

The PAIR Program: Enhancing the Parent and Infant Bond through Infant Occupation

A Program Development Plan

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Note: This document describes a Capstone Dissemination project reflecting an individually planned experience conducted under faculty and site mentorship. The goal of the Capstone experience is to provide the occupational therapy doctoral student with a unique experience whereby he/she can demonstrate leadership and autonomous decision-making in preparation for enhanced future practice as an occupational therapist. As such, the Capstone Dissemination is not formal research.

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Executive Summary

In today's society both parents are continuing to work and both are continuing to work during a child's infancy. Due to the changing society, parents are not spending adequate time with their infants therefore the parent and infant bond is not being created. The parent-infant bond is a crucial relationship and is the foundation for a child's development. Even though, both parents may need to work, the time they do have with their infant needs to be used efficiently to enhance the overall parent and infant relationship.

The goal of the PAIR (Parent And Infant Relationship) program at the St. Charles Child Development Center is to provide occupation-based services that increase the parent-infant bond and attachment for the contemporary parent. The program emphasizes the need for the parent and infant attachment, and if absent can cause delay or disability in a child's overall development. The PAIR program educates parents on the importance of the bond, creates interventions to enhance this bond, and commit to goals set forth by the parents. There will be 20-30 infants and their families involved in the PAIR program in the initial year. These families will identify any difficulties with their relationship with their infant and integrate occupation-based sensory integration techniques in their infant's everyday occupations. Evaluations will be used at the end of the program to receive feedback on parent's perspective of the program, the impact the program has on the relationship with their infant, their therapist, and overall opinion of the program. Outcomes will be based on meeting the goals of the program and the participants.

Introduction

Program Goal

The goal of the PAIR (Parent And Infant Relationship) program at the St. Charles Child Development Center is to provide occupation-based services that increase the parent-infant bond and attachment for the contemporary parent.

Sponsoring Agency

The PAIR program will take place at the Young Men's Christian Association (YMCA) St. Charles facility in Oregon, Ohio. This child development center has an enrollment of 185-200 children ranging from infant to preschool age. St. Charles currently has 2 infant classrooms, providing care for infants; 6-weeks to 18 months with 30 infants currently enrolled in the program. This facility describes the population as a working class community of parents and provider care is through the teachers, aids, and directors. The mission of YMCA and Jewish Community Center (JCC) of Greater Toledo states:

“To put Christian principles into practice through programs that build healthy spirit, mind, and body for all.” Additionally, America's YMCA extends the support and need for promoting healthy youth development. “With so many demands on today's families and the increased focus on early brain development, families need all the support they can get to nurture the potential of youth. That's why child care and early learning programs at the Y focus on holistically nurturing child development by providing a safe and healthy place to learn foundational skills, develop healthy, trusting relationships and build self-reliance

through the Y values of caring, honesty, respect and responsibility” (YMCA, 2010).

It is well within the purpose of the YMCA’s mission to strengthen relationships and bonds within the parent-child dynamic by building a strong foundation early in a child’s development. This early bond will achieve balance in emotional, social, and cognitive growth and enrichment for the child through the efforts of the family framework.

Organizational Structure

The organizational structure of the YMCA is complex because it is a nationally accredited organization that relies on public funds, donations, and volunteers to operate its services. Implementation of the PAIR program will take place at St. Charles Child Development Center, one of three infant care facilities operated by the YMCA of Greater Toledo. Employees and volunteers of this program are responsible for traditional caregiving such as changing diapers, feeding, and providing adult supervision. The proposed occupational therapist will collaborate with the executive directors, Christina Cassaubon and Roberta Keilemeier, to create and carry out the PAIR program (see Appendix A for organizational chart). It is the responsibility of the occupational therapist to provide services to the families, teachers, and volunteers to increase the parent-infant relationship through infant occupations. The occupational therapist will also be an advocate for the profession of occupational therapy as well as, the PAIR program by reporting to the YMCA president, board of trustees, and chairmen.

Investigating the Need for Programming

A comprehensive needs assessment was conducted to investigate the need for the PAIR program for parents and their children at the YMCA facility St. Charles Child Development Center. When discussing the need with the executive director, it was decided that the best method to reach out to all the parents was to develop a questionnaire survey. Due to the parent's busy schedule and lifestyle convenience was a necessity. The first approach to investigate the need was an initial questionnaire distributed to all of the parents that have an infant. This was followed by a semi-structured interview with pediatric professionals including early childhood professionals and an occupational therapist. Finally, the need was investigated through observing the parent and infant in a natural setting, typically this was at school or in the home environment.

Questionnaires were the first step to investigating the need in the community. When designing the questionnaire it was important to understand the needs of the population and their lifestyle (Witkin & Altschuld, 1995). It was imperative to build rapport with parents prior to asking them to complete the questionnaire. Therefore prior to conducting the needs assessment approximately 80 hours was spent at the center building rapport and relationships with the families that attended the program. Also, when creating the questionnaire, it was important to design the survey to fit other needs assessment data collection methods and determine types of decisions made from the collected data (Witkin & Altschuld, 1995). A questionnaire was developed for the YMCA St. Charles Development Center focusing on the infant population, asking about the amount of time parents spend with their infant, and type of care giving they provide to their infant. Also included in the survey were questions in regard to previous

participation in infant programs. This method was created specifically for the PAIR program. It addresses demographics of both parents, time spent with the infant, occupations engaged with the infant, communication with the infant, and personal feelings on attachment and bonding with their infant (see Appendix B for Creating a Bond through Infant Occupation questionnaire). Out of the 30 families in the Oregon & Toledo area, 12 questionnaires were collected. Many parents showed interest but due to their time constraints during pick-up and drop-off times many parents had difficulty setting time aside to complete the questionnaire. Also, many parents forgot or had multiple excuses for incompleteness. The difficulty parents had with taking 2-3 minutes to fill out a form already demonstrates that parents have a hard time balancing more than what is absolutely necessary. One hundred percent of the 12 surveys indicate that the families require childcare for their infant, and almost 70% require childcare 5-6 days per week ranging from 8-10 hours per day. There was a recorded 100% of both mothers and fathers involved in parenting and childcare even if shared custody was occurring. Out of the 12 families, 2 families recorded that they spend between 0-2 waking hours with their infant, 2 families recorded that they spend 2-4 waking hours with their infant, 4 families recorded they spend between 4-6 waking hours with their infant, and 1 family expressed spending more than 6 waking hours with their child. These findings indicate that parents are not spending adequate waking hours with their child. This may be due to work constraints, work hours, and family availability however the primary caregiver is spending the least amount of time with the child. Assumption can further be indicated that many infants could be bonding with other childcare providers aside from their parents. In this group of parents over 80% indicated that they have never participated in

a parenting education course however, 100% expressed interest in learning more about their child's development and strategies for enhancing their relationship with their infant. Further interest was stated in areas of sensory stimulation, benefits of parent/infant bonds, and enhancing bonds through infant occupations.

After the parents completed the questionnaire, semi-structured interviews were established based on the response. Semi-structured interviews were conducted with professionals in the field of pediatric occupational therapy, key professionals affiliated with the YMCA Corporation and parents that completed the interview. The interview questions were created in a non-directed format where the interviewee was able to freely express and reveal attitudes and feelings (Witkin & Altschuld, 1995).

When interviewing professionals in the field, questions pertained to the importance of occupational therapy in early intervention, the impact of the environment, the need for a positive parent/infant program, and recommended techniques to create this relationship (see Appendix C for Interview with Occupational Therapist). In the beginning of the interview the caseload and types of diagnoses were established. For this particular interview, the occupational therapist stated that she currently has 70 infant-toddler age children on her caseload with a variety of diagnoses. These diagnoses included autism, cerebral palsy, learning disabilities, fetal alcohol syndrome, and drug withdrawal to name a few. The following question pertains to these diagnoses, investigating the impact of the environment and asking if any of the delays or disabilities could have been prevented. The occupational therapist stated that the environment could have impacted many mild delays; "parents do not realize the impact their environment can have on the infant in early stages of development." It was further discussed that many

parents may only be meeting the basic needs for their infant and are also using the luxuries of swings, bouncers, and car seats too frequently. Children can lack many motor and sensory learning opportunities if they are not exposed to his/her environments due to being in these types of “containers.” The role of occupational therapy (OT) was established by discussing the types of interventions that are provided for infants. The occupational therapist stated valuable information expressing,

“Try to find items in the home and ideas/treatments that are practical for the family and will help them reach their goals. You need to make a goal attainable for families; taking baby steps with families that have never received services before. Also while establishing a collaborative relationship with the parents.”

Even though specific examples were discussed like sensory integration, feeding occupations, and tummy time, this statement really staples the need for a family centered approach. It is important to realize that every family is different and that goals need to be created that will be realistic and practical for the family. Finally the need was expressed by the occupational therapist stating that,

“Yes, I think parents can always benefit from tips/educational tools to enhance their relationship; especially if parents do not have anything to compare it too. It is also nice to create programs that just validate their parenting styles or provide suggestions to make the family framework slightly better.”

This interview expressed the need for a parent infant program for all families’ at-risk and for families that may have an infant with a mild to severe delay. When discussing the environment it is important to mention that the parent-infant program can also be noted as a preventative approach. Since the environment can highly impact a child’s development, it is important to incorporate this knowledge into families’ goals. When creating a program that focuses on the parent-infant relationship it is important for the occupational therapist to understand the family as a unit; to assess all underlying

reasons why a bond may be overlooked or absent. In many cases for parents that have a child with a delay, the parent may feel overwhelmed in caring for this child and enhancing this bond may not be a priority. However with this being said, parents need to understand the importance of this early and crucial bond furthering the need for the PAIR program.

Semi-structured interviews also occurred within the YMCA Corporation. This would include the executive directors at the infant facilities in the Toledo area, specifically directors at St. Charles Child Development Center, Calvary Christian Child Development Center and Fort Meigs Adventure Center (see Appendix D Interview with Professional in the Field of Child Development). The questions addressed concerns about programming that has been successful in the past and the need for parent-infant programming. All child centers varied on the amount of infant enrolled however ratios were consistent stating by law it is required to have 1:5 or 2:10 adult to child ratios. This was an important question to ask because it demonstrates the lack of individualized time a childcare provider has with an infant. This is not any fault to child care providers however many times children are rotated between swings, bouncers, and cribs to maintain safety and manageability in a classroom.

All of the director's feel that majority of parents would benefit from a parenting program focusing on the relationship with their infant. Especially parents that have their child enrolled 40-50 hours per week. One director stated that a few of the parents attending her childcare have difficulty finding parenting programs that focus on the infant after birth. Through discussion, one can assume that parents want to be more educated on child development and through the director's responses many parents

attending these centers want to be more involved however it's a matter of convenience and availability. The need exposed through these questionnaires is infants may not be getting the attention they need and deserve in childcare centers and from their primary caregiver. If an infant is enrolled in a classroom that has 10 children it is difficult to provide one-on-one attention. It is not realistic to believe that a childcare provider can grant this type of care and tend to the child's individual needs. Due to the higher ratios, parents need to be up to the challenge to go above and beyond a child's basic needs and create opportunities for a child to learn and explore their stages of development. All the directors expressed that if parents were given the opportunity they would be receptive to a parent and infant program that focuses on establishing early bonds.

In the assessment phase, it was important to interview with a sample of people that responded to the questionnaire that can validate or expand the implications of their answers (Witkin & Altschuld, 1995). Interviews can generate a narrative response therefore it is important to tailor questions in order to obtain more in depth and trustworthy information (Kielhofner, 2006). Each set of interviews investigated the need and also provided numerous perspectives from personal and professional experiences.

Finally, the third method for the needs assessment was observation. Observation mainly focused on a parent and their infant in the natural environment. Observations that were completed were with families of infants, caregivers, and teachers to observe the interaction, care, and environment that an infant experiences. "The observer's role was to capture certain details about the subject, discern important from unimportant observational data, interpret the observed data accurately, and in the light of the environment" (Kielhofner, 2006). The observations were guided by a specific protocol to

look at the parent and/or caregiver's natural environment (see Appendix E for Home Observation Sheet). Also used during the home visit was the infant attachment checklist during observation (see Appendix F for Infant Attachment Checklist) This checklist helps to define the importance of the interaction between an infant and their parent. Therefore observation was needed to see what and if this interaction occurs. It was important for the observer to see what occupations the parent-infant engaged in, what behaviors existed, if communication was present, techniques the parent were using, and if relationship disturbances existed. The primary advantage of observing was to collect data within the parent and infant's natural environment. Three home visits were established to investigate this need. During all three home visits the parent and infant were observed during naturalistic occupations such as eating or playing. On one home visit the Routine Based Interview was administered (McWilliam, 2003) (see Appendix G for Routine Based Interview). During this interview parents can identify routine disturbances that occur throughout the day or distinguish routines that may be difficult for the family. Routine needs to be consistent therefore it is a helpful tool to assess routines occurring within a family framework.

Being in a natural environment data collected can be more authentic and ecologically valid (Kielhofner, 2006). Observation occurred in the infant's home for this reason or other natural setting of the parent's choice. Data collection indicated there is a need to enhance the parent and infant relationship and improvement is needed for certain families

At the conclusion of the 3 home visits, the parents filled out a PAIR evaluation to distinguish the further need of a program in this area of study (see Appendix H for

evaluation form). The parents were able to distinguish the role of occupational therapy, the benefits of this program, as well as express their personal opinions for the necessity. All 3 parents evaluated the program as a high need and found as a caregiver they would benefit from the PAIR program. One parent stated, “it is easy to forget in our busy lives, the importance of spending time with my daughter.”

The goals of the comprehensive needs assessment was to gather and analyze many professional and personal perspectives involved in the community-based setting specifically pertaining to infants and the need to enhance their development by receiving attention and love from their parent. It was evident from all of the needs assessment data that was collected that there is a need for a program that focuses on the importance of the early relationship between a parent and their infant.

Literature Review

YMCA at St. Charles Development Center can be described as a working class population. “In America’s society many young parents have never been exposed to the caretaking of children before the birth of their own infant. The decline of the extended family, more emphasis on early career development and delay in childbearing are among the reasons for this limited experience” (Burke, 1987). Also, in today’s economy both parents typically have full-time jobs and are sharing care-giving roles for their infants with relatives, babysitters, or childcare facilities as stated by the needs questionnaire. It is not uncommon for a couple to have their infant or child in a daycare setting for 8 hours or more, 5-6 days per week. Even though most parents do not have a choice at times, this observation validates that parents are not spending enough waking hours with their children.

Maternal and paternal bonding is an initial factor in establishing sensitivity and understanding of the infant's need however with the job demand and inexperience this bond is being overlooked or non-existent (Areneda, 2010). A current population survey of 60,000 people show that over half of mothers with infants of less than one year are in the work force along with their husbands. In addition monthly labor statistics state that married mothers aged 25-54 who were employed full time spent 1.4 hours providing primary childcare, while their male counterparts spent .08 hours with their infant (Allard & Janes, 2008). Furthermore, the US bureau of labor statistics report that there are 35 million women in the US that have full time jobs and are mothers, 78.6% of mothers with one child less than 6 years of age are remaining in the workforce (Tong, 2009). Work-schedules are also changing for those parents with less education within the United States; it is not uncommon for a mother or father to be working nonstandard hours or days (Cox, 1997). Due to these odd hours it is difficult to find adequate childcare that fits the needs of the child. These statistics indicate that parents face time constraints due to job demands and the crucial time spent with the infant are diminishing as the primary caregiver becomes more unavailable within the family framework.

In addition to time constraints, there is also economic hardship. Parents that have difficulty providing basic needs due to low income may not focus on positive parenting behaviors (Engelke, 1992). Parents of lower social economic status may be unaware or uncomfortable with interacting, teaching, or being playful with their infant to enhance social and cognitive growth. Instead parents may be placing more emphasis on the basic necessities; this unfortunately could pose higher risks for their infant (Engelke, 1992). In 2009, Toledo, Ohio has reported that 23.8% of its residents retain incomes that are below

the poverty level (City-Data, 2009). This can indicate that there is a need for parenting programs that foster healthy infant development for at-risk infants. Variables that can decrease economic stresses include support from family, friends, and professionals and for this reason; parents that require additional support need to seek where opportunities exist.

“Parenting programs addressing infant-parent attachment have demonstrated success in fostering those interactions” (Burke, 1987). Nurturing one’s own infant appears to be instinctive but like most interactions parent-infant experiences need to be enhanced. “Attachment styles are developed in early infancy and are directly related to the history of interactions between the baby and its caregivers: For instance the satisfaction of the baby’s need for closeness, shelter, and protection when it’s feeling fear or pain” (Areneda, 2010). This being said, infants that develop with attachment issues could potentially lack social and emotional skills needed to adapt to certain situations, environments, and experiences. Also, this statement reflects that without creating a basis for trust in parents during infancy it may impact trusting others throughout life. When creating a parent and infant program it is important to respect a mother’s mental state. Many times attachment issues arise with new mothers due to depression, social problems, lack of support, negative representations of their child, and as their ability to be a mother (Areneda, 2010). These statements verify the importance of promoting a positive prenatal social-emotional well being and reaching out to new mothers that may be at psychosocial risk to prevent the cycle from continuing. Caregivers need to identify their child’s needs and gain insight into how their state of mind can influence and affect their child’s ability to develop attachment to others.

The Parent Source: Practice Toward Enrichment, focuses on programs that support infant mental health across promotion, prevention, and treatment. This program was developed to promote parent-child bonding and improve social and emotional development; it is created on the belief that the early relationship builds the foundation for healthy infant development. The program focused on several components including engaging parents in stimulating their child through a sensory diet, language and mobility skills, on-site parent consultation, and infant massage instruction. The article states, "... the need for infant mental health promotion and prevention is perhaps the greatest in the families who are least able to receive such services" (Blackwell, 2005). Parent Source is a profitable program, a fee is charged for services, therefore lower- income families cannot take advantage of this type of service benefit because of costs. The Childhood Supports and Services (ECCS) and the Temporary Assistance to Need Families-Eligible (TANF) programs may provide services to enhance the parent-infant relationship however a need in the community needs to be presented to create any individualized program. Even though the Parent Source is a profitable program, it emphasizes the need for enrichment programs in all infant and family practices to support healthy, social, and emotional development.

It seems only natural that the parent should be the most valuable team member in a parent-therapist collaboration. Therefore it is important for therapists to provide services in the family's natural environment. It was typical 10 years ago to complete all therapy in clinics through appointments on a weekly to monthly basis however today early intervention service is typically provided in the home or community center (Jung, 2007). Jung (2007) stressed the importance of providing services in the home/school

environment to remain “naturalistic.” There is not any benefit to pulling a child to a separate room at a childcare facility or providing services in the home when the parent is upstairs. As the article states even though situations mentioned are in a naturalistic setting (school or home), services are not meeting the purpose of the IDEA law (Jung, 2007). It is important for a therapist to understand the importance of collaborating with caregivers in these naturalistic environments and to maximize natural learning opportunities.

Therapists need to work with caregivers to evaluate the setting and embed therapeutic opportunities in a typical occupation or routine. Even if a therapist visits for an hour, by teaching and providing strategies for the caregiver, this session can carry into numerous learning opportunities provided by the caregiver (Jung, 2007). Also, to obtain a successful parent-therapist relationship it is important to recognize culture and diversity (working parents, low SES, parenting styles) and provide services in terms of the family’s availability and needs (Hanna, 2002).

A new program called OPC, or Occupational Performance Coaching, (Graham, 2009) discussed a new approach in client-centered occupational therapy to address working with parents and their children. This model advocates for assisting parents in creating achievable goals that are more meaningful for their child. It further discusses the need for programs to embed family-centered practice to ensure that appropriate and realistic goals are made that value the family as a unit (Graham, 2009). It is important for parents to be able to evaluate the situation and to picture their child’s ideal performance in a certain occupation. In family centered practice, the occupational therapist can take the role of the coach and help guide the family to their goals within the context of their environment. For infants, parents and caregivers impact their performance and

environment greatly, therefore families need to have a collaborative input. “It is important that interventions used by occupational therapists clearly and directly enable participation of families in life situations that they value” (Graham, 2009).

