



SCHOOL of  
GRADUATE STUDIES  
EAST TENNESSEE STATE UNIVERSITY

East Tennessee State University  
Digital Commons @ East  
Tennessee State University

Electronic Theses and Dissertations


Student Works

12-2015

# Patients' Perception of the Use of Motivational Interviewing for Childhood Obesity Treatment: A Qualitative Study

Penelope L. Neal Dr.  
*East Tennessee State University*

Follow this and additional works at: <https://dc.etsu.edu/etd>

 Part of the [Pediatric Nursing Commons](#), and the [Psychiatric and Mental Health Nursing Commons](#)

## Recommended Citation

Neal, Penelope L. Dr., "Patients' Perception of the Use of Motivational Interviewing for Childhood Obesity Treatment: A Qualitative Study" (2015). *Electronic Theses and Dissertations*. Paper 2610. <https://dc.etsu.edu/etd/2610>

This Dissertation - Open Access is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact [digilib@etsu.edu](mailto:digilib@etsu.edu).

Patients' Perception of the Use of Motivational Interviewing for Childhood Obesity Treatment:  
A Qualitative Study

---

A dissertation  
presented to  
the faculty of the College of Nursing  
East Tennessee State University

In partial fulfillment  
of the requirements for the degree  
Doctor of Philosophy in Nursing

---

by  
Penelope L. Neal  
December 2015

---

Dr. Masoud Ghaffari, Chair  
Dr. Sharon Loury, Committee Member  
Dr. Joellen Edwards, Committee Member  
Dr. Sebastian Kaplan, Committee Member

Keywords: Motivational Interviewing, childhood obesity, child-centered research, interpretive  
descriptive research

## ABSTRACT

Patients' Perception of the Use of Motivational Interviewing for Childhood Obesity Treatment:

### A Qualitative Study

The purpose of this qualitative interpretive descriptive study was to better understand children's perceptions of the use of motivational interviewing (MI) as a communication style for childhood obesity treatment. Childhood obesity in the United States has reached epidemic proportions and much research effort has been dedicated to reversing this trend. One approach that has demonstrated positive outcomes in the clinical setting is MI. Leading organizations in pediatric healthcare now recommend MI as a communication style to be used for childhood obesity-related behavior change. Although empiric studies have demonstrated improvement in outcomes when this communication style is used with patients and families, no study to date had looked at MI from the perspective of the child. Thorne's (2008) framework for interpretive descriptive research was used for this study. Individual interviews with children ages 7 through 13 were conducted in an outpatient weight management clinic that utilizes MI as the primary communication style for facilitating behavior change. Qualitative data analysis was conducted utilizing Thorne's recommendations for interpretive descriptive research. Five themes emerged from the data: 1) *Empowerment*, 2) *Freedom to be Me*, 3) *Educating without "Educating"*, 4) *Unconditional Support*, and 5) *Blossoming*. A conceptual model was developed from the research findings to help clinicians working with children in similar contexts glean a deeper understanding of the use of MI with children. Future research endeavors should focus on the implementation of this model in clinical practice to strengthen the conceptual links and determine applicability to practice.

## DEDICATION

I dedicate this work to my husband, Jim, and my three children, Harper, Maris, and Macey Neal. They have provided a constant source of encouragement and patience throughout this journey. Their love and laughter has carried me through the darkest days. I would also like to acknowledge and thank my parents, Joseph and Jill Perkey, for providing me with the foundational education and support needed to pursue a doctoral degree. Additionally, I would like to thank my dear colleagues and friends, Sheilah Vartan, Dr. Monica Nelson, Dr. Amber Roache, and Dr. Amy Knowles for walking beside me through this final process. I could have not achieved this lifetime goal without the love and support of all of these people. To my Chair, Dr. Masoud Ghaffari, I am grateful for his gentle persistence and guidance over the past two years. Mostly, I would like to thank God for providing me the direction, endurance, and focus needed to reach the end of this journey. I hope this degree provides additional opportunity to serve Him well.

In loving memory of

Kathryn Ann Wolford

Kevin Christopher Neal

*“The beautiful thing about learning is nobody can take it away from you.”*  
-B.B. King

## TABLE OF CONTENTS

	Page
ABSTRACT.....	2
DEDICATION.....	3
Chapter	
1. BACKGROUND AND SIGNIFICANCE.....	7
Introduction.....	7
The Voice of the Child.....	9
Key Concepts and Definitions .....	10
Problem Statement and Research Questions.....	10
2. LITERATURE REVIEW .....	12
Motivational Interviewing .....	12
Table 1: Characteristics of Motivational Interviewing.....	13
Table 2: Examples of MI Questions for Children and Families. ....	15
Motivational Interviewing in Children and Adolescents.....	16
Developmental Considerations .....	16
School-age Development .....	17
Adolescent Development.....	17
Motivational Interviewing in Childhood Obesity.....	19
3. METHODOLOGY .....	22
Philosophical Underpinnings of Study .....	22
Interpretive Description .....	22
Theoretical Forestructure.....	24
Researcher as an Instrument .....	24
Setting .....	25
Participants.....	26
Data Collection .....	27
Gaining Entrance .....	27
Interviewing .....	28
Interviewing Children and Adolescents.....	28
Current Study.....	30
Storing of Data.....	31
Data Analysis .....	32
Protection of Human Subjects .....	33
Ethical Considerations .....	33
Credibility of Study.....	35
4. RESULTS .....	36
Overview of Participants.....	36
Emerged Themes .....	37
Theme 1: Empowerment.....	38
Feeling of Importance.....	38
Knowledge as Power.....	39
Freedom to Choose .....	40
Theme 2: Freedom to Be Me .....	41
Individuality.....	42

Creating a Safe Environment .....	43
Theme 3: Educating Without “Educating .....	44
Developmentally Driven .....	44
Illuminating the Need for Change.....	45
Theme 4: Unconditional Support System .....	47
Desire for Long-term Relationship .....	47
Unconditional Acceptance .....	47
Trust .....	49
Theme 5: Blossoming .....	50
Tangible Benefits of Clinic Sessions .....	50
Improvement in Family Relationships.....	51
Planning for a Successful Future .....	53
Negative Cases.....	54
Summary.....	55
Figure 1: Word Cloud .....	55
5. DISCUSSION .....	56
Description of the Field .....	56
Environment for Data Collection.....	58
Discussion of Themes .....	61
Empowering Children.....	61
Permitting Individuality .....	63
How Children Want to Learn.....	63
Need for Unconditional Support.....	66
Tangible Benefits .....	66
Developmental Considerations of Findings .....	67
Sampling Process .....	68
Clinical Significance of Findings.....	69
Clinical Significance of Empowering Children.....	69
Clinical Significance of Providing Individualized Care .....	70
Clinical Significance of Child-Centered Education.....	71
Clinical Significance of Providing Unconditional Support .....	72
Clinical Significance of Blossoming .....	74
Implications for Nursing Theory .....	75
Explanation of the Conceptual Model .....	76
Figure 2: Conceptual Model of the Child’s Perception of MI as a Communication Tool .....	77
Critical Theory and Empowerment of Children .....	78
Trustworthiness of Data.....	78
Transferability of Study .....	79
Implications for Nursing Research .....	81
Implications for the Child-Centered Research Movement .....	82
Table 3: Children’s Descriptors versus Key Components of MI.....	83
Recommendations for Future Research Studies .....	84
Clinicians as Researchers.....	84
Implications for Clinical Practice .....	87
Applying Findings to Primary Care .....	87

Alignment with Clinical Practice Guideline .....	88
Overcoming Barriers for Implementation.....	89
Competency of Provider .....	89
Training for Clinicians.....	90
Table 4: Providers’ Role in Motivational Interviewing.....	91
Reimbursement for Childhood Obesity Services under the ACA .....	92
Revisiting the Guiding Research Questions .....	92
Personal Reflection of Research Study.....	93
APPENDICES .....	100
Appendix A: BMI Percentage Chart.....	101
Appendix B: Informed Consent (English) .....	102
Appendix C: Research Assent Form (English).....	106
Appendix D: Research Assent Form (Spanish) .....	109
Appendix E: Informed Consent (Spanish).....	112
Appendix F: Transcriptionist Confidentiality Form .....	117
Appendix G: Coding Diagram .....	118
VITA.....	119

## CHAPTER 1

### INTRODUCTION

Despite recent improvements in the rate of childhood obesity, the obesity epidemic continues to be one of the biggest public health issues in our nation (Wilensky, Whittington, & Rosenbaum, 2006). The economic, psychosocial and physical ramifications of obesity are taking a toll on the health of our nation and future generations. For the first time in modern history, today's youth are predicted to have a shorter lifespan than that currently enjoyed by adults in our nation. This prediction is based upon consideration of the comorbidities associated with obesity such as hypertension, diabetes, and cardiovascular disease. The problem has become so complex and concerning that it is now one of the newest targets of public health law (Mello, Studdert, & Brennan, 2006).

The vast majority of overweight and obese children, approximately 80%, are destined to become obese adults, unless the trajectory is stopped (Centers for Disease Control and Prevention, February 13, 2013). The sheer number of obese children who will grow into obese adults with chronic health conditions sets us up for an economic health care crisis in years to come. Research reveals that medical spending for the obese may be as much as 100% higher than for healthy-weight adults, and national medical spending may amount to as much as \$147 billion annually for adults and \$14.3 billion annually for children (Hammond & Levine, 2010). Obese children accumulate approximately \$14.3 million dollars in health care costs annually. Productivity losses linked with obesity (including absenteeism, disability, and premature morbidity) cost \$66 billion annually. Now, the staggering reality—the total annual economic cost associated with obesity in the United States is \$215 billion (2010).



The overwhelming consensus on the way to counter this epidemic is to focus on obesity prevention during the childhood years. Healthy children are much more likely to grow into healthy adults. Once a child reaches a body mass index (BMI) characterized as “overweight” or “obese,” it becomes much more difficult to reverse this trend and return the person to a healthy weight for age and gender. We know that prevention is the best treatment, however, practical treatment solutions for children who are already obese are lacking.

One approach that has demonstrated positive outcomes in the clinical setting is Motivational Interviewing (MI). Leading organizations in pediatric healthcare recommend MI as a communication style to be used for childhood obesity-related behavior change ([www.napnap.org](http://www.napnap.org), [www.aap.org](http://www.aap.org)). This patient-centered approach to behavior modification opposes the traditional prescriptive model of patient education, where clinicians provide direct instruction of changes to be made by their patients to improve health. The healthcare provider using MI as a tool for change plays the role of counselor and coach. Sensitive topics, such as parental weight and parenting styles, may be a barrier to discussing a child’s weight (Story et al., 2002). In these situations, MI can be used to provide nonjudgmental counseling to both overweight children and overweight parents by broaching the topic in a non-threatening manner while building rapport with the families.

Pediatric providers often report a lack of confidence when treating childhood obesity (Story et. al, 2002). Providers become frustrated with poor results and poor parent and child motivation for behavior change. Despite frustration and lack of confidence in this area of their practice, pediatric providers report an interest in improving their weight-loss counseling and behavioral skills (2002). Naar-King and Suarez (2011) suggest MI may be a means to improve clinician efficacy and treatment effectiveness for the childhood obesity.

## **The Voice of the Child**

In the limited research found on the use of MI in children, there is an obvious lack of data gleaned from the voice of the child. This could be due to the preconceived notion that children make difficult subjects and ethical issues surrounding research with children are overwhelming. However, experts in child research note that children are comprehensible and honest when approached in child-appropriate manner (Clark, 2011). Research that is done on children by parent proxy may “lack a direct line to children’s experienced meanings; youthful meanings are often divergent from those of adults. To fully understand the young...children need to be firsthand sources in studies” (p. 6). A new qualitative child-centered inquiry has become the ‘thrust’ of the child-centered movement—“an approach that seeks to avoid imposing on children adult-derived constructs” (p. 12).

Child-centered inquiry is a newer approach to research that emerged in the 1980’s and 1990’s in the fields of sociology, anthropology, and other disciplines across Europe and North America (Clark, 2011). The primary goal of the child-centered research movement is “to study children as complete social actors dynamically situated in context” (p. 15). Within this paradigm lies the understanding that children can provide competent voices for qualitative research that involves a person’s subject experience and reality. If we want to know what the child’s experience has been with a particular intervention, then we need to ask the child, with an understanding of developmental and contextual considerations. With patient-centered research as a goal for holistic healthcare, we must hear the voice of the child to provide child-centered interventions, as even parents cannot be assumed to know what will motivate the child. Deliberate research efforts must be undertaken to learn more about the child’s experience firsthand (Clark, 2011).

## **Key Concepts and Definitions**

The following key concepts and terms have been defined by the Centers for Disease

Control:

- *Body Mass Index (BMI)* is defined as one's weight in pounds (lbs) by height in inches (in) squared and multiplying by a conversion factor of 703.
- *BMI Percentile* is calculated for children and teens. The BMI is plotted on the Centers for Disease Control's *BMI-for-age growth charts* (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age ([www.cdc.org/healthweight](http://www.cdc.org/healthweight)).
- *Childhood Overweight* is defined as a BMI at or above the 85th percentile and below the 95th percentile for children of the same age and sex.
- *Childhood Obesity* is defined as a BMI at or above the 95th percentile for children of the same age and sex. (See Appendix A)

## **Problem Statement and Research Questions**

The use of MI as an intervention for childhood obesity treatment has been widely recommended by experts in the field ([www.aap.org](http://www.aap.org), [www.napnap.org](http://www.napnap.org)). However, research exploring patients' experience with MI as a technique for behavior change is lacking. The purpose of the current study was to glean deeper understanding of the use of motivational interviewing for childhood obesity treatment with children and families. This interpretive descriptive study will use qualitative data to gain a richer understanding of the impact of this communication technique on children. Emphasis for this study will be placed on exploring

children's perceptions of the interactions between MI- trained providers and themselves.

Understanding children's responses to this type of communication pattern as a tool for positive behavior change will be beneficial to health care providers working with children in this context.

A qualitative design was chosen to explore children's experience with obesity treatment by clinicians who are trained in motivational interviewing techniques. The research questions guiding this study are as follows:

1. What are children's experiences with the use of MI as a communication tool for healthy behavior change?
2. Should MI be used for other types of behavior change programs involving children?
3. What is it about this communication style that has shown positive outcomes in previous research in similar populations?
4. How is this different from other types of programs they have participated in before for behavior change?

## CHAPTER 2

### LITERATURE REVIEW

#### **Motivational Interviewing**

Motivational interviewing was first described as a counseling technique for individuals suffering from alcoholism (Rollnick & Miller, 1991). In the most recent edition of Rollnick and Miller's seminal text, *Motivational Interviewing: Preparing People for Change*, MI is described as "a collaborative, person-centered form of guiding to elicit and strengthen motivation for change" (p.137). Naar-King and Suarez (2011), experts in the field of psychology, describe MI as a "gentle, respectful method for communicating with others about their difficulties with change and the possibilities to engage in different, healthier behaviors that are in accord with their own goals and values to maximize human potential" (p.5). Proponents of MI describe the as a "spirit" rather than a technique (2011). Empathy, honesty and collaboration between the provider and the patient are key components to the method. The role of the provider when using MI is to help patients recognize their unhealthy behaviors and stimulate their intrinsic motivation for change.

Although initially used for behavior change in alcoholic patients, MI has been effectively used in for behaviors such as smoking, risky sexual activity, eating disorders, obesity, and chronic illness management (Naar-King & Suarez, 2011). Providers using this strategy approach the patient in an indirect, non-judgmental manner that is more supportive than argumentative (2011). It is dichotomous to the traditional "advice giving" approach that is most commonly used in health promotion (Van Nes & Sawatzky, 2010). Providers using this method see the patient as the key to behavior change, with each individual possessing the internal resources to make

change with or without professional advice (Naar-King & Suarez, 2011). Table 1 lists key elements of MI.

Motivational interviewing is particularly useful in patients who are resistant to change, as is often the case with overweight youth and their families. Parents, in particular, often do not characterize their child as “obese” or “overweight” and therefore do not see it as a barrier to optimal health. Resistance to change, particularly cultural and socioeconomic barriers, can be brought to light through the use of MI so individual priorities for health can be emphasized in the patient-provider relationship over time. This cooperative, rather than authoritative, approach to communication is in perfect alignment with the holistic approach to care embodied by nursing. Table 1 provides the key components of MI along with specific examples of what this sounds like in clinical practice.

Table 1

*Characteristics of Motivational Interviewing*

Key element:	Example:
Collaboration vs. Confrontation	Partnership grounded in point of view and experiences of client; provider builds rapport and facilitates trust
Evocation (Drawing Out of Ideas)	Provider draws out patient/family’s ideas rather than imposing own opinions as motivation; commitment to change is most powerful when comes from patient; patient discovers own reasons and motivation to change
Autonomy vs. Authority	Individual is ultimately responsible for making change happen, individual is empowered but held responsible for actions; provider reinforces there is no prescriptive way for change

*Note.* Modified from [www.motivationalinterviewing.com](http://www.motivationalinterviewing.com)

Motivational interviewing has been shown to be more effective than traditional provider advice-giving in changing target behaviors. A meta-analysis of the use of MI for behavior change demonstrated its effectiveness in decreasing BMI and total blood cholesterol (Rubak, S., Sandbaek, A., Lauritzen, T., & Christensen, B., 2005). In addition, this meta-analysis revealed that the effectiveness of MI as an intervention does not depend on the providers' disciplinary training (medical, nurse, or psychologist) (Rubak et al., 2005). Further support for the technique was found in systematic review of the use of MI to improve weight loss in obese adult patients. This study revealed a greater reduction in body mass in the MI group compared to control groups with an effect size of 0.51 SDs (Armstrong et al., 2011). These findings suggest that clinicians who are interested in helping their patients make healthy behavior changes should indeed utilize MI in the clinical setting.

MI can be done in a busy primary care setting during a 15-minute encounter but works best with longer and sequential follow-up visits (Van Nes & Sawatzky, 2010). According to Rubak et al. (2005), 81% of systematically-reviewed studies demonstrated MI to be an effective communication tool when patient encounters were 60-minutes in length; however, studies involving brief provider encounters (lasting less than 20-minutes) still demonstrated a 64% effectiveness in behavior change. The effectiveness of the MI increased with the number of patient-provider encounters with the target behaviors improving in 87% of the studies citing five or more encounters (Rubak et al., 2005). Additionally, there have been no adverse effects noted from motivational interviewing. Clearly, the use of MI in the primary care setting is a safe and effective means of improving health behaviors without negative impact on the patient.

A qualitative study of nurses' experiences with MI suggests that basic training in MI was necessary to begin using the method (Brobeck, E., Bergh, H., Odencrants, S., & Hildingh, C.,

2011). Training in this technique is warranted for primary care providers who would like to change from the traditional advice-giving model of health promotion to the patient-centered model. Table 2 lists components of motivational interviewing. Behavioral interventions for childhood obesity management and prevention should focus on decreasing undesirable behaviors (eating fast-food, sedentary activities) and increasing desirable behaviors (physical activity, eating fruits and vegetables, etc.). Through the use of MI, a provider can target both parents and children and assist them at identifying antecedents and consequences of their choices.

Table 2

*Examples of MI Questions for Children and Families*

---

How important is it for your child to be at a healthy weight?

What concerns you the most about your child's weight?

What do you think you might be able to do as a family to be healthier?

If you could change one thing about your health, what would it be?

What do you think would work if you decided you wanted to start exercising more?

What have you been successful at changing in the past?

If you don't make any changes, what do you think your child's health will be like in 5 years?

How does your weight stop you from doing things you like to do?

What do you think would happen if you quit (drinking sodas, eating fast food...)?

---



## **Motivational Interviewing in Children and Adolescents**

MI has been shown to be an effective means of guiding behavior change in older children and adolescents (Naar-King & Suarez, 2011). Research on the use of MI with adolescents has recently begun to appear in the literature. Older children and adolescents seeking treatment for obesity-related behavior change are often brought to the clinical setting against their will. This may create initial tension in the therapeutic relationship. As stated previously, the key components of MI-- empathy, honesty, and collaboration—must be used with children and adolescents to foster a culture of mutual respect between provider and patient.

The spirit of MI, which embodies a guiding, supportive patient-provider interaction, may help build rapport with children and adolescents. Particularly, when compared to other approaches used with children, MI providers see that change can occur without the child or adolescent actually accepting that there is a problem (Naar-King & Suarez, 2011). This is particularly important to children who may or may not see the need for change at this time. In addition, most treatments for adolescents are developed for patients who are indeed ready to change (Naar-King & Suarez, 2011). Children are often managed by a set of rules, whether written or unwritten, from the time they wake up until bedtime. For a child to be brought to a weight-management clinic or pediatric office and be further instructed on specific behaviors they need to change and how they should make this change is incongruent with a patient-centered approach to health. When using MI, unsolicited advice and feedback is only given when appropriate and with the child's permission (Naar-King & Suarez, 2011). This type of respectful and empathetic relationship will further help with building rapport and set the stage for a fruitful interaction between provider and patient.

