picture



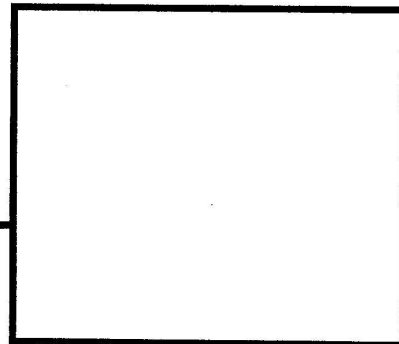
word



picture



word



picture

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CLASS EVALUATION

I LIKED....

I DIDN'T LIKE....

I SUGGEST....

I HAVE QUESTIONS ABOUT....

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Speech Class #4

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REVIEW GAME

CLASS 4

Answer the following questions by circling T if the statement is true, and F if the statement is false.

- T F 1. You should try to address the child's sound in all positions of a word at the same time.
- T F 2. There are many methods of speech therapy other than the one used in this class.
- T F 3. Last week's class discussion was about the child's sound in a phrase, so this week's discussion should be about how to say the sound in conversation.
- T F 4. You can move from the word level directly to conversation.
- T F 5. I should praise my child for trying, even when he did not say the sound correctly; for example, "Good try!"

WAYS TO WORK ON SOUNDS IN SENTENCES

When your child is correctly using his sound in phrases most of the time, you are ready to move to the sentence level. The following is a list of ways to teach your child to use the sound in a sentence. The list is in order of skill, easiest to hardest.

1. **Imitation**: Have your child repeat sentences after you. This is the easiest step in the process, because it is much easier for a child to repeat after someone than using the sound without hearing it first.
2. **Carrier Phrase**: Practice the sound in a sentence by using a carrier phrase. A carrier phrase is the first part of a sentence with the last word changed each time. Substitute one of the words each time with a word that has the child's sound. For example, "I see a... gate, goose, goat", or "I have a...cat, key, cow." This is more difficult, because the child is saying the word in a sentence without hearing it modeled first. However, this is not a totally original sentence for the child, because he is familiar with all of the sentence but the last word.
3. **Original Sentence**: The child uses a sentence that he has created on his own. This is more difficult, since each sentence is original and not previously practiced.