In *Occupational Therapy International*, Edwards (2003) recognized that occupational therapists play a critical role in influencing the development of children in their early years. The study directed its attention to the issues that help or hinder the parents, child, and therapist during the early intervention process. This article defines early intervention as a service that utilizes such techniques as family training, counseling, and home visits to increase the child’s likelihood of becoming socially and developmentally strong (Edwards, 2003). For these services to benefit the infant the study found that therapists had to involve the entire family in the planning process or run the risk that a lack of collaboration would prevent the parents and the therapists from understanding what was expected of them. The therapist also had to take into consideration that some mothers and fathers lack the resources of time, energy, and confidence and might have difficulty interpreting how the treatment plans should be administered. This article reported that some caregivers felt there was not enough time in the day to balance all the activities of daily living but the occupational therapists suggested practical, everyday solutions that fit into their natural family environment (Edwards, 2003). It is vital to design a program to show parents that quality time with their infant can be a normal part of their typical day-to-day routine. One of the teaching tools used to assist parents was a handout encouraging caregivers to engage in fun activities with their infant. A sampling of some of the suggestions included... “talking and singing when feeding or diapering the baby, gathering items with interesting textures

such as feathers, cotton balls, or nylon scarves and gently brushing them across the infant's body, turning off/on light switches, water faucets (that feels cold) touching silky curtains and then talking about touch, and sound, or whatever sensation one might feel, and finally, after the baby's bath, apply baby-safe lotion and massage and communicate with your infant" (Edwards, 2003). This article also pointed out the need to include siblings as part of the early intervention with infants (Edwards, 2003).

While many approaches are beneficial for a parent and infant program, it is important to evaluate the population to realize what services are most appropriate. A common underlying theme however is discussing how the occupational therapist should implement or carry out services. For an early childhood program, an occupational therapist's main focus is to promote healthy development and increase social emotional growth. Case-Smith (2009) defines social emotional growth as, "sustained reciprocal interaction and responsive communication between the therapist and the child." It elaborates by explaining that to develop a foundation for a successful relationship, interactions are playful and not evaluative, motivating, engaging, and letting the child take lead while also providing the just right challenge (Case-Smith, 2009). Even though research has shown that family-centered practice is highly beneficial in early childhood programs, the infant is still the client and can obtain higher attention from their therapist.

In 2009, a review was conducted addressing the importance of community-based intervention to optimize early child development in low resource settings (Maulik & Darmstadt, 2009). The review investigated the need for community-based intervention to promote healthy child development and prevent disability. The study focused on investigating the effectiveness of play, tactile and motor stimulation, and basic maternal

childcare in reducing childhood disability. The study concluded that in one or more areas, early interventions have definite advantages and can be beneficial for the infant and their development. It also stated that many of the interventions for the parent-child interaction are cost-effective therefore providing services in community-based settings typically would be feasible and relatively easy to deliver due to the low costs (Maulik & Darmstadt, 2009).

Another review looked at promoting mental and physical health in infants of less than 6 months of age. The study investigated how the parent-infant bond can be accomplished through a technique called infant massage. The International Association of Infant Massage indicates that the nurturing touch can enhance development, communication, and attachment with the parent. The review discussed how infant massage is increasingly being used in community-based setting for at-risk babies that might not be receiving the attention they require (Underdown, 2006). The I.D.E.A Act of 1990 specifies that occupational therapy needs to address the infant and family as a unit. Infant massage can address this need through occupationally based theory (Beyer, 2002).

The need for the parent-infant relationship may be taken for granted and the importance of the bond may be overlooked. It is critical to educate parents on the importance of the parent-infant relationship, the benefits of the bond, and how occupational therapy can assist parents in creating this type of bond. The benefits of this relationship pertain specifically to a child's development. The need to create a foundation for an infant's personal, emotional, and social growth is so vital and crucial to the infant's need. Without this bond, disability could result and early identification of relationship disturbances can help to prevent any additional damage. The significance attached to this

bond needs to be presented and explained to working parents or at-risk parents. Research findings indicated that families with two employed parents working outside the home, those who participate in non-conventional work hours (2nd shift, midnight to dawn), or people of lower economic status may be at-risk for not creating this bond with their infant. Even though parents in certain populations may be at-risk, it is not exclusive; it is a need for all parents to create this bond and experience the benefits they are providing to their child. National programs should be created for the parent population to express the need for the parent-infant relationship, education on how it can affect a child's development and techniques to create this bond. The need for infant care giving programs is high; child disability can be prevented through early intervention therefore the need for parent-infant relationship programs are essential.

Occupation-Based Programming

The American Occupational Therapy Association states,

“Occupational therapy practitioners promote the function and engagement of infants and toddlers, and their families, in everyday routines by addressing areas of occupation including activities of daily living, rest and sleep, play, education, and social participation. Practitioners enhance a family's capacity to care for their child and promote his or her development and participation in natural environments where the child and family live, work, and play” (2009).

The idea of the PAIR program is to enhance the parent-infant bond through the infant's occupations of daily living. An example of a technique that could be used is the use of infant massage while bathing an infant. Through the use of tactile stimulation, infant's can increase their body awareness and decrease stress through a parent's touch.

Occupational therapy can foster a bond through infant's sensory processing during an infant's daily routine (AOTA, 2009). It is important for an occupational therapist to assist parents in investigating their infant's strengths and weakness. When identified, intervention can be created to enhance their strengths or improve upon their weaknesses. The American Occupational Therapy Association stresses the need for occupational therapists to provide interventions in natural settings; suggestions are in the home or in a community setting. The PAIR program will be implemented at the YMCA St. Charles Development Center in conjunction with the infant's home. It is important for an occupational therapist to be able to analyze the natural environment and implement conditions to enhance the context of the environment. The PAIR program will use the infant's natural environment to set the stage for creating the parent-infant relationship. The need for the PAIR program is essential for new, confused, overwhelmed, or working parents. The need is to create structure, not only in the infant's development, but also for the family as a unit. The Occupational Therapy Practice Framework, (AOTA, 2009) defines routines that are regular, repetitive, and provide structure in occupations of daily living. How a family participates in daily routines can define their health overall. It is important for families to have a strong foundation starting with the early infant-parent relationship. The PAIR program is creating a bond through occupations; a role that is specifically geared toward the field of occupational therapy.

The Parent Source Program offers valuable advice when creating a program to enrich your practice when working with the parent-infant population. Suggestions expressed for practitioners were to seek training beyond academic experiences, recognize opportunities to connect within families in the community, listen to parents, and

collaborate with everyone on the team (Blackwell, 2005). Case-Smith (2009) also discusses the importance of developing a foundation for a successful relationship. This is done through interactions that are playful and not evaluative, motivating, engaging, letting the child take lead while also providing the just right challenge (Case-Smith, 2009). It is valuable for the occupational therapist to realize that the infants in the program take priority but each family member is a part of the team.

Models of Practice

The model of practice that the PAIR program will focus on is the Sensory Integration (SI) model of practice (Ayres, 1972) and the Coping model of practice (Williamson and Szczepanski, 1999).

The Sensory Integration model can be used in conjunction with other models however will be the basis for the Parent And Infant Relationship program. Sensory integration needs to be incorporated into a child's development and can contribute to their first learning experiences and healthy development. Ayres describes sensory processing as an infant's interaction with the world early in life. Furthermore, Ayres explains that if adequate sensory stimulation does not occur in infants at the critical early stages that brain development does not occur, resulting in disorder or abnormal development (Case-Smith, 2005). Sensory input needs to be provided by the parent and the PAIR program can assist parents in implementing techniques for optimal brain development. "Touch, smell, and movement sensations are particularly important to the newborn infant, who uses these to maintain contact with a caregiver through nursing, nuzzling, and cuddling. Tactile stimulations especially are critical in establishing a mother-infant bond and play a key-role in fostering feelings of security with the infant"

(Case-Smith, 2005). All the systems in an infant's body need to be stimulated early in life to promote development, specifically looking at the tactile and proprioceptive systems to enhance the parental bond.

As Ayres discusses the sensory integration theory it ... "seeks to provide children with enhanced opportunities for controlled sensory input, with a particular emphasis on vestibular, proprioceptive, and tactile input in the context of a meaningful activity" (Law, 2001). Some children may not receive sensory input from their environment and for this reason; children can develop learning difficulties because he/she is unable to organize sensory input. The sensory integration theory focuses on explaining behaviors in children based on neural functioning and motor training. If problems arise in sensory modulation children may have difficulty regulating their environment as well as learning and accepting new information. It is important for parents to understand that children need opportunities for sensory experiences. It is also important to observe and interpret a child's adaptive responses to sensory input. Using the SI model can form an intense bond between the child, parent and/or therapist. Also, the sensory integration model is useful when understanding a child's behavior; when a family understands a child's sensory needs it can lead to a more positive view of the child (Law, 2001).

The coping model of practice focuses on creating challenges in the environment and assisting the child in adapting to these challenges. The goal of a coping model of practice is to increase a child's ability to cope with stress in terms of meeting personal needs and learning how to adapt to the environment. If a child is able to cope in their environment it will allow the child to feel success in daily accomplishments (Law, 2001). Furthermore, this can increase their self-esteem to handle or cope with new challenges or

other stressors that occur. If children face stressors due to physical, emotional, or cognitive barriers it is important to provide family support to help alleviate stress; however motivate a child to internally cope to feel successful. Effective coping can begin as early as infancy. Parents can begin to develop environments that allow the child to feel safe and organized and provide challenges that allow a child to be intrinsically motivated to participate (Law, 2001). Parents may not be aware of stressors that an infant faces due to the communication barrier. Therefore it is important for parents to observe infant cues to develop an understanding of the infant's needs to further help them cope and adapt in the environment.

It is essential for parents to realize bonding can be created through sensory experiences within an environment; therefore these models of practice will play a vital role in the PAIR program's efforts and success. Sensory integration and coping difficulties may be the cause for infant stress; it will be the role of the occupational therapist to analyze relationship disturbances and with use of these models develop appropriate therapy interventions. The occupational therapist observes the child in their natural environment, understand the sensory integration and coping models, and implement it appropriately for the infant and parent to benefit and improve their bond.

Federal Initiative and Trends

The implementation of the PAIR program will address several national health initiatives in the Healthy People 2010 as well as the recently released national health initiative as stated in Healthy People 2020. In Healthy People 2010 one goal that pertains to the PAIR program addresses educational and community-based programs. It proposes an increase in quality, availability, and effectiveness of educational and community based

program designed to prevent disease and improve health and quality of life. One initiative to reach this goal is to increase the proportion of employees who participate in employer-sponsored health promotion activities. At The St. Charles Child Development Center, the PAIR program will be implemented by an occupational therapist through collaboration with the executive director, teachers, staff, and other personnel affiliated with the YMCA organization. Active participation and cooperation between the YMCA and the PAIR program will increase its effectiveness for success. Secondly, the PAIR program will address objective 7-10 of Healthy People 2010 to increase the number of community-based organizations providing population-based primary prevention services in the areas of injury, mental illness, nutrition, and physical activity. The PAIR program's goal is to enhance the parent-infant relationship; however, it also stresses the importance of prevention when addressing mental and physical health disabilities.

The proposed initiatives for Healthy People 2020 was recently released in December 2010 and describe encompassing goals and objectives that will be incorporated into the PAIR program. Two particular goals that set the stage for the PAIR program include 1. Promoting quality of life, healthy development, and healthy behaviors across all life stages and 2. Creating social and physical environments that promote good healthy behaviors for all. Healthy initiatives 2020 describe several topic areas and objectives that can help reach these goals and be incorporate into the PAIR program. Early and middle childhood section addresses several objectives. EMC-1 is directed toward increasing the proportion of children who are ready for school in all five domains of healthy development: physical development, social- emotional development, approaches to learning, language, and cognitive development. EMC-2 addresses increasing the

proportion of parent who use positive parenting and communicate with health care professionals about positive parenting. EMC-2.1 addresses increasing the proportion of parents who report a close relationship with their child. These sections describe the foundation of the PAIR program. Positive parenting and early communication is a primary goal of this program and increasing these percentages will improve the parent-infant bond. Finally, objective DH-20 focuses on increasing the proportion of children with disabilities, birth through age 2, and receiving early intervention services in home or community-based setting. It is important to note that the PA.R program is not focusing on infants with disabilities; however, preventing disability through the creating of early relationship is a goal of prevention. The fundamental intent of the PAIR program is to enhance child development and decrease the chance of disability and these goals will be met through the communication, education, and participation (U.S. Department of Health and Human Services, 2011).

Objectives

Program Goal

The tentative overall program goal is stated as follows; “The goal of the PAIR. program (Parent And Infant Relationship) at the St. Charles Child Development Center is to provide occupation-based services that increase the parent-infant bond and attachment for the contemporary parent.”

Objectives

1. During the initial interview, participants will state at least one problem area that they feel may be decreasing the bond with their infant.
2. Prior to beginning the program, participants (parent, caregivers, and teachers) will

attend a presentation on the benefits of the parent-infant relationship and verbally state one technique they learned.

3. At the conclusion of the first home visit, participants will identify at least 2 problem areas in their daily routine or symptoms indicated on the Infant Attachment Checklist they would like to improve.
4. At the conclusion of the second home visit, participants will create 1-3 goals to enhance the parent-infant bond.
5. During the course of the three scheduled sessions, 75% of the participants will use sensory interventions (i.e. tactile, auditory, and environmental learning opportunities) during infant occupations, at least one time per day.
6. By the end of the third session, 75% of the participants will verbally report one benefit or technique they learned that will be continued throughout the development of their child.
7. By the end of the first year, 70% of the families at St. Charles Child Development Center will have participated in the PAIR program and report increased knowledge of importance for creating a healthy parent and infant relationship.

The objectives created were meeting the goals of the previously stated literature.

This includes the national health initiatives in Healthy People 2010 that states there will be an increase in the percentage of parents that use positive parenting and early communication to improve the parent-infant bond. The objectives also incorporate the Healthy People 2020 initiatives stating that promoting quality of life, healthy development, and healthy behaviors across all life stages and creating social and physical environments that promote healthy behaviors within a family.

Marketing

Marketing starts off with approaching the stakeholders. The first stakeholders approached will be executive directors, staff, teachers, and volunteers at the YMCA at St. Charles Child Development Center. These stakeholders are a crucial component for the program. They will have direct contact with participants on a daily basis and their involvement will help promote the program to the parents. Specifically, the co-directors of the facility, Cristina Caussabon and Roberta Kehlmeier will be the targeted stakeholders. The directors will be in charge of giving flyers and information to teachers and parents that may be in need of the program. One of the co-directors, Roberta Kehlmeier, also works for the YMCA corporate office; therefore flyers and information regarding the PAIR program can be recognized at higher administration levels. For this reason, other stakeholders include the corporate offices of the YMCA to continue advertising and promoting the program to other YMCAs in the Toledo area.

The most beneficial and cost-effective marketing strategy to promote the PAIR program will be word of mouth. Development of conversation and building rapport with parents and infants will naturally occur with the presence of an occupational therapist in the facility. Mini lectures, presentations, and one-on-one conversations of the program would be beneficial and individualized to each parent and their infant. A letter will be provided by the occupational therapist to all the parents introducing themselves, their role as the occupational therapist, and a quick description of the PAIR program.

Another conventional marketing approach will be brochures and flyers. These will be provided to the parents at the YMCA at the St. Charles facility as well as, other infant YMCA facilities in the area to explain the PAIR program, the benefits, and goals.

The flyers will be delivered in children's mailboxes and displayed on bulletin boards in the facility. There are two other infant YMCA facilities in the Toledo area; these include The Fort Meigs YMCA Adventure Center and YMCA at Calvary Christian Child Development Center (see Appendix I for Recruitment Flyer). The YMCA website (<http://www.ymcatoledo.org/>) is another marketing venue that reaches out to many people in the YMCA community as well as, the general public. The website specifically addresses infant and parent programs that are available. Also the website addresses new and upcoming programs. A goal would be to have the PAIR program advertised in one or both of these sections. This is a cost-effective strategy however not all programs across all the YMCA's are chosen for advertisement therefore, a unique approach to reach out to the public would be needed. A marketing strategy that would be beneficial to reach out to all childcare facilities in the area is the Toledo Parent newspaper . The Toledo Parent newspaper is a local newspaper that offers parent resources, personal and informative stories, and calendar of family events. The PAIR program can be promoted through articles or flyers posted in the paper promoting the benefits of the parent-infant bond, the role of occupational therapy in regard to the program, and contact information. Even though the Toledo Parent newspaper reaches out to many accredited childcare facilities in the Toledo area recruitment of parents will occur only within a 20 mile radius of the YMCA at St. Charles Child Development Center. Finally, after initial recruitment of participants, an informal presentation will be conducted at the YMCA at St. Charles to promote the program as well as suggest techniques and strategies for parents to enhance their relationship with their infant. Also as an incentive, a free infant massage class will be taught as a strategy to bring in parents as well as, educate them on the importance of

tactile stimulation and loving touch. All of the marketing strategies are appropriate for reaching out to the parent population by using resources that parents come in contact with regularly.

Potential participants for the program are parents at the YMCA at St. Charles with an infant between the ages of birth to 18 months. This specific population of parents is described, as working parents and the use of childcare facility is a necessity. The parents will need to identify that time spent with their infant is lacking and recognize problem areas that exist with bond and attachment; use of the infant attachment checklist will be used (Buenning, 1999). The participants will need to attend the initial presentation and be willing to set up at least one appointment with the occupational therapist to be observed in their home. After initial observation, subsequent appointments will be made. In addition, the participants need to be willing to create goals addressing the parent-infant bond. It will be important for parents to understand that this program is meant to increase their bond with their infant and that their parenting skills are not be scrutinized, just enhanced or time spent with their infant is being used more effectively.

Information collected on the participants are age of the parent and infant, gender of parent and infant, socioeconomic status, parent education level, time spent with infant, relationship to infant, job requirements (hours a day), and indication of amount of hours infant spends in childcare. Definition of childcare is any childcare facility such as the YMCA and/or other family member besides the parent taking responsibility for the care and well being of the infant. Data will be collected through initial interviews with the parent and observations conducted by the occupational therapist in the home. A summary will be written on the outcomes of infant attachment issues identified by the parent

through the use of the infant attachment checklist. Also, if needed, outcomes of the infant sensory profile if sensory issues are present. These initial interviews will take place with parents at St. Charles however this can expand if the need exists or arises from other Toledo area parents.

Recruitment of Participants

The occupational therapist will be the main recruiter for the PAIR program. The occupational therapist will initially be working in the facility to build rapport with the staff, infants, and parents. Also, the occupational therapist will distribute flyers, discuss the PAIR program with parents, teachers, and staff, and will create unique advertisements for the website or newspaper. It will be the role of the occupational therapist to advocate the benefits of the parent and infant relationship and how this bond has lasting effects.

Programming

The PAIR program is going to be focusing on the relationship of the parent and infant. Each relationship is very unique and needs individualized attention from the occupational therapist. The programming foundation is based upon the Sensory Integration Model of Practice and Coping Model of Practice. The Sensory Integration Model focuses on stimulating the infant through touch, sounds, smells, and overall environment to enhance development and create a foundation for a secure parent-infant bond (Bundy, 2002). The Coping Model focuses on creating opportunities for an infant to adapt to changes in the environment (Law, 2001). With the use of the SI and Coping model, parents will be able to use sensory integration and coping techniques to build attachment with their infant and decrease chance of delayed development. Some examples of sensory integration techniques include proprioceptive input (deep pressure,

tactile stimulation) and vestibular input (dipping your child, or slowly spinning in a circle).

In the first month of the program, the first priority is hiring a qualified occupational therapist specializing in early intervention and/or has experience with infants and child development. It will be important to find a person that is compassionate, has a passion for children and their development, and is enthusiastic about a developing a program. Also, due to the new program, an occupational therapist will need to be flexible and willing to advocate for the profession and belief in the program. It would be preferred to have an occupational therapist that has at least two years of clinical experience due to the fact that a supervising occupational therapist will not be present. Once the therapist is hired, gathering of supplies, organization of marketing materials and recruitment will also take place during the first month of the program. It is important to have a strong foundation prior to the start of a new program. Therefore a well organized program development plan including goals and objectives will increase the probability of success.