## **Developmental Considerations**

Children are developmentally and cognitively unique human beings. Biological, cognitive and social developmental factors should be considered when using MI with children and adolescents. Specific social developmental considerations, such as an emphasis on forming identity, autonomy, and relationships with family and peers must be understood when using MI with this population. Finding one's own identity, within the context of peers and family, is imperative to the developmental process in children. The concept of self is formed during this time as youth experiment with many roles before settling in with a secure sense of self (Erikson, 1980). Understanding the uniqueness of the thought processes and value systems of children and adolescents will help guide effective, meaningful communication with these populations.

### **School-age Development**

Erickson's Stages of Psychosocial Development characterize children ages 6-11 with the conflict between industry and inferiority (Erikson, 1980). This is the time in childhood when children enjoy successfully completing tasks. School and social interaction play an important role in the development of the child's self-confidence. Children in this stage of development should be encouraged by adults to master new skills and meet their goals. They should be given the freedom to be industrious and try new things. According to Erickson, the major question in the child's mind during this stage is "How can I be good?" (Erikson, 1980). This need for adult acceptance and approval aligns nicely with the supportive and encouraging spirit of MI. Providers utilizing MI as a communication tool with children who are struggling with the industry versus inferiority stage of development can utilize these natural conflicts to guide the child in coming up with ways they may be industrious and successful with healthy behavior change. Practitioners of MI, through conversation, can explore what is valuable in the eyes of the

child and help the child set goals they would like to meet. This is in contrast to a prescriptive approach to childhood weight management, in which the child may be given a standard food or exercise chart to track “their” goal behaviors.

### **Adolescent development**

Naar-King and Suarez (2011) describe adolescence as a “prime opportunity to intervene and positively alter the trajectory of unhealthy behaviors and poor outcomes” (p. 15). The conflicts that occur during the normal developmental process can be effectively used to facilitate behavior change in childhood weight management programs using MI. The collaborative partnership may be quite different from other approaches that have been used in the professional-patient interactions the youth has previously experienced. The dialogue and power balance between youth and adult is much different than the traditional adult-child hierarchy that exists in our society. In fact, much restraint must be used on behalf of the adult when communicating in the spirit of MI. Naar-King and Suarez (2011) point out that it is important to stifle the human tendency to correct things the adolescent says or is doing and give unsolicited advice. Dispensing unsolicited advice places the adolescent into a passive, rather than active role, and can trigger rebellion and damper communication (Naar-King & Suarez, 2011).

Erikson’s fifth stage of psychosocial personality development is characterized by the struggle between identity and identity confusion. During this time, according to Erickson, adolescents must form a sense of self and personal values or they will lack a sense of identity as they venture into adulthood (Hazen, Schlozman, & Beresin, 2008). Establishment of a healthy self-image is one of the major developmental goals of this time period. Authority figures, such as clinicians, can help foster positive self-images through acceptance (Hazen, Schlozman, &

Beresin, 2008). Acceptance and respect of the adolescent are key components of MI and may be one of the reasons this communication approach works with this age group.

Autonomy is a key component in adolescent development. Adolescents attempt to develop increasing autonomy from parents but are still strongly influenced by the values and attitudes of parents and other adult adults in their lives (Hazen et al., 2008). In fact, adolescents often turn to coaches, teachers, etc. to serve as role models (Hazen et al., 2008). This consideration may help professionals who are attempting to build rapport and trust with the adolescents during the MI process. It is also important to consider the significance that peer-acceptance has during this time period. Social acceptance by peers improves a sense of well-being and adolescents often depend heavily of the feedback of others for decision making (Naar-King & Suarez, 2011). Understanding the values of the adolescents' perceptions of their peers and using this information to facilitate healthy discussion about behavior change can enhance communication (Naar-King & Suarez, 2011). A common question used by MI practitioners is "What do *you* want?" (Naar-King & Suarez, 2011). The spirit of MI involves respecting the need to establish one's own personal values and goals, which aligns nicely with the developmental goals of adolescence.

Cognitive development and brain development also change during the period of adolescence. During this time, the concrete thinking that is characteristic of younger children expands to the ability for abstract reasoning and problem solving (Hazen et al., 2008). Around 11 years of age, children begin to be able to think hypothetically and generalize from their observations. This ability guides future decision-making can be used when communicating with the adolescent. MI practitioners often use "imagining questions" to explore a person's goals (Naar-King & Suarez, 2011). Often, a practitioner may ask the adolescent to imagine extreme

scenarios that could arise in the future if specific behaviors did not change. Similarly, future thinking, asking the adolescent to look forward may help instill hopefulness about how behavior change could impact their life (Naar-King & Suarez, 2011). This strategy can also be used to demonstrate discrepancy in what the adolescent values or desires in life versus their current behaviors. Gently demonstrating discrepancy between behaviors and goals is a key component to MI (Naar-King & Suarez, 2011).

### **Motivational Interviewing in Childhood Obesity**

A thorough review of the literature describing the use of MI with overweight and obese children was conducted. Database searches included CINAHL (2007-2014), PsychINFO (2007-2014), PUBMED (2007-2014) and Cochrane Reviews. Boolean searches were performed using “motivational interview” and “childhood obesity” as key words. In addition, reference sections of retrieved articles were reviewed to identify research articles published since 2007 with these key words. Results revealed very few controlled trials utilizing MI specifically in overweight and obese children. No studies were located addressing the use of MI for childhood obesity from the child’s perspective. Minimal qualitative research was located on the use of MI in children in general.

A non-randomized clinical feasibility study was conducted with 91 children between the ages 3 and 7 with BMI at or above the 85<sup>th</sup> but lower than the 95<sup>th</sup> (or a parent with a BMI greater than 30) to determine whether an office-based obesity prevention program could use MI as the primary intervention for improvement in BMI (Schwartz et al., 2007). Pediatricians and dietitians administered this primary care intervention and assessed BMI at 6 months follow-up visits. There was a decrease in BMI percentiles of 2.6 in the intensive MI groups and a decrease BMI of 1.9 with the minimally intensive MI group (Schwartz et al., 2007). In addition, 94% of

the parents in the study reported that the intervention helped them think about changing their family's eating habits (Schwartz, et al., 2007). Decreasing BMI percentiles over a 6-month period with no change in practice other than counseling through the use of motivational interviewing demonstrates the potential of this promising technique.

A randomized controlled study to examine the effectiveness of a primary care-based obesity intervention for children ages 2 to 6 years of age using MI and educational modules was located (Taveras et al., 2011). In this study, the purpose of the modules was to decrease television viewing, fast food consumption and sugar-sweetened beverage intake. Results of this study at the 1-year mark included a decrease in television viewing with no significant reduction in BMI. However, Wong and Cheng (2012) evaluated the use of MI with 5<sup>th</sup> and 6<sup>th</sup> grade students in schools in Hong Kong. This quasi-experimental design utilized MI as the primary intervention with students in the school setting. The researchers used a MI intervention with students during the school day plus used telephone consultation with a subset of parents. The students involved in the 14-week MI intervention, both with and without supplemental parental counseling, demonstrated significant improvement in their weight-related behaviors and obesity-related measurements. The control group demonstrated a significant worsening in their anthropometric measurements during the 14-week intervention period (Wong & Cheng, 2012). Another school-based program used MI with overweight or obese high school girls. A group-randomized controlled design was used in this study to evaluate effectiveness. Improvements in sedentary activity, eating patterns, unhealthy weight control behaviors, and body image were noted but no significant change in percent body fat or BMI (Neumark-Sztainer et al., 2010).

## CHAPTER 3

### METHODOLOGY

A qualitative interpretive descriptive approach was used to explore the child's perspective of their experience in a childhood obesity treatment program where all clinicians and providers have been trained in the communication style of motivational interviewing. The interpretive descriptive design is a qualitative approach to research that can be used to gain a deeper understanding of a clinical phenomenon (Thorne, 2008). The interpretive descriptive (ID) research method was selected to gain deeper understanding of the child's experience through the use of in-depth, loosely structured interviews with children and adolescents, with or without their primary caregivers.

#### **Philosophical Underpinnings of Study**

The philosophical underpinnings of this study lie in the realm of pragmatism. This worldview focuses on research outcomes (actions, situations, and consequences of inquiry) and applicability of findings (Creswell, 2007). Pragmatism utilizes many different research methods. The method is selected to best answer the research question of the study. Pragmatic researchers acknowledge the social, historical, and political contexts that surround their research studies. Additionally, research conducted from this philosophy focus on the "what" and the "how" of research and applicability of the findings (Creswell, 2007). The method chose for from this pragmatic philosophy is interpretive description.

#### **Interpretive Description**

The research method chosen for this study was a qualitative interpretive descriptive design. Qualitative description is an "open and exploratory" means of answering questions "that beg an inductively derived description of a phenomenon" (Thorne, 2008, p. 48). Qualitative

descriptive research does not set out test theory or confirm relationships but rather intends to report and describe what is found when exploring a phenomenon. The goal of qualitative descriptive research is to provide an accurate summary of events using the participants' everyday terms (Thorne, 2008). Data remains in the terms used by the participants without extensive interpretation.

Derived from a qualitative descriptive research design, the *interpretive* descriptive (ID) approach to qualitative research “seeks to discover associations, relationships and patterns within the phenomenon that has been described” (Thorne, 2008, p. 50.) Therefore, phenomenon is described but the researcher then uses interpretation and logic to “extend beyond mere description and into the domain of the ‘so what’ that drives all applied disciplines” (Thorne, 2008, p. 33). This type of research is necessary when evaluating clinical phenomena to improve patient outcomes and provide patient-centered care.

Interpretive description was created from the need for a research design fitting to the needs in nursing and other health professions (Thorne, 2008). If we wish to provide patient-centered care, we must *ask patients* about their healthcare-related experiences. ID provides a research framework from which qualitative data from participants can be collected, analyzed, and utilized to improve new or existing intervention or approach to care. Research questions appropriate to this design are those that can help extend the rich description found in qualitative research into clinical practice. According to Thorne (2008), a founder of ID, this approach should be used with an actual practice goal and an understanding of what is and is not known from empirical evidence. This research design utilizes both *disciplinary knowledge* and *empirical knowledge* to generate new insight and application for practice (Thorne, 2008).



## **Theoretical Forestructure**

Whereas ID research does not set out to view phenomena through an explicit theoretical model, it is not completely lacking of theory. Interpretive description is “designed to mimic the interpretive mental attitude that is the hallmark of applied health clinical reasoning processes...to generate credible and defensible new knowledge in a form that will be meaningful and relevant to the applied practice context” (Thorne, 2008, p. 51). The theoretical lens, therefore, for this type of design is that of a *clinician researcher using the clinical reasoning process*. The clinical reasoning process, is the decision-making process clinicians think through to end up with a clinical decision. One definition of clinical reasoning is “the processes by which nurses and other clinicians make their judgments, and includes both the deliberate process of generating alternatives, weighing them against the evidence, and choosing the most appropriate... might be characterized as engaged, practical reasoning (e.g., recognition of a pattern, an intuitive clinical grasp, a response without evident forethought)” (Tanner, 2006), p. 204).

Morse (2012) argues that qualitative health research is its own discipline. Qualitative health researchers, according to Morse, have a unique disciplinary perspective from which their research focus and goals will be derived (Morse, 2012). The disciplinary perspective for this research study is derived from the art and science of nursing.

## **Researcher as an Instrument**

Qualitative research recognizes and embraces the researcher as an instrument and thus it is essential that this instrument is reflected upon. This purposeful reflection includes locating one’s theoretical allegiances, locating oneself within a discipline, and locating the personal relationship to the ideas one holds (Thorne, 2008). The disciplinary perspective from which this research study was designed is reflected in each step of the research process. This researcher is a

board-certified pediatric nurse practitioner that has provided care to rural and underserved children for over fifteen years. This researcher is also a mother of three healthy children who have never struggled with childhood obesity. The researcher has conducted patient care in the spirit of motivational interviewing and believes strongly that quality care must be patient-centered and fit within the value system of the patient. In addition, this researcher has extensive experience attempting to manage overweight children through a prescriptive approach, without using motivational interviewing as a communication tool. This researcher acknowledges that through both clinical experience and research on the topic of childhood obesity, her concept of a “healthy child” includes a healthy weight, healthy diet, and regular physical activity. Lastly, the researcher acknowledges a strong belief in the effectiveness of the use of motivational interviewing as a communication tool for helping patients and families make positive behavior change. In consideration of these reflections, the researcher used a personal journal that ultimately became part of the research documentation. In this journal, the researcher recorded preconceptions, clinical opinions, questions and evolving interpretations. The researcher kept the journal with her in a locked briefcase at all times for quick notes (Thorne, 2008).

### **Setting**

The setting for this study was an outpatient clinic specializing in childhood obesity treatment. The clinic is located in an urban area in the southeast and serves children and families with weight problems. The clinic uses a multi-disciplinary team of professionals to provide research-based care. Physicians, dietitians, exercise specialists and counselors are all trained in the principles of MI and use this communication technique throughout the intensive outpatient program. Providers at the clinic provide research-based, family-centered care, focusing on healthy behavior change. MI training is provided to clinic staff by a psychologist who has been

highly trained in the spirit of MI. Refresher courses for the clinic staff are held periodically to sharpen skills. This psychologist belongs a group called the Motivational Interviewing Network of Trainers (MINT).

### **Participants**

A purposeful sample of 11 children were recruited for the study. Children and adolescents, ages 7 through 13, who were current patients in the clinic and had been in treatment longer than four months were invited to participate in the study. Both English and Spanish-speaking patients were eligible to participate. The clinic site employs a translator who is fluent in both languages and who has participated in the research process before. Consent and assent forms in English and Spanish were available if needed. Seven females and four males, ages 7 through 13 participated in the study. Two of the participants were African American and 9 were white/non-Hispanic. All of the patients spoke English and had been patients greater than 4 months. Many stated they had been patients for “a long time” but were unsure of the length of their relationship with the clinic.

Interpretive descriptive studies can be conducted on samples of almost any size, according to Thorne (2008). Sampling was concluded when data saturation occurred and a deeper understanding of the children’s experience with MI was revealed. Saturation occurs when no new information is gleaned through interviews and observation. The goal of this study was to provide a “meaningful clinical description” of a complex problem filtered through a “disciplinary lens” and thus a smaller sample may be adequate (Thorne, 2008).

The pediatric weight management clinic treats children ages 2-18 who have been diagnosed with obesity and a co-morbid condition. The most common conditions seen at the clinic and related to obesity are the following:

- Hypertension
- Pre-diabetes, diabetes, or insulin resistance
- High cholesterol or high triglycerides
- Sleep apnea
- Muscle or bone problems (slipped capital femoral epiphysis, Blount's disease)
- Increased pressure in the brain (Pseudotumor Cerebri)
- Menstrual and hormone problems (Polycystic Ovary Syndrome)
- Fatty liver disease (Steatohepatitis)

Children who participated in the study were interviewed alone or with an adult guardian. The child was allowed to choose if they preferred to meet alone or with an adult. Many children at the clinic meet with the physician, dietician and counselors without an adult caregiver. Decisions on whether or not an adult guardian should be present during treatment sessions are made by the counselors and physicians on an individual basis for each family. For the purpose of this study, interviews were all conducted in a similar manner to improve the comfort level of the participants. The focus of the interview was child's experience with the clinic.

### **Data Collection**

#### **Gaining Entrance**

The researcher is a pediatric nurse practitioner with experience working with children and families desiring to make healthy behavior changes. This study took place in a clinic that is a component of a research hospital with university affiliations. The medical director assured the researcher that research is on-going at the clinic and the families are generally supportive and

open to research studies. All families that had been coming to the clinic for greater than 4 months were invited to participate in an interview. The researcher was introduced to the families by one of the clinic staff at the end of their routine visit. It was made explicitly clear that the researcher would not be performing in the role of pediatric nurse practitioner during her time at the clinic. It was important for the researcher to undo any preconceived roles of provider-patient relationships and transition into the role of someone “who does not know, who has entered the study participants’ world to know, and who cannot bring that expertise into shaping the conversations as it unfolds” (Thorne, 2008, p. 110)

### **Interviewing**

Interviewing is used in interpretive descriptive research as a primary data source (Thorne, 2008). With the clinical focus of interpretive description, interviews are often the in “in-depth” questions clinicians would like to ask if they had more time in their clinical interactions with patients. To obtain high-quality data that is not simply a reflection of popular thinking or what the participant “thinks” the researcher wants to hear, Thorne recommends a “carefully thought out frame of reference, attitude and communication style designed to build rapport... foster elaboration, clarification...requires a great deal of humility and reflexivity to ensure that the dominant aspects of your own personality and passion don’t steer the interactions in predictable directions” (Thorne, 2008, p. 129). This was particularly important to reflect upon as an advanced practice nurse entering the field as a “curious learner” (Thorne, 2008, p. 131) and not as a healthcare provider. In addition, the communication style and frame of reference was of utmost importance to consider when interviewing children.

**Interviewing children and adolescents.** According to Clark (2011), health-care research that is conducted in a child-centered manner follows a more flexible, unpredictable

route that must be accommodating to the children. Children may not know the purpose of adult questions and may resort to answering questions in a manner that generally satisfies adults due to the tendency to treat adults with authority. The goal then, is to remove the age-based power struggle for a more honest and open interview. Clark (2011) recommends the following practices to facilitate open discussion, empower the child, and have a successful interview:

- Explain to the child that they will be teaching the interviewer about something kids know more about than grown-ups.
- Allow the child to choose where to sit and have seats equal height or with child higher than interviewer.
- Encourage child to talk freely, to challenge, to reframe, to correct and to condescend. Do not correct.
- Check out equipment and setting beforehand to devote attention to child.
- Check room for anything hazardous or distracting.
- Spend time with the child to get to know him/her at the outset. Find out about family pets, hobbies, learn what each child is passionate about.
- Provide privacy. Don't have parents in the room.
- Clearly explain the interview process. Explain that the child has authority and power, as does the adult.
- Bring to the interview specific, age-appropriate tasks.
- Show sincere, human warmth.
- Monitor child's affective state.
- Encourage, don't belittle.
- Seek to understand, rather than judge.

- Help the child self-reflect.
- Look and listen. Mirror the children's gestures.
- Pick up the child's language. Use words and terms that the child uses.
- Repeat and explore. Probe with concrete questions such as, "What's the best part about \_\_\_?"
- If you must hint, do so carefully. Don't put words into children's mouths.

The researcher acknowledges that despite best efforts, the interview process was unpredictable and she needed to remain flexible and patient throughout the interactions.

**Current study.** For the purpose of this study, participants were invited to participate in a 30- minute semi-structured interview conducted in a private room in the childhood obesity clinic. Semi-structured interviews should be utilized in studies in which the researcher knows what questions to ask but does not know what answers to expect (Morse, 2012). According to Morse, these interview questions should be asked in the same order in each interview and then the interviewer is allowed to use gentle probing for further information. The participants in this study had the freedom to respond as need to the questions (Morse, 2012). Interviews were scheduled along with appointments through the clinic staff, and the researcher travelled to the site to conduct interviews on an individual basis. Interviews were held at the clinic immediately following the child's clinic visit. This helped reduce the need for additional trips for families. The parent or primary caregiver was only present if that was the usual practice for that child's counseling sessions. Most of the children at the clinic met with the counselors privately, and then the counselors met with the adults in a separate session. Permission was obtained to interview the child without the adult present, and this was noted on the signed consent. Semi-structured interviews were conducted and audio recorded on two hand-held recording devices, to preclude

technical difficulties. These interviews continued until no new data emerged, and a meaningful picture of the experience from the children's perceptions emerged. Saturation, according to Thorne (2008) should not be a goal of applied health research data collection, as it is "problematic... to justify that one has obtained sufficient data to fully understand all that is potentially relevant about the clinical phenomenon in question" and "to claim that no new variation could emerge seems antithetical to the epistemological foundations of practice knowledge" (p. 98). Each interview was transcribed, coded and analyzed for themes. Some of the guiding interview questions that were asked were these:

- Tell me what you don't like about this program
- How do you feel after you come to the clinic?
- Do you feel different since you started coming to this program?
- How long do you think you should come and see Dr. \_\_\_?
- Are the doctors and nurses here different from other places you have been?
- How do you feel about trying new things?

Cues for child fatigue, restlessness, and unhappiness were noted, and the interview ended if the child exhibited any of these behaviors. Reflective journaling and field notes were used after the completion of each interview. The participant received a \$25 gift card to Target from the clinic staff after completion of the interview as a gift of appreciation for the participation of the study.

**Storing of data.** Each recorded interview began with the researcher introducing the participant with a code name of a chosen fruit or vegetable and listing name, age, and gender. For example, "I am meeting with Apple, female, age 10, today." From this point onward in the research study, all data was coded with the selected code name. No other personal or medical



information was recorded, unless it was offered during the interview. The tapes from these devices were stored in a locked briefcase, along with the researcher's reflective journal. The key to the briefcase was kept on the researcher's personal keychain, which was kept on-person at all times. The briefcase was kept locked in the trunk of the researcher's personal vehicle when not in the researcher's possession. All transcripts were kept in this locked briefcase as well. Transcription took place in the researcher's private office on a password-protected personal computer. The researcher's office is locked at all times.