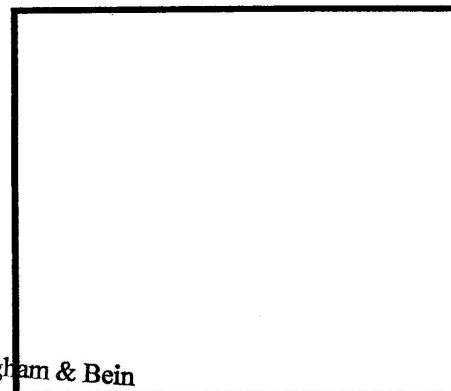
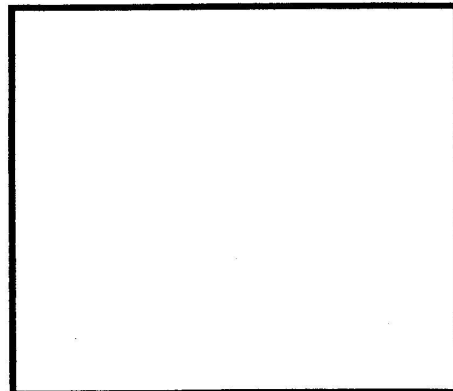
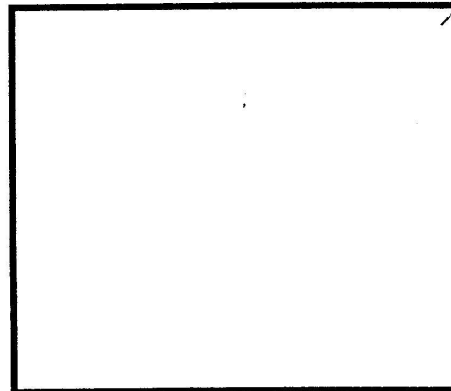
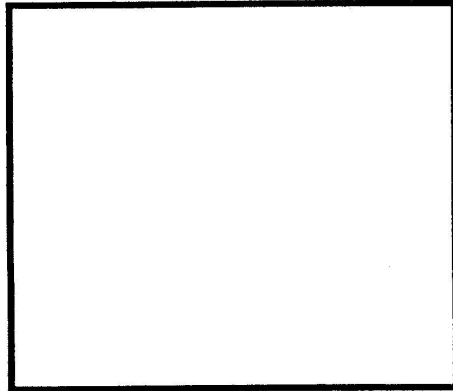
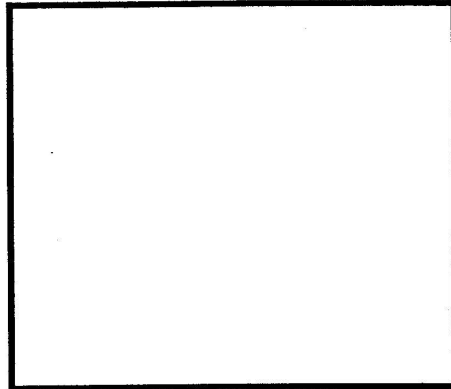
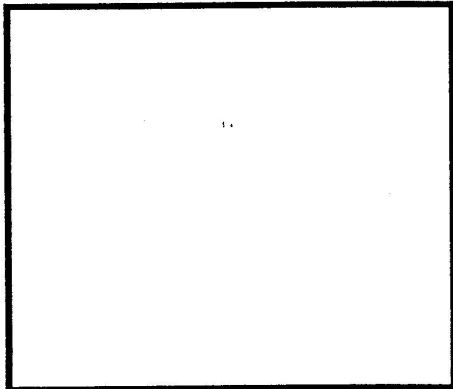
The difference of using the sound in sentences versus conversation is that conversation or "carryover" is more spontaneous speech. In other words, carryover is your child's ability to say the sound correctly in conversation. You should find your child using the sound without thinking about it as much. Your child may still need to closely monitor his speech at sentence level. However, learning how to correctly say the sound in sentences will help transition to conversation.

CARRIER PHRASE WORKSHEET

Practice the sound in a sentence by using a carrier phrase. A carrier phrase is the first part of a sentence with the last word changed each time. Substitute the last word each time with a word that has the child's sound. The spaces below are for pictures to use as the last word of the sentence.

I

(SEE A..., WANT A..., LIKE..., ETC.)



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CLASS 4 SUMMARY

My child's sound goal: _____

At home this week, I am supposed to:

- Continue working on the sound by itself.
- Continue working on the sound in a word.
- My child is correctly saying the sound in a word, so I will work on the sound in a phrase.

Other homework:

The next class date is: _____

Questions to ask at the next class: _____

CLASS EVALUATION

I LIKED....

I DIDN'T LIKE....

I SUGGEST....

I HAVE QUESTIONS ABOUT....

REVIEW GAME
CLASS 5

Answer the following questions by circling T if the statement is true, and F if the statement is false.

- T F 1. You should work on the "K" sound before the "L" sound.
- T F 2. You use your voice to say the "F" sound.
- T F 3. Imitating a sentence is easier than using an original sentence.
- T F 4. If your child just started saying the sound in a word, it is okay to correct the sound in conversation.
- T F 5. You can do speech therapy with your child in the car.



CARRYOVER AND CONVERSATIONAL SPEECH THERAPY

The goal with speech therapy is to make correct speech be automatic. Carryover means working on speech at times other than a therapy session, such as playing with friends, eating dinner, reading, using the phone, etc. During carryover, the focus is on communication rather than intentionally thinking about how to produce clear speech.

Ideas of stimulating automatic or "carryover" speech are to point out things the child sees and have him tell you something about it, or if you hear your child say the sound incorrectly ask your child to say it again using his/her good "goal" sound. At this point, it is acceptable to correct the sound in conversation throughout the day. However, keep a positive attitude, and try not to correct the child every time he/she says it wrong. Sometimes, the child needs a chance to correct it himself. You have to become a speech "watch dog", because sounds occur in so many places in conversation. Remember, if you have not specifically worked on a speech sound or have not worked on the speech sound in a particular place in a word, don't correct it in conversation. Just praise or correct in those places you have addressed in speech therapy.