As stated earlier, the occupational therapist needs to work in the facility to not only recruit but to build a confident and trusting relationship with the infants and parents. Without this trust, parents will not be willing to participate in the program. Every family dynamic is different therefore it is important for the occupational therapist to remain unbiased in all situations. Every caregiver may have certain caregiving techniques and these need to be respected and acknowledged. If more than one parent is willing to participate in the program it will be important to schedule sessions that both parents can attend. The program's initial year will try to separate families into groups; however due to the need of the infant, availability of the parents, and infants on caseload; groups may

not be created and instead occur on an individualized basis. Whether or not groups can be organized, each intervention cycle will run approximately 4 months with the possibility of groups overlapping. The occupational therapist will still be on site and schedule appropriate amount of visits if continued support is needed from the family.

The program will begin through the use of the YMCA at St. Charles facility. Once the program establishes a foundation, an outreach to other infant facilities will be an option. The other two infant facilities in the Toledo area that could be a part of the program during the initial year include Calvary Christian Child Development Center and Fort Meigs Adventure Center. These centers will be included if the need is accounted for across the three centers and the caseload does not reach capacity. Directors, teachers, and staff will refer any parent interested in the PAIR program to the employed occupational therapist. After the recruitment process begins and interest arises, it will be important for the occupational therapist to be present on site to answer any questions and advocate for the program. Once interest has turned into commitment, parents will need to have an informal interview with the occupational therapist to disclose information about demographics, concerns, questions, and overall satisfaction with their parent-infant relationship. It is important for the occupational therapist to begin this process with an open mind to all family dynamics, their outlook on parenting, and their feelings and issues they may have towards their infant.

Once a reasonable amount of families (between 4-10) have been established and committed to the first group, the initial presentation time will be appointed. The location of the presentation will be in the large conference/classroom at the St. Charles facility. One parent is to attend however it will be recommended that both parents and/or all

caregivers attend if applicable. The time of the presentation will most likely be in the afternoon, after the workday is completed. Continued childcare will be available so all parents can attend the presentation. Prior to the conclusion of the presentation each parent will arrange session appointments for the next 3 months, 1 session per month. Each parent and occupational therapist needs to be flexible due to conflict in multiple schedules.

As stated earlier, the occupational therapist will meet with each parent and infant for 1 session for 3 months for a total of 3 sessions. Session 1 will be devoted to completing a modified routine based interview (McWilliam, 2003) that evaluates everyday occupations the family engages with the infant. The family at this time will discuss what areas in the routine lack satisfaction. Also on the first session, with guidance from the occupational therapist the family will assess their attachment with their infant using the Infant Attachment Checklist (Buenning, 1999).) During this time, the occupational therapist will assess the infant's current level of performance and assess the environment. Throughout the observation the occupational therapist needs to make note and address relationship disturbances that may be affecting the parent-infant bond. If problem areas are present it will be the occupational therapist's role to inform parents of techniques to change or increase the parent-infant interaction. After a brief observation has been completed of the infant and the environment, the occupational therapist will suggest 1-3 techniques to try and implement in the families' daily routine. Depending on the families' consent, the next session, month 2 will be scheduled. The complete first session will be 1.5 hours in duration, leaving 15 minutes before and after the session for discussion in terms of family roles, concerns for infant development, and families' level

of satisfaction in terms of relationship styles. By the conclusion of the first session the parent will fill out the infant attachment checklist and identify at least 1-2 symptoms that they feel their infant displays. Also concluding the first session, the parents will describe one area they feel needs improvement in the infant or families' routine. The occupational therapist will also refer to the infant attachment checklist during the observation.

Month 2 will begin by reviewing what was completed in session 1. If techniques or suggestions occurred in session 1, at this time the occupational therapist will review and discuss changes that have occurred within the family due to the implementations. The second session will be devoted for observing a typical routine that occurs within the family; i.e. bath time or eating a meal. The observation will last for approximately 20 min, observing the parent interacting with infant during infant occupations. Prior to the observation the occupational therapist will explain to the parent the intent of the home visit is to observe a "typical" day or night that they spend with their infant. At this time parents will be encouraged to avoid engaging in routines that do not occur in their natural daily occupations. Also, stressed to the parent will be to try to avoid doing things that normally does not occur in their daily routine. The observation will consist of analyzing time spent with infant; use of the parent-infant attachment checklist (Buenning, 1999), occupation routines, techniques used with infant, and general overview of infant's attitude and affect. After the observation, the occupational therapist will present a general overview of what was observed and noted. It will not be essential for the occupational therapist to go in depth of the complete observation, but to at the least provide the parent with a brief overview of observation notes and again provide demonstrated techniques or verbal suggestions. Also at this time the occupational

therapist will teach and educate parents on sensory stimulation techniques including tactile, auditory, or visual stimulation to use with their infant during infant occupations. Infant occupations include feeding, changing diapers, bathing, dressing, and play. It is important for the parent to be educated on using this time as effectively as possible and interact with their child in a variety of ways. The parents will have an opportunity to model techniques suggested by the occupational therapist. The therapist will note techniques that were most effective and goals will be collaboratively created. Once techniques have been established it will be the parent's job to log in a journal the technique used; describing the infant's occupation, the infant's reaction, and the overall outcome of the sensory integration technique. It will be recommended for the parent to initiate at least one sensory stimulation technique daily with their infant and record the results in their journal. Due to time constraints, a quick description or note is sufficient.

It is important during this session to reassure parents of positive attributes observed to maintain a respectful and collaborative relationship. At the conclusion of this observation, parents will express concerns and goals they want to accomplish concerning their relationship with their infant. These goals will be re-evaluated concluding the third month of the program.

When completing the 3 month sessions, the occupational therapist will review the infant attachment checklist, observations, and goals that were set forth in a collaborative manner. The last month will be dedicated to the parent. This session is focused on the parent's ability to demonstrate the techniques and skills they have learned by the occupational therapist. During this session it will be important to evaluate the techniques and to justify that the family goals are realistic and can be accomplished through the use

of certain strategies. If a parent feels that the recommendations made by the occupational therapist are unreasonable or do not fit within their families' caretaking approaches then alternative options should be provided. Goals will be reevaluated if parents feel that changes need to be made. Due to the individualized plan for each family it is important to respect and collaborate with the parents to create the most efficient approach. The final goals for the families will be provided to them in writing and subsequent interventions listed under each goal. This is provided to remind parents the steps in obtaining a specific goal. Due to time constraints, the occupational therapist may need to provide the goals and intervention to the families via email or postal mail to ensure accuracy and completeness.

Finally, depending on the parent's availability one last (fourth) session will be scheduled to discuss evaluation of the program and validity of its use. Also during this time parents will sign a parent commitment form that entails that they will integrate sensory integration techniques on a daily basis to increase their bond with their infant (see Appendix J for commitment form) This session will be short and the infant does not need to be present; this session can also be completed at St. Charles Child Development Center. Finally, Parents will be reminded on the last session how crucial the parent and infant relationship is and if absent can result in delayed development or disability.

This program can be completed in 3-4 months including the initial interview and presentation. Therefore, it is not practical to state that a long-term goal can be reached however family commitment can be established. Finally, an important note to stress is that if the occupational therapist observes certain characteristics that indicate a disability, indirect services may be recommended. In addition, when concluding the third month,

depending on the occupational therapist's caseload, the therapist can schedule additional home visits.

Documentation including parent and infant information, parent interview, routine based interview, infant attachment checklist, established goals, progress notes, and parental commitment form will all be organized in parent files. All documentation will be kept confidential and securely locked in file cabinets at the St. Charles facility. Hard copies will be available for parents upon request or at conclusion of the 4-month program.

For the first year of this program, the goal is to try and obtain 70% of the attending families or approximately 18-23 families. Groups will begin with the initial interview however due to time, availability of parents, and level of interests each family will end at different points and times. If families participate for the estimated allotted time and session, they will be enrolled an estimated 3-4 months. Makeup sessions will be reschedule however if consistent absences occur the family will be evaluated for removal from the program. If a session is unable to be made up, final goals and interventions should be provided to the parents as well as parent commitment form completion if applicable. Due to parent and infant schedules it is essential for the occupational therapist to be flexible. Even though sessions can run between 1-2 hours, the needs assessment described the parent's availability that more time on fewer days was more convenient.

The occupational therapist will be working part time or 20 hours a week during the initial year. These 20 hours are made up of 15 clinical hours and 5 hours that will be used for travel time and paperwork.

Budgeting and Staffing

The estimated expenditures to begin and maintain the PAIR program for the first year are described in the following budget. The program will be developed and implemented by the hired occupational therapist. The position for the occupational therapist entails a part time position or 20 hours a week, for 11 months. The first month of the program will be used to hire a qualified occupational therapist. The salary was determined by using the average salary at salary.com (\$71,020) dividing this number by 52 weeks (1 year) to obtain the salary weekly (\$1,365) and then multiplying this by 48 weeks (65,520). Finally since this job is part time, this number will be divided in half to get the occupational therapist's salary, which is \$32,760. This calculates the salary for an occupational therapist, working part-time, for 11 months in the Toledo, Oh area. The occupational therapist must have 1-2 years preferred experienced, be licensed in the state of Ohio and have a background in early child development or early intervention. (see Appendix K for job description and Appendix L for sample advertisement). The following budget provides the projected staff costs, items for therapeutic purposes, office items and supplies, and miscellaneous. In-Kind support and total program costs are also provided.

Projected Staffing Cost

Employee Position	Hours Per Week	Salary	Benefits	Total Expenditure
Occupational Therapist	20	\$32,760	\$8,190	\$40,050
Total Projected Staffing Costs				\$40,950

Salary generated from <http://www.salary.com>

Items for Therapeutic Purposes

Item	Rationale	Quantity	Total Cost
Infant Attachment Checklist	This will be one of the initial assessments to identify attachment issues	25	\$0.00
Fiber Optic Visual Stimulate	The following items are necessary for demonstrating techniques for parents to enhance their relationship during infant occupations and play.	1	15.99
Alex Toys Sand Box		1	\$10.99
Mini Animal Assortments		1	\$ 9.49
Laugh and Learn Piggy Bank/Coins		1	\$19.89
Blanket/Boppy		1	\$ 33.00
Peek-a-blocks Sensory- Sound Sensations Blocks		1	\$14.49
Massager Brush	The following items are necessary for demonstrating techniques for parents to enhance their relationship during infant occupations and play. These sensory toys will be brought by the occupational therapist during home visits. Each toy integrates tactile, proprioceptive, or vestibular stimulation.	1	\$12.00
Vibrating Snake		1	\$15.00
Infant Matching Colors and Textures		1	\$12.99
4" Sensory Balls, set of 4		1	\$13.68
Playskool Let's Play Together Go and Grow Giraffe (Rocker)		1	\$75.50
Weighted Lap Blanket		1	\$34.99

AeroBlocks Bubble Fun Pack		1	\$99.99
Multisensory Soft Sorter		1	\$21.21
Band in a Box		1	\$18.11
Fisher Price Jumperoo		1	\$68.84
Fisher Price Bouncer		1	\$42.84
Fisher Price Melodies and Lights Deluxe Gym		1	\$49.54
“Sassy First Sounds Book”	The following books are infant books that will be used and necessary for home visits for reading occupations.	1	\$10.00
“Squishy Turtle and Friends” Cloth Books		1	\$8.95
“Who Do You See” Book w/Tags		1	\$10.38
ABC Animal Train Travel Bag by Pockets of Learning Book		1	\$32.00
	These supplies can be used for Oral Motor/Feeding occupations		
AromaBath &	The following	1	\$22.95

Powder	products will be used for tactile stimulation techniques during bathing or dressing occupations.		
Natural Baby Lotion		10	\$239.50
Pure Baby Lotion for Newborns		5	\$74.75
Essential Oil Home Aromatherapy		1	\$19.99
Less Mess Spoon/Forks		6 (3 each)	\$17.95
Baby Grabber		1	\$6.99
Total Cost of Therapeutic Purposes			\$661.12

Item prices were generated from www.Amazon.com & www.aromababy.com

Office Items

Item	Rationale	Quantity	Total Cost	
White Computer Paper, Case, 5,000 Sheets	For copying and printing educational materials, marketing materials, brochures, assessments and evaluations.	1 case=5,000 Sheets	\$39.99	
White Legal Pads	Writing notes and observations	6-Pack	\$6.99	
Color & Black Ink Cartridges	In-kind support will be offered for copying and printing some materials, however OT will need ink for home printing of materials	2, 3-Pack	Black \$31.99	Color \$27.99

Bic Black Ball Point Pens	Use for documentation	12-Pack	\$11.49
Legal Hanging folders	Organizing participant files and maintaining confidentiality in file cabinet	2 boxes-25 files per box	\$ 24.74
File folders with fasteners	Keep all of patients records, assessments, and evaluations secure in file and for traveling to home visits	1 box-25 per box for 25 participants	\$32.47
Spiral File Folder, 13 pockets	For carrying files for home visits and organizing OT materials, educational materials for home visits	4	\$63.96
1 year, Monthly Planner	Organize session appointments, use for scheduling	1	\$18.99
Post-Its	To use for quick notes/documentation & reminders	1	
Paperclips	Office Use	500 count	\$6.99
Total Cost of Office Items			\$ 272.60

Prices generated from www.officemax.com

Miscellaneous Items

Item	Rationale	Quantity	Total Cost
Mileage Reimbursement	The OT is required to travel for home and facility visits for a majority of the program	4 visits for each person for 25 participants at 25 miles per visit at .50 a mile.	\$2500.00
Total Cost of Miscellaneous Items			\$2500.00

In Kind Support

The YMCA at St. Charles Child Development Center will provide the following for the in-kind support to the PAIR program: office space, desk, printer, telephone, copying services, meeting space for parent interview, classroom space for presentation, and projecting screen for PowerPoint presentation. Also, the supplies listed in the therapeutic items are to demonstrate ideas of items to be used however many of the therapeutic items will be items already in the home. All interventions are to be practical within the family and their available resources.

Indirect Costs

Indirect costs for facility amenities and administration including electricity, heat, and air conditioning will be reimbursed by to Child Development Center by the PAIR program.

Total Program Costs

Expense Category	Amount
Projected Staff Costs	\$40,950.00
Items for Therapeutic Purposes	\$661.12
Office Supplies	\$272.60
Miscellaneous Items	\$2,500.00
In-Kind Support	\$0.00
Subtotal of Program Costs	\$44,384.32
Indirect Costs (25% of Subtotal of Program Costs)	\$11,096.08
Total Program Costs	\$55,480.04

Funding

To implement the first year of the PAIR program, grant funding will need to cover the total funding costs estimated at \$55,480.04. Three possible grant agencies were identified to create and fund the PAIR program. The first grant agency was a federal initiative entitled, Family Planning Services Grants; funded through the Department of Health and Human Service, Public Health and Science, and Office of Population Affairs. This grant seeks program/projects that will provide family planning services with priority to persons from low-income families. The grant is dispersing its funds to public and private non-profit organizations including community-based organizations like the

YMCA throughout the Ohio region. The program specifically addresses creating and enhancing a families' emotional, behavioral, and social development that coincides with the PAIR program and the effects of the parent and infant relationship. The grant also addresses the need to provide services to families to promote mental and physical health, education, and prevention. The program needs to assure the sponsors that this program will lead to improvement in the overall health of the family as a unit. The PAIR program fits into this realm because it addresses the infant holistically by looking at the family framework and preventing disability/delays that could occur in infancy due to lack of appropriate care or barriers in the environment. Also the grant focuses on the term family counseling and referral services if the program deems necessary. If delays/disabilities are present it will be the role of the occupational therapist to refer children to other professional if the needs of the child cannot be met due to time constraints or the amount of children on the caseload.

The award amount for the grant is unspecified however under the Family Planning Program Grants there is approximately 327 million to be dispersed among 12 states. Over 1 million is to be dispersed in the state of Ohio. The grants are individualized among applicants however the grant will be provided in annual increments and can be approved for up to 5 years. Funding for the first year will be a guarantee however the grant can continue depending on the availability of funds and satisfactory of the program.

The grant is looking for specific criteria; this included the need, significance, quality of the project design, quality of project services, quality of management plan, and the quality of project evaluation. This will need to be reinstated after the first year the grant is taken into effect. Particularly the program evaluation is to ensure that

improvement has occurred within the participating families and satisfaction has been demonstrated.

The application contact for this grant is Eleanor Walker, Department of Health and Human Services, Arlington, VA. Her email address is Eleanor.walker@hhs.gov. The grant can be mailed or submitted electronically. The duration of review varies on the type of grant and the amount given.

The Funds for Family Planning Services Grants is an appropriate source for the proposed goal for the PAIR program because it addresses the family as a unit. The PAIR program addresses the infant's needs by educating the family on the importance of fostering an infant bond through emotional, behavioral, and social development. The infant and family need to create a nurturing environment. This grant's main goal is to reach out to families to provide preventative health services. The key aspect of the PAIR program does have a preventative approach; many delays and disabilities can be prevented if identified early on in development. This could include low-income families or infants at-risk. The PAIR program's goal is to create a bond and attachment with the parent and infant to prevent child disability and improve a child's overall development.

The second source identified for the PAIR program is sponsored through the Toledo Community Foundation through the community funds grants. The Toledo Community Foundation focuses on the foundation of the family and the effects on the community. The sponsor feels that to improve the community, support starts with our children and the need to enhance their development to become successful, caring, and responsible individuals. The grants are seeking new community programs that focus on educating families to develop skills and resources needed to support and nurture each

member and foster the development of young people to achieve their fullest potential. The PAIR program will be educating parents about their infant's development, what techniques can be used to enhance it, and discuss if relationship disturbances may be present. The PAIR program will also be conducted by an occupational therapy professional educating parents on their infant's development and how creating a relationship with their infant is so vital in improving mental, physical, and emotional health. Furthermore, the community grants stress the need to create safe and positive living environments. The PAIR program's overall goal is to evaluate the family as a unit, create techniques that can enhance their relationship, and overall achieve a healthy, stable, and successful family environment.

In 2011, The Toledo Community Foundation respectively awarded almost \$200,000 in grants to non-profit organizations to strengthen the Toledo community. The YMCA of Greater Toledo received \$15,000 this year. The PAIR program will be affiliated with the YMCA St. Charles Development Center, a non-profit community in the Toledo area. The application process includes a written proposal expressing the need, evaluation, and funding in less than five pages. Attachments that need to be included are a brief summary of grant request, person to contact, name and affiliations of program, brief background on the mission and purpose, and a copy of the most current operating or proposed budget. The Toledo Community's Foundation professional staff and the Community Funds Board of Trustees will conduct the review process. The reviewers place priority on grants that represent an unduplicated opportunity of a community need, it is important to make the proposal stand out and show benefit for the Toledo area. Applicant organizations will be notified in writing one week after the Board of Trustees

begins review. The deadline dates are annually in January, May, and September 2011. The grants are awarded competitively and on a one-year basis. Grant applicants should send their proposals to Sarah Harrison, Toledo Community Foundation, 300 Madison Ave. Toledo, Ohio, 43604. Her phone number is 419-241-5049.