### **Data Analysis**

An explicit plan for data analysis was followed. As recommended by Thorne (2008), the initial period of data analysis was an open-minded reading of the transcribed data that allowed the researcher "to react to the initial pieces of data that seem to take on a life of their own and 'attract' [her] attention" (Thorne, 2008, p. 143). The interviews conducted by the researcher and were transcribed by an outside party. A confidentiality document was signed by the transcriber (Appendix F). The researcher listened to all tapes prior to reading the transcriptions. This allowed the researcher to pick up on subtle nuances that could have been lost in transcription. An alternative to early coding was used as recommended by Thorne (2008). Data was cut and pasted into electronic files with descriptive titles that were broader and did not prematurely interpret meaning. From there, highlighted sections of data were organized into interpretive codes and then categories, considering similarities and differences among the cases, while attempting to maintain the individual meaning within the data (2008).

Thorne cautions against prematurely attaching a code to a piece of data in interpretive descriptive research but rather to apply a broad-based coding system from which data that might

be thematically related may later be brought together (Throne, 2008). With inductive research, the data should be viewed as a whole and from different angles “to appreciate the implications of each of the available options for handling, grouping, and reconstructing pattern” (p. 147). Thorne (2008) recommends highlighting transcripts with colors and using marginal memos to denote possible thematic similarities.

### **Protection of Human Subjects**

Prior to initiation of data collection, ethical approval for the study was obtained through East Tennessee State University’s Institutional Review Board (IRB) and a letter of support from the medical director of the hospital-based pediatric obesity clinic was obtained. Secondly, IRB approval was obtained from the hospital IRB through which the clinic is governed. After approval from both IRBs was obtained, the medical director of the clinic was notified, and fliers were given to clinic staff to provide to families at their next clinic visit. All families were informed of the intent of the study, and a written consent and assent form in English and Spanish was signed before participation. It was made explicitly clear that children would still be able to participate in the clinic if they chose not to participate in the study. Participation was completely voluntary and children were permitted to withdraw from the study at any time. Parents were reassured that their child would receive the same quality and type of treatment whether or not they participated in the research study. Consent and assent forms in English and Spanish were available (Appendices B, C, D, and E).

### **Ethical Considerations**

Many ethical obligations must be considered when conducting qualitative research with children. For the purpose of this study, the researcher explained to the family that she was a pediatric nurse practitioner but was not able to provide any medical advice or treatment during

her time at the clinic. Instead, the researcher explained that she was here “to learn from the child” about his/her experience with the clinic. Additionally, the researcher made it explicitly clear that the interview could be stopped at anytime and the child did not need to participate to continue care at the clinic. The informed consent and assent was read to the parent and child prior to signing. The parents gave permission for the child to meet alone with the researcher while the parent waited in the lobby.

Particular ethical considerations must be noted when the researcher discloses that he/she is an experienced healthcare provider. Clear boundaries must be designated, and the researcher must inform the participants that he/she will not be functioning as a healthcare provider, but instead as a researcher, during their interactions. Many families may see this time together as an opportunity to gain medical opinions or further information about their children’s conditions. In this study, the researcher set clear boundaries at the initial interview to prevent this from happening. Morse (2012) notes that risk may occur due to the unanticipated nature of qualitative research. The researcher must be prepared to address the emotional issues surrounding childhood obesity. A licensed therapist is on staff at the clinic and would have been notified if a child became distressed. In such a situation, the interview would have stopped, and the therapist would have been consulted. However, this did not happen during the study. With children, all of the ethical implications of a study cannot be fully predicted because even prepared adults do not always know what may harm or threaten children (Clark, 2011). Clark points out that research with children must be flexible to safeguard every child’s best interest, that privacy must be protected (including privacy from the parent), and that children should receive compensation for their contributions if honorarium are offered in the research study (2011). In addition, the

researcher must protect herself from becoming overinvolved and make sure she “feels with” not “feels for” the child (Morse, 2012).

### **Credibility of Study**

To enhance the credibility of this study, an audit trail of the entire process was kept. There are several methods of demonstrating the trustworthiness of a qualitative study, and Thorne (2008) discusses the quality considerations that are applicable to interpretive descriptive research. Thorne argues against the common practice of member checking (bringing the data back to the participant for validation) in interpretive research (Thorne, 2008). Additionally, she argues against the benefits of triangulation, or gleaning an outsider’s interpretation of the findings of an interpretive study (Thorne, 2008). Instead data should be triangulated with field notes and the reflective journal. With Thorne’s recommendations in mind, the credibility of this study was enhanced by maintaining epistemological integrity, representative credibility, analytic logic, and interpretive authority (Thorne, 2008). This study was heavily grounded in the epistemological stance that truth is contextual and will be discovered through the voice of the children participating in the study. An audit trail was used to provide an explicit reasoning pathway, and thick description was obtained by including verbatim accounts from the voice of the participants. Finally, interpretive authority will be demonstrated through the researcher’s reflexive evaluation of her personal bias and experience and those biases will be made explicit (Thorne, 2008).

## CHAPTER 4

### RESULTS

The purpose of this study was to explore the pediatric patient's perception of the use of motivational interviewing (MI) as a communication style to facilitate healthy behavior change. Eleven children, ages 7 through 13, were interviewed using a semi-structured interview technique to glean deeper understanding of how these children felt before, during, and after meeting with professionals who have been trained and embrace the spirit of MI. All children were interviewed individually, without parents or clinicians present, in attempt to reduce adult influence and hear the true voice of each child.

#### **Overview of Participants**

Eleven children met criteria and assented to participate in the study. Of these eleven participants, seven were female and four were male. Each child selected a code name of a fruit or vegetable and from that time forward they were referred to only as their food name. The researcher introduced them with this code name at the beginning of the recorded interview to protect anonymity. The section below lists each child with their participant identification number, code name, gender and age. Ethnicity was noted in field notes but was not recorded anywhere else. No other demographic or anthropometric data was collected on participants. For purposes of the written research report, participants are identified in the following manner:

- P01 Blueberry, female, age 12
- P02 Celery, male, age 8
- P03 Olive, female, age 11
- P04, Raspberry, female age 11
- P05 Carrot, female, age 9

- P06, Strawberry, female, age 13
- P07, Grape, male, age 13
- P08, Papaya, male age 12
- P09, Banana, male age 13
- P10, Banana, female age 11
- P11, Strawberry, female, age 7

Parental consent and child assent were obtained from each of the participants and guardians prior to beginning the interviews. The consent (Appendix B) was discussed with the child and all questions were answered. The researcher made it explicitly clear that the child did not have to participate in the study and that we could stop the interview whenever they chose. Informed consent forms in English and Spanish were given to the parents and time was allowed for them to read and ask questions prior to signing the consent.

### **Emerged Themes**

After systematic analysis of the transcribed interviews, qualitative data was coded using Thorne's (2008) recommendations for analysis of interpretive descriptive research. Marginal memos were cut and pasted into electronic files and assigned interpretive codes. These codes were analyzed and sorted into categories. Fifteen categories emerged from the coded data and from these categories emerged five major themes. These five themes helped the researcher better understand the child's perception of the use of motivational interviewing as a communication tool for healthy behavior change. The five major themes were: 1) *Empowerment*, 2) *Freedom to be me*, 3) *Educating without "educating"*, 4) *Unconditional Support*, and 5) *Blossoming*. The themes and associated subthemes are presented below with data from the voice of the child to support each theme.

## Theme 1: Empowerment

The theme of *empowerment* was woven throughout all of the interviews. The children described feeling empowered in many different ways and different components of their interactions with the counselors seemed to empower them. However, each of the participants described feeling empowered in some manner. The children described a *feeling of importance* and individual self-worth since attending the clinic. They repeatedly described being willing to try new things after their sessions and were not afraid of failure or negative feedback from the clinicians. Children described feeling empowered through *knowledge acquisition* and *freedom to choose* their own treatment path. One child described feeling more “mature” after being involved with the clinic for some time. Choosing their own specific goals and interventions provided a feeling of empowerment for all of the children interviewed.

**Feeling of importance.** Several factors appeared to contribute to subtheme of *feeling of importance* created during the child-clinician interaction. The participants frequently described a feeling of “being known” or “understood” by the clinicians and staff. Children spent a significant amount of time meeting with the clinicians alone, which may contribute to a feeling of importance or maturity. Participants described how the clinicians built rapport with them and got to know them as individuals, as well as portraying a genuine interest in their family and social situations. Participant 01 shared this perspective during her interview:

You can actually talk to people that you don't know for the first time... You actually have time to get to know them, and you can actually talk to them about personal things... they kind of help you get into other people's perspectives about the things that you're going through, so it kind of makes you think of how you're maturing during life.

The same child added, “I get to talk to them about, basically, just me, and how my feelings are on my perspective.” Participant 10 shared this, “the people at (clinic) are by your side the whole way...when I’m with the people at the clinic, it feels right.” This feeling of “mattering” or being important to an adult figure outside of the family unit may be an significant factor in motivational interviewing with children. Children often report feeling “unheard” in an adult-oriented world. Allowing time for a child to sit with a trusted adult figure and talk about “me” for a while may be a key component to the success of MI with children as well as one of most important ways to build trust and rapport with them.

**Knowledge as power.** The attainment of new knowledge to improve their own health was empowering to the children. Participants shared specific healthy living guidelines learned at the clinic and how meeting their goals could help them live healthier lives. Participant 01 described this, “I feel good...because, now I know what I’m supposed to do, so I, when I get to my house, I do what they tell me to do.” Another child (P07) reflected the concept of knowledge as power when he stated, “Because they tell me stuff that I need to know, well they tell me stuff that I need to know cause, if they wouldn’t told me, I wouldn’t never know.” The concept of knowledge as power is important as children are usually in a social position without much power or control over their own lives. By teaching them daily living skills and specific interventions they can use to help themselves and their families, they become empowered as decision-makers and teachers. The understanding that the children are an “expert” on themselves permeates the spirit of MI and is reflected in the data. The counselors clearly empowered the children through the provision of specific knowledge and skill sets to help them succeed.

Children described specific interventions that they had learned during their time in the clinic, such as putting their fork down between bites, waiting 15 minutes before getting second



servings, using a “red light, green light” food guide, and stopping drinking sugar-sweetened beverages. When they “taught” the researcher these guidelines during the interviews, they appeared to feel empowered and authoritative. Participant 02 “taught” the researcher how to help her patients, “like if they have food problems, eating fast and stuff, you can just tell them, like, eat 3 or 4 or 5 meals a day and it should be a full plate, but sometimes they might eat half of it...you should save it for the next day or for later.” Additionally, having these self-guided “rules” to follow allows the children to feel more in control and knowledgeable about their health. Additionally, a feeling of respect for “doctors” as providers of important information was reflected in the interviews, “Because doctors tell good, important things to people so they can stay alive and stay healthy and good” (P07). This appears to be contradictory to the over-arching theme of being free to chose their own path of treatment and make their own decisions; however, the doctors were still held in high-regard and their contribution of knowledge was taken seriously.

**Freedom to choose.** Each participant indicated that they chose their plan for behavior change either alone, with the clinician, or with their parents. This sense of freedom to choose their own paths made goals feel more tangible and attainable. One child (P10) described the process of goal setting in this manner, “Like you have to sort of make your own rules, so they’re not really telling you really what you have to do. You can pick what you want to do. Sort of like your goals are your rules.” Several children used the words “not bossy” and “nice” to describe the clinicians. When asked to describe how the clinicians interacted with them, one child (P11) responded, “they won’t be the boss, they’re being nice... you shouldn’t really force stuff, you should take it easy.” Another child (P10) described the clinic in this way, “It’s not like really strict, it’s like, what you can do at your own pace.” When discussing previous providers or other

adults trying to tell children what to do for their health or give them a list of rules (prescriptive approach), one child (P11) stated, “I don’t think that is really right. Let them pick and choose and give them time and stuff”. Another child expressed the importance of the freedom to choose, “It makes me feel more in control, like I can go at my own pace. Like, good that I can make up my own rules because I think they’re easier to follow. Because I made them up” (P10). Setting goals that were attainable was important to the children and many described how much they enjoyed “checking them off their list” after they had met a goal. They also add a sense of excitement to the idea of trying new things, “They talked to us about like trying new drinks and stuff, and but its really fun to try new stuff” (P10).

Two additional subthemes, “unconditional support” and “building up of the child as an individual” also supported the overarching theme of empowerment. Both of these concepts are discussed further in the next sections; however, it is important to note their contribution to the theme of empowerment. The idea that the counselors and staff at the clinic were there for the child “no matter what” helped the children feel strong and supported. The counselors’ respect for the individuality of each child was also a prominent theme that will be discussed in the next section but, again, it is important to note its role in empowering the children. Children felt empowered by “being known” and accepted by the clinic staff for who they were, as individuals.

## **Theme 2: Freedom to Be Me**

The second major theme that emerged from the data was the child’s feeling of *freedom to be me*. Subthemes associated with this theme were: *Building up of the child as an individual* and *creating a safe environment*. Individuality appeared to be emphasized and embraced during clinic sessions.

**Individuality.** There was a focus on individuality and the understanding that what works for one child may not work for another. This concept offered a sense of freedom for the children to discuss their personal preferences, hobbies, and likes and dislikes, with the clinicians. There was a sense of openness and flexibility noted that empowered each child to continue to try to find what works for him/her as an individual. One child stated, “Like, my thinking is like trial and error. If it works it works. If it don’t, you find something else.” (P07). This type of attitude was noted by most of the children interviewed. Interestingly, most of the children described their favorite activities as those that allowed them to express themselves freely:

I like to dance and I like to paint... It is just basically telling a story with your body through your movements (P01)

My hobbies are gymnastics, dance, soccer, and art (P05)

I like to play with my Legos...you get to be creative (P08)

Oh there’s a big difference here, for instance most doctors’ offices don’t let you paint, most of ‘em don’t let you drum and play guitar... It’s not just fit, it’s the whole fit for life program (P09)

The sense of freedom to be themselves at the clinic and not attempt to fit into a predetermined picture of health appeared to empower the children and improve their self-confidence. Children reported feeling “good” and “happy” after clinic visits. One child stated she felt “opened” after her visits. Another participant (P01), described an increase in self-confidence after coming to the clinic, “if you don’t believe in yourself, nobody else will... if you boost their confidence, they will start to believe in themselves.”

**Creating a safe environment.** The creation of a *safe place* to talk and express themselves freely was another important subtheme to emerge from the literature. Clinicians built rapport with the children by building trust and taking time to find out the individual likes and dislike of each child. They also spent time discussing family relationships and the child's social situations. Many of the children used the word "trust" in their interviews. There was a sense, throughout the interviews, that the children felt free to come to session feeling however they truly felt that day. Once child reflected, "They ask me what's wrong because I have facial expressions when I'm mad" (P06). Additionally, the fact that they were permitted to spend time alone with a trusted adult provided an additional outlet for expressing themselves. There was an overarching sense of feeling safe and secure in the clinic. Participant 10 stated, "[The clinic] makes you feel like you're at home. I feel really comfortable and like, it's so much fun there." Another child (P11) reflected feeling safe and secure because of her time at the clinic, "And the fun thing like coming here is getting to have fun and knowing that I'm going to be ok and stuff". This feeling of optimism about their health and knowing "I am going to be OK" was reflected throughout many interviews.

There was a sense of honesty and openness between clinician and child and a genuine feeling of interest in each child's wellbeing and perspective. Participant 01 stated, "I get to talk to them about, basically, just me, and how my feelings are on my perspective." This is often not the case in the lives of children in an adult-driven world. Children are not permitted to express themselves freely in school nor at home. They are often limited to talking about their feelings only when and if they are asked. A sense of reciprocity between clinician and child was noted as well,

They, when we have one-on-one talk, when we meet each other, we talk about personal

things like, what do you like. And some of them we have the same things that we like. And it feels like they know me really well. And I just feel like I can trust them. (P10)

The clinicians often opened up and shared their personal stories of challenges and successes. This helped build rapport with the children and allowed them to form bonds with the adults. One child described how a counselor shared her college story and told how she ended up in her clinical role. The reciprocity of sharing created a mutual respect and blurring of the typical patient-provider relationship.

### **Theme 3: Educating Without “Educating”.**

There were frequent comparisons between clinic sessions and both the traditional educational system and the traditional healthcare system. Clinicians were often indirectly compared to schoolteachers and doctors. The theme of *educating without “educating”* was a standalone category that became a theme with two sub-themes: 1) *Educating without “educating”* and 2) *Illuminating need for change*. One participant, when asked how she would describe the clinic to a friend, replied, “I would tell her it’s not really like a doctor’s office, it’s not like the environment in a doctor’s office. It’s more fun, it doesn’t have the feel of a doctor’s office. It’s more like somewhere you can have fun while learning new things” (P10). The words “fun” and “games” were used in all interviews. Participants described playing games during clinic time that taught them how to make healthy choices but were fun at the same time, “He was teaching me to play drums out there. Yeah, sometimes they teach us how to do crafts in the room, and while Mommy and people are talking, I was playing with the exercise stuff of all things” (P09). The concept of learning while having fun was found in most of the interviews.

**Developmentally driven.** It was apparent from the first interview forward that the clinic

provided different types of interactions for different aged children. Additionally, the interactions appeared to be focused on the child's developmental level, not merely their age. The adolescent participants described their time at the clinic much differently than the younger children. Games were often used with younger children, and more intellectual discussions were used with the more mature patients. Children made it explicitly clear that the clinic made learning new things "fun" and not "boring", in comparison to other doctor's offices, where they "just tell you stuff."

The following quote nicely reflects the theme of *educating without "educating"* by capturing how the clinic "taught" new things. Participant 10 said, "Yeah, cause they make things that kids think are boring, they like put a game with it or something. And, like some doctors' offices tell you straight, and it's really boring. Them playing games and stuff- like- it is not as boring. And, it makes me want to do it." The idea of capturing the child's attention through the use of games is important and parallels nicely with various hands-on teaching techniques used in the education discipline. Additionally, the fact that the children feel as though the clinic makes learning fun increases the likelihood of children wanting to continue to come for sessions and thus improves retention and patient success.

**Illuminating the need for change.** Behaviors that needed to be changed were discussed as they emerged from conversations about the children and their own thoughts and desires. Most children described the process of coming up with their plans of action using words such as "us" and "we," suggesting a joint effort in solving individual problems. One participant said, "We, honestly, just try to take time to figure out a plan that can help us reach our goals. We sit down in the little rooms and we think of a plan to help us reach the potential to meet your goals" (P01). Children described knowing what they needed to change, but wanting to make sure that they chose goals that were achievable and meaningful to them, "They don't tell us what to set, we get

to pick. Like, they give us a variety of ones to pick, and then we pick it at the beginning. And, then throughout the time, we get to pick our own goals. If we need- like- if we need to find some new not sugary drinks or something, then we get to pick those goals and stuff” (P10). The “we” and “us” wording found throughout the interviews was reflective of either the child-clinician dyad or the family-clinician dyad.

Children described several different pictures of why *they* felt they needed to be healthy. These personal motivating factors had been isolated and discussed during their session.

- Because I eat a lot of vegetables and I make sure I work out by doing cheerleading and dance and by taking the time to breathe (P01)
- I exercise a lot, and- um- I like sports and stuff (P05)
- Me not eating as much, being more active, stuff like that (P07)
- Maintain my weight so when I get older I can lower my weight easier (P08)
- Well to lose weight, get my cholesterol a little bit lower. It’s like 225. My cholesterol.
- Stay healthy. Because in sports you do have to stay healthy (P11)

Sports and the desire to be able to remain active was a common intrinsic motivator for the children. Also, many children were aware of their family histories and discussed a relative who had diabetes or who had had a heart attack. Participant 06 shared, “I have had family members die from not being healthy, like from diabetes and stuff...like my grandfather died of his lungs shutting down, stuff like that.” The intrinsic motivating factors varied according the age and developmental level of the child. Typically, the middle-school aged children cited sports and being able to exercise as the reason they wanted to make healthy behavior change. Participant 07 compared his motivating factors to his mother’s, “It’s something we both wanted to do. I wanted

to do it for sports and stuff like that. And she [mom] wants me to cause she didn't want me to be too big... [We are] trying to find ways that might help me do better in sports, like lose weight so I can run faster." Participant 08 shared one of his motivating factors, "I want to be healthier so that I can grow taller because I'm kind of short." Family history of chronic disease was also a motivating factor for several of the children.

#### **Theme 4: Unconditional Support System**

Theme four is derived from three subthemes: 1) *Desire for Long-Term Relationship*, 2) *Unconditional Acceptance*, and 3) *Trust*. Participants described feeling supported and cared for by the clinicians and staff regardless of their immediate successes or failures. Almost all of the children, when asked, discussed their desire to continue to come to the clinic even after they had met all of their goals.