Carrying over a sound into conversation is the most difficult level to achieve in speech therapy. It may take a considerable amount of time for your child to completely correct his sound. Remember to be patient and have fun with your child!



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CLASS 5 SUMMARY

My child's sound goal: _____

At home this week, I am supposed to:

- Continue working on the sound by itself.
- Continue working on the sound in a word.
- Continue working on the sound in a phrase.
- Continue working on the sound in sentences.
- My child is correctly saying the sound in sentences, so I will work on the sound in conversation.

Other homework:

CLASS EVALUATION

I LIKED....

I DIDN'T LIKE....

I SUGGEST....

I HAVE QUESTIONS ABOUT....

APPENDIX C

Questionnaires

Demographic Questionnaire

Today's Date: _____

1. Date of birth of child who attended the Speech Therapy Group _____
Month Day Year
2. Gender of child who attended the Speech Therapy Group: ___ Male ___ Female
3. Mother's/Father's/Guardian's Date of Birth: _____
4. What is your relationship to the child who attended the Speech Therapy Group?

5. Your current household income per month before taxes (please check one)
___ \$ 0-499 ___ \$ 2000-2499 ___ \$ 4000-4499
___ \$ 500-999 ___ \$ 2500-2999 ___ \$ 4500-4999
___ \$ 1000-1499 ___ \$ 3000-3499 ___ \$ 5000-5499
___ \$ 1500-1999 ___ \$ 3500-3999 ___ \$ 5500 plus
6. What is your employment status: Employed full-time Employed part-time Unemployed
7. What is your marital status? (check one)
___ Married, first time ___ Single, never married
___ Single, separated ___ Single, divorced
___ Single, widowed ___ Remarried
___ Other, please specify _____
8. What is ethnicity of the child who attended the speech therapy group?
___ Native American - Nation: _____
___ African American
___ Hispanic
___ Asian
___ Caucasian
___ Multiethnic - Describe: _____
___ Other
9. What is your ethnicity?
___ Native American - Nation: _____
___ African American
___ Hispanic
___ Asian
___ Caucasian
___ Multiethnic - Describe: _____
___ Other
10. Please place a check mark next to the highest grade the child's mother completed in school.
___ 9th grade ___ some vo-tech ___ some graduate courses
___ 10th grade ___ some college courses ___ masters or doctorate degree
___ 11th grade ___ vo tech graduate
___ 12th grade ___ college graduate
11. Please place a check mark next to the highest grade the child's father completed in school.
___ 9th grade ___ some vo-tech ___ some graduate courses
___ 10th grade ___ some college courses ___ masters or doctorate degree
___ 11th grade ___ vo tech graduate
___ 12th grade ___ college graduate

Parental Sense of Competence Scale
Sample Items

Listed below are a number of statements. Please respond to each item, indicating your agreement or disagreement with each statement in the following manner.

If you strongly agree, circle the letters SA

If you agree, circle the letter A

If you mildly agree, circle the letters MA

If you mildly disagree, circle the letters MD

If you disagree, circle the letter D

If you strongly disagree, circle the letters SD

1. The problem of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired. SA A MA MD D SD
2. Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age. SA A MA MD D SD
3. I go to bed the same way I wake up in the morning- feeling I have not accomplished a whole lot. SA A MA MD D SD
4. I do not know what it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated. SA A MA MD D SD
5. My mother was better prepared to be a good mother than I am. SA A MA MD D SD

SPEECH THERAPY GROUP
Program Satisfaction Questionnaire

1. The length of this program was: too short just right too long

Please indicate how much you agree or disagree with the following statements, using this scale:

1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

	SD	D	N	A	SA
2. The flipchart used during each session was helpful.....	1	2	3	4	5
4. The program allowed enough chances for me to participate and ask questions.....	1	2	3	4	5
5. The presenters were well organized and easy to understand.....	1	2	3	4	5
6. The presenters understood the needs and problems of children attending the program.....	1	2	3	4	5
7. The presenters held my interest throughout the program.....	1	2	3	4	5
8. The program helped me understand how children typically develop speech.....	1	2	3	4	5
9. The information presented has influenced the way I interact with my child.....	1	2	3	4	5
10. As a result of the Speech Therapy Group I plan to try harder to work with my child on his or her speech development.....	1	2	3	4	5
11. The program increased my understanding of the importance of developing a plan to help improve speech development.....	1	2	3	4	5
12. The program helped me to better understand the needs of my child regarding speech development.....	1	2	3	4	5
13. The program helped me to better understand the benefits to my child if we can work on his/her speech together.....	1	2	3	4	5
14. The program helped me think of new ways to incorporate speech therapy into our everyday interactions.....	1	2	3	4	5
15. The program offered helpful suggestions to support my child....	1	2	3	4	5
16. The program provided useful ideas about rewarding my child...	1	2	3	4	5
17. I have continued to incorporate information gained from the Speech Therapy Group into interaction with my child.....	1	2	3	4	5
18. Overall, the program was worthwhile.....	1	2	3	4	5
19. Overall, I am satisfied with the Speech Therapy Group.....	1	2	3	4	5
20. I would recommend the Speech Therapy Group to other families	1	2	3	4	5

APPENDIX D

Cover Letter

5-15-05

Dear Parents,

We have been presented with an outstanding opportunity for our Teaching Speech the Fun Way group to be studied by Katy Oden, who is in the process of completing her Master's degree in child development at Oklahoma State University. This study will involve those families who attended the speech therapy group by requesting them to complete several short questionnaires. You are invited to complete the questionnaires and return them using the addressed, stamped envelope included. In addition, the children's pre- and post-test results will be compiled to determine the effectiveness and benefits of the program. Please read the Parental Consent form for further details.

Through this non-biased study, our goal is to examine parental expectations and parental satisfaction with the Teaching Speech the Fun Way group. We will explore how parents make a difference in helping their child's speech become clearer. Katy has endured an intensive process of having the study approved and she has spent a great deal of time compiling research.

Although participation is not required, the Tulsa City-County Health Department supports Ms. Oden's study and would appreciate your **voluntary** participation. If you have any questions, please do not hesitate to call us at (918) 594-4843.

Thank you,

Monica L. Bein, M.Ed., CCC-SLP
Speech-Language Pathologist

Missy Bingham, M.A., CCC-SLP
Speech-Language Pathologist

APPENDIX E

Parental Informed Consent

Parental Informed Consent

The Research Project. Your family is invited to volunteer to participate in a research study conducted by Katy Oden, a graduate student at Oklahoma State University for the purposes of her master's thesis. You are being asked to participate in this study because your child recently participated in the Speech Therapy Group provided by Child Guidance at the Tulsa City-County Health Department.

The purpose of this study is to understand how parental competence and parental expectations are associated with changes in children's speech scores after the completion of a parent education program targeting specific speech problems of the participating children.

If you consent to your family's participation, we will invite you to do the following:

- (1) complete a demographic questionnaire
- (2) complete a questionnaire about parental competence
- (3) complete a questionnaire about parental expectations
- (4) complete a questionnaire about satisfaction with the Speech Therapy Group
- (5) sign a release form to release your child's speech scores on the Goldman-Fristoe II Test of Articulation to the primary investigator

The demographic information and questionnaire about your satisfaction with the program will be used to statistically control for differences in family background among children in different communities, and general satisfaction or dissatisfaction with the Speech Therapy Group. All questionnaires will be mailed directly to you and will include return envelopes and postage for returning the information directly to the primary investigator. It takes approximately 25 minutes to complete all of the questionnaires.

Cost to you. There is no cost to you. This study is funded by the researcher.