The third grant proposed to support the funding of the PAIR program is entitled Grants for Enhancing the Lives of Children and Their Families sponsored by the Frey Foundation. This source's mission is committed to working together to make a difference in the lives of individuals, families, organizations, and communities. The goal is to create programs that promote young children and family health. The goal also expresses the need to create a program within populations that may be more vulnerable or not have services available to promote a better quality of life. The grant focus areas include improving parenting skills, ensuring available quality childcare, and maximizing universal access to pre-school programs. The PAIR program will be created in a community that is in a working class community. It will be targeting families with two working parents that may not be spending the crucial time necessary with their infant. These infants and their families may be at a vulnerable state. Furthermore, they may not be aware of the detrimental effects of not creating a healthy bond with their infant and educating parents is key. The PAIR program fits into this grant because it will promote infant health by creating a foundation for a healthy parent-infant relationship. Also, the PAIR program is designed for YMCA therefore the program is collaborating not only with community efforts but pre-school programs as well. The grant needs programs that create stable and secure families, the PAIR program wants to create this framework. The Frey Foundation primarily serves the Grand Rapids area however accepts proposals from

community-based organizations that have state-level presence. Even though this program may start in the Toledo area, it has the capability to expanding to other YMCA's in the Ohio/Michigan area. The Frey foundation has two upcoming deadlines for proposals including August 15 and November 15, 2011. The foundation request that applicants use the Frey foundation's format for submitting an application; also to include in the proposal is a proposal cover sheet, budget worksheet, and narrative information describing the program. Once the online application is received, the Foundation's Board of Trustees will review grant proposals during each quarterly meeting or approximately every 3 months.

The Frey Foundation is determined to create funds for new ventures; their mission is consistent that through their grants they want program to promote innovation and change. In 2010, The Enhancing the Lives of Children and their Families Grant supported through the Frey Foundation provided "First Steps with over \$300,000 to promoting health, early education, and general well being to young children 0-5 in the Kent, MI area. Also in 2010, Health Department of Northwest Michigan received a \$160,000 grant from the Frey Foundation to increase mental health services for young children. The sponsor contact is the grant manager, Teresa Crawford .She can be reached at 40 Pearl St., Grand Rapids, MI 49503 or via email; www.freyfdn.org.

Self-Sufficiency Plan

After the grants have funded the first year of the PAIR program, it is the goal to keep the program running with the assumed success of the program. To continue the program the executive directors, board of trustees of YMCA, and family coordinator director of the YMCA will recognize the positive outcomes of the program and will

support its continuation. The occupational therapist involved with the program will be able to provide services through other child care facilities in the Toledo area including the two other infant YMCA/JCC facilities. The program will be billing for services through Medicare and private insurance companies. The budget will be covered through billing for these services including the salary of the employed occupational therapist. The YMCA is one of the largest non-profit facilities in the nation therefore donations and fundraising may be contributing to the program's efforts and continuation.

Program Evaluation

Evaluation of the PAIR program is very important to provide evidence that the program is effective as well as supporting for the program to continue. The program will be evaluated tentatively after each 3-month session; therefore it will be evaluated during and at the conclusion of the 12-month program. The therapist will conduct formative evaluations by meeting with the parents on a weekly basis providing feedback at each session. The occupational therapist can facilitate questions to retain feedback such as, "Do you feel this program is meeting your individual needs?" "Are there goals you would like to change or interventions you feel are helpful or not helpful?" "Do you have any overall opinion, comments, or suggestions?" The occupational therapist will also have meetings every two weeks with the executive directors discussing the progress of the current group, concerns, or comments they have heard about the program. These weekly meetings will inform the occupational therapist changes that need to be made and reassurance of the success of the program.

Summative evaluations will be conducted to both the parent and the stakeholders. The summative evaluations will be completed at the end of each 3-month session. In each

evaluation it will contain evaluation of the PAIR program and evaluation of the PAIR occupational therapist (see Appendix K for evaluation form). Also the Infant Attachment Checklist and the infant sensory profile will be given to the parent prior to the therapy sessions, both of these assessments will be reviewed at the end of the 3 month session. Due to the short duration of each group it may not be logical to assume that an identified symptom will be eliminated in 3 months however improvement will be hopeful. Therefore the checklist will be reviewed and the commitment form will be signed. This is to encourage parents to continue using techniques learned by the occupational therapist. The goal for the conclusion of each group is for parents to understand and be educated on the importance of creating and maintaining a relationship with their infant, techniques to enhance this bond, and commitment to continue throughout their early development. The goals and objectives that were established for the PAIR program will be evaluated on a continuous basis, if the need or program changes, it will be the occupational therapist's responsibility to update the goals to meet the needs of their participants. The current objectives for the PAIR program are stated in the following:

1. During the initial interview, participants will state at least one problem area that they feel may be decreasing the bond with their infant.
 - a. Parents will evaluate their quality time spent with their infant and constraints that may be increasing daycare hours due to job, family, and other distractions. Prior to concluding the parent interview with the occupational therapist, the parents will verbally or in writing state a problem area that may be impacting their relationship with their infant. The occupational therapist will make note of this in their file and will

expand on this problem during home visits, assess the problem, and provide intervention techniques to decrease this problem.

2. Prior to beginning the program, participants (parent, caregivers, and teachers) will attend a presentation on the benefits of the parent-infant relationship and verbally state one technique they learned.
 - a. At the beginning of the program, the parents will be educated on the importance of creating a bond with their infant, the benefits, and the potential harm relating to child disability if this bond is absent. Parents will meet briefly with the occupational therapist after the presentation to arrange session time for the home visits and to state one thing they learned and will try at home with their infant. The occupational therapist will make note of what they learn and evaluate their participation and responses in regard to the presentation.
3. At the conclusion of the first home visit, participants will identify at least 2 problem areas in their daily routine or symptoms indicated on the Infant Attachment Checklist they would like to improve.
 - a. The Infant Attachment Checklist will provide information regarding symptoms that the child is dealing with attachment issues and needs more attention in certain areas. Once symptoms are identified the occupational therapist can evaluate the symptoms and create occupationally based interventions and techniques for the parents to decrease these identified problems. The occupational therapist can also use the Routine Based Interview to establish problem areas in the family's daily routine.

4. At the conclusion of the second home visit, participants will create 1-3 goals to enhance the parent-infant bond.
 - a. The occupational therapist will evaluate this objective by documenting all goals stated by the participants and whether these goals are relative and achievable by the parent and infant.
5. During the course of the three scheduled sessions, 75% of the participants will use sensory interventions (i.e. tactile, auditory, and environmental learning opportunities) during infant occupations, at least one time per day.
 - a. The occupational therapist will have each participant keep a log and document each sensory integration techniques they used with their infant, the response to the techniques, and outcomes. The occupational therapist will evaluate the parent's documentation on a weekly basis and make suggestions accordingly.
6. By the end of the third session, 75% of the participants will verbally report one benefit or technique they learned that will be continued throughout the development of their child.
7. By the end of the first year of the PAIR program, 70% of the families are St. Charles Child Development Center will have participated in the program and report increased knowledge of importance for creating a healthy parent and infant relationship.
 - a. The occupational therapist will evaluate this objective by the verbal and evaluation feedback that is provided by the participants and through observation of the parent and infant in their home. Also, parents will sign

a parent commitment form at the end of the program indicating they are committing to continuing to enhance their bond with their infant.

Program Timeline

The timeline is created for the first year of the PAIR program for exactly 12 months (see Appendix N for program timeline). This is a tentative outline; the occupational therapist is required to be flexible due to the young age of the participants.

Letters of Support

Individuals from several agencies will be requested to provide letters of support for the PAIR program. The executive directors at the YMCA at St. Charles Child Development Center, Cristina Caussabon and Roberta Kehlmeier, will provide the primary letter (see Appendix O for Letter of Support) Roberta Kehlmeier is a key stakeholder due to her executive position at the corporate level. She is the executive director for volunteer services for all of the YMCA/JCC in the Toledo area and has direct contact with the president and CEO of the YMCA/JCC Corporation. Directors from the other two infant development centers can provide further letter of support. Specifically Pam Sattler from Fort Meigs Adventure Center and Lew Kott from the Calvary Christian Child Development Center. Both of these facilities are affiliated with the YMCA and can be incorporated into the program depending on the need.

Additional letters of support would be solicited from people at many different levels including the local, state, and national level (see Appendix P for additional letters of support). One proposed letter of support is from the president of the YMCA/JCC, Todd Tidbits. This letter of support would be beneficial because it would provide support at the corporate level, and would provide the opportunity for the program to be

implemented in all YMCA/JCC in the Toledo Area. Also with their support the program could expand to their YMCA's at the national program level. A second letter of support could come from Maureen Kane, OTR/L, She is an occupational therapist that is well know through her proficient work at Educare in Toledo, Ohio. She provided an interview for the needs assessment for this program and states a need for promotion of infant health. She specializes in early child development and early intervention. Maureen also highly supports the implementation of sensory integration techniques to be used in occupational therapy interventions. A third letter of support could come from Judith Palfrey, the director of the American Academy of Pediatrics. The American Academy is nationally renowned therefore through their support the advocate for the need for this program in a child's healthy development. Jeanne Brookes, The director of the National Center for Children and their families, could provide a fourth letter of support. This organization is centered around research and educating the public on children and families as a unit. Their support would advocate for the PAIR program indicating the importance of the parent and infant relationship. The founder of the Baby's First Massage, Teresa Kirkpatrick Ramsey, could give the fifth letter of support. Infant massage will be one sensory integration techniques, specifically tactile stimulation, through the use of infant massage to enhance the parent and infant relationship. Teresa support can indicate the benefits of infant massage for both the parent and infant. Also, Teresa can provide certification for the occupational therapist in this area. The sixth and seventh letters of support could be provided by the state and national level promoting the role of occupational therapy in this program, The American Occupational Therapy Association (AOTA) and The Ohio Occupational Therapy Association (OOTA). The

support of these two organizations, Florence Clark, the president of AOTA, and Monica Robinson, the president of OOTA will both be beneficial by advocating the occupational therapist's role in meeting the needs of the parents and infants through enhancing their bond through infant occupations.

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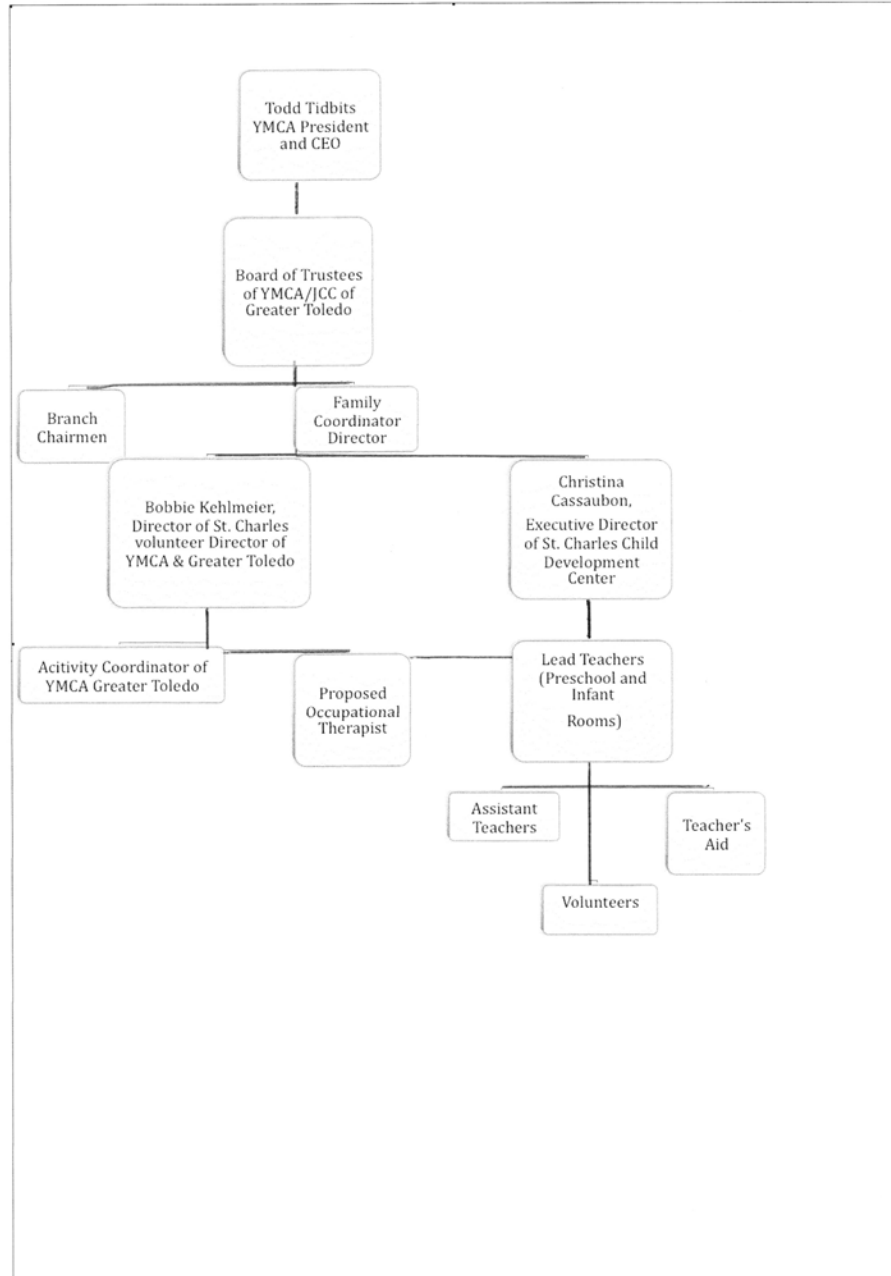
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Appendix A

Appendix A

YMCA Child Development Center P.A.I.R. Program Organizational Chart



7. Do you participate or have you participated in parent child programs and/or parent education courses?

YES

NO

8. If yes, what type of programs?

9. As a parent and/or caregiver would you be interested in helpful tips to enhance you parent/infant relationship? Or activities to enhance your child's development?

YES

NO

10. As a parent, what types of care giving do you provide? Circle all that apply

Changing diapers Dressing Grooming Creating learning environment

Feeding Play Social Interaction Arts & Crafts

Bathing Reading Motor skills (movement activities, tummy time)

Please describe special activities you do with your child _____

11. The parent infant relationship is an important bond that can be created through infant everyday occupations (i.e.Bathing, changing, feeding, dressing, and play) The P.A.I.R program wants to use this valuable time and make it as efficient as possible. Please check all areas of interest.

Sensory stimulation _____
(using environment to stimulate senses)

Benefits of parent/infant interaction _____

Reading infant cues/communication _____

Enhancing child development _____

Creating bond through infant activities _____

Appendix C

Interview with Occupational Therapist

Date _____ Interviewee _____

1. How many infants do you currently have on your caseload? Between the ages of 6weeks -18 months?)
2. What types of diagnoses do you have on your caseload or diagnoses you have worked with in the past?
3. Do you feel that any of the infant's diagnoses/child development delays were preventable? Environmentally caused?
4. Do you think any could be caused to lack of care, (i.e., only providing basic needs, not establishing a relationship with their child, lack of stimulation in their environment,)
5. Are there infants that have several caregivers? Different homes? Foster care? Or enrolled with childcare providers? (spending less time with parents)
6. What types of treatment/interventions/therapy is provided at your facility?
7. Does your facility provide any type of parenting classes or programs? If yes, what types?
8. Do you feel that the parents in the facility would benefit from a program that aims to enhance the initial bond with their infant?
9. Do you feel that parents would respond well to helpful tips/education on different techniques to enhance the parent/infant relationship?

Appendix D

Interview with Professionals in Field of Child Development

Date _____ Interviewee _____

1. How many infants do you currently have enrolled in the program? (Between the ages of 6weeks -18 months?)
2. On average how many days/hours does an infant come to facility for childcare?
3. Are their infants enrolled that have several caregivers? Different homes? Foster care? Or enrolled with other childcare providers?
4. Typically what is your ratio in the classrooms?
5. Is it difficult for the teachers/caregivers to provide one-on one care for the infants due to the ratio of adult to infant?
6. Does your facility provide any type of parenting classes or programs? If yes, what types?
7. Do you feel that the parents in the facility would benefit from a program that aims to enhance the initial bond with their infant?

8. Do you feel that parents would respond well to helpful tips/education on different techniques to enhance the parent/infant relationship?

The parent infant relationship is an important bond that can be created through infant everyday occupations (i.e., Bathing, changing, feeding, dressing, and play) Due to the lifestyle of the contemporary parent due to common stress like work hours, financial instability, divorce etc., it may be difficult for a parent to go beyond an infant's basic needs. The goal of this program is to use this valuable time during the activities listed above and make the time as efficient as possible. Would the items below be areas of interest for your staff and parents?

Sensory Stimulation

(using environment to stimulate senses) _____

Benefits of parent/infant interaction _____

Reading infant cues/communication _____

Enhancing Child Development _____

Creating bond through infant occupations _____

Appendix E

Home Observation Sheet



Name of Child/Caregiver: _____

Date of Observation: _____

Location child was observed/Occupation: _____

Time of Day/Duration: _____

Initial Observation: Questions to Consider

Assessing the environment? Is their adequate play space? Is the room safe/clean for the child to play in? Does the infant seem comfortable/relaxed or irritable and fussy in the environment? Is there age appropriate toys/books in room? Efficient lighting? Does the infant explore the environment?

Notes:

Infant Interaction with Parent: Questions to Consider

Does the infant like being held? Does the parents talk/sing/communicate through faces and gestures? Is the infant responsive/unresponsive to noises or their parent's voice? Does the infant make eye contact with caregiver or exchange smiles? Does caregiver show reactions to infant's emotions? Does the infant like to be on the floor prefer tummy/back? Is the infant upset/crying?

Notes:

Occupation: Questions to Consider

What is the parent doing when child is eating, bathing, playing? Is the parent engaged or uninvolved? Does the parent talk/sing/ or show interaction during occupation? Are Parents responding to infant's needs? Is the parent/infant's affect generally happy?

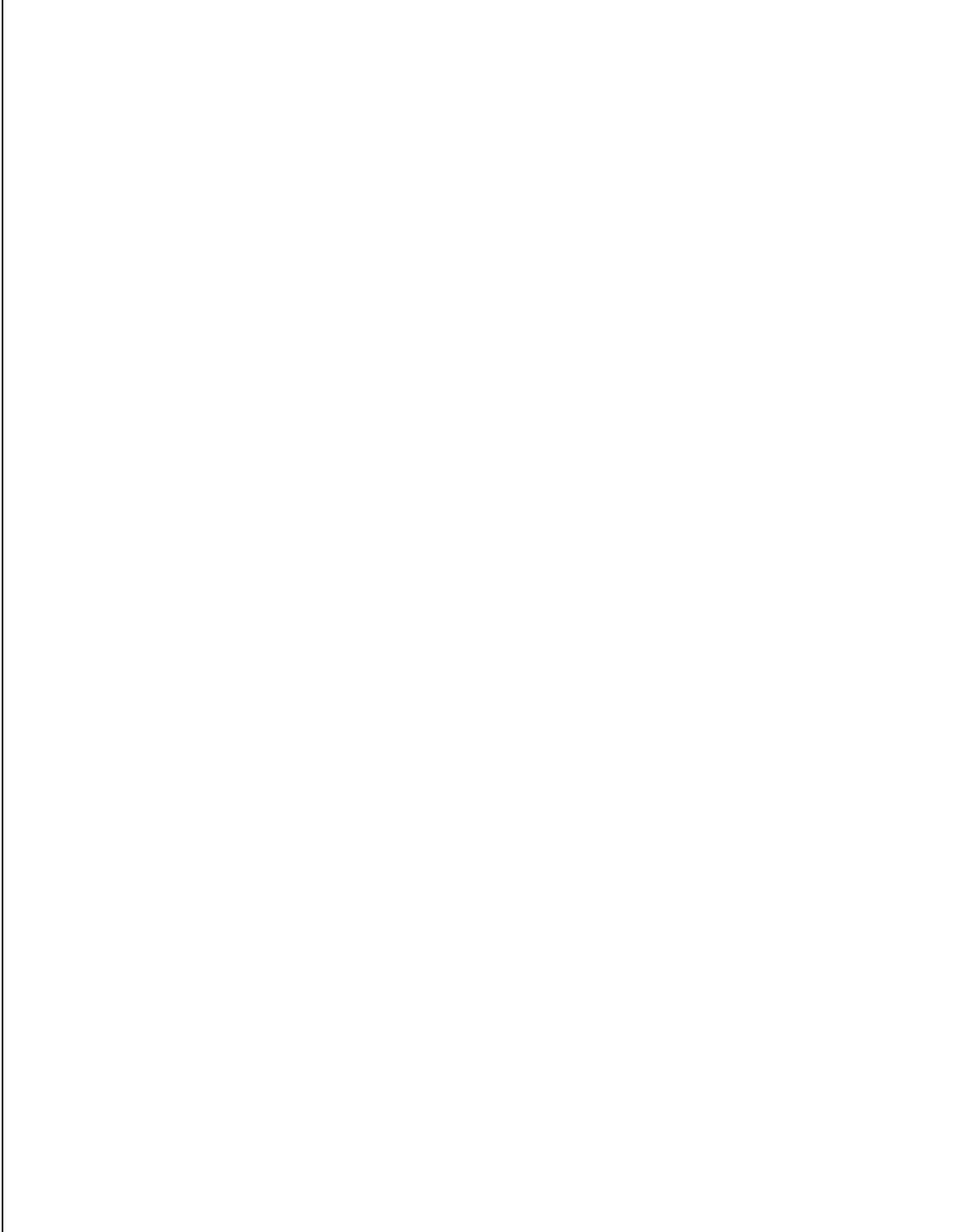
Notes:

Handouts/Suggestions/Comments Provided:

Parent Concerns/Questions:

Are parents generally satisfied with their relationship/routines with their infant?