**Desire for long-term relationship.** Nearly all of the children were passionate about their desire to continue coming to the clinic. This stemmed from their desire to maintain the personal relationship each had with the counselors and staff. One child stated, "I think I should stop when I'm at the point at reaching all of my final goals. And, then I could stop, but then I could come back once in a while and visit" (P01). Participant 10 discussed why she believed she should continue to come to the clinic indefinitely, "Because like, it will keep me motivated to do these things, it will make me feel like I have somebody who wants to help me and is there for me if I need any help or anything. And, they are there for me for anything."

**Unconditional Acceptance.** The concept of being supported and cared for unconditionally is similar to the relationship between a parent and child or the "unconditional love" that exists in healthy family units. Several participants alluded to the fact that the clinicians



were “always there for them.” Despite being held at a weight management clinic, none of the children stated that they work on their “weight” during their sessions. There was an overall focus on healthy habits and improved quality of life that could last into adulthood. Surprisingly, some children either did not know why they started coming to the clinic or described family relationships as the primary reason for attending. One participant poignantly described the difference in this clinic’s approach to discussing his weight versus another pediatric specialists’ approaches (P09),

They don’t say I’m heavy weight. They don’t pay attention to that. They just help me out, they don’t call me fat...Cause I believe a cardiologist, or something, said the only reason I have bad cholesterol was because I was fat. He called me fat.

All participants described having positive emotions and feeling “good” when leaving the clinic. Many attributed this to the lack of negativity and focus on successes rather than failures. Participant 10 described this feeling of unconditional acceptance, “They don’t criticize you or anything. They don’t yell at you. And they don’t say bad things like you can’t do it and you didn’t do it on time. I like how they say, ‘Just keep trying. You can do it. You can get it sometime.’” Another participant described his experience after not meeting his goals:

‘Cause when I feel bad about myself, they always make me feel better, make me happy. They always have some way of making me happier or making me laugh or something. To make me forget about that part and go back to being like, I can do this, and it doesn’t matter if I don’t reach my goals, that day, or that week, as long as I keep trying I’m going to make that goal.

Participant 06 also described his view on failing to meet his goals: “There’s always a second

time you can complete something. I've never felt discouraged about not meeting a goal. Because most of the time it always happens." None of the children described negative consequences or fear to report failures to the clinicians at their follow-up appointments. Lack of fear of disappointing their clinicians allowed the children to be honest and open about their health habits in between visits. This was a surprising finding due to children's natural tendency to try to please adult figures.

**Trust.** The concept of trust permeated all of the interviews. Each of the children alluded to the fact that they trusted the clinic staff and providers. Review of the field notes revealed that many of the children appeared to be from lower-income families and many from fragmented homes. Several children described coming from stressful family environments, including parental incarceration, loss of a parent, special needs siblings, and crowded living arrangements. One child stated she was homeschooled because "there was drama at school." These children seemed to be even more passionate about their desire to continue coming to the clinic long-term.

MI might be particularly useful for children who do not have a strong support system at home. One child described the importance of being able to talk to his/her counselor as a trusted adult figure, "They might not, we might not, be able to do that at home. Or have somebody to talk to at home" (P01). The feeling of unconditional support may be particularly comforting to children living in more chaotic environments. Participant 10 also described a feeling of unconditional support and compared the clinic staff to her schoolteacher, "the people at (the clinic) are by your side the whole way. When I meet with my teacher, it sort of doesn't feel right. But when I'm with the people at [clinic name], it feels right."

## Theme 5: Blossoming

The theme of *blossoming* emerged from children's descriptions of feeling "changed". Participants described changes in their own health habits, school habits, and family relationships. There was a strong feeling of accomplishment and positivity towards the future noted in the interviews. Children described immediate, *tangible benefits* of coming to the clinic—both with their health status and with their *family dynamics*. Additionally, several participants discussed how the clinic was helping them *plan for success in the future*.

**Tangible benefits of clinic sessions.** Children, developmentally speaking, are often motivated by immediate gratification, rather than delayed gratification. They often lack the foresight to see the implications of their actions in the future. Participants described many "changes" that had occurred both individually and within their families. Many described feeling a strong sense of accomplishment after clinic visits. This sense of accomplishment provided motivation to continue to work towards other goals and an overall feeling of positivity when leaving the clinic. One child (P07) stated:

I don't like to come here on some days. But it helps a lot. I can see a change in my family's ways. We don't argue as much anymore. We don't eat as much stuff that's not good for us anymore. And we spend more time together...(I) feel like I've accomplished something...We talk about goals and they ask us how we've been doing with them. And we tell them, and they cross it off on our plan, and that means I've accomplished something.

Participant 03 described how she felt when leaving the clinic, "Happy...because I know I met my goal last time and I have another goal to work on." The presence of an actual running list of

goals that could be crossed off of a list appeared to be highly motivating to the children. Goals not yet met remained on the list for subsequent visits. The visualization of crossing items off of their list seemed to provide a sense of motivation to continue working toward their goals. Importantly, these were lists made of self-determined goals that were viewed as realistic and manageable by the children. This hands-on approach to goal setting and list-making may be important when creating interventions for healthy behavior change in children.

Several children discussed the formation of new healthy *habits* to replace old habits.

Participant 07 stated,

We talk about weight, how to fix old problems that might lead to [this], and, like, try to make it so it comes, like, natural... like turn it around, make it a different way. So it's not the same thing, instead of the bad habit being there. It's like putting a good habit there.

Participant 08 shared a similar thought, "Well, I think we will keep on going until we have the habit of doing everything that our goals are, and, once we meet all our goals, I guess we can stop it or something like that."

**Improvement in family relationships.** Several children shared how their family life had improved since coming to the clinic. There appeared to be a focus on the family unit as an integral component of healthy behavior change and healthy lifestyle. Some children expressed family relationships as the sole area of concern in their life. Participant 01, when asked what she was focusing on with during her sessions, stated, "We just talk about how me and my mom can improve our relationship together... we compromised and found out what the problem was." Another child, Participant 06 shared that his sessions often focused on family relationships, "and about how we are going to spend quality time together." She shared that she mainly focuses on

“getting along with my sisters...because, I believe that’s important because one day we are going to have children of our own and we’re going to want those children to get along with each other. And one day we’re going to need our sisters.” When asked how they were working on improving their relationship, she replied:

We try to sit together at dinner, but it really doesn’t happen because some people don’t eat. Like my sister that’s downstairs now, only one is here today, the other one is still at school, she doesn’t really eat much. Sometimes she’s not that hungry so she’ll come eat later. Or eat when everybody is asleep. And normally we sit at the couch and talk and watch movies or sit at the table if we have heavy plates. And we sit at the table and talk and ask each other how our day was, what happened today.

The children all had a positive demeanor when discussing the changes noted in their family relationships and activities since coming to the clinic. Participant 10 shared, “It’s my family change. Like, we all get up and exercise together as a family. We play together. We have a lot of family time now. We are all eating healthier and stuff. It’s mostly all of our family.” This type of positive family interaction appeared to be a direct result of the counseling sessions and may have served as a motivating factor to return to the clinic. Family change was mentioned in most of the interviews. It was evident that the clinic visits focused on changes that needed to occur within the entire family unit. These tangible changes were noted and enjoyed by the children, who by nature crave attention and time with their caregivers. This family-centered approach is a necessary component of any childhood weight management program, as parents and guardians are the “gatekeepers” of what types of food and beverages enter the home and what type of activities are allowed and encouraged.

**Planning for a successful future.** Many children, particularly the middle-school aged children, shared that they talk to the counselors about what they want to be when they grow up, college plans, and life skills. This may be particularly important to children who do not receive this type of guidance and encouragement at home. Participant 06 stated,

We talk about what we want to be when we grow up, and how we are going to succeed in life... Then we talk about it at home... They can help tell me what I need to do in school and how to stay focused, what I need to do in life to get the career that I want.

Specific life-skills, such as contemplation and organization were mentioned in the interviews as well. Participant 01 shared that she was working on “getting organized” with her counselor. When asked what this meant to her, she stated, “To throw away old stuff that you don’t need anymore. Don’t buy as much stuff as you think you need, when it’s mainly really wants.” Additionally, Participant 06 stated that she is able help her family eat better through the use of contemplation,

So I can see someone getting something that they don’t need at the grocery store and we can tell each other to put it back...I contemplate on it...My mom was at the store the other day and my sisters were asking for sodas, and she said we could get one, but I said I didn’t want one. I just think about it, and then I let her know what I want to do.

The concepts of mindfulness and contemplation permeated throughout the interviews. Participant 01 described mindfulness as, “Like when you take time to actually breathe and think about what things that you are doing... you have to close your eyes and do stuff like that... So mindfulness actually helps me slow down.” She stated that she used mindfulness at home and at school when faced with a tough decision.

## Negative Cases

All of the participants described positive interactions with the clinic staff. The only negative comments were those regarding getting “blood drawn” or “sometimes not wanting to come” to the clinic. “They do give me blood tests, I don’t like that” (P11). One child stated that the visits were too long. These comments were followed with a description of enjoying the clinic once they arrived despite not always being excited about coming. The vast majority of children, however, looked forward to coming to the clinic and wanted to continue to come long-term.

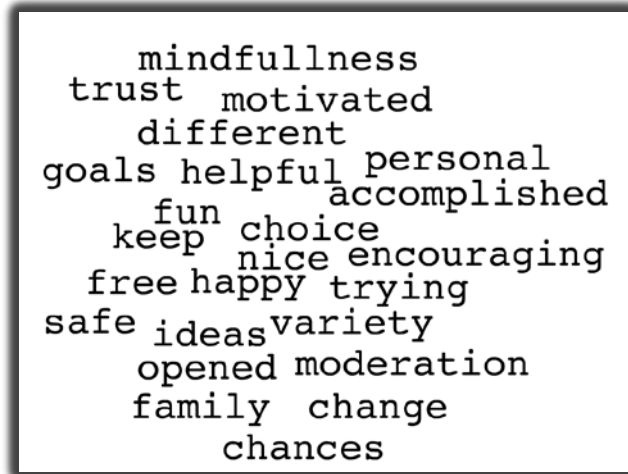
One child, P02, age 8, described more of a prescriptive approach to behavior change. The following excerpt occurred early in the interview and implies that the child was “told” what to do. This child was one of the youngest participants and was somewhat developmentally delayed.

Yes, they tell me to eat, um, to eat fruits and vegetables... They help me with my foot and they help me with all kinds of stuff... They tell my mom and me some things that I should do that will make it feel better... Well, I think about what they said and I do it. Because they say that it’s good for me so I believe them.

It is important to note that although there were very few negative cases, the “fun” environment of the clinic and the attention factor need to be considered. It is possible that children enjoyed the one-on-one attention, and this contributed to the positive responses to interview questions. Additionally, children of a younger age are developmentally “people pleasers” and may have felt hesitant to say anything negative about the clinic. The researcher made all possible attempts to separate herself from the clinic staff in hopes of reducing this type of effect on the research study. This was done by physically being in a separate area of the hospital and explaining that the researcher was a nurse practitioner that lived in another state.

## Summary

Five themes emerged as a result of data analysis: *Empowerment, Freedom to be me, Educating without “Educating”, Unconditional Support, and Blossoming*. These five themes,



derived from actual transcribed utterances of the children interviewed, show the patients' perception of MI. The five themes, extracted from the interviews with 11 children who experienced being cared for by providers and staff trained in MI, provide great insight into the children's perception of MI for behavior change. These findings have implications for nursing theory, research, and clinical practice.

*Figure 1.* Word cloud

This word collage or “word cloud” was created with some of the most powerful words spoken by the children. The words in this image were selected by the researcher because of their frequency of appearance in the interviews. Each of these words had a significant impact on the researcher.



## CHAPTER 5

### DISCUSSION

The purpose of this qualitative interpretive descriptive research study was to glean a deeper understanding of the child's perception of Motivational Interviewing (MI) as a communication style for healthy behavior change. MI has gained recent attention due to its inclusion in best practice recommendations for the treatment of childhood obesity (American Academy of Pediatrics [AAP], National Association of Pediatric Nurse Practitioners [NAPNAP], ). Current research on MI and childhood obesity treatment, as discussed in Chapter 2, has demonstrated improved outcomes when this interaction style is utilized with children but no study to date prior to this one had explored MI from the child's perspective. By understanding how and why this communication style is so effective with behavior change in children, pediatric providers may choose to embrace this type of interaction when dealing with health issues that are particularly difficult to manage. These research findings may encourage providers to utilize MI when interacting with children suffering from chronic conditions that require significant lifestyle modification.

#### **Description of the Field**

The clinic at which this study took place is embedded within an academic teaching hospital. The clinic staff consists of two nutritionists, two therapists, a physician, a physical therapist and administrative staff. All of the staff and providers receive training on MI with regular updates and refreshers. A clinical psychologist who is trained in MI serves as a consultant and educator for the clinic staff. The clinic serves children across the state via satellite locations and telemedicine. The traditional set-up of the clinic consists of the child and

parent/caregiver coming to the office together and seeing a therapist, nutritionist, and physical therapist at each visit. Some of the time is spent with child alone and some with the parent or entire family. Most visits begin with a meeting with the nutritionist who discussed healthy dietary choices with the family. The child is permitted to come up with his/her own goals for improving dietary intake. Games are often used to teach children about making good nutrition choices. Then the child spends time individually with the physical therapist to learn some type of stretching, to exercise, or to play a game involving movement. Lastly, the child will meet with the therapist either alone or with his/her caregiver. There is no set agenda for discussion during therapy. Often, the child leads the discussion, and the therapist follows. The medical doctor sees the child at some of the visits but not each time. The physician is usually present when the visit requires blood work or other procedures.

The waiting room of the clinic is shared with other outpatient clinics and is on a pediatric floor of the hospital. There are several play areas in the waiting room with toys to stimulate the children while they wait for their appointments. The atmosphere of the hospital floor is warm and child-friendly. There are murals on the walls, and other decor in the lobby that is visually stimulating for children. There is also a playground on one of the hospital floors that is open to outside. The physical therapist often takes patients to the playground when working on exercise moves and playing games.

Clinic visits average from 1½ hours to 2 hours in duration. During this time, the children and families move to different rooms within the hospital. There are two “teams” of providers and each child is managed under one of the two “teams”. This ensures continuity in care and enhances rapport with the patients and families. There are also “family days” that are held outside the clinic at a local gym or school. These special outings are designed to teach the entire

family how to play together and remain active. A focus on “active playing” over “exercising” was noted during time spent at the clinic. During the clinic visits, “games” teach the children healthy behaviors and get them moving. All of the games are intentionally non-competitive so there are no “winners” and no “losers”. According to the clinic director, this non-competitive approach helps build children’s self esteem and differentiates the clinic games from other athletic-type competitive games.

### **Environment for Data Collection**

The researcher travelled to the primary clinical site at the hospital to conduct interviews. The interviews took place during the late fall and winter of 2014. The researcher was placed in a separate room within the hospital, on a separate floor from the clinic. This was done due to limited clinic space but also helped the researcher remain somewhat of an “outsider” to allow the children to feel comfortable sharing both positive and negative feelings about the clinic. The interview room was selected by the clinic director and was a combination of therapy room and staff office. There was a divider between the staff desks and the interviewing area. There were three soft chairs and small coffee table in the middle of the interview section. There were kid-friendly health posters on the walls. The door remained shut and a sign reading “interview in progress” was posted on the door. After the first interview day, the researcher brought a can of “moon sand” and placed it on the coffee table. This proved to be a great distractor for the children but actually helped them engage more in the interview. The children played with the moon sand, which kept their hands busy and prevented them from having to make eye contact with the researcher. It also seemed to lengthen the amount of time the children could participate in the interview before coming fatigued.

Multiple trips were made to the clinic for interviews. On average, two to three interviews took place per trip. However, due to a significantly intense winter, many clinic visits resulted in no interviews because of patient no-shows or cancellations. This will be discussed further in the limitations section. After each clinic session, the therapist would briefly discuss the purpose of the study, pass out the research flyer, and ask the parent if they would allow their child to meet with the researcher for an interview. If the parent consented and child assented, they were escorted to the clinic room where the researcher was waiting. The researcher had a clinic schedule for each day provided to her by the clinic director. The children who met study criteria were highlighted on the list along with their age and appointment time.

When a child and parent arrived at the interview room, the clinic director (who is also a therapist) or another therapist would introduce the parent and child to the researcher and assist with building rapport. There was a definite transfer of trust from the therapist to the researcher, in respect to the child and parent. After the therapist left, the researcher, parent and child would sit for approximately 10 to 15 minutes and share general discussion about the child and the research project. The informed consent was discussed at this time. Most of the attention at this point was placed on the parent, as children refer to their parents as a source of determining trust of strangers. None of the children appeared anxious or shy when arriving at the interview room, and each child stated that they wanted to be interviewed alone. There was no hesitation on the part of any parent to allow the child to interview with the researcher alone. This is most likely due to the children's comfort level with the hospital, clinic staff, and meeting with adults to discuss how they feel. Several of the families had participated in a research project at the clinic previously and were familiar with the informed consent process and comfortable leaving the child to be interviewed. If this study were to be replicated outside of the clinic, there might have

been greater resistance to allowing children to be interviewed without a parent or guardian present. One of the greatest contributions of this study is the open and honest dialogue between each child and the researcher that was facilitated by the comfort of the children in the clinic environment.

After four months of travel to the clinic to complete interviews, a total of 11 qualitative interviews were completed. The children interviewed ranged from age 7 through 13. Field notes were drafted immediately after interviewing each child. The field notes commented on the child's demeanor at the onset and completion of interview, developmental level, ethnicity, and any other pertinent data. Data was analyzed after completion of each of the interviews and analysis was on-going throughout the study. Modifications were made after the first day of interviewing. These modifications included rewording of some of the interview questions to make them more "kid-friendly." The researcher found that the children answered with very brief descriptions and "yes" or "no" whenever possible. The researcher also found that when she asked the child to "teach her how to help her patients" or "teach her what kind of things she should talk about with her patients," the children took an authoritative role and were much more engaged in the interview process.

In-depth analysis and data reduction to codes and categories resulted in five major themes: 1) *Empowerment*, 2) *Freedom to be me*, 3) *Educating without "educating"*, 4) *Unconditional Support*, and 5) *Blossoming*. Thorne's (2008) recommendations for interpretive descriptive research data analysis were utilized. Each of these themes and the associated sub-themes will be thoroughly discussed in this chapter, along with implications for clinical practice.

## Discussion of Themes

### Empowering Children

Empowerment emerged as the most powerful theme in the research study. All of the participants discussed a sense of feeling empowered through their interactions with the professionals at the clinic. Although the term *empowerment* was not specifically used by the children, they discussed many ways in which they felt stronger and more in control through their involvement with the clinic. Something in the patient-provider interaction encouraged a feeling of importance and self-worth with the children. Children left the clinic feeling motivated to try new foods, new activities and other new healthy behaviors. The children felt stronger and more capable of success after their clinic sessions. They also described a sense of individual self-worth. They felt “known” and “important” to the adult figures at the clinic. One child described feeling “open” and this description nicely captured the open-mindedness and freedom voiced by many of the children in the study.

Children described being *empowered through knowledge*. It is important to note that the means through which knowledge was shared, or “taught,” was completely dependent upon the child’s developmental stage. It was noted through field notes and transcriptions that when the child “taught” the researcher specific information they had gleaned from the clinic, they appeared proud and took control of the conversation. Many children described “knowing what to do” after they got home and that they could apply what they had learned during their clinic visits. All of the participants shared the concept of the clinic being “there to help you” and to “teach you things to help you.” The fact that this knowledge was catered for each child individually and delivered at different sessions was also noted. There was sense of a “one-size-does-not-fit-all”

mentality shared by the participants. The individuality of the “teaching” was noted and appreciated by the children.

All of the children shared that they had the *freedom to choose* their own goals and foci for the time spent during clinic sessions. Many children discussed how they worked with the clinicians to come up with “choices” and then getting to “pick what you want to do.” In a world where children are constantly governed by their parents, teachers, and other adult authority figures, their love of the *freedom to choose* echoed clearly. It quickly became clear that for the children interviewed, choice equaled freedom, which equaled empowerment. The concept of being allowed to make their own decisions and choose their own path for improvement made the children feel “mature” and capable. As one child stated, “It seems easier to meet my goal because I made it.”

Offering choices to children is a known factor in enhancing motivation. Educators have begun using choice to positively influence motivation and achievement (Perks, 2010). Giving children the choice between several healthy options is one way to make them feel a sense of control. An essential component of motivation is an individual’s need to feel autonomous. Also, when a child makes a choice, it becomes more meaningful to them and increases the likeliness of completion. Allowing children to make their own choices gives them a sense of competence. When children set goals they deem as achievable, they are more likely to be motivated to complete the goal. Goals that are seen by the child as too difficult to achieve do not foster much motivation (Perks, 2010).