Confidentiality. Information that is obtained for the purposes of this study that could be identified with you or any member of your family will remain confidential. Careful measures will be taken to ensure confidentiality. The identity of all research participants will remain unknown because names will not be used in any presentation of this study, including the primary investigator's final thesis draft submitted to Oklahoma State University. Each packet that is completed by the families will be returned to Mrs. Monica Bein's Child Guidance office at the Tulsa City County Health Department where it will be locked in a file cabinet. The researcher will only receive information from those parents who give consent. Those returned packets and the computer disk containing records of the children's speech scores will be transported to the Stillwater Graduate Student Office in HES in a locked, portable file box with one key held by the primary investigator.

In Stillwater, the data will be stored on one computer in the Graduate Student Office, in the Human Environmental Sciences building, which is locked at all times and is only accessed by a small number of graduate students and faculty. Only the primary investigator and her academic advisor at Oklahoma State University will have access to the data which will be password protected on one computer, as well as the data in the portable file box. These numbers will be assigned and names will be deleted as soon as the data is received. No individual scores will be released to any persons other than the primary investigator and her graduate adviser. The data will be stored for approximately four months before it is deleted from the computer and all disks, and the information completed by the parents (questionnaires, consent form, etc.) will be shredded in a shredder by the primary investigator in the Graduate Student Office in HES. Again, all information gathered will be kept confidential without names used on any questionnaires, and

will only contain numbers used as identifiers. When the data is composed it will only be reported collectively rather than individually.

Risks. The only possible risk resulting from your participation in this study might be accidental disclosure of information. However, as previously noted under confidentiality, the risk will be greatly reduced through careful procedures utilized to keep all records anonymous.

Voluntary Participation. Your family's participation in this study is completely voluntary. You may refuse to participate. You or any member of your family are free to withdraw your consent and participation in this study at any time without any penalty and without affecting the services you receive from Child Guidance at the Tulsa City-County Health Department, or any other organization.

Other information. There will be approximately 40 families participating in the study. You will be given a signed and dated copy of this form to keep.

For further information. If you have any questions about this research project, you may contact the primary investigator, Katy Oden, at 918-760-4165, or her graduate advisor, Dr. Stacy Thompson at the Department of Human Development and Family Sciences, 243 HES, Oklahoma State University, Stillwater, OK 74078; telephone number; 405-744-8360. For information on subjects' rights, contact Dr. Sue C. Jacobs, IRB Chair, 415 Whitehurst Hall, Stillwater, OK, 405-744-1676.

I have read and understood this consent form. I understand that my signature means that I agree to my family's participation. I sign it voluntarily, and a copy of it has been given to me.

Date: _____ Time: _____ (a.m./ p.m.)

Name of child: _____

Name of parent: _____

Signed: _____

Signature of Parent

I certify that I have listed the necessary information for the subject or his/her representative before requesting the subject or his/her representative to sign it.

Signed: _____

Primary Investigator

Appendix F

Tables

Table 1

Means and Standard Deviations of Participants on Each Measure

	Mean
PSOC	62.33 (19.21)
KIDS	34.67 (7.16)
Program	91.11 (6.65)
Satisfaction	
Goldman- Fristoe II	9.52 (9.87)

Table 2

Frequency Distribution for the Parental Sense of Competence Scale

Score	Frequency (%)	Cumulative Percent
33	1 (3.7%)	3.7
37	1 (3.7%)	7.4
38	1(3.7%)	11.1
39	2 (7.4%)	18.5
43	1 (3.7%)	22.2
44	2 (7.4%)	29.6
55	2 (7.4%)	37
56	1 (3.7%)	40.7
57	1 (3.7%)	44.4
58	2 (7.4%)	51.9
62	2 (7.4%)	59.3
63	1 (3.7%)	63
74	1 (3.7%)	66.7
75	1 (3.7%)	70.4
78	1 (3.7%)	74.1
81	1 (3.7%)	77.8
84	1 (3.7%)	81.5
85	1 (3.7%)	85.2
86	1 (3.7%)	88.9
90	1 (3.7%)	92.6
91	1 (3.7%)	96.3
96	1 (3.7%)	100
Total	27 (100%)	