Appendix F



APPENDIX G**RBI- Routine Based Interview
R.A. McWilliam (2003)**

Modified by Abby Enser (2011)

*Routine: **Waking up***

- Could you describe what wake up time is like?
- Who usually wakes up first?
- Where does your child sleep?
- How does your child let you know she is awake?
- Does she want to be picked up right away? If so is she/he happy when picked up?
- Or is she/he content by him/herself for a few minutes? What does she do?
- What is the rest of the family doing at this time?
- Is this a good time of day? If not, what would you like to be different
- What is your interaction with your child at this time?

Notes:

Rate Your Satisfaction Level 1 2 3 4 5

Suggestions/Comments:

Routine: Diapering/Dressing

- Lets look at dressing, how is this routine accomplished?
- Who helps your child dress?
- Does he/she help with dressing? How? What can he/she do on his/her own?
- What is her/his mood like?
- What is communication like?
- Does your child wear diapers? Cloth or disposable?
- Are there any problems with diapering?
- What does your child do while you are changing him?
- Does your child use the toilet? How much assistance is needed?
- How does your child inform you that he/she needs to use the toilet?
- How satisfied are you with this routine? Is there anything you would like to see change?

Notes:

Please Rate Your Satisfaction Level

1 2 3 4 5

Suggestions/Comments:

Routine: Feeding/Meals

- What are feedings/meal times like?
- Does anyone help feed your child? Who?
- How often does she/he eat?
- How much can your child do on their own? Use utensil appropriately?
- How involved is she/he with meals?
- Where does your child usually eat?
- What are the other family members doing at this time?
- How does your child let you know what he/she want or whether she is finished?
- Does your child enjoy mealtime? How do you know?
- What would make mealtimes more enjoyable for you?
- What are mealtimes like for you child when under the care of others?
- How satisfied are you with feeding/eating routines?

Notes:

Please Rate Your Satisfaction Level 1 2 3 4 5

Suggestions/Comments:

Routine: Transitions/Traveling

- How do things go when you are getting ready to go somewhere with your child?
- Who usually helps your child get ready?
- How much can he do on his own?
- How involved is he/she in the whole process of getting ready to go?
- How comfortable is the child transitioning? Excited, anxious, nervous?
- What is communication like at this time?
- Does your child like outings? How do you know? Do they enjoy being in a car, car seat?
- Is this a stressful activity? What would make this time easier for you?
- What are drop off and pick up times like for you child? Is it difficult to part ways? Do your caregivers express any concerns?
- How satisfied are you in the traveling routine?

Notes:

Please Rate Your Satisfaction Level 1 2 3 4 5

Suggestions/Comments:

*Routine: **Relaxing at home***

- What does your family do when relaxing at home?
- What does your child do when the family is having a “down time?”
- How does your child interact with other family members?
- Does your family watch TV? Will your child watch TV? How many hours do you watch TV?
- Is your child able to play independently? Or entertain themselves during down times?
- Is there anything you would like to do in the evening but can't?
- How satisfied are you with this routine?

Notes:

Please Rate Your Satisfaction Level 1 2 3 4 5

Suggestions/Comments:

*Routine: **Bath Time***

- What is bath time like?
- Who usually helps your child bathe?
- How is she/he positioned in the bathtub?
- Does she/he like the water? How do you know?
- How involved is your child in bathing or playing in the water?
- Does your child kick, splash, play with toys in the water?
- How does your child communicate with you during this time? What do you talk about?
- Is bath time usually a good time? Enjoyable? If not, what would make it better?

Notes:

Please Rate Your Satisfaction Level

1

2

3

4

5

Suggestions/Comments:

*Routine: **Nap/Bed Time***

- How does bedtime go?
- Who usually puts your child to bed?
- Do you read books or have some type of ritual at this time?
- How does your child fall asleep?
- How does your child calm him/herself?
- Does your child sleep through the night? What happens if he/she wakes up? Who get up to get your child?
- Is bedtime easy or stressful time for your family?
- Does he take naps for other caregivers? How does that go?
- Are you satisfied with the bedtime routine?

Notes:

Please Rate Your Satisfaction Level

1 2 3 4 5

Suggestions/Comments:

*Routine: Outdoors/ **Public outings***

- Does your family spend much time outdoors? What do you do?
- What does your child do?
- Does your child like (the activity)?
- How does he/she get around?
- How does he/she interact with others?
- Are there any toys or games your child engages with/in?
- How does your child let you know he/she want to do something different?
- What things do your child like or notice outdoors, or in public places?
- Is this usually an enjoyable time? Would anything make this time easier?
- What kinds of outdoor activities or family outings does your child participate in? Does he interact with peers his age?

Notes:

Please Rate Your Satisfaction Level

1

2

3

4

5

Comments/Suggestions

Routine: Other parts of your families' routine you would like to discuss

- Are you generally satisfied with this routine?
- What do you like/dislike about this routine?
- Is this routine integrated daily?

Notes:

Please Rate Your Satisfaction Level 1 2 3 4 5

Comments/ Suggestions:



Appendix H
Evaluation of Home Visit

1. Were the program goals established? Please circle.

YES **NO**

Comments: _____

2. Was the role of occupational therapy explained in terms of the PAIR program?

YES **NO**

Comments: _____

3. Why is it important to establish a healthy parent/infant relationship? Benefits?

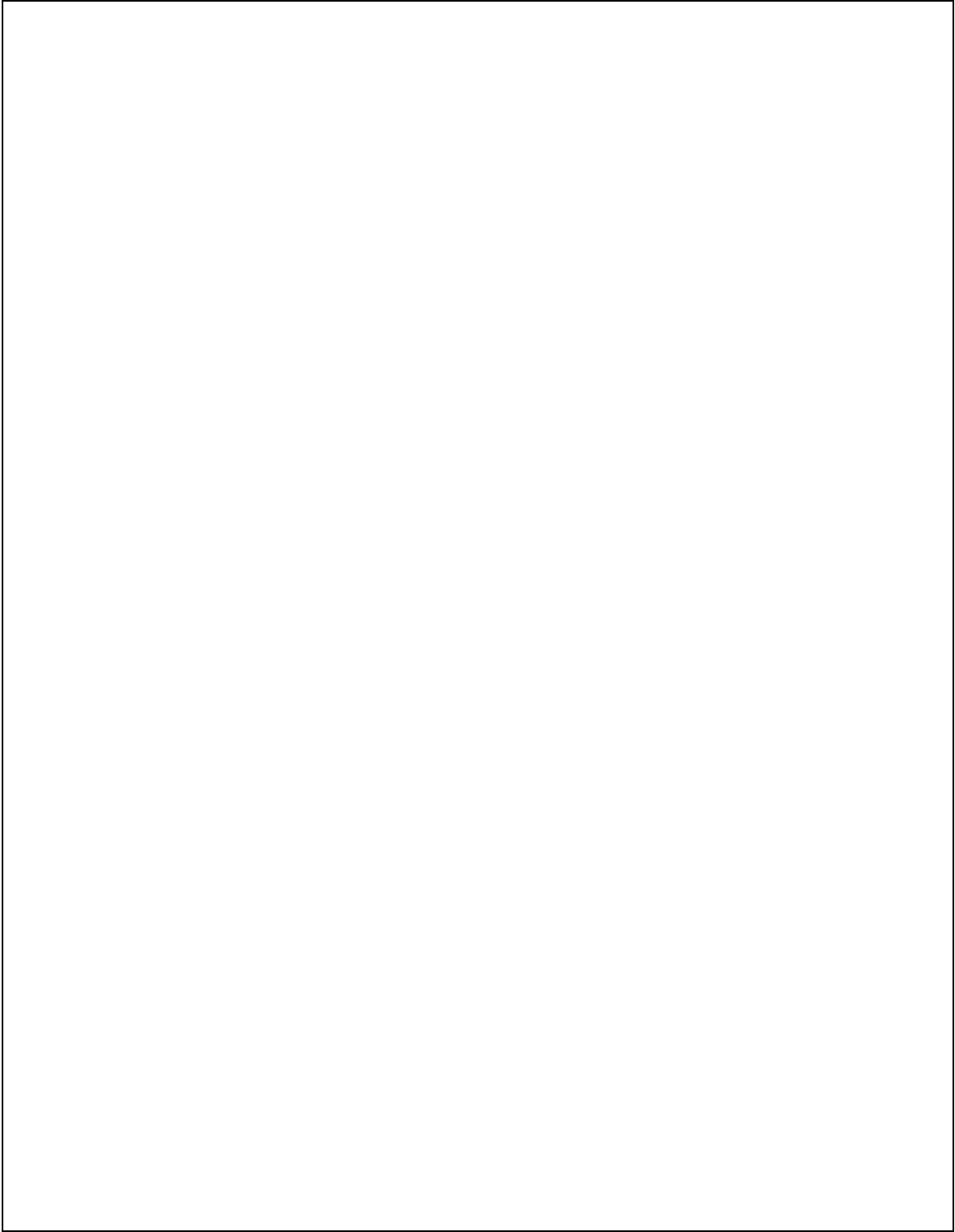
4. Do you feel as a caregiver you or other parents would benefit from the PAIR program?

YES **No**

Please explain: _____

5. What techniques were discussed during your home visit that you think would be helpful for parents in the PAIR program? What new techniques did you learn?

6. What additional questions, concerns, and comments do you have regarding the PAIR program? Please also comment on the efficiency of the occupational therapist!



Appendix J

Parent Commitment

The PAIR Program

I commit to performing the sensory integration techniques I learned through the PAIR program to continue to build and enhance my relationship with my child.

Parent Name _____

Date: _____

Occupational Therapist

Director of Facility

Appendix K

Occupational Therapist Job Description

The PAIR (Parent And Infant Relationship) program at the YMCA at St. Charles Child Development Center is requiring an occupational therapist that will be employed part time (20 Hours) to implement occupational based services to parent and infants to enhance the parent-infant bond. The occupational therapist should have at least 1-2 years experience because there will not be any supervising occupational therapist on site. This is a new program therefore it will be important for the occupational therapist to have experience in early child development, infant attachment, and early intervention techniques.

The responsibilities of the occupational therapist will begin with marketing and recruiting participants, it will be important for the occupational therapist to be present at the site to build rapport with the parent and infants at the facility. Once participants are recruited the occupational therapist will conduct parent interviews, present a formal presentation on the PAIR program, assess and observe each parent and infant their natural environment, implement interventions, create goals collaboratively with the parent, and assess outcomes of the program. Due to the uniqueness of each individual it is important to have a wide-scope on the diversity of this population and techniques that can meet the needs of each infant and their parent. The therapist will need to provide their own transportation and be willing to travel throughout the Toledo and Oregon area. The occupational therapist will collaboratively work within the YMCA corporation specifically with YMCA at St. Charles Child Development Center under the leadership of the Executive Directors, Cristina Caussabon and Roberta Kehlmeier.

Appendix L

Sample Advertisement for Occupational Therapist



It Starts at the Beginning!



YMCA at St. Charles Child Development Center is currently seeking an occupational therapist to run a community-based, parent education and intervention program for working parents to enhance their bond with their infant in the NW Ohio area.

Interested candidates must be competent in early child development, early intervention, and sensory integration. Applicants must be registered occupational therapists, licensed in the state of Ohio, and have at least two years of professional experience. This is a part time position and requires traveling in the Toledo and Oregon area for home and facility visits. Limited benefits are available for this position.

**If interested please send resume to: Cristina Cassaubon, 2600 Navarre Ave.
Oregon, Oh 43616
Fax number is 419-696-7269**

Appendix M

The PAIR Program Participant Evaluation Form

The PAIR Program Participant Evaluation Form

Participant or Parent Evaluation Form for the PAIR program, Please Circle

1. Did the PAIR program educate you on the benefits of the parent infant bond?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

2. Did the PAIR therapist take time to get to know you and your infant?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

3. Did the PAIR program inform you on techniques to use with your infant to enhance your relationship?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

4. Do you feel that the sensory integration approach will be useful in your daily routine?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

4. Do you feel more confident spending time with your infant?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

5. Did you feel that your goals were individualized to your needs as a parent?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

6. Would you recommend the PAIR program to other working or new parents?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

7. Do you feel that the therapist was well educated in the area of infant development?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

8. Was the therapist professional, organized, punctual?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

9. Did the therapist address to your needs, concerns, questions, and comments?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

10. Overall, do you feel that this program was helpful to enhancing your bond with your infant?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

Please feel free to provide suggestions or comments on how you felt about this program or areas that may need improvement.

Evaluation form for the Stakeholder

1. Do you feel the occupational therapist met the objectives of the program?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

2. Is the occupational therapist meeting the goals of the parents?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

3. Is the occupational therapist professional, organized, punctual?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

4. Is the occupational therapist meeting the needs of the program and well experienced in the area of infant development, early intervention, and sensory integration?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

5. Would you advocate continuing this program?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

6. Do you feel that the PAIR program positively affected the participants and the parent and infant relationship?

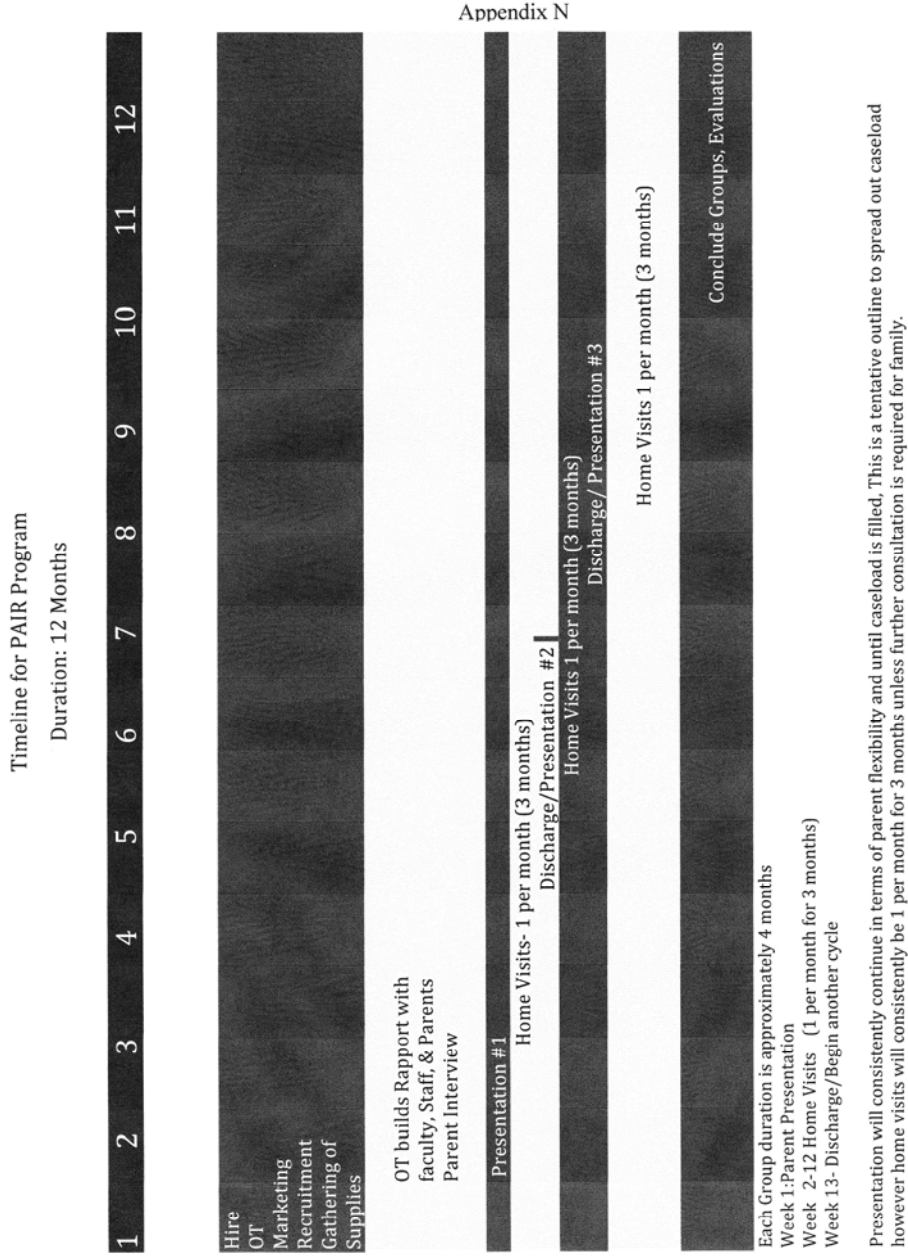
Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

7. Would you recommend this program to new parents in your facility?

Strongly Agree Somewhat Agree Undecided Disagree Strongly Disagree

Please provide suggestions, comment, and concerns about the PAIR program.

Appendix N



Appendix O: Letter of Support



FOR YOUTH DEVELOPMENT
 FOR HEALTHY LIVING
 FOR SOCIAL RESPONSIBILITY

April 6, 2011

Dear Abby Enser,

The intent of this letter is to pledge our support for the P.A.I.R. program (Parent and Infant Relationship Program) sponsored by the YMCA at St. Charles Hospital Child Development Center. Our center has been in operation over 50 years and we serve children from 6 weeks to 5 years old. In the summer we have a school age program for children from 6 to 12 years of age. This program will serve the parents and infants at our facility and enhance a child's development by increasing the parent-infant bond.

Our facility focuses on creating an environment that is family centered to encourage healthy child development. The P.A.I.R. program is needed to reach out to the busy working parents outside of our facility and provide services that will increase the parent and infant relationship and decrease the chance of child disability. The P.A.I.R. program can address families individually and provide techniques on developing a healthy relationship and use time spent with their infant as beneficial as possible. The P.A.I.R. program will also benefit our parents by educating them on the lasting effects of creating this crucial early bond. As the Directors of the YMCA at St. Charles Hospital Child Development Center, we support the development of the P.A.I.R. program.

Thank you Abby for all you have done for the YMCA St. Charles Program!

Sincerely,

Two handwritten signatures in black ink. The first signature is 'Christina Cassaubon' and the second is 'Bobbie Kehlmeier'.