## **Permitting Individuality**

The second theme that emerged from the study is *freedom to be me*. This theme evolved from the participants' focus on how the clinic made them feel as an individual. The children discussed how well the counselors and clinicians “knew them” and “got them.” They expressed happiness when talking about how the clinic providers asked about their hobbies and sporting events. They were able to lead the conversations during their clinic sessions and talk about whatever felt important to them on that day. Several participants discussed how their time at the clinic never focused on weight, but rather on living a healthy lifestyle. The participants also shared how they felt “happy” and “good” and “ready to try new things” after leaving the clinic. Again, they were empowered, but this time because adult figures were accepting them *just as they were* and not attempting to fit them into a predetermined idea of what a healthy child looks like. Small changes made by each child were embraced and celebrated.

## **How Children Want to Learn**

The theme of *educating without “educating”* was derived from the children's descriptions of learning important health information without feeling like they were being *taught* in the traditional sense of the word. Children compared the clinic to the traditional classroom setting and to their schoolteachers, as this is the child's frame of reference for learning. The participants unanimously discussed how the clinic providers made learning “fun.” The children pointed out that they did different activities at each session. Often, they played games or did physical activities that taught them concepts about good foods versus unhealthy foods and how to develop positive health habits. One child, age 7, stated, “she shows us how to defeat unthinkables and stuff. So its kinda fun, we get to do activities with her... Like sometimes she



brings jelly for us to show like how strong super flex is with unthinkables to the mean people” (P11). Incorporating fun and movement into learning activities for children is critical. In addition to enhancing engagement by keeping children awake and upright, moving activates physical, emotional, and cognitive responses that enhance memory (Jensen, 2005). It also shows children that they can have fun with non-sedentary activities, such as electronics.

The older children shared that their clinic time was spent more in discussion about themselves and their futures. They were often able to describe what was going on in their bodies when they were hungry and specific techniques to use to make healthy choices. This is an excellent approach to adolescents who are naturally curious about their bodies and want to know what is “normal.” The older children seemed to appreciate the mature, intellectual conversations between themselves and the clinic providers. Again, a developmental and individualized approach to the child versus a uniformed, prescriptive approach was well received by all of the participants. In the developmental stage of Identity vs. Role Confusion, adolescents seek out and form strong bonds with non-related adult mentors (Erikson, 1959). This was bore out in this research study; the children demonstrated that they felt bonded to clinic staff members.

The subtheme of *illuminating the need for change* emerged from the participants’ descriptions of *why* they felt they needed to learn about healthy lifestyle choices and make healthier decisions in their life. The researcher asked each child “Why do you think you need to be healthy?” This prompted much discussion about sports, family history, and future goals. It became apparent that the clinic staff used the child’s value system to help capture their inner motivation. Most of the older children described playing sports and the need to be “healthy” to be good at sports. Eliciting this type of discussion from adolescents helps them focus on an

immediate, tangible need for health. Adolescents have a difficult time with future-oriented thinking and are concerned with appearance, performance, and “fitting in” with their friends (Hazen et al., 2008). It is very important to understand the adolescent perceptions of relationships with their peers. Often peer relationships are more valued than parental relationships. Knowing this about adolescents can help elicit discussion about behavior change in relation to peers (Naar-King & Suarez, 2011). This approach reflects the importance of peer interaction and identity during adolescence. Simply telling an adolescent that he/she needs lifestyle changes because later in life there will be negative consequences does not align with the developmental stage of Identity versus Role Confusion and is not an effective means of triggering behavior change in this age group.

Most of the younger children discussed family members who had become ill or passed away from preventable diseases such as high blood pressure or diabetes. All of the children with comorbidities such as elevated cholesterol or elevated blood sugar named their own health condition as a reason for needing to change. Interestingly, discussing long-term consequences of their health condition did not appear to be used as a scare tactic but rather as concrete example of someone becoming ill from an unhealthy lifestyle. The use of concrete examples (such as relatives) that are relevant and have an emotional attachment help the child visualize undesired future health complications. Developmentally, anticipatory thinking is difficult for the school age child and especially difficult for the adolescents, who often feel invincible to consequence and live in the moment. Results from this study suggest that the use of concrete examples of negative health outcomes in known individuals may help children visualize the need for personal behavior change.

## **Need for Unconditional Support**

The fourth theme, *Unconditional Support System*, emerged from the participants' emphasis on their personal relationships with the clinic staff. The counselors were described as being "like family" to some of the children. Each child interviewed felt as though they should continue to come to the clinic to "see the counselors" even after they had met all of their clinic goals. They felt as though it "would be good for them" to continue to come periodically and "visit." There was also a strong sense of support from the clinic that was unconditional. The children all expressed that if they failed at meeting their goals, it would be "OK" because there is "always a second chance." As stated in chapter 4, none of the children named their weight as the primary reason for coming to the clinic. In fact, none of the children described the clinic as a "weight management" or "weight loss" clinic. All of the children stated that the providers were there to "help them" with different things. All of the children also stated that they "trusted" their counselors and some said they felt like they "could tell them anything." This level of trust in a non-familial adult can serve as source of empowerment and strength for vulnerable children.

## **Tangible Benefits**

The final theme, *blossoming*, emerged from children's descriptions of feeling different or "changed". All of the participants expressed a sense of optimism and excitement about their future. Children described various, *tangible benefits* of coming to the clinic. Many described how their entire family had changed for the better. Several participants cited *family relationships* as their main goal for coming to the clinic. This was an interesting and unexpected finding at a weight management clinic. Most of the children discussed how their family routines had changed for the better. Children discussed eating meals together as a family more, playing outdoors

together, walking for exercise as a family and grocery shopping together. This quality time with family members was seen as a very positive change that had occurred since coming to the clinic.

Additionally, several participants discussed how the clinic was helping them *plan for success in the future*. Life skills, such as being *mindful* and *contemplating* when making decisions, were taught at the clinic. Several children discussed how the clinic has helped them with organization skills at home and at school. Additionally, several stated that they “talk about their future” with the clinic providers and that their counselors had shared their personal story of how they ended up in their chosen career. Participant 06 stated, “They can help tell me what I need to do in school and how to stay focused, what I need to do in life to get the career that I want...they give me examples of how they got their career.” This appeared to reinforce the sense of caring about the child as an *individual* and offered *long-term support* for the child. This focus on a successful future seemed to empower the children. Many participants shared their future college or career plans with the researcher and explained how the clinic has helped them focus on what they need to do to meet their future goals.

### **Developmental Considerations of Findings**

As discussed in chapter 2, children are unique individuals who should be approached and cared for with respect and knowledge of their specific developmental level. The children in this study ranged from ages 7-13. Developmentally, many of these children were in Erickson’s Industry versus Inferiority Stage of Psychosocial Development (Erickson, 1980). During this critical time in development, school-age children use the mastery of specific tasks to develop self-confidence. Social interaction is key during this time. Relationships with adult mentors are therefore key during this developmental stage. The relational component of MI appeared to be a significant factor in the child’s perception of the use of MI for behavior change. Children were

empowered and strengthened by the addition of a trusted adult mentor in their life. Particularly, one who “knew” them and never “got mad.” Children repeatedly discussed the trust that was shared between the clinic staff members and themselves. Removing the fear of someone not seeing them as “good” allowed an openness to ensue that encouraged true dialog about how a child was feeling.

Goal setting and completion is also extremely important during this developmental stage. As previously stated, children should be given the freedom to be industrious and try new things. Children in this stage, according to Erickson, aim to *please* and “be good” (1980). They strive for adult acceptance and praise for their good works and successes. The children in the study described how MI made them feel like they were accomplishing their goals. They were empowered by the freedom to set their own goals, meet their goals, and check them off their lists. The natural conflict between industry and inferiority in this developmental stage is the perfect time to help children make healthy behavior changes.

### **Sampling Process**

Thorne (2008) states that interpretive descriptive research can be done with a very small sample sizes. The concept of “saturation” is often used in qualitative research. Saturation occurs when no new themes emerge from the participants and the data are repeating (Speziale & Carpenter, 2003). Thorne (2008) warns against claiming “saturation” has been reached in qualitative research as that suggests “a ubiquitous and somewhat arrogant assumption that one has tapped all relevant human variation” (p. 161). Additionally, she states that in applied health research, “the idea that one can claim no new variation could emerge seems antithetical to the epistemological foundations of practice knowledge” (Thorne, 2008, p. 98). Therefore, as recommended by Thorne, an interpretive descriptive study was conducted with the knowledge

that there will always be more to study and learn from the children and concluded when collected data were repeatedly described with similar experiences in this context.

Recruitment for this study took place over several months. The clinic director assisted with recruitment of qualified participants. All children, ages 7 through 18, who were actively involved in treatment at the clinic and had been in treatment longer than four months were asked by the researcher to participate in the study. The researcher chose this length of time to ensure that the child had significant exposure to MI as a communication style before providing their perception of the process. The clinic director emailed the researcher with the clinic dates that children meeting criteria for the study would be coming in for their sessions. Both English and Spanish-speaking patients were eligible to participate but all of the participants spoke English. One patient spoke Spanish with English as his second language. No translator was needed.

### **Clinical Significance of Findings**

#### **Clinical Significance of Empowering Children**

The magnitude at which the theme of *empowerment* shone through data is a commentary on the overall psyche of the children interviewed, and perhaps on children in general. Children, although loved and cherished by society as “dependents,” can be seen as an *oppressed group*. In the United States, children are under adult constraints in all aspects of life. Clark (2011) notes,

Children have to accept consequential decisions adults make for them in families, in medical settings, in places of education, in religious activities—through a power structure taken by adults as the natural order of things. In school, children have rules that govern when they can talk, when they should use the toilet, when they can move about, whether they can carry contraband items (gum, stickers, sweets, etc.) and even whether it is permissible to carry an inhaler that would give relief from asthma.

Therefore, if children are viewed as an oppressed group, the significance of needing to feel *empowered* by their healthcare providers is easily understood. When working with children of any age, we must be mindful of the need to empower children in order to help cultivate their inner motivation and desire for healthy behavior change. Being mindful of a child's position in society, as a minor, and in control of nothing except their own actions, can help us respect the child's need for empowerment in their lives. This can be accomplished through the establishment of rapport and a personal relationship, through the sharing of knowledge, and by offering choices in their daily lives.

### **Clinical Significance of Providing Individualized Care**

Providers caring for overweight children, and children in general, must be cognizant of the importance of self-esteem and individuality in this age group (ages 7-13). Developmentally, the establishment of a sense of self is imperative during the adolescents' *Identity versus Role Confusion* stage (Erikson, 1980). During this time, peer interaction and relationships are essential. Adolescents are particularly aware of society's expectations about how they should look and behave yet they are inwardly attempting to determine who they would like to become (Erikson, 1980). The perception of obesity in society is undeniably unfavorable. To be an overweight or obese child in a society that idolizes "thinness" in the media adds a significant strain on the developing sense of self.

Overweight and obese children have been shown to be at-risk for low self-esteem. A longitudinal study of obese children in this age group (10- and 11-year olds) demonstrated that childhood obesity is a significant predictor of low-self esteem in children, particularly in Hispanic and white females (Wang, Wild, Kipp, Kuhle, & Veugelers, 2009). Self-esteem can be

defined as “the evaluation that persons make about themselves that expresses a self-judgment of approval, disapproval, and personal worth” (Zimmerman, Copeland, Shope, & Dielman, 1997). The results of this study clearly demonstrate that a child’s overall self-worth and feeling of importance can be enhanced through the use of MI as a communication style. Therefore, if clinicians will utilize a communication style that is open and supportive, such as MI, they can help build adolescents’ self-esteem while trying to coach them into making healthy choices.

### **Clinical Significance of Child-Centered Education**

Each child was motivated for change by different, but specific, reasons. Through the use of MI, providers at the clinic were able to draw out the need for change from each child. The passive tone of MI provided a non-threatening environment for the children to explore their own health conditions, family histories, and motivating factors (such as sports) in order to determine the need for behavior change. One child, age 13, stated that change was desirable “because I have had family members die from not being healthy, like from diabetes and stuff” (P06). The participants in this study had learned about health habits without being confined to the hierarchy of the teacher-student relationship that they are accustomed to in the academic setting. Throughout the interviews, learning was seen as *positive* experience at clinic but not necessarily at school.

Clinicians were able to capture the attention of both the elementary-school age and adolescent children by providing developmentally driven approaches to communication. Developmentally, elementary-school age children are in the concrete operations stage of cognitive development until around age 9 (Piaget, 1970). During this time, children are able to deal with concrete logical examples. Around age 10-12, during the formal operations stage,



children develop the ability to generalize across concrete situations and are able to think hypothetically. When attempting to *educate* children about healthy lifestyle choices, providers must utilize these developmental concepts to have meaningful and effective interactions. The practical application of this theme is the recommendation that pediatric providers desiring to “educate” their patients on health behaviors need to be developmentally relevant, stimulating, and emotionally appealing to the children. Games to stimulate learning will help retention and increase the overall appeal of the lessons. Clinic interactions should be fun and developmentally driven. Such practices will improve patient learning and increase the probability of patient retention and overall success.

### **Clinical Significance for Providing *Unconditional Support***

The concept of support needs to be considered when providing care for children. How can we support children unconditionally? What makes a child feel supported? How do we respond when a child does not meet his/her goals? Results from this study help to answer some of those questions. Children feel supported when they feel accepted unconditionally and are treated the same way regardless of their success level with behavior change. The open, trusting relationship developed between provider and patient permits a child to fail but remain optimistic about trying again. This type of relationship is essential to honest communication and effective behavior change. Patients often tell providers what they *think* the providers want to hear. Young children in particular do not want to disappoint parents, teachers, and other adult mentors (Erikson, 1980). Adolescents have a natural tendency to rebel when feeling cornered (1980). We, as clinicians, must provide care without passing judgment and without offering our own advice. We must provide unconditional support to our patients to keep them motivated.

The relational component of MI is particularly important during adolescence, when parents tend to have less involvement and supervision. This is also the time when many young people with chronic diseases begin transitioning to managing their illnesses themselves. Chronic diseases, such as Type 1 Diabetes, require significant motivation on behalf of the child to adhere to the strict medical guidelines. Similarly to those treating childhood obesity, providers managing children with high-acuity chronic diseases like diabetes may have difficulty motivating children to follow strict lifestyle guidelines. Using a prescriptive approach, or telling children what to do, may cause them to feel *unsupported* when they fall short of their instructions. Communicating in the spirit of MI may be one way to provide a feeling of *unconditional support* to this needy population. We should ask children what *they think they could do differently*, rather than instructing them on what they need to do. Indeed, they are the experts on themselves and will know the correct answers better than any outside party would.

Many of the children in the study reported at least one life stressor—such as poverty, parental incarceration, or divorce. Research has demonstrated that children living in poverty are at higher risk for obesity. Skelton (2011) discusses the potential link between mother-only households, poverty, childhood obesity and poor health outcomes. If we are providing care for vulnerable groups such as these, we must be particularly aware of the need for additional support. We must communicate in ways that have shown to make children *feel* supported. MI appears to be one communication style that demonstrates unconditional support to pediatric patients when used correctly.

Research has also demonstrated that the overall health-related quality of life of obese children has been shown to be less than children of normal weight (Williams et. al, 2005).

Quality of life (QOL) refers to an individual's physical, mental, and social wellbeing. Specifically, research suggests that the *social* wellbeing of overweight children often differs from their non-obese counterparts (2005). This strengthens the need for providers of overweight children to utilize communication styles that foster a feeling of unconditional support and positive regard.

### **Clinical Significance of *Blossoming***

The importance of providing Family Centered Care (FCC) is reinforced through this research study. Through the voices of the children, we are able to detect the importance of the family unit to children in this study sample. The significance of the family meal and time spent exercising and time playing together should not go unnoticed. To the child, time together appeared to be one of the most important changes resulting from their clinic treatment. Children were able to *see* and *feel* immediate positive changes to their family routines. Each child stated that his/her family was making changes along with them.

Recommendations to provide “family-centered care” for childhood obesity treatment are included in all expert recommendations (Daniel & Hassnick, 2015). Unfortunately, despite being considered “the standard of pediatric health care by many clinical practices, hospitals, and health care groups”, research on *how* to provide FCC is lacking (Kuo et al., 2012, p. 297). The definition of FCC in the ambulatory setting has not been fully operationalized (Kuo et al., 2012). FCC in the outpatient setting involves the acknowledgement that all pediatric care should be accessible, coordinated, comprehensive, family-centered, culturally competent, continuous and compassionate (Kuo et al., 2012). The core principles of providing FCC are Information Sharing, Respect/Honoring Differences, Partnership, and Care in Context of Family and Community (Kuo

et al., 2012). Many of these attributes of care were described by the children in this research study. It appears that through the use of MI, culturally competent, individualized care for families can be provided. This study supports the use of MI with children and families when attempting to provide family centered care.

### **Implications for Nursing Theory**

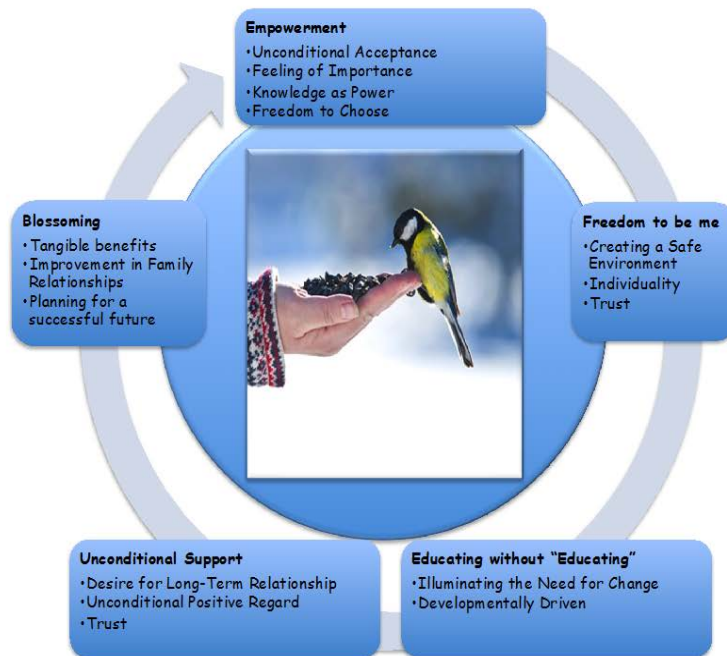
To date, there is no theoretical model for motivational interviewing found in the literature. An early theoretical model of MI, or a “testable theory of its mechanisms of action is emerging, with measurable components that are both relational and technical” has been proposed by Miller and Rose (2009, p. 535). A theoretical model for MI needs to be developed to guide practice and research. One step in this direction is the development of a conceptual model that clearly defines the relationships between concepts. A conceptual model for the child’s perception of MI was created from the results of this study.

A major liaison between nursing research and nursing practice is the development and use of a conceptual model. Fawcett (1992) discusses the reciprocal relationship between conceptual models of nursing and nursing practice. She defines a conceptual model as “a set of abstract and general concepts and the propositions that state something about the concepts” (Fawcett, 1992, p. 224). Fawcett recommends the use of conceptual models as a source of data collection from clinical practice. If a conceptual model is used for research purposes, every report or case study of the use of a conceptual model should include conclusions regarding the credibility of the model. This method of credibility determination begins with development of protocols for areas of nursing practice encompassed by the content of the conceptual model...the conceptual model is considered credible if patient outcomes are congruent with expectations raised by the model. (p. 227)

The conceptual model developed by the researcher is explained below (figure 2). This conceptual model was designed to show the themes and subthemes surrounding the research question, “What is the child’s perception of the use of MI as a communication tool?” This model may be used to as a guide to understand the relationship between the themes and how they relate to the research question. To further nursing theory, protocols for practice in the treatment of childhood obesity should be developed and tested from this conceptual model. Patient outcomes from care provided using this conceptual model should be noted to enhance credibility to the model.

### **Explanation of the Conceptual Model**

The five themes and associated sub-themes are displayed in a cyclical nature. This is representative of the interconnectedness between empowerment and all other themes. The bird in the center of the model represents the child. The feeding hand is symbolic of the spirit of MI; it offers unconditional support, nourishment (education and guidance) for the present and future, and appears to be a safe place to land (trust). The bird is able to fly and feed on its own but chooses to come feed from this safe location. The weather appears cold and dismal but the hand appears warm, wrapped in a sweater. This is representative of the unconditional presence of the supporting hand (through any weather) and the reciprocity of trust that occurs between the bird (child) and the hand (MI provider) (see Figure 2).



*Figure 2.* Conceptual Model of the Child's Perception of MI as a Communication Tool (modified from image found on [www.freeimages.co.uk](http://www.freeimages.co.uk))

## **Critical Theory and Empowerment of Children**

The outcomes of this study have two other implications for nursing theory development: 1) Children in this study voiced a need to feel empowered and 2) Research conducted from the perspective of a critical theoretical framework should be conducted to further explore the voice of children in relation to their position in health care. Critical theory focuses on empowering human beings to transcend the constraints placed on them by race, class, and gender (Fay, 1987 in Creswell, 2007). The results of this study, although not generalizable to children in different contexts, suggest that children may need to be empowered by their healthcare providers for effective, patient-centered care. Therefore, critical theory may be a guiding framework for designing future research studies in similar contexts.