Table 3

Frequency Distribution: Knowledge Inventory of Development and Behavior

Score	Frequency (%)	Cumulative Percent
13	1 (3.7%)	3.7
16	1 (3.7%)	7.4
27	2 (7.4%)	14.8
31	1 (3.7%)	18.5
32	1 (3.7%)	22.2
33	3 (11.1%)	33.3
34	1 (3.7%)	37
35	2 (7.4%)	44.4
36	2 (7.4%)	51.9
37	2 (7.4%)	59.3
38	2 (7.4%)	66.7
39	2 (7.4%)	74.1
40	3 (11.1%)	85.2
41	3 (11.1%)	96.3
44	1 (3.7%)	100
Total	27 (100%)	

Table 4

Frequency Distribution: Program Satisfaction Questionnaire

Score	Frequency (%)	Cumulative Percent
74	1 (3.7%)	3.7
78	2 (7.4%)	11.1
82	1 (3.7%)	14.8
83	1 (3.7%)	18.5
87	1 (3.7%)	22.2
88	1 (3.7%)	25.9
90	2 (7.4%)	33.3
91	1 (3.7%)	37
92	1 (3.7%)	40.7
93	2 (7.4%)	48.1
94	4 (14.8%)	63
95	1 (3.7%)	66.7
96	3 (11.1%)	77.8
97	6 (22.2%)	100
Total	27 (100%)	

Table 5

Frequency Distribution: Goldman-Fristoe II Test of Articulation

Number of Errors	Frequency (%)	Cumulative Percent
1	2 (7.4%)	7.4
2	2 (7.4%)	14.8
3	5 (18.5%)	33.3
4	1 (3.7%)	37
5	3 (11.1%)	48.1
6	2 (7.4%)	55.6
7	2 (7.4%)	63
8	1 (3.7%)	66.7
10	1 (3.7%)	70.4
11	1 (3.7%)	74.1
12	1 (3.7%)	77.8
15	1 (3.7%)	81.5
17	1 (3.7%)	85.2
21	1 (3.7%)	88.9
26	1 (3.7%)	92.6
29	1 (3.7%)	96.3
42	1 (3.7%)	100
Total	27 (100%)	

Table 6

Summary of Child Demographic Variables (n=27)

Variable	Frequency N (%)
Child's Age (months)	
24-28	1 (3.70%)
29-33	5 (18.52%)
34-38	9 (33.33%)
39-43	0 (0%)
44-48	7 (25.93%)
49-53	0 (0%)
54-58	3 (11.11%)
59-63	0 (0%)
64-68	1 (3.70%)
69-73	0 (0%)
74-78	0 (0%)
79-83	1 (3.70%)
Child's Gender	
Male	21 (77.78%)
Female	6 (22.22%)
Child's Ethnicity	
Native American	1 (3.70%)
Asian	1 (3.70%)
Caucasian	24 (88.89%)
Multiethnic	1 (3.70%)

Table 7

Summary of Parent Demographic Variables (n=27)

Variable	Frequency N (%)
Mothers	25 (92.59%)
Fathers	1 (3.70%)
Grandmothers (legal guardian)	1 (3.70%)
Parent age	
20-30	6 (22.22%)
31-40	18 (66.67%)
41-50	2 (7.41%)
51-60	0 (0%)
61-70	1 (3.70%)
Ethnicity	
Native American	2 (7.41%)
Caucasian	25 (92.59%)
Employment Status	
Full-time	10 (37.04%)
Part-time	11 (40.74%)
Unemployed	6 (22.22%)
Highest level of Education	
11 th Grade	1 (3.70%)
12 th Grade	3 (11.11%)
Some Vo Tech	0 (0%)
Some College Courses	5 (18.52%)
Vo-Tech Graduate	0 (0%)
College Graduate	13 (48.15%)
Some Graduate Courses	0 (0%)
Masters or Doctorate Degree	5 (18.52%)