Christina Cassaubon
 Bobbie Kehlmeier
 Co-Directors
 YMCA @ St. Charles Hospital
 Child Development Center

Appendix P
Additional Letters of Support

Director of volunteer services at YMCA

Roberta Kehlmeier
2600 Navarre Ave.
Oregon, Oh 43612
(419) 725-7840

Director of YMCA at St. Charles Development Center

Cristina Cassaubon
2600 Navarre Ave.
Oregon, OH 43612
(419) 696-7269

Director of Fort Meigs Adventure Center

Pam Sattler
210 E. South Boundary
Perrysburg, Ohio 43551
(419) 873- 8202

Director of Calvary Christian Child Development Center

Lew kott
5025 Glendale Ave
Toledo, Ohio 43614
(419) 381-7980

President/CEO of YMCA/JCC of Greater Toledo

Todd Tidbits
YMCA Metropolitan Office □
Summit Plaza □ 1500
N. Superior Street □
Toledo, Ohio 43604
(419) 729-8135

Rehab Dynamics/Educare Certified Occupational therapist specializing

in early intervention
Maureen Kane, OTR/L
3160 Central Park West
Toledo, OH 43617
(419) 841-1840

American Academy of Pediatrics

Judith S. Palfrey, MD

141 Northwest point blvd.
Elk Grove Village, IL 60007
(847) 434-4000

National Center for Children and Families Director

Jeanne Brooks-Gunn, Ph.D.
525 West 120th Street, Box 226 | New York, New York 10027
Phone: 212-678-3904 | Fax: 212-678-3676

Founder of Baby's First Massage

Teresa Kirkpatrick Ramsey
PO Box 750052
Dayton, Ohio 45475-0052
(937) 433-5000

Ohio Occupational Therapy Association President

Monica Robinson, MS, OT
Ohio Occupational Therapy Department
P.O. Box 693
Canal Winchester, OH 43110

American Occupational Therapy Association President

Florence Clark
Department of Occupational Therapy
4720 Montgomery Lane
Bethesda, MD 20284
(301) 652-2682

Annotated Bibliography:

Demographics

Allard, M.D., & Janes, M. (2008). Time use of working parents: A visual essay.

Monthly Labor Review. 17(2) 3-9.

Abstract:

Working parents have many constraints on their time as they try to balance paid work, childcare, household activities, shopping, and leisure activities. Data from the American Time Use Survey (ATUS) are a rich source of information about how people spend their time doing various activities.¹ This visual essay highlights how working parents spend their time on an average day. Using ATUS data, one can examine what activities parents do and how long they do them. The ATUS enables analysts to measure how Americans spend their time in primary activities their main activities, in other words. This includes the measurement of time all working parents spend providing primary childcare, which consists of physical care of children; playing, reading, or talking with children; travel related to childcare; and other childcare activities. For those parents with children aged 12 or younger, it is also possible to measure the amount of time spent in more passive secondary childcare that is, the amount of time that they have at least one child of that age group in their care while doing activities other than primary childcare. Focusing on both primary and secondary childcare gives a more complete picture of parents' time spent providing childcare. Unless otherwise specified, all data in this visual essay refer to married parents between the ages of 25 and 54 who were employed full time at the time of the survey; that is, they were usually working 35 or more hours per week. Parents are those who live with at least one biological, step-, or adopted child aged 17 or younger. All data are taken from the 2003–06 ATUS. This essay was prepared by Mary Dorinda Allard and Marianne Janes, economists in the Division of Labor Force Statistics, Bureau of Labor Statistics.

Summary/Significance:

In today's society it is not uncommon for both parents to be working full time jobs. Also, it is not uncommon for a couple to have their infant or child in a daycare setting for 8 hours or more, 5-6 days per week. Even though most parents do not have a choice at times, this article validates that parents are not spending enough waking hours with the children. One very surprising statistic states, "On days that they worked, married mothers aged 25–54 who were employed full time spent 1.4 hours providing primary childcare,

while their male counterparts spent 0.8 hour” (2008). The PAIR program is gearing towards the working families that have difficulty managing time to spend with their infant. Due to the economic restraints that many Americans face it is still a moral obligation to provide sufficient and loving attention to a child. The statistics stated throughout this article prove that many people have difficulty balancing their time between work, home management, and leisure. If a parent is only able to spend 1-2 waking hours with their infant, it is important for a program to be available to support parents to provide helpful tools to make these hours as valuable as possible.

Barth, RP., Green, R., Webb, MB., Wall, A., Gibbons, C., & Craig, C. (2008).

Characteristics of out-of-home caregiving environments provided under child welfare services. *Child Welfare*, 87(3), 5-39.

Abstract:

A national probability sample of children who have been in child welfare supervised placements for about one year identifies the characteristics (e.g., age, training, education, health, and home) of the foster parents, kinship foster parents, and group home caregivers. Caregiving respondents provided information about their backgrounds. Interviewers also used the HOME-SF to assess the caregiving environments of foster care and kinship care. Comparisons are made to other nationally representative samples, including the U.S. Census and the National Survey of America's Families. Kinship care, foster care, and group care providers are significantly different from each other-- and the general population-- in age and education. Findings on the numbers of children cared for, understimulating environments, use of punitive punishment, and low educational levels of caregivers generate suggestions for practice with foster families.

Summary/Significance:

Because childcare cannot always be successfully provided by the parent, a substantial amount of federal money is spent to ensure that children are well taken care of outside of their homes through foster or kinship care. Unfortunately, the competence of care, the suitability of those providing care, the motivation and purpose of the foster or

kinship “parents,” and follow-up and supervised visits are inadequately examined. The issues of safety and maltreatment of children has been an ongoing concern and the national media tends to sensationalize those foster care cases where children are exploited or abused. Public sentiment fueled by media reports shows a lack of trust and capability in the foster care system. One study (Orme & Buehler, 2001) cited in this article verified that approximately 80% of the environments into which children were placed were not developmentally safe. This study states that there are also indications that children in foster care have higher levels of behavioral and developmental problems as opposed to children in a typical population. This study (Barth et al., 2008) found that caregivers in the child welfare system tended to be older, less educated, and lower in socio-economic status than the general population and those factors make it more difficult to provide a stimulating environment in which to achieve a normative level of well being for the child. The study points out that the child welfare system is in need of repair and one suggestion would be to provide foster care in the family’s local neighborhood so that foster parents could cooperatively joint parent with the biological parents to achieve reunification or open adoption. At this writing, the PAIR Program is directed toward the parent/infant relationship with the intention of providing information and support to develop strong, loving bonds within the family. Eventually, this program could incorporate foster, kinship, and biological parents within the home visit phase so that secure relationship attachments extend to all caregivers. The ultimate goal is to help children grow into emotionally and psychologically healthy adults, so improvement in their environment, whether within their own home or the out-of-home care giving site, will only increase their chance of success.

Engelke, M.K., & Engelke, S.C. (1992). Predictors of the home environment of high-risk infants. *Journal of Community Health Nursing*, 9(3), 171-181.

Abstract:

The quality of the home environment is an important predictor of the cognitive and social development of high-risk infants. Community health nurses (CHNs) have played a central role in the assessment and care of families with high-risk infants. We examined predictors of the home environment in a sample of 106 infants discharged from a neonatal intensive care unit. The most consistent predictor of an optimal home environment was an internal parental locus of control. Socioeconomic status affected dimensions of parenting related to cognitive stimulation but not emotional responsiveness. Young mothers and those with other children are less responsive to their infants. Males are treated in a more responsive manner than females. These findings suggest that CHNs need to adopt an empowerment model of intervention and focus on the particular needs of young mothers and those with other children.

Summary/Significance:

This article used a home observation tool to assess the quality of the environment for at-risk infants. The HOME or the Home Observation for the Measurement of the Environment evaluates, “emotional and verbal responsiveness, avoidance of restriction and punishment, organization of physical and temporal environment, provision of appropriate play materials, maternal involvement with their child, and opportunities for variety in daily situations.” One statement discussed that parents that have difficulty providing basic needs do not focus on positive parenting behaviors. This study suggests that parents of lower social economic status may be unaware or uncomfortable with interacting, teaching, or being playful to enhance social and cognitive growth. Instead parents may need to focus on the basic necessities instead, that unfortunately could pose higher risks for their infant. Variables that can decrease economic and environmental stresses are social support from family, friends, and professionals. Parents that require additional

support need to seek opportunity where services are available and obtainable. Overall the study advocates for parents to understand the importance of their parenting style.

Promoting beneficial parenting will in turn promote healthy social and cognitive development.

Forsythe, P. L., Maher, R., Kirchick, C., & Bieda, A. (2007). The long road home. SAFE discharge for infants with high-risk home environments. *Advances in Neonatal Care (Elsevier Science)*, 7(2), 69-77.

Abstract:

Safe transitioning of high-risk infants from hospital to home requires these essential elements: (1) a thorough understanding and adherence to infant-identified discharge criteria; (2) the coordination and progression of educational activities that prepare families for care at home; (3) the appropriate identification and utilization of referral services, both during hospitalization and in the community; (4) the involvement of community healthcare providers well versed in the care and follow-up of infants born ill or prematurely; (5) the psychosocial adaptations parents make as they accept their role as independent caregiver. A family Social assessment, Advocacy by all healthcare team members for the safety and well-being of the infant, strong Family involvement, and accessible Environmental resources contribute to the success of a SAFE discharge.

Summary/Significance:

This article reiterates the hope that all expectant parents experience, the dream that their infant is strong and healthy. When that expectation turns out not to be a normal event and their baby must receive neonatal intensive care parents may demonstrate fear, the sense of failure, or feelings of sadness. Consequently, the parents may not respond appropriately to their infant because they may not be ready to accept the challenges of additional infant care, are stressed about finances, the nature of the pregnancy, or be aware of the resources available to them. This article points out that there are programs in place to make the transition from intensive care to home care as simple and

uncomplicated as possible. One program, SAFE, an acronym for social assessment, advocacy by healthcare professionals, family involvement, and environmental resources is a plan designed to assist the families and the therapists in creating a successful outcome within the infant/parent dynamic. The article also reports that there is a discharge criteria within the Neonatal Intensive Care Unit (NICU) based on clinical and functional results that determine if an infant will be able to maintain a move from the NICU to the family home. Factors such as weight, gestation, oxygen levels, and body temperature are taken into consideration before a baby could be transferred. Physical readiness is critically important, but assessing the parent's ability to provide appropriate and nurturing care is also essential in the infant's emotional and psychological development. This article supports the PAIR program because it discusses how all infants should be welcomed into a home that has adequate space and has established family members. The presence of both parents within the home would also provide more stability and increase the opportunities for stronger interaction between the infant and parent. The report discusses that basic necessities such as a crib, diapers, bottles, clothing, and the phone numbers to pediatrician, social workers, and therapists for additional support should all be in place when the infant comes home. Although not specifically noted, this article focuses on a lower socio-economic demographic and the likelihood that parents with less education and financial means are at greater risk of having a premature infant or a baby in the NICU due to the lack of health care. I infer this demographic because the report suggests support services to teenage mothers, those with custody problems, and parents with drug and alcohol history. Programs parents can contact for additional help include Women, Infant, and Children (WIC), food stamps,

welfare, and Supplemental Security Income (SSI). This article is more geared toward infants in the NICU however it gives a different perspective in helping all parents in different circumstances.

Humphry, R. (1995). Families who live in chronic poverty: meeting the challenge of family-centered services. *American Journal of Occupational Therapy*, 49(7), 687-693.

Abstract:

Family-centered occupational therapy services are based on a collaborative relationship that does not always come easily. Role performance in parenting a child with special needs and being a consumer of occupational therapy services can be partially understood in terms of environmental context. Although occupational therapists recognize the need to adjust services to the cultural and economic backgrounds of families, most of the available literature has examined the contribution of ethnic differences. A particular challenge for occupational therapists may be treating clients and their families who live in chronic poverty. This article examines chronic poverty as it shapes parenting the child with special needs and subsequently the caregiver's participation in occupational therapy services. A framework for understanding cultural differences is used to suggest contrasting value orientations between families who live with persistent poverty and occupational therapists. A family centered approach challenges the professional to understand varied influences on caregiving. Suggestions are offered to enhance communication between therapists and caregivers.

Summary/Significance:

This article acknowledges that it is difficult for the parent or primary caregiver and the therapist to break down the cultural, ethnic, and socioeconomic level differences and treat the child and the family within the boundaries of those differences. The therapist needs to accept the family's values and beliefs and recognize that adjustments may have to be made in order to engage the parents. The study points out that there has been an increase in the amount of literature regarding cultural adaptations but little is available addressing chronic poverty and how that element can adversely affect family-centered services.

Characteristics that may have caused an individual to spiral towards poverty may make the parent mistrust case workers and health professionals because they may feel a lack of control or understanding. Conversely, occupational therapists are usually white, have a higher education, receive professional recognition, and enjoy steady employment so they may not relate to the disadvantages experienced by low-income families. Within this study, reference was made to the findings of Fodiller, Rosage, and Neuhaus (1990) and they concluded that the profession of occupational therapy is based on middle-class values and a strong emphasis on individual achievement. At times, it is difficult to step back and acknowledge that the lack of ambition may not be the reason that the family is low-income, so adjustments in attitude and lack of empathy need to be reexamined. Low income compromises the ability of the parent to adequately provide for the family so factors such as poor diet, lack of housing, overcrowding, and poor neighborhoods creates an environment that is not conducive to a happy, healthy, socially accepted, emotionally stable child. It follows that parents who are poor lack the training and the skills to adequately respond to their children and fatigue, stress, hunger, and mental and physical health issues make it very difficult to give proper care to one's child. Buying diapers, food, supplies, or medication may be almost impossible and seeking services may be difficult because they lack the know-how to go about obtaining them. The study reminds therapists that miscommunication is a real and serious issue and that imposing one's own values may not necessarily reflect those who live in chronic poverty. The therapist may see all human nature to be good, whereas those living with violence and poverty may look at most people as bad, but the important issue is to provide the service and improve communication. The author's intend was to broaden our understanding of different

cultural issues and how chronic poverty influences the relationship between the child, family, and therapist. One challenge that I have experienced as the PAIR Program was being developed focused on interactions and observations between myself and the parents of the infants and toddlers. I would assist in the childcare facility and was shocked at how little affection and attention some of the parents displayed towards their infants when they came to pick them up after a day of being apart. My upbringing would have included hugs and kisses and questions asked of the teachers as to what I had accomplished that day. This article reminded me that I do need to continue to encourage parents to become more affectionate and to show them techniques to create their parent/infant bond and to realize that not all suggestions will be put into practice.

Lippmann, L., Vandivere, S., Keith, J., Atienza, A. (2008). Child care use by low-income families: variations across states. *Child Trends*. Publication #2008-23.

Abstract:

For many low-income and single parents, employment depends on securing reliable, affordable child care. Yet these parents may face greater challenges than do higher-income and two-parent families in making affordable, appropriate child care arrangements that complement their work schedules. Indeed, the cost, availability, stability, and quality of child care can act as barriers for low-income parents who want to work.⁶ To help address this problem, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) increased federal child care funding by \$3.5 billion between 1996 and 2002.⁴ This step was in keeping with available research indicating that child care subsidies make it easier for families to afford child care, thus supporting parental employment and financial independence.^{13,15}

This Research Brief provides new estimates to show the variation across the 50 states in the use of nonparental child care, the types of child care used, and parents' experiences with child care problems that interfere with their work schedules. The brief concludes with a discussion of possible reasons for these patterns across states.

Significance:

This article points out that many low-income families have a high need for childcare

and include significant statistics that show a need to have a parent/infant program for families that are at risk. As my needs assessment demonstrated many parents that had their infant in childcare ranged between 35-40 hours per week and spent an average of 4 waking hours with their infant. Many low income families need to work a variety of hours and do not have the availability to be spending efficient time with their child. other statistic that validate the need for a parent/infant program with low income families include:

- “One in three US children under the age of five was in a low-income family.”
- “Children with low income families were more likely to have people in the household that have not attained a high school diploma.
- More likely to be living with only one parent
- Difficulty providing all the maternal & emotional needs for children due to financial stress

Many parents may face financial hardship in today’s society. Especially due to the increase in unemployment and loss of jobs. Parents need to understand however that even if stress arises within the family it is important to provide a healthy stable environment for the infant. At times families may be in a survival mode but the crucial time in early infancy can mold a child to being a confident and productive adult. IF a parent needs to work long and unstandard hours it is important to take the time that one has and make that time as effiecient as possible.

Tong, L. (2009). Relationship of working mothers' parenting style and consistency to early childhood development: a longitudinal investigation. *Journal of Advanced Nursing*, 65(10), 2067-2076.

Abstract

This paper is a report of a longitudinal study of the relationship of working mothers' parenting style to their children's social competence and vocabulary/motor/intellectual development. *Background.* With an increasing number of women choosing to remain in the workforce after starting a family, there has been a concomitant increase in use of non-parental childcare facilities to help look after the child while the mother is at work. This increase in non-parental care has led to a dramatic change in the traditional child-rearing environment. *Methods.* Long-term investigations were conducted over a period of 2 years in 41 Japanese government-licensed childcare facilities. Child development was evaluated by childcare professionals and parenting style was assessed by questionnaire. A total of 504 children and their mothers participated in the study. Data collection was carried out in 2004 and 2006. *Findings.* We found that the changes in parenting style were statistically significantly related to children's development after 2 years. For instance, changes in the parent-child playing routine contributed to the child's social competence. Variation in working mothers' disciplinary practices was also associated with children's vocabulary development after 2 years. *Conclusion.* Working mothers should increase interactions with their children in their free time to reduce the risk of developmental delay. Daily childcare support provided by family members or social organizations for long-term working mothers is helpful in mediating the negative relationship of mothers' working with children's development.

Summary/Significance:

The US bureau of Labor statistics reports that there are 35 million women in the US that have full time jobs and are mothers. 78.6 % of mothers with one child less than 6 years of age are also remaining in the workforce. These statistics indicate that the parent-infant relationship may be adversely affected because actual physical time spent together has decreased. The population at the YMCA St. Charles facility supports these findings in that both parents typically are working and most of the child's adult interaction is at a childcare facility. With this being said, the children at St. Charles may not be getting the attention and interaction they crave from their parent due to time and economic constraints. The PAIR program needs to educate the working parents on prioritizing time for their children because of the lasting effects that could occur. This article specifically looks at how the child is affected due to reduced mother-infant interaction caused by

separation attributed to additional time spent in the work force by the parent. The study also discusses that parents may not have a choice in the matter therefore time that is available for interaction should be used effectively. The National Institute of Child Health and Human Development states that interaction can be about quality not quantity therefore any free time should be spent with their child to reduce the risk of developmental delay. The PAIR program wants to benefit from infant occupations such as changing, feeding, and dressing into quality time spent with their infant. Due to these risks, the PAIR program can help working parents find balance in their relationship with their infant.

Early Child Development

Abbott, A., & Bartlett, D. (1999). The relationship between the home environment and early motor development. *Physical & Occupational Therapy in Pediatrics*, 19(1), 43-57.

Abstract:

The purpose of this paper is to examine the evidence-based research supporting the role of the home environment in relation to infant motor development by reviewing the literature investigating deprivation, parental expectations, and the qualities of the home environment associated with poverty. Methodological issues associated with the misinterpretation of data, the presence of confounding variables, and the use of inadequate measurement tools will be discussed. If aspects of the home environment contributing to infant motor development are clarified, important theoretical, research, and clinical implications arise for physical and occupational therapists working in early intervention programs.

Summary/Significance:

This article, written from the viewpoint of a physical therapist, emphasizes factors affecting the physical development of an infant but those issues may go hand in hand with intellectual and social development as well. Through evidence-based research, there

is a correlation between home environment and attachment relationships but there is little evidence to show the parallel between motor development and the home setting. This report states that more evidence-based investigation is necessary to support the assumption that both maturation and environmental factors contribute to the physical development of the child. Such information will help the occupational and physical therapist develop programs that better serve their clients. It is commonly believed by the general population that as a child matures, certain motor skills such as sitting up, crawling, and walking are natural progressions in development but a dynamic systems theory adds more elements to that assumption. This article cites a review in Thelen and Smith regarding the dynamic systems theory that proposes motor behavior is influenced by the child, the environment, and the task in addition to neural development. For example, a child may be able to sit up successfully but cannot crawl because he or she has been transferred from one sitting position to another without the opportunity to develop the crawling stage. I have recently witnessed a child who could not stretch out because he was put from bouncer, to highchair, to car seat without adequate time to flex his legs. I was informed that more and more children are experiencing what is being called “container syndrome” because they are not developing muscular strength. Many contemporary parents do not carry, hold, or do tummy time with their children. Instead, the child is transferred from one device to another and this environmental factor may hinder neural maturation. This report also suggests that young mothers, those living in poverty, and those experiencing depression may create an environment that negatively influences motor development. I see this information as very helpful to the PAIR Program because it makes me consider additional factors when suggesting environmental

occupations to parents. Making tummy time, rocking, stretching, and cuddling an important part of the bonding relationship between the infant and the parent may also help develop motor skills in addition to the emotional and psychological benefits.