### **Trustworthiness of Data**

As described in chapter 3, the trustworthiness of a qualitative study can be evaluated in several different ways. For this study, Sally Thorne's (2008) recommendations on enhancing quality in interpretive descriptive research were followed. After each of the interview, careful field notes were drafted about each child. Details such as what the child was wearing, demeanor, attitude towards interview, interaction with parent, habitus, ethnicity, grade level and physical build were recorded. A reflective journal was also kept and the researcher wrote her reflections in the journal at the end of each day at the clinic. In this journal, notes about what actually took place at the clinic that day were recorded. Notes about information from the clinic staff were taken regarding the children who were being interviewed that day.

Qualitative research strives to create a valid and reliable presentation of the individuals studied. According to Lincoln and Guba (1985), the credibility, transferability, dependability, and confirmability of a study are determinants of its quality. They recommend prolonged

engagement in the field, triangulation of data sources, methods, and investigators to establish credibility. Triangulation is the combination of more than one research strategy in a single investigation (Speziale & Carpenter, 2003). The credibility of this study was enhanced through triangulation of the findings with the literature, field notes, a reflective journal, a content expert and the clinic director. Multiple in-depth conversations with the clinic director about the use of MI in the clinic and the clinic's approach to treatment occurred throughout the duration of the study. The extended amount of time at the clinic allowed the researcher to be "in the field" and gain a better understanding about the clinic logistics and the type of patients they serve. An audit trail for this study was used to provide an explicit reasoning pathway, and thick description with quotes from the voice of the participants was used for data analysis. The transcribed interviews and coding sheets were not shared with the children or families (member checking). Thorne (2008) argues against the practice of member checking with interpretive descriptive research.

### **Transferability of Study**

It is important to note that the results of this qualitative study are not generalizable to other contexts. Generalizability is a quantitative concept and not the goal of qualitative research (Creswell, 2007). The primary goal of this study was not to generalize to all populations but rather to glean a deeper understanding of what is "beneath the surface" of MI use with children. Rather than generalizability, qualitative research focuses on *transferability* (Creswell, 2007). Transferability in qualitative research is ultimately in the hands of the readers of the research report. If the researcher has provided detailed descriptive information, the readers should assess and determine the extent the results may apply to similar contexts. Thorne extends the concept of transferability with research conducted in applied disciplines, such as nursing (Thorne, 2008). She states, "the researcher who presents qualitative research findings to a health science



discipline understands that the state of knowledge development is such that research results may well find their way into clinical applications regardless of the researcher's explicit assumptions about the origins...health science disciplines exist because of a social mandate that entails a moral obligation toward benefiting individuals and the collective" (Thorne, 2008, p. 223).

There is a "pragmatic obligation" that is also described by Thorne that addresses the issue of generalizability of findings in qualitative health research. Pragmatic obligation relates to the fact that "qualitative health researchers cannot therefore put forth their findings with the comfortable assurance none will apply them in practice before they become 'scientifically proven'...researchers in this field are obliged to consider their findings 'as if' they might indeed be applied in practice" (Thorne, 2008, p. 227). Thorne goes on to note that the products of interpretive descriptive research are not "evidence" but "a particular species of knowledge that can be profoundly relevant in shaping the sensitivities of the practice context, and in expanding consciousness of the larger spheres within which the structures of our societies evolve" (Thorne, 2008, p. 233). Additionally, she notes:

In clinical qualitative research...our findings may be taken up on the practice context without the benefit of what other scientists might consider essential testing...there is much within the clinical world that is highly sensitive to the findings of a well-timed, articulate, and powerful qualitative research presentation, especially if it matches the "clinical instincts" that our audiences are already predisposed to favor (p. 101).

Therefore, the results of this qualitative descriptive study should be viewed as qualitative evidence that can be used by clinicians working with children in similar contexts and also to provide insight into how we can facilitate pediatric behavior change. For example, a pediatric

nurse practitioner, working with children on health behavior change, could take this new knowledge and integrate it with their clinical expertise and clinical reasoning for application in the practice setting. Providers managing children transitioning to self-care of chronic diseases, particularly adolescents may benefit from applying the results of this study into their practice.

### **Implications for Nursing Research**

As discussed in Chapter 3, the philosophical underpinning of this study is pragmatism. Research generated from this worldview focuses on the outcomes, actions, and consequences of the study (Creswell, 2007). Studies designed from a pragmatic viewpoint often focus on the *application* and *solution* to a problem. The pragmatic paradigm aligns nicely with the focus of this study—to better understand the child’s perception of motivational interviewing for obesity treatment in order to make recommendations for practice. Qualitative exploration from a pragmatic stance requires a focus on the *what now* of research. The results of this study can be applied in research and practice. The strong sense of the need for empowerment that emerged from this study suggests that children may feel oppressed when it comes to many aspects of their lives. The spirit of MI appears to empower them through several different mechanisms. Critical theory is a theory of *emancipation for oppressed individuals* (Speziale & Carpenter, 2003). This theoretical framework is therefore applicable to children in the healthcare setting.

Future research designed from a critical viewpoint should focus on empowerment in pediatric healthcare and ways in which we can elevate children and foster their sense of control and freedom of choice in a world in which they are dominated by adult authority figures in most aspects of their life. Children are forced to accept decisions made for them in families, medical settings, schools and religious activities (Clark, 2011). Children, therefore, can be seen as an *oppressed* group. The overarching goal of research designed from a critical theoretical

framework is to not only *describe a situation* from a particular viewpoint but to *change the situation for the better* (www.quaires.org).

The focus on application exists in both critical theory and interpretive descriptive research. As previously stated, the goal of interpretive descriptive research is to “extend beyond mere description and into the domain of the “so what” that drives all applied disciplines” (Thorne, 2008). Interpretive descriptive research should have an *actual practice goal* and the goal for this research study was to *understand* what the children were thinking and feeling in attempt to make recommendations for practice and for future research endeavors. Therefore, future interpretive descriptive research needs to be designed from a critical theory paradigm with the intent to improve pediatric healthcare by exploring critical issues in healthcare disparities in children.

### **Implications for the Child-Centered Research Movement**

Perhaps one of the most important findings of this research study is that children in the selected age group are both *reliable* and *insightful*. They are truly experts on themselves and their place within particular contexts. Child-centered research is being conducted and embraced with much fervor in countries outside of the United States (Dell, 2011). The UN Convention on the Rights of the Child grants children a voice in their affairs, but this has not trickled down to the practice in the United States. Qualitative research with children is particularly lacking in the United States. If we are to give voice to children and avoid making treatment decisions simply by adult proxy, qualitative research with children must be conducted.

An unintended outcome of this study was support for the reliability of child-centered research. This study demonstrated that children, ages 7-13, can articulate their feelings and perceptions in a manner that mirrored the core principles of MI. When compared to the

literature’s descriptions of the “spirit of MI”, the children’s descriptions of their own interactions were very similar. The spirit of MI, if the practice is conducted correctly, is *collaborative*, *evocative*, and *honoring of patient autonomy*. As demonstrated in the following figure, these core principles were both articulated and interpreted by the children in this study. This suggests that children in this age group are able to articulate their feelings and experiences in a manner that supports their ability to participate in qualitative research studies and share their thoughts and feelings. The recommendation for future research, therefore, is for children to be actively involved in research studies focusing on pediatric-related issues. The children are reliable, intuitive beings capable of participating in high-quality research studies.

Table 3  
*Children's Descriptors v. Key Components of MI*

Collaborative	Evocative	Honors Autonomy
P03, 124, “They try to get you to meet the goal, but they don’t push you to do it. They try to ask you. They try to make it so you want to do it”	P07, 12, ‘It’s something we both wanted to do. I wanted to do it for sports and stuff like that. And she [mom] wants me to cause she didn’t want me to be too big”	P07, 83, “Like, my thinking is like trial and error, if it works it works, if it don’t you find something else”
P07, 38, “I get to choose but they get a little bit of say so, but I get a little more, like saying what time or what place or”	P07, 94, “Trying to find ways that might help me do better in sports, like lose weight so I can run faster”	P10, 14, “It’s not like really strict, it’s, like, what you can do at your own pace”
	P08, 235, “I want to be healthier so that I can grow taller because I’m kind of short. “	

## **Recommendations for Future Research Studies**

Qualitative research does not begin with theory. However, “it is generally accepted that qualitative research findings have the potential to create theory” (Speziale & Carpenter, 2003). As stated above, the conceptual model derived from the results of this study needs to be utilized and tested to determine relevance and applicability. This could be done through quantitative research studies designed to measure specific outcomes when this model is applied.

According to the most recent edition of the Miller and Rollnick’s (2013) seminal text on MI, the number of scientific publications on MI has been doubling about every 3 years since 1990. Clinical trials continue to demonstrate positive results (Miller & Rollnick, 2013). Results from the current study suggest that pediatric providers in similar contexts may benefit from communicating with children in a way that is appealing to their developmental level, establishes trust and rapport, and facilitates empowerment. According to the children interviewed for this study, MI is one means of communicating in this manner. A quantitative study could be undertaken in the primary care setting to see if implementing MI by non-mental health providers would produce similar findings. Additional qualitative research on the child’s perception of MI in other clinical settings would strengthen and support these findings as well. Research on the use of MI with children suffering from chronic conditions, such as diabetes, would provide clinicians a better understanding of how to manage behavior change in these vulnerable populations.

## **Clinicians as Researchers**

Nurses and nurse practitioners providing care in the clinical setting need to be encouraged and educated on how to interview children. Implications from this particular study include the need for more pediatric providers to be trained on interviewing children for the

advancement of nursing knowledge. The scarcity of qualitative research with children is alarming. Interpretive descriptive research, as developed by Thorne (2008), is an effective method to be used in the clinical setting. The children in this research study responded very honestly and comprehensively to being interviewed by a pediatric nurse practitioner who was there to “learn from them.” This may be due to the fact that they were in a familiar setting in which they felt safe and in control. As clinicians, we need to replicate this scenario in our own practice settings and become versed in conducting qualitative research with children. This is invaluable if we are to play a role in the child-centered research movement that has taken hold in other countries.

As discussed in chapter 3, Clark (2011) has made recommendations for improving the effectiveness of interviewing children for research purposes. The following strategies (taken from Clark and modified by this researcher) were utilized in this study and found to be effective:

- Explain to the child that he/she will be teaching the interviewer about their individual experience
- Allow the child to choose where to sit and have seats equal height or with child higher than interviewer.
- Encourage children to talk freely, to challenge, to reframe, to correct and to condescend. Do not correct. Verbalize understanding and acceptance of their expressions.
- Check out equipment and setting beforehand to devote attention to the child being interviewed.
- Check room for anything hazardous or distracting.
- For younger children, have something they can hold in their hands and play with during the interview.

- Spend time with the child to get to know them at the outset. Find out about family pets, hobbies, learn what each child is passionate about.
- Have parent in the room while building rapport with child. Ask child if it is ok for you to talk to him/her without a parent in the room.
- Provide privacy.
- Clearly explain the interview process. Explain that the child has authority and power, as does the adult.
- Bring to the interview specific, age-appropriate tasks. Coloring materials, clay, sculpting sand, etc.
- Show sincere, human warmth.
- Monitor each child's affective state.
- Encourage, don't belittle.
- Seek to understand, rather than judge.
- Help the child self-reflect.
- Look and listen. Mirror the child's gestures.
- Pick up the child's language. Use words and terms that the child uses.
- Do not set a time limit or minimal time for interview. Be aware of interviewee fatigue, apparent when child stops answering questions as thoroughly.

A very positive but unexpected finding of this study was how excited many of the children were to "share their story". Many appeared to enjoy the freedom to discuss their own thoughts and experiences without being corrected. Allowing them to "tell their story" while still guiding them back to semi-structured interview questions proved to be an effective means of gathering data from children as young as seven.

A major purpose of interpretive descriptive research, as previously stated, is to generate “credible and defensible new knowledge in a form that will be meaningful and relevant to the applied practice context” (Thorne, 2008). The intent of the study was to glean better understanding of what MI means to children in hopes of applying this understanding to clinical practice. Before making recommendations for implementation in practice, researchers and theorists need to know *why* and *how* this works with children. Previous quantitative research has demonstrated the *effectiveness* of the use of MI in childhood weight management (see Chapter 2). This particular study adds to the discipline the understanding of *why* this approach works with children—through the voice of the children and not by adult proxies-- and it provides a conceptual model from which other research can be developed.

### **Implications for Clinical Practice**

#### **Applying Findings to Primary Care**

As clinicians, we must veer away from the prescriptive approach to facilitating behavior change in children. Historically, this authoritative approach between provider and patient has been heavily utilized. The epidemic of childhood obesity suggests that this approach is not working with today’s youth. The results of this study reinforce previous findings suggesting that a patient-centered, individualized and collaborative approach to behavior change is more appropriate for children. The American Academy of Pediatrics (AAP) recommends the use of MI for childhood obesity treatment in the primary care setting. Most research has focused on the provision of MI by mental health specialists. However, a recent meta-analysis of MI for adolescent health behavior change suggests MI is effective when administered in the primary care setting (Cushing, Jensen, Miller, & Leffingwell, 2014). This meta-analysis demonstrated small but significant sustained improvement in health behavior outcomes. Results from 15



studies (1,610 participants) were analyzed for change in various health behaviors such as substance use, diet, sexual health, weight management, diabetes, and physical activity. Half of the studies in the meta-analysis utilized non-mental health providers, such as nutritionists, physicians, and nurse practitioners to provide MI in the primary care setting. These results demonstrate the effectiveness of MI with adolescents for healthy behavior change when MI is provided by mental health providers or primary care providers. A second meta-analysis of randomized controlled trials (RCTs) of MI as a means of health behavior change demonstrated significant effect sizes in outcomes related to weight loss, blood pressure, and substance use (VanBusKirk & Wetherell, 2013). These studies took place in the primary care setting as well and suggest that MI is useful in the primary care setting.

### **Alignment with Clinical Practice Guideline**

In 2007, the AAP released a policy statement challenging physicians to make screening and counseling of families part of routine well-child examinations. The recommendations from this expert committee include a staged approach to treatment for children whose BMI is greater than 85<sup>th</sup> percentile. According to the committee, “these recommendations can be implemented by the primary care physician or an allied health care provider who has some training in pediatric weight management of behavioral counseling” for 6 months time. If no improvement in BMI or weight status has been noted during that time, the next stage of treatment consists of a “structured weight management protocol’ which can be implemented by a primary care physician or and allied health care provider who is highly trained in weight management” (Barlow, 2007).

The question arises, then, as to how one becomes “trained” or “highly trained in weight management?” The National Association of Nurse Practitioners (NAPNAP) has also issued a policy statement encouraging all pediatric providers to make childhood obesity identification and

prevention a high priority (National Association of Nurse Practitioners [NAPNAP], 2009). Both professional organizations recommend, among other interventions, the use of culturally sensitive, family-focused interventions and motivational interviewing when counseling children and families. Awareness of community resources and advocacy for healthy communities are also recommended provider behaviors by these two expert panels (Barlow, 2007; NAPNAP, 2009).

The primary care provider has the unique advantage of following a child for both episodic and well-child care for an extended period of time. Rapport can be established over many patient-provider interactions and a partnership for wellness can develop over time. With this unique position of influence, primary care providers must become adept in screening and preventing childhood obesity. For those children who are already overweight or obese, the primary care provider must intervene and prevent worsening of their health status.

### **Overcoming Barriers for Implementation**

**Competency of provider.** In 2009, a systematic review of primary care physicians' knowledge, attitudes, beliefs and practices regarding childhood obesity in the United States and abroad concluded that only 5% to 33% of the physicians surveyed considered themselves competent in treating childhood obesity (Van Gerwen et al., 2008). Behavioral management strategies and guidance in parenting techniques, both of which are indicated in Stage II of the AAP's recommendations, were two areas physicians desired additional training (Van Gerwen et al., 2008). Specifically in the U.S., of 339 pediatricians and family practitioners surveyed, only 19% were aware of any expert committee recommendations on childhood obesity screening and only 5%- 9.5% considered themselves "good" or "excellent" at obesity counseling (Kolagotla & Adams, 2004).

The common theme noted throughout the literature is that primary care providers consider childhood overweight and obesity an important problem; however, they lack the training and expertise to competently manage the issue. A recent survey of physicians practicing in Southern Appalachia, an area plagued with overweight and obesity, reiterated this common theme (Holt et al., 2011). Of the 36 physicians surveyed, 71% of providers reported talking to parents about their children's eating and physical activity but only 19% provided their patients and families with any tools to improve their lifestyle habits. This low intervention rate may be due to the low self-perceived skill level in treating childhood obesity, with 38% of the physicians reporting low skill levels with behavior management strategies (Holt et al., 2011).

### **Training for Clinicians**

The practice of MI builds on principles innate to the holistic practice of nursing. Active listening and communication skills are introduced at the entry level to practice in nursing. Five basic principles (expressing empathy, supporting self-efficacy, rolling with resistance, reflective listening, and summarizing) guide the practice of MI and can be applied to primary care delivery and enhanced with practice. Table 4 lists these basic principles along with the rationale for their inclusion in MI.

MI can be done in a busy primary care setting in as few as 15 minutes but works best with longer and sequential follow-up visits (Rubak et al., 2005; Van Nes & Sawatzky, 2010). Pediatric providers desiring to facilitate health behavior change can easily access resources and become trained in the practice of MI. Practicing pediatricians who received brief training on motivational interviewing skills to use in their practice cited "role-playing" with the use of open-ended questions, reflective listening, building motivation, and eliciting change talk as a helpful learning tool (Schwartz et al., 2007). Training videos, conferences, and textbooks are also widely

available for clinicians. The AAP has developed a video for primary care providers that discusses the main tenets of MI to use when discussing mental health issues with parents (American Academy of Paediatrics, 2012).

Table 4

*Providers' Role in Motivational Interviewing*

Principle:	Rationale:
Expressing Empathy	Provides basis for patient to be heard and understood; involves provider seeing world through patient's eyes; facilitates sharing of the patient's experiences
Supporting Self-Efficacy	Patient's belief that they have the capability to change is needed to instill hope about making difficult changes; providers support self-efficacy by focusing on previous successes and highlighting patient's skills and strengths
Rolling with Resistance	Resistance occurs when patient experiences a conflict between their solution to the problem behavior and the provider's recommendations—instead of confronting this resistance, providers “roll with it” to allow patient to continue to define the problem and their own solutions; described as a metaphorical “dance”
Reflective Listening	Critical to expressing empathy; patient comes to understand provider sees issues from their perspective; guides client toward change and resolving ambivalence by focusing on the negative aspects of current behaviors and the positive aspects of making change
Summarizing	Special type of reflection where provider recaps what has occurred during visit; communicates interest, understanding and calls attention to important elements of the discussion; provider can highlight patient's ambivalence about change and help demonstrate discrepancies in their talk and behavior

## **Reimbursement for Childhood Obesity Services Under the ACA**

Lack of reimbursement for obesity management services has also been cited as a primary reason clinicians do not manage weight issues in the primary care setting (Story et al., 2002). The Affordable Care Act extended Medicaid eligibility as well as increased reimbursement for preventative services. As of 2013, state Medicaid programs were required to pay providers with a specialty designation of family medicine or pediatric medicine and nurse practitioners *at least* at the Medicare rate in effect in calendar years 2013 and 2014, attempting to encourage more primary care providers to accept Medicaid patients (American Academy of Pediatrics [AAP], 2012). In addition, certain Evaluation and Management (E&M) codes are eligible for reimbursement at 100% of the Medicare rate. Codes 99381-99387 (new patient) and 99391-99397 (established patient) include coverage for individual counseling (nutrition, health education, exercise, and mental health) by a physician or nurse practitioner (Wilensky et al., 2006). Therefore, under the Affordable Care Act, not only are primary care providers encouraged to approach children from a preventative model, they are also reimbursed more for preventative services. This reimbursement, if coded correctly, should cover physician and nurse practitioner comprehensive management of childhood obesity in the primary setting, including time for MI.

## **Revisiting the Guiding Research Questions**

The research questions that guided this study are as follows:

1. What is the child's experience with the use of MI as a communication tool for healthy behavior change?
2. Should MI be used for other types of behavior change programs involving children?
3. What is it about this communication style that has shown positive outcomes in previous research in similar populations?

4. How is this different from other types of programs they have participated in before for behavior change?

Results from this study were overwhelmingly positive when discussing the child's experience with the use of MI as a communication tool. The conceptual model that was derived from the data delineates *what it is about MI* that leads to the positive outcome demonstrated in related studies (mostly quantitative). Components of the conceptual model could easily be applied to similar populations. The primary difference between the clinic at which this study took place and other clinics appears to be the communication style, most specifically MI. The data from the voices of the children in this study emerged into themes of *empowerment, freedom to be a unique individual, educating in a non-traditional manner, unconditional support and blossoming*. These themes reflect what the child experiences when providers trained in the spirit of MI provide ongoing care for childhood obesity treatment.