Summary of Parent Demographic Variables (n=27) con't

Household Income (monthly)	
0-499	1 (3.70%)
500-999	0 (0%)
1000-1499	1 (3.70%)
1500-1999	1 (3.70%)
2000-2499	1 (3.70%)
2500-2999	4 (14.81%)
3000-3499	4 (14.81%)
3500-3999	6 (22.22%)
4000-4499	2 (7.41%)
4500-4999	3 (11.11%)
5000-5499	4 (14.81%)
5500 plus	0 (0%)

Table 8

Partial Pearson Correlation: Hypothesis 1

	Hypothesis 1	
	Parental Competence (PSOC)	Change in Goldman-Fristoe II Scores
Parental Competence (PSOC)	1.00 p= .	.4442** p= .011
Change in Goldman-Fristoe II Scores	.4442** p= .011	1.00 p= .

**Correlation is significant at the 0.05 level (1-tailed).

Table 9

Partial Pearson Correlation: Hypothesis 2

	Parental Expectations (KIDS)	Change in Goldman-Fristoe II Scores
Parental Expectations (KIDS)	1.00	.2229**
Change in Goldman-Fristoe II Scores	p= . .2229** p= .137	p= .137 1.00 p= .

**Correlation is significant at the 0.05 level (1-tailed).

APPENDIX G

IRB Approval

Oklahoma State University Institutional Review Board

Date: Tuesday, May 10, 2005
IRB Application No HE0557
Proposal Title: Examining Outcomes of a Parent Education Approach to Speech Therapy

Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 5/9/2006

Principal Investigator(s)

Rebecca Oden
3527 E. 102nd St.
Tulsa, OK 74137

Stacy Thompson ✓
338 HES
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 415 Whitehurst (phone: 405-744-5700, emct@okstate.edu).

Sincerely,



Sue C. Jacobs, Chair
Institutional Review Board

VITA

Rebecca Kate Oden

Candidate for the Degree of

Master of Science

Thesis: EXAMINING OUTCOMES OF A PARENT EDUCATION APPROACH TO
SPEECH THERAPY

Major Field: Human Development and Family Science

Biographical:

Personal Data: Born in Tulsa, Oklahoma on April 21, 1981, the daughter of Steve and Beverly Oden. Will be married to Jacob Croll November 26, 2005.

Education: Graduated from Bishop Kelley High School, Tulsa, Oklahoma in May 1999; received Bachelor of Science in Family Relations and Child Development from Oklahoma State University, Stillwater, Oklahoma in August 2003. Completed the requirements for the Master of Science degree with a major in Human Development and Family Science at Oklahoma State University in July 2005.

Experience: Employed by Oklahoma State University as a Research Assistant for Dr. Laura Hubbs-Tait in Stillwater, Oklahoma.

Professional Membership: Phi Kappa Phi, Kappa Omicron Nu, Phi Upsilon Omicron.

Name: Rebecca Kate Oden

Date of Degree: July, 2005

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: EXAMINING OUTCOMES OF A PARENT EDUCATION
APPROACH TO SPEECH THERAPY

Pages in Study: 93

Candidate for the Degree of Master of Science

Major Field: Human Development and Family Science

Scope and Method of Study: The purpose of this study was to examine how parental competence and parental expectations are associated with the changes in children's speech scores after the completion of a parent education program targeting specific speech problems of the participating children. The participants were 27 parent-child dyads who participated in the Speech Therapy Group at the Tulsa City-County Health Department during the Fall of 2004 and Winter of 2005. Each parent completed a demographic questionnaire, the Parental Sense of Competence Scale, the Knowledge Inventory of Development and Behavior: Infancy to School-age, and the Program Satisfaction Questionnaire as well as a release form for their child's scores on the Goldman-Fristoe II Test of Articulation. A correlational design was utilized to examine the relation between parental competence, parental expectations, and the change in children's speech scores while controlling for program satisfaction.

Findings and Conclusions: Analysis showed a statistically significant association between levels of parental competence and change in children's speech scores. In other words, as levels of parental competence increased, their children experienced greater gains in speech development. The other analysis did not have a strong correlation; however, this association approached statistical significance. Results suggested that as levels of appropriate parental expectations increase, children's gains in speech development also increase.

Dr. Stacy Thompson

Advisor's Approval: _____