Christakis, D.A., & Rivara, F.P. (2010). Influence of experiences from birth to 5 years of age on emotional and psychological health. *Archives of Pediatrics & Adolescent Medicine*, 164(5), 491-492.

No abstract

Summary/Significance:

This article emphasizes that environmental influences can significantly effect infant and childhood development and make a difference in the health of an individual over the course of his/her lifetime. This article states negative factors affecting the fetus include exposure to drugs, toxins, and cigarettes smoke during the mother's pregnancy and low weight at birth. Infant and young children exposed to hours of television may difficulty engaging in other in the classroom and risk obesity as a result of inactivity. Articles in this issue point out that lower socioeconomic standing may cause emotional and physiological health concerns but changes to the environment can positively effect children. This article supports early intervention with implicating evidence that early experiences matter and that positively early learning lasts a lifetime. Although a specific program for early intervention was not mention the article focuses on the importance of establishing a healthy routine within a family setting.

Tomopoulos, S., Dreyer, B.P., Berkule, S., Fierman, A.H., Brockmeyer, C., &

Mendelsohn, A.L. (2010). Infant media exposure and toddler development.

Archives of Pediatrics & Adolescent Medicine, 164(12), 1105-1111.

Abstract

Objective: To determine whether duration and content of media exposure in 6 month old infants and associated with development at age 14 months. Design: Longitudinal analysis of 259 mother-infant dyads participating in a long-term study related to early child development, from November 23, 2005, through January 14, 2008. Setting: An urban public hospital. Participants: Mothers with low socioeconomic status and their infants. Main Exposure: Duration and content of media exposure at age 6 months. Main Outcome Measure: Cognitive and language development at age 14 months. Results: Of 259 infants, 249 were exposed to media at age 6 months, with mean total exposure of 152.7. In unadjusted and adjusted analyses, duration of media exposure at age 6 months was associated with lower cognitive development at age 14 months. Of 3 types of content assessed, only 1 as associated with lower cognitive and language development at age 14 months. No significant associations were seen with exposure to young child-oriented educational or non educational content. Conclusion: The study is the first, to our knowledge, to have longitudinally assessed associations between media exposure in infancy and subsequent developmental outcomes in children from families with low socioeconomic status in the United States. Finding provide strong evidence in support of the American Academy of Pediatrics recommendations of no media exposure prior to 2 years, although further research is needed.

Summary/Significance:

Infant media exposure and toddler development was completed to determine whether duration and content of media exposure in 6-month-old infants are correlated with the current development of an infant at the age of 14 months. Results in this study provide strong evidence in support of the American Academy of Pediatric recommendations that media prior to the age of 2 years should be avoided. The study also does not support media exposure that involves educational content. It can be assumed that whether educational or not, naturalistic occupations and being exposed to new experience are much more beneficial then sitting in front of a television. Also according to this study there can be developmental delays and other adverse side effects when an infant is exposed to excessive media. A couple of the side effects include reductions in parent-child engagement and conversations, decreased reading and play activities. An very alarming statement suggested in this article is families with low SES, have increased

children with developmental delay due to media exposure and the lack of parental language being directed at them. This article states the need that parents with infants need to be educated and informed on the effects media can have on their child. More importantly it will be important for therapists or early intervention specialists to suggest other occupations rather than television to promote parent- infant relationship and enhance child development. As stated in the article, “advocacy efforts and public health interventions will be necessary to reduce exposure and optimize developmental outcomes.” This article really supports the need for a parent/infant program in terms of educating parents media awareness and promoting more sufficient ways for parents to spend time with their infant. Through awareness developmental delays can be prevented.

White, C., Simon, M., & Bryan, A. (2002). Using evidence to educate birthing center nursing staff about infant states, cues, and behaviors. *MCN: The American Journal of Maternal Child Nursing*, 27([5]), 294-298.

Abstract:

The authors sought to apply evidence from research to nursing practice. Research about infant states, cues, and behaviors was presented to a birthing center nursing staff and expectant parent class instructors. Posttest results indicated that the staff's knowledge and skill in interpreting infant behavior for parents increased after an educational session. The results are important, for research supports the idea that parent-infant attachment affects both parents and infants by promoting a loving relationship and improved infant development, a healthy self-image, and better relationships later in life. Cue sensitivity has been documented as the origin of parent-infant attachment. Cue sensitivity involves recognition of individualized infant body language and provision of an appropriate response. Parents who are sensitive to their infant's needs and who respond consistently and appropriately foster a mutually satisfying reciprocal interaction that leads to a healthy relationship. Incorporating information about infant states, cues, and behaviors into prenatal education can provide parents with an introduction to quality parent-child interactions.

Summary/Significance:

This study aims to educate nursing practitioners to be competent in reading infant cues and behaviors and in turn teach parents this valuable skill. The study focuses on the ability to read/listen infant cues, what the cues and behaviors mean, and how a parent can begin to interact with their child. If a parent is able to listen to their infant and meet their needs this forms a trusting relationship and an impacting bond. The article discusses how “attachment form the foundation of a child’s social, emotional, and cognitive development, forms a trusting relationship with a parent, develop mature relationships with others, and function as a competent adult.” This statement really expresses how crucial the early stages of development can be. Infants are ready for experiences almost instantly as they come into this world. Parents need to understand that by recognizing their infant needs they can create a wonderful and trusting connection. An infant learns through meaningful experiences, as the article states certain states of consciousness or cues can alert a parent when they need more attention. This article emphasizes the need to educate parents to recognize these early sign of communication so they can feel confident in meeting the needs of their child.

Infant Assessments Used in PAIR program

Buenning, W. D. (2011). *Bonding and attachment: Infant attachment checklist*.

Walter Buenning and Associates.

No Abstract

Summary/Significance:

This articles defines the terms bonding and attachment; “referring to the emotional connections or the strength of the relationship between one person or another.” For infants, attachment is forming a close and trusting relationship with their caregiver.

Dr. Buenning is a psychologist that specializes in bonding and attachment and Reactive Attachment Disorders or RAD. RAD refers to infants that have difficulty with bonding with a caregiver usually caused by certain experiences occurring in early infancy. Many times infants that have gone through adoption face attachment disorder due to the fact that these early relationship were not established. An important prevention technique that this article discusses is knowledge. It is important for any parent or caregiver to be educated on the importance of bonding and establishing a positive relationship with their child. Also by educating parents on attachment disorders can help with early detection and early intervention. Because RAD usually begins in early infancy it can be treated quickly in many cases. The Infant Attachment Checklist is an assessment that can be used for infants showing symptoms of RAD or other characteristics indicating difficulty with bonding.

McWilliam, R.A. (2003). *Functional intervention planning: The routines-based interview*. U.S. Department of Education.

No Abstract

Summary/Significance:

This article expresses a powerful, appropriate, candid way in which to gain useful information in order to create an individualized early intervention plan. A routines-based interview (RBI) is described as a two interview process; one interview with the family to discuss what they do throughout the day and one with the teacher to gain a sense of the classroom, the child's behavior, and the routines of the other children. This RBI is more casual than most types of interviews and often the families are surprised at the relaxed approach and are more apt to participate with truthful responses. There are no right or

wrong answers; daily routines can be one activity after another or no activity at all. The therapist asks questions designed to determine the child's development status, the family's daily occupation, and the feelings of both the family and the teacher. The interviewer asks open-ended questions of the family or caregiver that help to establish the child's engagement, independence, and social relationships. The family prioritizes their concerns so that the therapist can address them in the order of relevance to the child and his environment. Questions asked of the teacher are meant to provide functional information for the family and are necessary in order to offer an intervention strategy. Approaching intervention by using the family's day-to-day practices with follow-up information from the teacher gives the family ways to incorporate the child's needs within the family route. This article suggests that the RBI would be a great tool to use to interview parents and to get an overall picture of the families routine. Also, the therapist can discover where families may be struggling during certain routines or where satisfaction lacks. The PAIR Program could specifically asks parents and caregivers to share routines, play time activities, feeding and bedtime practices, and family customs in order to achieve a plan that works best for the infant and the family. An assessment or interview like the RBI can establish a relationship between the parent and the occupational therapist, and then objectives, suggestions, and outcomes can be further evaluated.

Maternal and Paternal Attachment & The Early Parent/Infant Relationship

Araneda, ME., & Santelices, M.P., & Farkas, C. (2010). Building infant-

mother attachment: the relationship between attachment style, socio-emotional well-being and maternal representations. *Journal of Reproductive & Infant Psychology*, 28(1), 30-43.

Abstract:

The pilot study explored differences in maternal representations between primiparous pregnant woman with different attachment styles and different levels of socio-emotional well-being. The sample included 55 pregnant women between the ages of 18 and 38, between 4 and 7 months pregnant. Representations were assessed using the 'R' Interview, attachment styles using the CaMir, and socio-emotional well-being using the OQ-45.2. According to the results, prenatal representation of own mother-as-mother may be significantly related with pregnant women's attachment experiences, but this representation may not be significantly related to the woman's prenatal socio-emotional well-being. On the other hand, representation of the child and self-as-mother may not be significantly related to attachment experiences, but rather with prenatal socio-emotional well-being. This implies that the prenatal socio-emotional context plays a great role as a protective factor with respect to the representations of the child and self-as-mother and, therefore, has strong implications for the future mother–infant attachment and child development, which is very relevant in terms of prevention of attachment difficulties.

Summary/Significance:

This article made significant point in terms of maternal relationships and the affect attachment experiences can have on a child and throughout development.

“Attachment styles are developed in early infancy and are directly related to the history of interactions between the baby and its caregivers: For instance the satisfaction of the baby's need for closeness, shelter, and protection when its feeling fear or pain” (Areneda, 2010). Depending on a mother's background, her self-concept, her perception on motherhood, and other experiences can largely impact how to treats and/or cares for her infant. “The bonds of attachment formed during childhood may persists as models in the representational world of the adults and are enriched, reinterpreted and remodeled throughout adult life” (Areneda, 2010). This being sad, infants that develop with attachment issues could potentially lack social and emotional skills needed to adapt to

certain situations, environments, and experiences. Also, this statement reflects that without creating a basis for trust in parents during infancy may impact trusting others throughout life. When creating a parent and infant program it is important to respect a mother's mental state, many time attachment issues arise with new mothers due to depression, social problem, lack of support, negative representations of their child, as their ability to be a mother (Adrena, 2010). These statements verify the importance of promoting a positive prenatal social- emotional well-being and reaching out to new mothers that may be at psychosocial risk to prevent the cycle from continuing.

Berlin, L. J. (2001). Enhancing early child-parent relationships: implications of adult research. *Infants & Young Children: An interdisciplinary Journal of Special Care Practices*, 14 (2), 64-76.

Abstract:

Mental health practitioners working with infants, young children, and their families are assigning increasing importance to enhancing early child-parent relationships. Enhancing early child-parent relationships is viewed both as a goal in and of itself and as a means to enhancing children's development as a whole. In the past three decades, attachment theory and research have made substantial contributions to understanding early child-parent relationships. This article discusses the implications of one branch of attachment theory and research, that concerning adult attachment, for enhancing early child-parent relationships. It begins with a synopsis of the theory and research concerning adult attachment. It then presents the implications of this theory and research for interventions designed to enhance early child-parent relationships. The article argues that enhancing early child-parent relationships involves two principal tasks: (a) helping parents identify their children's needs and parents' own responses to these needs; and (b) helping parents gain insight into how their "states of mind with respect to attachment" influence their parenting behaviors and their children's development. Key words: attachment, child-parent relationship, early intervention.

Summary/Significance:

This article discusses the importance of attachment between a parent and his or her child and how it enhances a child's overall development. This article pertains to a

parent/infant program emphasizing two tasks that can assist in increasing the parent-child relationship. These tasks include helping parents identify their child's needs and helping parents gain insight into how their state of mind can influence their parenting behaviors and affect their child's development. This article reflects upon past and current research on the importance of attachment and how therapists need to integrate attachment techniques into their therapy when working with parents and their children. This article can be a contribution for any therapist when creating a parent and infant relationship program.

Burke, J.P. (1987). Maternal role preparation: a program using sensory integration, infant-mother attachment, and occupational behavior perspectives. *Occupational Therapy in Health Care, 4*(2), 9-21.

Abstract:

The Maternal Role Preparation project demonstrates an innovative occupational therapy approach to increasing maternal competence in first time mothers. This four session program provided women with discussion, demonstration, practice, and written material covering topics concerning their infants (attachment, sensory systems, developmental abilities) and themselves (acquiring a new role as mother). Theoretical constructs from Behavioral Pediatrics, Sensory Integration and Occupational Behavior were evaluated for their compatibility and combined under the unifying framework of Occupational Behavior. The program represents an opportunity for occupational therapists to combine sensory integration theory and practice with other compatible treatment perspectives and approaches.

Summary/Significance:

Many infant programs are created to help new mothers prepare for the birth of their infant. Types of programs teach new mothers about nursing, swaddling, changing diaper etc., however there is a missing piece. The PAIR program wants to address this missing piece. Similar projects have had this area of focus in mind as well. This project was called the Maternal Role Preparation and is occupationally focused on the transitions that

occur in role changes when a woman becomes a mother. This particular program focused on a variety of maternal skills that would be needed from the time a woman gives birth to caregiving through infancy. The article discusses contemporary parents and how a shift is occurring in families across the world. There are declines in extended family, more families are focusing on career development, and people are waiting to have children. Due to these reasons people today are becoming less aware of child development and are overall not experienced in taking care of children prior to having their own. It states in the article that, “Women who have not had opportunities to learn about the early abilities of infants, how to effectively interact with them or how to manage the everyday demands of mothering may be “at risk” for developing feelings such as dissatisfaction and incompetence in their role of a mother.” This quote validates the need for an infant program to not only educate parents but also help them transition into a life changing role when becoming a parent. Mothers and fathers need to adapt and realize what their new role entails and be confident in this role to provide a healthy, stable environment for their child. The article states that there are certain factors that mothers should learn and possess when becoming a mother, these factors include

- Infant- mother bonding
- Reciprocal Mother- Infant reaction
- Responsiveness of Infant to Mother
- Provision of Appropriate Stimulation
- Understanding infant temperament
- Social/Emotional Support

The problem with most new parents is that are not aware of these important factors and

for this reason need to be included in any infant/parenting program. These factors and information are important to include in the PAIR program to foster healthy parent and child relationships. Finally the article also provides information about giving parents ideas to manage stress, conserve energy, and have effective routine management. Again, having these skills as a parent will affect the parent's success in providing a successful environment and routine for the infant.

Koomar, J. (2009). Trauma- and attachment-informed sensory integration assessment and intervention. *Sensory Integration Special Interest Section Quarterly*, 32(4), 1-4.

Abstract:

Occupational therapists commonly work with children with autism spectrum disorder, attention deficit disorder, learning disabilities, and other developmental disorders. Although many of these children have difficulties with sensory integration, they also may have trauma or attachment disorders that may or may not be formally identified. Early childhood trauma includes early loss or lack of consistent caregivers, emotional, physical, or sexual abuse; various forms of neglect; surgical procedures, and life-saving measures in the neonatal intensive care unit. This article reviews current issues related to trauma, identifies overlapping characteristics of trauma disorders and sensory modulation disorders, and discusses the occupational therapist's role in working with children who have experienced trauma.

Summary/Significance:

This article looks at how sensory integration can impact a child that has trauma or attachment issues. As stated in the abstract, occupational therapists commonly work with many different disabilities in the pediatric population however many time sensory modulation may be confused for a child that has a traumatic past. Due to traumatic events children have a lack of trust with parents and develop feelings of anxiousness and avoidance to others making it difficult for a child to bond or attach with anyone. This

further impacts a child's social and emotional development. This article focuses on the importance of attachment and bonding with their child and if this relationship is abused it can have lasting impressions.

It is important for any profession working with children to holistically assess the family and child and to keep in mind the possibility of delays due to traumatic events. When creating a program that is designed around the use of the sensory integration model all components need to be addressed. For instance, one theory explained in this article is when an infant or young child has a bad past experience it could be triggered by sensations. It is very important to understand that when using the sensory integration model one technique or intervention that worked for one child does not mean it will be successful for others. Especially in the case for a child that has been influenced by a traumatic memory and a certain sensation triggers this experience.

Nakamura, W.M., Stewart, K.B., & Tatarka, M.E. (2000). Assessing father-infant interactions using the NCAST Teaching scale: a pilot study. *American Journal of Occupational Therapy, 54*(1), 44-51.

Abstract

OBJECTIVE: The purpose of this pilot study was to gather preliminary data on father-infant dyads using the Nursing Child Assessment Satellite Training (NCAST) Teaching scale, a parent-infant interaction measure, to determine whether and how fathers score differently than mothers from normative samples. **METHOD:** Interactions between first-time father (N = 15) and their infants, 3 months to 6 months of age, during the instruction of an unfamiliar play activity were rated using the NCAST Teaching scale. Scores were compared both with a normative database (N = 2,123) of mother-infant dyads and with a subsample (n = 34) of the normative database to control for demographic variables, including the age, gender, and birth parity of the child and the age, education, marital status, and ethnicity of the parent. **RESULTS:** The fathers scored significantly lower on items related to fostering the infants' cognitive growth than the mothers in the normative database. However, the infants in this study provided clearer

behavioral cues and were more responsive to their fathers than the infants in the normative sample. These findings were also true for the subsample comparison. The fathers also scored significantly lower than the normative subsample on items measuring their ability to foster the social and emotional growth of their infants. **CONCLUSION:** There may be important differences in the interactions of father-infant dyads compared with mother-infant dyads, but further research with a larger, more representative sample of fathers on this parent-infant interaction measure is warranted to support this. The development of normative scores for fathers and their infants is recommended to accurately interpret father-infant interactions when administering the NCAST Teaching scale.

Summary/Significance:

In this pilot study, participant fathers took part in an assessment measuring the differences or similarities between the way a father may interact with his infant as opposed to the mother's approach using the Nursing Child Assessment Satellite Training (NCAST) as the scale to evaluate the data. To summarize, this observation tool (NCAST) measures the interaction between the parent and the infant recognizing that each must respond to the other. The parent needs to be able to respond to the infant's cues, alleviate stress, communicate a warmth and sincerity, and provide opportunities for growth and learning. In response to the parent's nurturing, the infant should react positively to this communication. This article specifically stated that the quality of this interaction has a significant impact on the overall development of the infant, so the unique ways in which the father interacts is extremely important to early intervention. Fathers tend to verbalize less and use physical play more, whereas, mothers focus more on care giving activities and cognitive development, so it is important that the occupational therapist recognizes these differences when a program plan is recommended. When planning intervention strategies, it is important to remember that more and more fathers are becoming increasingly responsible for the care giving of their children, so programs providing education, time

management, and methods to make the most of available time are vital to help reduce the number of at risk infants and children. A parent and infant program focusing on early development can become a valuable teaching tool and an early intervention practice by acknowledging the father's role and proposing ways to make the dad more a part of the infant's development.

Pierce, D. (2000). Maternal management of the home as a developmental play space for infants and toddlers. *American Journal of Occupational Therapy*, 54(3), 290-299.

Abstract:

Objective: One purpose of this qualitative study was to describe the work done by mothers as they manage the spaces and objects of the home to support the development of infants and toddlers at play. **Methods:** Eighteen mother-infant dyads participated in the study. Data were collected via monthly in-home videotaping of infants and monthly interviews with mothers, from 1 to 18 months of infant age. Data were analyzed with a grounded theory approach and computer-assisted video and text analysis. **Results:** The results describe the everyday tasks of mothers of infants and toddlers, such as selecting commercial toys and household objects for play, positioning infants for play, maintaining and making play objects available, furnishing the home with child care equipment, controlling infant access to the spaces of the home, and monitoring for safety. **Conclusion:** This description contributes to our understanding of maternal work, infant and toddler development in context, co-occupations, and the neglected spatial dimension of occupation.