### **Personal Reflection on Research Study**

The clinical issue of childhood obesity has been the focus of my research since beginning the doctoral journey. During my interview for acceptance into the doctoral program, I was asked to reflect on a clinical issue or problem that I felt warranted further exploration. I immediately responded that the management of childhood obesity in the primary care setting has been my biggest challenge as a pediatric nurse practitioner practicing in a rural, underserved area. It seemed as though all of the clinical guidelines and recommendations for treatment did not seem to work with my patients. They continued to struggle with making healthy decisions in their lives.

After spending much time in the literature, I realized that motivational interviewing seemed to be one of the few evidence-based recommendations that might help the population I

had always served. I also realized there the clinical guidelines all referred back to a scant amount of literature on the topic of MI, and virtually no qualitative research with children who had participated in MI sessions. This led me to look further into the topic of MI with overweight and obese children, as it appeared to be one of the few “interventions” that worked.

I began studying MI and attended a training workshop. Initially, I planned on providing weight management care in the rural clinic where I had practiced, and I intended to use this patient population for my research study. I quickly realized this plan was not going to come to fruition. Very few families in the low-income, rural community joined the pediatric weight management clinic. I redesigned my study after locating a clinic that was rooted heavily in the spirit of MI and which had many MI-trained providers. This clinic proved to be an excellent site for research; however, many logistic issues ensued. The clinic is a 4 ½ hours from my home and the study took place during the winter months. Many trips were made to the clinic in vain, due to patients cancelling or not showing up for appointments. This made the recruitment process long and tedious.

In hindsight, I would have designed the study to include telehealth and built in means to ensure rapport was built with patients. This would have opened up a greater recruitment area for the study and improved access to patients. Additionally, the clinic utilizes telehealth for appointments and their patients are very comfortable with communicating in this manner.

As a pediatric nurse practitioner, I am very excited about the results of this study being utilized in other clinical settings. Although the results of this study are not generalizable to other contexts, clinicians caring for children in similar contexts may benefit from gaining a deeper understanding of the children’s perception of MI. The empirical data has already proven the efficacy of MI, but this qualitative study adds to the literature a deeper look into what is

happening between a child and a clinician during the MI process. My hope is that other pediatric providers will hear the voice of the children through this study and modify their communication styles in a manner that are effective and empowering for children.



## REFERENCES

- American Academy of Pediatrics. (2012). *Q&A on Final Rule: Medicaid Payment for Services Furnished by Certain Physicians and Charges for Immunization Administration Under the Vaccines for Children Program*. Retrieved from [www.aap.org](http://www.aap.org)
- Armstrong, M. J., Mottershead, T. A., Ronksley, P. E., Sigal, R. J., Campbell, T. S., & Hemmelgarn, B. R. (2011). Motivational interviewing to improve weight loss in overweight and/or obese patients: a systematic review and meta-analysis of randomized controlled trials. *Obesity Reviews*, *12*, 709-723. <http://dx.doi.org/10.1111/j.1467-789X.2011.00892.X>
- Barlow, S.E. (2007). Expert committee recommendations regarding the prevention, assessment, and treatment of child and adolescent overweight and obesity: summary report. *Pediatrics*, *120*, S164—S192. <http://dx.doi.org/10.1542/peds.2007-2329C>
- Brobeck, E., Bergh, H., Odencrants, S., & Hildingh, C. (2011, June 15). Primary healthcare nurses' experiences with motivational interviewing in health promotion practice. *Journal of Clinical Nursing*, *20*, 3322-3330. <http://dx.doi.org/10.1111/j.1365-2702.2011.03874.X>
- Centers for Disease Control and Prevention. (February 13, 2013). <http://www.cdc.gov/healthyyouth/obesity/facts.htm>
- Clark, C.D. (2011). *In a younger voice: Doing child-centered qualitative research*. New York, NY: Oxford University Press.
- Creswell, J.W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches (2<sup>nd</sup> ed.)*. Thousand Oaks, CA: Sage Publishing.
- Cushing, C.C., Jensen, C.D., Miller, M.B. & T.R. (2014). Meta-analysis of motivational interviewing for adolescent health behavior: Efficacy beyond substance use. *Journal of*

- Consulting and Clinical Psychology*, 82(6), 1212-1218. <http://dx.doi.org/10.1037/a0036912>
- Daniels, S.R. & Hassink, S.G. (2015). The role of the pediatrician in primary prevention of obesity. *Pediatrics*, 136(1), e275-e292. <http://dx.doi.org/10.1542/peds.2015-1558>
- Erikson, E.H. (1980). *Identity and the life cycle*. New York, NY: WW Norton.
- Freedman, D. S. (2011, January 14). Obesity--United States, 1988-2008. *Morbidity and Mortality Weekly Report (MMWR)*.
- Hammond, R. A., & Levine, R. (2010, August 30). The economic impact of obesity in the United States. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, 3, 285-295. <http://dx.doi.org/10.2147%2FDMSOTT.S7384>
- Hazen, Schlozman & Beresin. (2008). Adolescent psychological development: A review. *Pediatrics in Review*, (29), 161-168. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/18450837>
- Holt, N., Schetzina, K. E., Dalton III, W. T., Tudiver, F., Fulton-Robinson, H., & Wu, T. (2011, January 1). Primary Care Practice Addressing Child Overweight and Obesity: A survey of primary care physicians at four clinics in Southern Appalachia. *Southern Medical Journal*, 104(1), 14-19. <http://dx.doi.org/10.1097/SMJ.0b013e3181fc968a>
- Jensen, E. (2005). *Teaching with the brain in mind* (2<sup>nd</sup> ed.). Virginia: Association for Supervision and Curriculum Development.
- Kolagotla, L., & Adams, W. (2004). Ambulatory management of childhood obesity. *Obesity Reviews*, 12(12), 275-283. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/14981220>

- Kuo, D.Z., Houttaw, A.J., Arango, P., Kuhlthau, K., Simmons, J.M. & Neff, J. (2012). Family-centered care: Current applications and future directions in pediatric health care. *Journal of Maternal & Child Health, 16*, 297-305. <http://dx.doi.org/10.1007/s10995-011-0751-7>
- Mello, M. M., Studdert, D. M., & Brennan, T. A. (2006, June 15). Obesity--the new frontier of public health law. *The New England Journal of Medicine, 354*, 2601-2610. <http://dx.doi.org/10.1056/NEJMp060227>
- Miller, W. R. & Rollnick, S. (2013). *Motivational interviewing: Preparing people for change* (3<sup>rd</sup> ed.). New York: Guilford Press.
- Miller, W.R. & Rose, G.S. (2009). Toward a theory of motivational interviewing. *American Psychologist, 64*, 527-537. <http://dx.doi.org/10.1037/a0016830>
- Morse, J.M. (2012). *Qualitative health research: Creating a new discipline*. Walnut Creek, CA: Left Coast Press.
- Naar-King, S. & Suarez, M. (2011). *Motivational interviewing with adolescents and young adults*. New York, NY: The Guilford Press.
- National Association of Nurse Practitioners. (2009). *NAPNAP position statement on the identification and prevention of overweight and obesity in the pediatric population* [Position Statement]. *Journal of Pediatric Health Care: National Association of Nurse Practitioners*.
- Neumark-Sztainer, D. R., Friend, S. E., Flattum, C. F., Hannan, P. J., Story, M. T., Bauer, K. W., ... Petrich, C. A. (2010, November). New Moves-Preventing weight-related problems in adolescent girls: A group randomized study. *American Journal of Preventive Medicine, 39*(5), 421-432. <http://dx.doi.org/10.1016/j.amepre.2010.07.017>

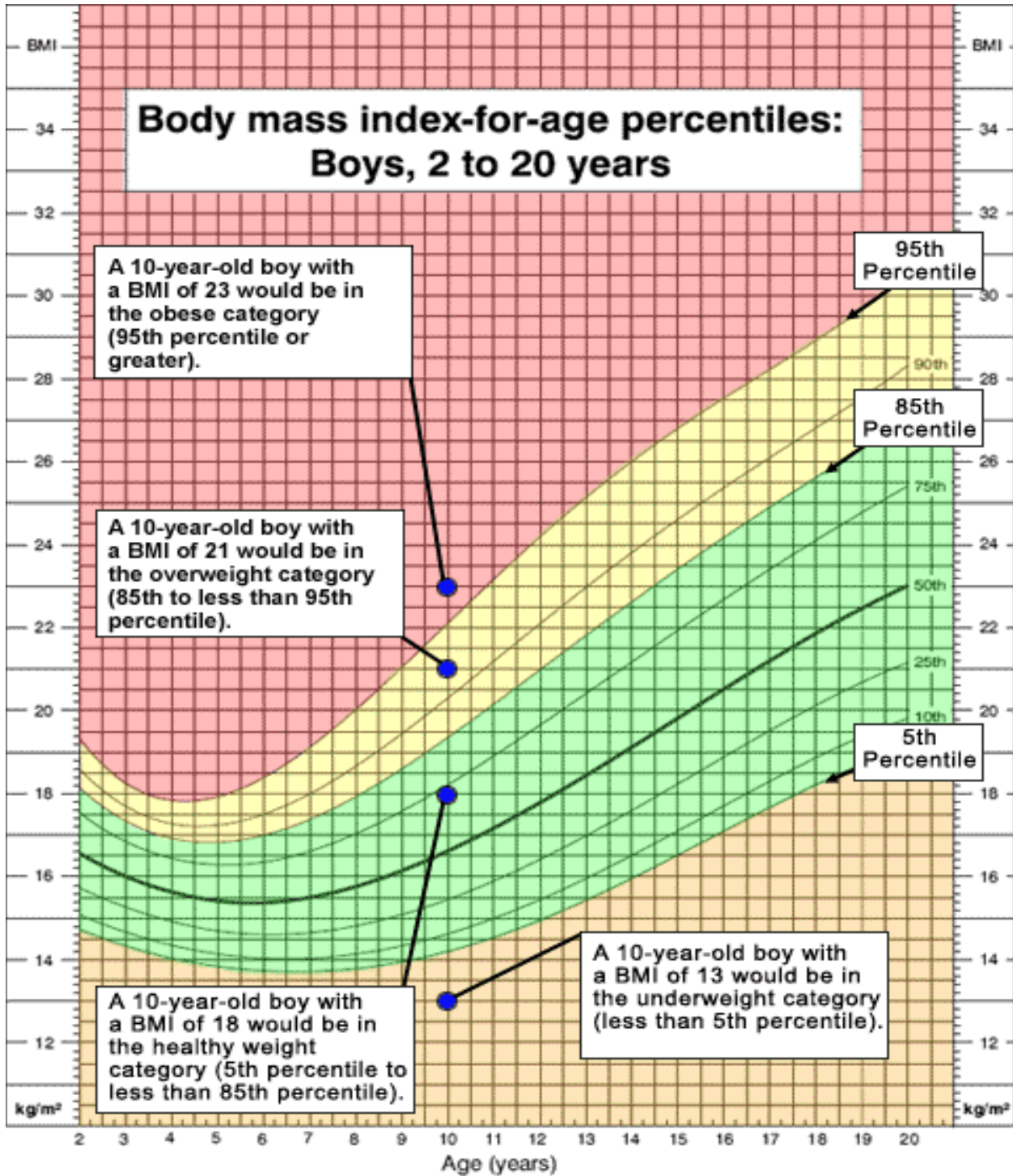
- Perks, K. (2010). Creating effective choices to motivate students. *Adolescent Literacy in Perspective*. [http://www.ohiorc.org/orc\\_documents/orc/adlit/inperspective/2010-03/in\\_perspective\\_2010-03.pdf](http://www.ohiorc.org/orc_documents/orc/adlit/inperspective/2010-03/in_perspective_2010-03.pdf)
- Rubak, S., Sandbaek, A., Lauritzen, T., & Christensen, B. (2005, July 1). Motivational interviewing: A systematic review and meta-analysis. *British Journal of General Practice*, 55, 305-312. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1463134/pdf/bjpg55-305.pdf>
- Schwartz, R. P., Dietz, W. H., Wasserman, R. C., Slora, E. J., Myers, E. F., Sullivan, S., ... Thomas, K. A. (2007, May). Office-based motivational interviewing to prevent childhood obesity. *Archives of Pediatric Adolescent Medicine*, 161. Retrieved from <http://archpedi.jamanetwork.com/article.aspx?articleid=570359>
- Skelton, J.A., Irby, M.B. Grzywacz, J., Miller, G. (2011). Etiologies of obesity in children: Nature and Nurture, *Pediatric Clinics of North America*, 58(6), 1333-1354. <http://dx.doi.org/10.1016/j.pcl.2011.09.006>
- Speziale, H. J. & Carpenter, D.R. (2003). *Qualitative research in nursing* (3<sup>rd</sup> ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Story, M. T., Neumark-Stzainer, D. R., Sherwood, N. E., Holt, K., Sofka, D., Trowbridge, F. L., & Barlow, S. E. (2002). Management of child and adolescent obesity: Attitudes, barriers, skills, and training needs among health care professionals. *Pediatrics*, 110(1), 209-215. Retrieved from [http://pediatrics.aappublications.org/content/110/Supplement\\_1/210.full.html](http://pediatrics.aappublications.org/content/110/Supplement_1/210.full.html)
- Taveras, E. M., Gortmaker, S. L., Hohman, K. H., Horan, C. M., Kleinman, K. P., Mitchell, K., ... Gillman, M. G. (2011, April 4). Randomized controlled trial to improve primary care

- to prevent and manage childhood obesity. *Archives of Pediatric Adolescent Medicine*, 165(8), 714-722. <http://dx.doi.org/10.1001/archpediatrics.2011.44>
- Thorne, S. (2008). *Interpretive description*. Walnut Creek, CA: Left Coast Press.
- Van Gerwen, M., Franc, C., Rosman, S., Le Valilant, M., & Pelletier-Fleury, N. (2008, September 4). Primary care physicians' knowledge, attitudes, beliefs and practices regarding childhood obesity: a systematic review. *Obesity Reviews*, 10, 227-236. <http://dx.doi.org/10.1111/j.1467-789X.2008.00532.x>
- Van Nes, M., & Sawatzky, J. V. (2010, October). Improving cardiovascular health with motivational interviewing: A nurse practitioner perspective. *Journal of the American Academy of Nurse Practitioners*, 22, 654-660. <http://dx.doi.org/10.1111/j.1745-7599.2010.00561.X>
- Wang, F. Wild, T.C., Kipp, W. Kuhle, S. & Veugelers, P.J. (2009 ). The influence of childhood obesity on the development of self-esteem. *Health Reports: A Canadian Peer Reviewed Journal of Population Health and Health Services Research*, 20(2), 21-28.
- Wilensky, S., Whittington, R., & Rosenbaum, S. (2006). *Policy Brief: Strategies for improving access to comprehensive obesity prevention and treatment services for Medicaid-Enrolled children*. Retrieved from [www.gwhealthpolicy.org](http://www.gwhealthpolicy.org)
- Wong, E. M., & Cheng, M. M. (2012). Effects of motivational interviewing to promote weight loss in obese children. *Journal of Clinical Nursing*, 22, 2519-2530. <http://dx.doi.org/10.1111/jocn.12098>

APPENDICES

Appendix A

BMI Percentiles



## Appendix B

### Informed Consent Form

#### EAST TENNESSEE STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD INFORMED CONSENT DOCUMENT (ICD)

This Informed Consent will explain about being a participant in a research study. It is important that you read this material carefully and then decide if you wish to be a volunteer.

#### PURPOSE:

This study is being directed by Penelope Neal, PhD(c), MSN, CPNP, doctoral student in the College of Nursing at East Tennessee State University (ETSU). The main objective of this study is to explore the patient and family experience with motivational interviewing, a communication technique used by specialists to promote behavior change.

#### PROCEDURES AND STUDY DURATION

If you agree to participate in this study, you and your child will be asked to participate in an interview at a time mutually agreed upon between the researcher conducting the study and you. The interview will take approximately 30 minutes to complete. During these interviews, the researcher will ask a series of questions regarding your experience with the clinic helping you and your child make positive lifestyle changes. The researcher is investigating the effects of the clinic on your child's level of physical activity, dietary habits, and overall response to this type of program. You understand that the researcher will audiotape record the interviews and also take notes. There will be no cost to you for participating in the research.

#### ALTERNATIVE PROCEDURES/TREATMENTS

None.

#### POSSIBLE RISKS/DISCOMFORTS

The researcher is not aware of any known risks to you or your child for participating in this study. Benefits include the opportunity to share your thoughts, feelings, and experience with the topic. If at any time you or your child becomes uncomfortable with the interview process, you may discontinue participation in the study immediately.

In the event of research related injuries or if you have further questions about the research, you may contact Penelope Neal at (865) 804-1464. If you have any questions

about your rights as a research participant, you may contact the Chairman of the Institutional Review Board of ETSU at 423/439-6055.

If you have any questions or concerns about the research and want to talk to someone independent of the research team or you can't reach the study staff, you may call an IRB Coordinator at 423/439-6055.

### VOLUNTARY PARTICIPATION

Participation in this research experiment is voluntary. You may refuse to participate. You can quit at any time. If you quit or refuse to participate, the benefits or treatment to which you are otherwise entitled will not be affected. You may quit by calling Penelope Neal, whose phone number is (865) 804-1464. You will be told immediately if any of the results of the study should reasonably be expected to make you change your mind about staying in the study.

### CONFIDENTIALITY

Every attempt will be made to see that your study results are kept confidential. A copy of the records from this study will be stored on a password-protected computer file for at least 5 years after the end of this research. Your name will not be associated with the interview. The results of this study may be published and/or presented at meetings without naming you as a subject. Although your rights and privacy will be maintained, the Secretary of the Department of Health and Human Services (DHHS) and ETSU's Institutional Review Board (IRB) have access to the study records. Your records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above.

### AUTHORIZATION TO USE AND DISCLOSE PROTECTED HEALTH INFORMATION FOR RESEARCH PURPOSES

The privacy law, Health Insurance Portability & Accountability Act (HIPAA), protects my individually identifiable health information (protected health information). The privacy law requires me to sign an authorization (or agreement) in order for researchers to be able to use or disclose my protected health information for research purposes in the study entitled "Motivational Interviewing as a Tool for Healthy Behavior Change in Children".

I authorize Penelope Neal and her research staff to use and disclose my protected health information for the purposes described below. I also permit my doctors and other health care providers to disclose my protected health information for the purposes described below.

#### **My protected health information that may be used and disclosed includes:**

- Age and gender.



**The Investigator, Penelope Neal, may use and share my health information with:**

- The East Tennessee State University Human Research Protections Program (HRPP) Institutional Review Board Administration when the researcher or the research site is undergoing *Quality Improvement Program (QIP)* auditing.

Once my health information has been disclosed to anyone outside of this study, the information may no longer be protected under this authorization. The investigator(s) Penelope Neal agrees to protect my health information by using and disclosing it only as permitted by me in this Authorization and as directed by state and federal law.

**I do not have to sign this Authorization. If I decide not to sign the Authorization:**

- It will not affect my treatment, payment or enrollment in any health plans, nor affect my eligibility for benefits.
- I cannot be allowed to participate in this research study.

**After signing the Authorization, I can change my mind and:**

- Not let the researcher disclose or use my protected health information (revoke the Authorization).
- If I revoke the Authorization, I will send a written letter to: Penelope Neal (865) 804-1464 to inform her of my decision.
- If I revoke this Authorization, researchers may only use and disclose the protected health information **already collected** for this research study.
- If I revoke this Authorization my protected health information may still be used and disclosed should I have an adverse event (a bad effect, or experience something unanticipated).
- If I change my mind and withdraw the authorization, I may not be allowed to continue to participate in the study.

It has been explained to me that I will not be allowed to review the information collected for the research until after the study is completed. When the study is over, I will have the right to access the information again.

This Authorization does not have an expiration date.

**If I have not already received a copy of the Privacy Notice, I may request one by contacting the Privacy Officer. If I have any questions or concerns about my privacy rights, I should contact the East Tennessee State University, James H. Quillen College of Medicine Privacy Officer, Paula Wright,, at 423/433-6074 .**

**I am the subject or am authorized to act on behalf of the subject. I have read this information, and I will receive a copy of this form after it is signed.**

By signing below, you confirm that you have read or had this document read to you. You will be given a signed copy of this informed consent document. You have been given the chance to ask questions and to discuss your participation with the investigator. You freely and voluntarily choose to be in this research project.

In addition, by signing below, you are authorizing the use and disclosure of your protected health information for research purposes as described above.

---

SIGNATURE OF PARTICIPANT

DATE

---

PRINTED NAME OF PARTICIPANT

DATE

---

SIGNATURE OF INVESTIGATOR

DATE

---

SIGNATURE OF WITNESS (if applicable)

DATE

(If requesting consent by LAR, add reference to "or research subject's legally authorized representative" after the word participant in the first 2 signatory lines. In addition, add lines for an explanation of the representative's relationship to patient/subject and include a description of representative's authority to act on behalf of Patient)

## Appendix C

### Research Assent Form



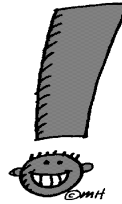
#### **What is a research study?**

Research studies help us learn new things. We can test new ideas. First, we ask a question. Then we try to find the answer.

This paper talks about our research and the choice that you have to take part in it. We want you to ask us any questions that you have. You can ask questions any time.

#### **Important things to know...**

- You get to decide if you want to take part.
- You can say 'No' or you can say 'Yes'.
- No one will be upset if you say 'No'.
- If you say 'Yes', you can always say 'No' later.
- You can say 'No' at anytime.
- We would still take good care of you no matter what you decide.



#### **Why are we doing this research?**

We are doing this research to find out more about your experience talking with the providers at the clinic.



#### **What would happen if I join this research?**

If you decide to be in the research, we would ask you to do the following:

- Talking: A person on the research team would ask you questions. Then you would say your answers out loud. Your parent will be there with you.



#### **Could bad things happen if I join this research?**

Some of the tests might make you uncomfortable or the questions might be hard to answer. We will try to make sure that does not happen. You can say 'no' to what we ask you to do for the research at any time and we will stop.



**Could the research help me?**

We think being in this research may help you because you will get to talk to us about what you have liked or not liked about the clinic. You will also get to share anything you would like with us during our talks.



**What else should I know about this research?**

If you don't want to be in the study, you don't have to be.

It is also OK to say yes and change your mind later. You can stop being in the research at any time. If you want to stop, please tell the research doctors.

You would not be paid to be in the study but will receive a "thank you" gift for your time and participation.

You can ask questions any time. You can talk to Penny Neal. Ask us any questions you have. Take the time you need to make your choice.



**Is there anything else?**

If you want to be in the research after we talk, please write your name below. We will write our name too. This shows we talked about the research and that you want to take part.

**Name of Participant** \_\_\_\_\_  
(To be written by child/adolescent)

**Printed Name of Researcher** \_\_\_\_\_

**Signature of Researcher** \_\_\_\_\_

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Time**

**Interpreter Information (applicable if LEP participant)**

\_\_\_\_\_  
*Printed Name of Interpreter during initial presentation of study*

\_\_\_\_\_  
*Date*

---

*Printed Name of Interpreter when translated form is presented*

*Date*

**Original form to:**  
Research Team File

**Copies to:**

## Dictamen conforme Formulario Investigación



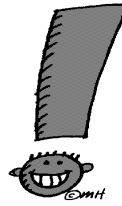
### ¿Qué es un estudio de investigación?

Estudios de Investigación ayudarnos a aprender cosas nuevas. Podemos poner a prueba nuevas ideas. En primer lugar, formular una pregunta. A continuación, tenemos que tratar de encontrar la respuesta.

Este documento habla sobre nuestra investigación y la elección que usted tiene que tomar parte en ella. Queremos que usted nos solicite cualquier pregunta que usted tenga. Puede hacer preguntas cualquier momento.

### Cosas importantes a saber...

- Usted es el que decide si quiere tomar parte.
- Usted puede decir "No" o puede decir "Sí".
- Nadie se molestará si usted dice "No".
- Si usted dice "sí", siempre se puede decir "No" más tarde.
- Usted puede decir "No" en cualquier momento.
- No obstante, aún tener buen cuidado de que no importa lo que usted decida.



### ¿Por qué se está haciendo esta investigación?

Estamos haciendo la investigación para descubrir más acerca de su experiencia con el MI VIDA Healthy Kids clínica.



### ¿Qué pasaría si me sumo a esta investigación?

Si usted decide ser en la investigación, le pedimos que haga lo siguiente:

- Hablando: una persona en el equipo de investigación que le hará preguntas. A continuación, se podría decir sus respuestas en voz alta. Tus padres estarán allí con usted.
- Registros Médicos: Vamos a examinar su pasado las visitas al médico y el uso de la información sobre su atención médica.



### **Podría suceden cosas malas si me sumo a esta investigación?**

Algunas de las pruebas pueden hacer sentir incómodo o las preguntas podrían ser difíciles de responder. Vamos a tratar de asegurarse de que no es así. Se puede decir "no" a lo que le pedimos que lo haga para la investigación en cualquier momento y se detendrá.



### **La investigación podría ayudar a mí ?**

Pensamos que en este trabajo de investigación puede ayudar a usted, porque usted va a hablar con nosotros acerca de lo que le hubiera gustado o no me gustó de la clínica. también podrá compartir algo de lo que quiere con nosotros durante nuestras conversaciones.



### **¿Qué más debo saber acerca de esta investigación?**

Si no quieres estar en el estudio, no tiene que ser.

También es correcto decir que sí y cambiar de opinión más adelante. Usted puede dejar de ser en la investigación en cualquier momento. Si desea detener, por favor, dígame a los doctores en investigación.

Usted no sería pagado por estar en el estudio.

Puede hacer preguntas cualquier momento. Usted puede hablar con Penny Neal. consultarnos cualquier duda que tenga. Tome el tiempo que necesite para hacer su elección.



### **¿Hay algo más?**

Si quieres estar en la investigación después de que hablar, por favor escriba su nombre . Vamos a escribir nuestro nombre. Esta muestra se ha hablado de la investigación y que desee tomar parte.

**Nombre del participante**

(Para ser escritas por niños/adolescentes)

**Nombre impreso del Investigador** \_\_\_\_\_

**Firma del Investigador** \_\_\_\_\_

Fecha

**Tiempo**

**Información Intérprete (aplicable si LEP participante)**

---

*Nombre impreso del intérprete durante la primera presentación de estudio*  
*Fecha*

---

*Nombre impreso del intérprete cuando se traduce se presenta*  
*Fecha*

**Formato original:**

Equipo de Investigación Archivo

**Copias a:**



## Appendix E

### Spanish Informed Consent Form

**EAST TENNESSEE STATE UNIVERSITY  
JUNTA DE REVISIÓN INSTITUCIONAL  
DOCUMENTO DE CONSENTIMIENTO INFORMADO (DCI).**

Este Consentimiento Informado explicará acerca de ser un participante en un estudio de investigación. Es muy importante que usted lea cuidadosamente este material y, a continuación, decidir si desea ser voluntario.

#### PROPÓSITO :

Este estudio está siendo dirigida por Penelope Neal, PhD(c), MSN, CPNP, estudiante de doctorado en el Colegio de Enfermería de East Tennessee State University (ETSU). Los objetivos del proyecto titulado "entrevista motivacional para tratamiento de la obesidad infantil" son para evaluar: (1) la eficacia de la utilización de entrevistas motivacionales para mejorar la actividad física y los hábitos alimentarios en los niños con sobrepeso y (2) el paciente y cuidador experiencia con el manejo del peso clínica.

#### PROCEDIMIENTOS Y DURACIÓN DEL ESTUDIO

Si está de acuerdo en participar en este estudio, a usted se le pedirá que participe en tres entrevistas en un momento mutuamente acordado entre el investigador que realiza el estudio y usted. Las entrevistas será de aproximadamente 30 minutos. Durante estas entrevistas, el investigador hará una serie de preguntas sobre la eficacia de la MI VIDA Healthy Kids Clínica en ayudar a usted y a su hijo a hacer cambios positivos en el estilo. El investigador está investigando los efectos de la clínica del niño en su nivel de actividad física, hábitos alimentarios, y la respuesta general a MI VIDA Healthy Kids Clínica. Usted entiende que el investigador audio grabar las entrevistas y tomar notas. No habrá ningún costo para usted por participar en la investigación.

Además, a medida que el investigador comienza a mirar los resultados del estudio, se le pedirá que revise una transcripción de la entrevista y dar su opinión en cuanto a la exactitud de la información, y si se describe adecuadamente su experiencia con la clínica.

#### OTROS PROCEDIMIENTOS o TRATAMIENTOS

Ninguno.

## POSIBLES RIESGOS O MOLESTIAS

El investigador no es consciente de los riesgos conocidos a usted o a su niño para participar en este estudio. Las ventajas incluyen la oportunidad de compartir sus pensamientos, sentimientos, y la experiencia con el tema. Si en cualquier momento que usted o su hijo se vuelve incómoda con el proceso de la entrevista, puede poner fin a su participación en el estudio.

En el caso de la investigación relacionada con las lesiones o si tiene más preguntas acerca de la investigación, usted puede ponerse en contacto con Penelope Neal en (865) 804-1464. Si usted tiene alguna pregunta sobre sus derechos como participante en la investigación, puede ponerse en contacto con el Presidente de la Junta de Revisión Institucional de ETSU en 423/439-6055.

Si tiene alguna pregunta o inquietud acerca de la investigación y desea hablar con alguien independiente del equipo de investigación o no se puede alcanzar el estudio personal, usted puede llamar a un IRB Coordinador en 423/439-6055.

## PARTICIPACIÓN VOLUNTARIA

Participación en este experimento de investigación es voluntaria. Usted puede negarse a participar. Puede salir en cualquier momento. Si sale o que se nieguen a participar, los beneficios o el tratamiento a los que usted está de algún modo el derecho no se verán afectadas. Puede salir llamando Penelope Neal, cuyo número de teléfono es (865) 804-1464. Usted será informado inmediatamente si alguno de los resultados del estudio deben esperarse razonablemente que te hagan cambiar tu mente quedarse en el estudio.

## CONFIDENCIALIDAD

Se hará todo lo posible para que su estudio los resultados son confidenciales. Una copia de los registros de este estudio serán almacenados en el bienestar de la Mujer y la Maternidad Centro de al menos 5 años después del final de esta investigación. Los resultados de este estudio pueden ser publicados y/o presentados en las reuniones sin nombrar que como un sujeto. Aunque sus derechos y se mantendrá la privacidad, y el Secretario del Departamento de Salud y Servicios Humanos (DHHS) y de ETSU Junta de Revisión Institucional (IRB) tienen acceso al estudio. Los registros se guardarán de forma totalmente confidencial de acuerdo con los requisitos legales. Que no será revelada a menos que sea requerido por ley, o como se ha señalado anteriormente.

AUTORIZACIÓN PARA USAR Y DIVULGAR  
INFORMACIÓN DE SALUD PROTEGIDA PARA PROPÓSITOS DE INVESTIGACIÓN

La ley de privacidad, Health Insurance Portability & Accountability Act (HIPAA), protege mi información de salud identificable individualmente (información de salud protegida). La ley me obliga a firmar una autorización (o acuerdo) con el fin de los investigadores para ser capaz de utilizar o divulgar la información protegida de salud para fines de investigación en el estudio titulado "entrevista motivacional para tratamiento de la obesidad infantil".

Yo autorizo Penelope Neal y su personal de investigación para utilizar y revelar mi información de salud protegida para los fines que se describen a continuación. También me permiten mis médicos y otros proveedores de atención de salud para revelar mi información de salud protegida para los fines que se describen a continuación.

**Mi información de salud protegida que puede ser utilizada y divulgada incluye:**

- Edad y la demografía.

**El investigador, Penelope Neal, puede usar y compartir mi información de salud con:**

- El East Tennessee State University Programa protección sobre la investigación en humanos (HRPP) Junta de Revisión Institucional Administración cuando el investigador o el sitio de la investigación se encuentra en *Programa de Mejora de la Calidad ( QIP)* auditoría.

Una vez que mi información de salud ha sido revelada a nadie fuera de este estudio, la información ya no puede ser protegido en virtud de la presente autorización. El investigador(s) Penélope Cruz Neal y el bienestar de la Mujer y Centro de Maternidad acuerdo para proteger mi información de la salud por medio de las teclas y divulgarlo, sólo en los casos permitidos por mí en esta autorización y, de acuerdo con lo indicado por ley estatal y federal.

**No tengo que firmar esta autorización. Si me decido a no firmar la autorización:**

- Esto no afectará a mi tratamiento, el pago o la inscripción en los planes de salud, ni a mi elegibilidad para recibir beneficios.
- Yo no puedo participar en este estudio de investigación.

**Después de la firma de la autorización, puedo cambiar mi mente y:**

- No deje que el investigador revelar o utilizar la información de salud protegida (revocar la autorización).
- Si me revocar la autorización, envíe una carta a: Penelope Neal (865) 804-1464 para informar de mi decisión.
- Si me revocar esta autorización, los investigadores sólo podrán utilizar y divulgar la información de salud protegida **ya recogido para este** estudio de investigación.
- Si me revocar esta autorización mi información de salud protegida puede ser usada y revelada se me debe un evento adverso (el efecto malo, o experimentar algo imprevisto).
- Si cambio mi mente y revocar la autorización, yo no puede ser permitido a seguir participando en el estudio.

Se me ha explicado que no me será permitido para revisar la información recopilada para la investigación hasta que una vez finalizado el estudio. Cuando el estudio se me tendrá el derecho de acceso a la información de nuevo.

Esta autorización no tienen una fecha de caducidad.

**Si no lo he recibido una copia del Aviso de Privacidad, podrá solicitar uno por ponerse en contacto con el Oficial de Privacidad. Si tengo alguna duda o pregunta acerca de mi derecho a la intimidad, deben ponerse en contacto con el East Tennessee State University, James H. Quillen College de Medicina Oficial de Privacidad, Paula Wright" en 423/433-6074 .**

**YO soy el sujeto o estoy autorizado a actuar en nombre del objeto. He leído esta información, y voy a recibir una copia de este formulario después de que haya sido firmado.**

Al firmar a continuación, usted confirma que ha leído o ha leído este documento. Se le dará una copia firmada de este documento de consentimiento informado. Se le ha dado la oportunidad de hacer preguntas y para discutir su participación con el investigador. Usted elige libremente y voluntariamente en este proyecto de investigación.

Además, al firmar a continuación, usted está autorizando el uso y la divulgación de su información de salud protegida para fines de investigación como se describe más arriba.

---

FIRMA DEL PARTICIPANTE

FECHA

---

NOMBRE IMPRESO DEL PARTICIPANTE FECHA

---

FIRMA DEL INVESTIGADOR

FECHA

---

FIRMA DEL TESTIGO (si corresponde)

FECHA

## Appendix F

### Transcriptionist Confidentiality Agreement

As the transcribing typist for this research project, “Motivational Interviewing for Childhood Obesity”, I understand that I will be listening to tapes of confidential interviews. The information on these tapes have been revealed by participants who have volunteered in good faith, and they have been assured that their interviews would remain strictly confidential. I understand that I have a responsibility to honor this confidentiality agreement. I hereby agree to not share any information in these tapes with anyone other than the Principal Investigators, Penny Neal. Any violation of this agreement would constitute a serious breach of ethical standards, and I pledge not to do so.

---

Transcribing Typist Name Printed

---

Signature

---

Date

# Appendix G

## Coding Diagram

<p><b>Planning for success</b></p> <ul style="list-style-type: none"> <li>Provides tools for problem solving</li> <li>Teaches child to slow down and think</li> <li>Teaches organizational skills</li> <li>Offers support system for "life situations"</li> <li>Creates new healthy habits</li> <li>Encourages a personal relationship</li> <li>Teaches guidelines to follow</li> <li>Discusses college/future plans</li> </ul>	<p><b>Establishment of a trusting relationship</b></p> <ul style="list-style-type: none"> <li>Fosters sense of trust</li> <li>Encourages a personal relationship</li> <li>Encourages reciprocity between patient-provider</li> <li>Establishes trust and mutual respect, counselor/patient as a team or "us"</li> <li>Meets with child without parent</li> <li>Builds rapport with child</li> </ul>	<p><b>Demonstrates unconditional acceptance</b></p> <ul style="list-style-type: none"> <li>Promotes sense of accomplishment</li> <li>Does not use negativity or judgement</li> <li>Utilizes intuition and emotional intelligence to "read" child</li> <li>Lack of disappointment in child's failures</li> <li>Unconditional positive regard</li> <li>Child feels like adult "gets it"</li> </ul>
<p><b>Permanent support system</b></p> <ul style="list-style-type: none"> <li>Promotes desire for long-term relationship between patient-provider</li> <li>Provides family-centered care</li> <li>Helps with family relationships</li> <li>Feels like extended family</li> <li>Helpful for children from chaotic homes</li> </ul>	<p><b>Building up of child as an individual</b></p> <ul style="list-style-type: none"> <li>Promotes sense of identity</li> <li>Helps develop self-confidence</li> <li>Expression of self through activities</li> <li>Demonstrates faith in the success of the child</li> <li>Focus on successes and persistence</li> <li>Provides special time to focus on child only</li> <li>Child and counselor</li> </ul>	<p><b>Empowerment of child</b></p> <ul style="list-style-type: none"> <li>Provides empowerment through knowledge</li> <li>Counselor uses rationale and knowledge, not "because I told you so"</li> <li>Provides empowerment through choice</li> <li>Provides a sense of control in child's life</li> <li>Does not focus on restrictive rules or diets</li> <li>Helps child by "Knowing I..."</li> </ul>
<p><b>Freedom to be me</b></p> <ul style="list-style-type: none"> <li>Fosters feeling of safety, security</li> <li>Expression of self through activities</li> <li>Allows child's feelings to be heard, focuses on child's perspective</li> <li>Provides personal motivators that are meaningful to the child</li> <li>Unconditional positive regard</li> </ul>	<p><b>Educating without "educating"</b></p> <ul style="list-style-type: none"> <li>Uses flexible approach</li> <li>Makes learning about behavior change "fun"</li> <li>Makes behavior change feel achievable</li> <li>Teaches guidelines to follow</li> <li>Patient-provider on level playing field</li> <li>Child recalls specific information taught by provider</li> </ul>	<p><b>Provides a trusted adult mentor</b></p> <ul style="list-style-type: none"> <li>Speaks to child like a mature individual</li> <li>Helpful for children from low-income families</li> <li>Helpful for high-risk social situations</li> <li>Child may not have support at home</li> <li>Clinic feels like extended family</li> <li>Reciprocal trust demonstrated between child and counselor</li> </ul>
<p><b>Creates willingness to try</b></p> <ul style="list-style-type: none"> <li>Open to change, trying new things</li> <li>Not afraid of failure</li> <li>Does not use negativity or judgement</li> <li>Uses flexible approach</li> <li>Feels counselor has faith in them</li> <li>Does not deny child anything</li> </ul>	<p><b>Creates safe environment</b></p> <ul style="list-style-type: none"> <li>Fosters feeling of safety, security</li> <li>Providers remain calm</li> <li>Empowerment through choice</li> <li>Teaches provider about themselves</li> <li>Lack of disappointment in failures</li> <li>Allows child's feelings to be heard, focuses on child's perspective</li> </ul>	<p><b>Illuminates need for change</b></p> <ul style="list-style-type: none"> <li>Child has own picture of health</li> <li>Child feels healthier</li> <li>Focus on long-term benefit of healthy behavior</li> <li>Draws out family history of illnesses</li> <li>Child is seen as expert on self</li> <li>Child chooses what to change, does not deny child of anything</li> </ul>
<p><b>Helps child feel important to others</b></p> <ul style="list-style-type: none"> <li>Provides special time to focus on child only</li> <li>Child may not have support at home</li> <li>Child feels happy, encouraged after encounter</li> <li>Establishes trust and mutual respect, counselor/patient as a team or "us"</li> <li>Views child as "expert" on himself</li> </ul>	<p><b>Immediate improvement in family relationships</b></p> <ul style="list-style-type: none"> <li>Eats dinner together now</li> <li>Focus on sibling relationships</li> <li>Family-centered activities</li> <li>Improved communication techniques</li> </ul>	<p><b>Creates immediate, tangible benefits of sessions</b></p> <ul style="list-style-type: none"> <li>Improved weight</li> <li>Improved family relationships</li> <li>Increased knowledge of healthy habits</li> <li>Improved confidence</li> <li>Improved attitude about health</li> <li>"Energized" and happy after sessions</li> </ul>

## VITA

### PENELOPE NEAL

- Education: B.S. Nursing, University of Tennessee, Knoxville, 1992  
M.S. Nursing, University of Tennessee, Knoxville, 1999  
Ph.D. Nursing, East Tennessee State University, Johnson City, 2015
- Professional Experience: Pediatric Nurse Practitioner, Allergy and Asthma Affiliates, Knoxville, Tennessee, 1999-2002  
Pediatric Nurse Practitioner, Loudon County Pediatrics, Lenoir City, Tennessee, 2002-2004  
Pediatric Nurse Practitioner Cherokee Health Systems, Lenoir City, Tennessee, 2004-2008  
Assistant Professor of Nursing, Tennessee Wesleyan College, 2008-2012  
Associate Professor of Nursing, King University, 2012-present  
Associate Dean of Nursing, King University, 2013-present
- Publications: Perkey, P.L. (1999). *Pathophysiology of Alcoholism*, in *Advanced Pathophysiology: "Application to Clinical Practice"* by Maureen Groer, PhD
- Honors and Awards: Recipient, ETSU Graduate Add-on Fellowship, "Most Outstanding PhD Applicant", 2010  
Outstanding Faculty Advisor, Tennessee Association of Student Nurses Annual Convention, 2011  
Recipient, Sigma Theta Tau International, Epsilon Sigma Chapter Research Grant, \$500, 2015