Summary/Significance:

The stated purpose of this article was to increase awareness and our knowledge of daily occupations or everyday tasks that mothers perform to enhance infant and toddler development. Mothers understand that play is one way children learn about their environment, and paying attention to objects (toys) of interest, changes in interest (maturity and development) toward specific objects, and the amount of household space allocated to play will provide a way to select and modify appropriate parent/child

interventions. I appreciated that mothers manage home play and the space assigned to play whether they do it deliberately or it just evolves, but regardless, it has an impact on the infants' development. I see the role of the PAIR Program as a constructive intervention in assisting mothers in the selection of toys or play objects and offering ways to modify the safety of the space dedicated to play. It will enable the mother to enjoy the quality of time spent with the infant or toddler and make it the best that it can be.

However, I did find one part of this qualitative study difficult to understand and, if accurate, this article would not fit my program. The Pair Program focuses on the needs of working parents and those experiencing a lower socio-economic standing, whereas, this article states that, "Mothers in lower socio-economic status (SES) homes expressed more concerns over infant safety and appeared to exercise more caution and restraint of the infant's play than did mothers in higher SES homes" (296). I find this data inconsistent with all the other developmental material I have read on social/economic levels.

Pizur-Barnekow, K. (2006). Maternal attitudes and self-definition as related to perceptions of infant temperament. *American Journal of Occupational Therapy*, 60(5), 494-499.

Abstract:

Maternal childbearing attitudes and self-definition as related to maternal perceptions of infant temperament were investigated in a pilot study. Maternal attitudes, self-definition, and perceptions of infant temperament were determined through mothers' self-report. Results indicated that maternal attitudes-including self-confidence and feelings toward infants and children-were positively related to maternal perceptions of infant temperament. That is, mothers who reported low self-confidence and negative feelings toward infants and children in general also rated their infants' temperament as more negative. In addition, maternal work experience involving children was inversely related to maternal perceptions of infant temperament, in that those mothers who had more work experience with children rated their infants as being more difficult. The findings are consistent with Sameroff's transactional model of development (Sameroff &

Chandler, 1975) wherein both the psychological and behavioral aspects of mother and infant create the milieu for further development.

Summary/Significance:

In my opinion, the general population believes that mothering and nurturing are instinctive, but this article examines what it means to be a mother and points out that not all women respond to their role in the same manner. This information is important because occupational therapists may want to assess the mother's attitude toward childbearing and the infant's temperament when considering an early intervention treatment. All women undergo some modification in their lives when they become pregnant and experience the eventual birth of their child, so identifying and acknowledging their state of mind and mood, changes in their role as an individual and how they perceive those changes (welcoming, threatening, unfamiliar, happy), and social interactions with spouse and new baby will facilitate a better understanding of the parent-infant relationship. Newborns require a great deal of care and attention and some mothers may feel overwhelmed or ill-prepared if they feel they are not meeting their infant's needs. Often there is guilt because mothers want to do everything right and that definition of the perfect mom may be hard to fulfill. It stands to reason that if a mother is anxious she may transfer that distress to her child or feel that the child has a difficult temperament. This study found that mothers with high-risk infants described them as less adaptable, whereas mothers that viewed their child as cooperative, responsive, and receptive felt that the child's temperament was positive. Early assessment of the attitudes of the mother is another tool in determining what form of early intervention might be appropriate. The PAIR Program could help to reassure a mother that spending quality

time with her infant is the most productive way to reduce the anxiety associated with motherhood and help to develop a stronger parent-infant connection.

Puckering, C., Webster, J., Wilson, P. (2011). Secure mother-infant attachment and the ABC programme: a case history. *Community Practitioner*, 84(1), 35-37.

Abstract

This case history describes the first application of the Attachment and Bio-behavioural Catchup (ABC) programme in the UK. It illustrates the key role and value of primary care clinicians in early infancy. The health visitor's careful and reflective observations, and her close links with a GP who shared her understanding of why these were significant, were the only means for this family to access help. The need for interventions in attachment is only likely to be identified by health visitors, with their unique opportunities to see families in their own homes.

Summary/Significance:

This case study is significant to the PAIR program because it addresses parents that have attachment issues, how to identify them, and the long-term effects when attachment relationships are absent. Specific strategies this program addresses with mothers include

1. Responding to infant's needs for nurturance even when the baby's cues may not be clear
2. Following the infant's cues in interaction
3. Reading child signals for engagement or disengagement, including fearful responses
4. Exploration of the parent's voices and how they baby responds to these voices
5. The importance of touch

This particular case study, the mother had attachment issues with the child due to the unexpectedness of the pregnancy. At times, parents may not be coping with a pregnancy and avoiding correct parenting skills all together. This case study explains the significance to

evaluate each family's situation and providing support in different approaches. In this case, the mother knew she was not providing an adequate relationship with her infant however with the support of the program and other professionals the mother realize the affect that her actions may have. This article explains that it is vital for early development specialist to support families that may be having attachment issues to prevent social and emotional delays for typically developing infants.

Steele, H. (2010). Revisiting the influence of the early mother-infant relationship on later development. *Attachment & Human Development, 12*(1-2), 1-2.

No Abstract

Summary/Significance:

This editorial supports an parent infant program and describes the theory that the mother-infant relationship is at the core of a child's development and that the future success or long-term insecurities of that individual are directly related to the type of mother-infant attachment that was experienced. Steele points out in this editorial that there is measurable data linking behavioral indicators between the mothers and their infants that will determine infant-mother attachment or disconnect at a very early age. Studying these differences in infant-mother attachment security may be an additional means of identifying early risk infants and providing early-assessment intervention. Providing tools for evaluating behavior, analyzing feedback, and offering guidance to parents are ways to positively impact the family-centered approach with the therapist as a strong connection within that relationship. The author recognizes that video-film and audio-recording technology could also be implemented by the practitioners as a way to link research and actual clinical observations. The opinion of this author is that there are

two ways to analysis the affects of attachment. Micro-analytic observation, considering the individual mother-infant relationship within a brief time period, is the most appropriate method to interpret, extend, and apply the early interactions between a mother and her infant. Conversely, the editorial also states that a mother's perception of her infant influences later development and such feelings influence individuals three and four decades later. This macro-analytic approach tracks relationship patterns over an extended period of time. These editorial comments further support the need for the PAIR Program because research implies that long-term emotional/psychological outcomes are influenced from birth and early intervention to assist in a positive parent/infant relationship is essential to the well-being of the child.

Wong, M.S., Mangelsdorf, S.C., Brown, G.L., Neff, C., Schoppe-Sullivan, S.J. (2009).

Parental beliefs, infant temperament, and marital quality: associations with infant-mother and infant-father attachment. *Journal of Family Psychology*, 23(6), 828-838.

Abstract:

The present research examined parental beliefs about the importance of the paternal care giving role, mothers' and fathers' reports of infant temperament, and observed marital quality as predictors of infant-mother and infant-father attachment security, over and above the effects of parental sensitivity. Infants' attachment security to mothers and fathers were observed in the Strange Situation at 12 and 13 months, respectively ($N = 62$ two-parent families). Hierarchical regression models revealed that mothers who viewed the paternal care giving role as important were less likely to have securely attached infants, but only when infant fussiness was high. In addition, fathers who viewed the paternal caregiving role as important were more likely to have securely attached infants, but only when infants' fussiness or marital quality was high.

Summary/Significance:

This article defines attachment as the early, close relationship between the infant and caregiver and emphasizes that a secure relationship leads to a more confident socio-emotional individual as he or she grows. The uniqueness of this study is that it investigates and takes into consideration the association between what the mother believes to be true about the importance of the father's care giving role and how it might affect her infant-mother attachment. For example, more women are now in the workforce, and if they are hesitant about dividing time spent with the infant because they do not consider child care a man's role or are fearful that it might not be done correctly, then both mother and father may be reluctant to share these activities. If the parents have a strong marriage, allocate duties, working within the confines of the budget, and keeping stress within manageable limits, then it is hypothesized through this study that there will be greater infant-parent attachment security. The study also suggests that fathers who want to participate are more prepared for this paternal role and will provide better quality care and develop a closer relationship with their child. As the study indicated, it also stands to reason that the more hours a father worked, the less likely his infant would develop a strong attachment. Research also implied that a child's temperament could affect the way a parent responds to their infant, and a fussy or distressed child could experience an insecure infant-mother attachment especially if the mother received low social or family support. Conversely, parents with strong resources, higher social support, harmonious marriages, and less stress should have more favorable outcomes with secure infant-parent attachment. This article confirms the need for early intervention by suggesting that parents who need to be away from their children will benefit by sharing infant and childhood activities and that the PAIR Program would

provide methods to decrease distress in infants and offer the parents a way to relax and spend quality time with their child. It also substantiates the need to use an individualized intervention approach to care giving because each parent-child relationship is as unique as the participants and some experience greater risk and/or benefits than others. I recognize that there are cumulative interactions that affect this relationship and more than one approach may need to be suggested.

Occupational Therapy & Early Intervention

Case-Smith, J., & Holland, T. (2009). Making decisions about service delivery in early childhood programs. *Language, Speech & Hearing Services in Schools*, 40(4), 416-423.

Abstract:

This article presents a rationale for specialized services personnel to use fluid models of service delivery and explains how specialized services personnel make decisions about the blend of service delivery methods that will best serve a child. **METHOD:** The literature on occupational therapy, physical therapy, and speech-language pathology service delivery in early childhood programs is reviewed, synthesized, and applied to current practice. The literature explains that direct and consultative services provide unique benefits to children and should be flexibly scheduled based on each child's current priorities. Flexible service delivery models allow therapists to meet the evolving needs of children within dynamic environments. **CONCLUSION:** To establish fluid service delivery models, therapists need to (a) plan collaboratively with teachers so that the model selected meets the teacher's preferences, (b) design flexible scheduling systems that emphasize inclusive practice, and (c) maintain precise documentation about when and how services are provided.

Summary/Significance:

This article addresses services provided for children with disabilities in community settings and or school settings. This article focuses more on the therapist and child's relationship unlike the family centered practice as previous articles have stressed. This article more so discusses the importance of a therapist helping assist a child with a disability to be involved and included with typical peers and how those services are

carried out. This article does provide valuable information in terms of therapist's relationship when supporting the child. It defines social emotional growth as, "sustained reciprocal interaction and responsive communication between the therapist and the child." It elaborates by explaining that to develop a foundation for a successful relationship, interactions are playful and not evaluative, motivating, engaging, letting the child take lead while also providing the just right challenge. This is perfect advice when working with infants on a more individualized basis or modeling interaction for families.

Cohn, E. (2001). From waiting to relating: parents' experiences in the waiting room of an occupational therapy clinic. *American Journal of Occupational Therapy*, 55(2), 167-174.

Abstract:

Objective. The purpose of this study was to gain an understanding of parents' perceptions of outcomes of occupational therapy intervention using a sensory integration approach.

Method. Interviews with parents regarding their children's participation in occupational therapy were analyzed using grounded theory. **Results.** The parents' experiences of sitting in the waiting room while their children received occupational therapy emerged as a powerful outcome theme. Through their interactions with other parents, this particular group of parents gave and received naturally occurring support for parenting children with sensory integrative dysfunction. Additionally, by virtue of repeated experiences of waiting, parents moved to positions of liminality, shared weekly rituals, engaged in downward social comparison, and reframed their views of their children.

Conclusion. Implications are proposed for expanding the definition of family-centered intervention; attending to the meaning of the cultural world of practice; and directing future research related to how a physical setting, such as a waiting room, might shape naturally occurring support and social interaction.

Summary/Significance:

Although the original purpose of this study was to interview parents and ascertain how they viewed the outcomes of occupational therapy using the sensory integration approach, a unique side benefit was discovered. It appears that the shared experience of

sitting in the waiting room and interacting with other parents may expand the definition of family-centered intervention. Instead of isolating oneself, parents took advantage of this naturally occurring setting and its predictability to share information about their children's conditions, receive spontaneous social support, identify downward social comparison, and learn to reframe the condition or expectation affecting one's child. In other words, parents could outwardly express health and social concerns affecting their child, share information about existing services, develop friendships, realize that their child's condition may not be as severe as perceived, and more realistically assessing the expectations that therapy may help greatly or be of little consequence in a relaxed and natural environment. The parents in this study were Caucasian, moderate to affluent socioeconomic status, most had master's degrees and all had college educations. Their children had participated in 32 1-hour therapy sessions so I am inferring that each parent had sufficient time in the waiting room to form the opinion that parenting was difficult but sharing common experiences made it easier to accept. In addition, the interviewer conducted home visits and asked the parents to describe a typical day with their child and why they had decided to include occupational therapy in their treatment and what they hoped to gain from such intervention. Within that framework, the meaningful waiting room experiences emerged, and as Lawlor and Mattingly were credited as saying, the practice of occupational therapy must pay attention to the entire context surrounding the intervention process and not just the therapeutic aspect. It was determined that family-centered clinics are not a natural setting but the spontaneity of the waiting room may be a powerful tool in assisting families seeking services. This article took a new approach to family-centered therapy and how occupational therapists need to constantly seek out new

ways to help their clients. The PAIR Program is currently focused on working families that might need additional help in developing an early bond with their infant. Although this study is very unique, one might imply that this group of parents was probably more social, less self-conscious, and more willing to seek out services due to their financial range and education. Taking these considerations into account, the social interactions and the supportive advantages might not be present in a waiting room occupied by those of lower socioeconomic status or education. However, I like this study and feel that eventually the PAIR Program could incorporate small groups of parents rather than concentrating on individual families. The additional support from other working moms and dads might prove to be beneficial in that experiences and ideas could be shared and relationships could develop that would be beneficial to the children.

Edwards, MA., Millard, P., Praskac, L. A., & Wisniewski, P.A. (2003). Occupational therapy and early intervention: a family-centred approach. *Occupational Therapy International*, 10(4), 239-252.

Abstract:

The purpose of this study was to identify factors that encourage or inhibit family-centred practice in the occupational therapy intervention process. A qualitative paradigm using grounded theory methodology was utilized to gather and analysis data. Participants included six families and four occupational therapists. Data analysis from the family interviews identified six categories: education, communication, relationship, parental roles, follow through, and scheduling. With further analysis two central themes of time and support were extracted from these categories. Analysis of the occupational therapists' interviews revealed six categories: education, communication, relationship, sibling/family participation, follow through, and empowerment. The central themes emerging from these categories are time and natural routine. The themes obtained from the families and occupational therapists were then compared and family individuality was identified as the core concept. Viewing families as a unique entity is necessary to assist occupational therapists in providing the most effective family-centred occupational therapy.

Summary/Significance:

This article recognized that occupational therapists play a critical role in influencing the development of children in their early years. The study directed its attention to the issues that help or hinder the parents, child, and therapist during the early intervention process. In the mid-1970s, therapy practices supported a child-centered approach and treated the child as an individual and not as part of the family unit. Later laws acknowledged that the family was the most important element in a child's life and was the contributing factor in the success or failure of the intervention. This article defines early intervention as a service that utilizes such techniques as family training, counseling, and home visits to increase the child's likelihood of becoming socially and developmentally strong. The PAIR Program looks to incorporate all of these service tools. For these services to benefit the infant the study found that therapists had to involve the entire family in the planning process or run the risk that a lack of collaboration would prevent the parents and the therapists from understanding what was expected of them. The therapist also had to take into consideration that some mothers and fathers lack the resources of time, energy, and confidence and might have difficulty interpreting how the treatment plans should be administered. This article reported that some caregivers felt there was not enough time in the day to balance all the activities of daily living but the occupational therapists suggested practical, everyday solutions that fit into their natural family environment. The PAIR Program has been designed to show parents that quality time with their infant can be a normal part of their ordinary day to day routine. One of the teaching tools used to assist parents was a handout encouraging caregivers to engage in fun activities with their infant. A sampling of some of the suggestions included talking and singing when feeding or diapering the baby, gathering items with interesting textures

such as feathers, cotton balls, or nylon scarves and gently brushing them across the infant's body, turning off/on light switches, water faucets (that feels cold) touching silky curtains and then talking about touch, and sound, or whatever sensation one might feel, and finally, after the baby's bath, apply baby-safe lotion and massage and communicate with your infant. This article also pointed out the need to include siblings as part of the early intervention with infants. The PAIR Program was aware that families might have other children, so when handouts were given, a small toy was attached for the infant and extra ones were provided for siblings if necessary. This study stressed the importance of family and that working together as one entity along with the early intervention therapist would facilitate a stronger outcome for their infant.

Gorga, D. (1989). Occupational therapy treatment practices with infants in early intervention. *American Journal of Occupational Therapy*, 43(11), 731-736.

Abstract:

This paper explores occupational therapy treatment practices for infants (birth to age 2 years) in early intervention programs. Generic treatment is viewed as the facilitation of the infant's independence through improved motor control, sensory modulation, adaptive coping, sensorimotor development, social-emotional development, daily living skills, and play. Treatment practices in specialized settings, that is, in a neonatal intensive care unit and in a follow-up program for high-risk infants, are outlined. The efficacy of intervention is discussed in light of recent research findings and of the comments made by critics of early intervention.

Summary/Significance:

The PAIR Program has focused on typically developing infants, and even though some infants in the program may later be diagnosed as high-risk, it is too early in their infancy to make that assumption. This paper concentrates on a specialized setting for infants in a neonatal intensive care unit, but the specific needs of these infants can also

apply to the general population. This article investigates the performance of early occupational intervention taking into consideration those occupations that apply to most settings and those practices that apply to a neonatal intensive care unit. Although the PAIR Program does not address high-risk infants at this writing, developmental milestones such as motor control; the ability to effectively use the body, sensory modulation; gaining equilibrium, adaptive coping; skills to make one independent and confident, and daily living proficiencies such as feeding oneself are developmental objectives for all infants in any population whether typical or high-risk. The infant's ability to behave independently and appropriately and provide coping skills for daily life through social interactions should support the necessity to establish an early treatment intervention. The article encourages two treatment plans; one is an environmental approach and the other is a clinical approach. The PAIR Program concentrates on the home or center based approach. Its purpose is to improve the quality of interaction between infants and their families and provide information that will expedite that outcome.

Hanna, K., & Rodger, S. (2002). Towards family-centered practice in pediatric occupational therapy: a review of the literature on parent-therapist collaboration. *Australian Occupational Therapy Journal*, 49(1), 14-24.

Abstract:

The importance of parent involvement in intervention with children has always been recognized by occupational therapists. Current trends in pediatric service delivery have been towards family-centered care, with a central component of this approach being parent-therapist collaboration in planning and evaluating intervention. This paper reviews issues and provides suggestions for clinical practice from the literature on parent-therapist collaboration, including consideration of parents' diversity and unique perspectives, development of effective parent-therapist relationships, establishment of shared goals and priorities when planning intervention, and development of services that

support parent-therapist collaboration. Further research is needed in Australian settings to explore the nature of parent-therapist partnerships, the impact of parent participation throughout the intervention process and the extent to which collaboration with parents results in better therapy outcomes for the child and their family.

Summary/Significance:

In the past decade services provided for children have taken a shift; instead of only focusing on the child and the child's goals, therapy and interventions are being directed toward the family as a unit. It is not uncommon for professionals in any field to feel that they are the expert and may know what is best for a child. This could not be farthest from the truth. The real expert of any child is the primary caregiver. Parents are the caretakers and nurturers and are with their child and are with them for the majority of their daily routine. It seems only natural that the parent should be the most valuable team member in a parent-therapist collaboration. It is important for therapists to provide services in the family's natural environment, this typically may be their home however support to use community resources would be beneficial. Major themes that were stated in the article to have a successful parent-therapist relationship is to recognize culture and diversity (working parents, low SES, parenting styles), provide services in terms of the family's availability and needs, making decisions is a joint effort reflecting the family instead of child's goals, and services provided are intended to enhance family systems and encourage community participation. When creating a new program the themes listed in the article are valuable components to use when working with infants and their families. It is important to have a positive relationship with parents to create a effective collaboration with the main goal in mind which is meeting the needs of the child.

Jung, L. (2007). Occupational therapy in early intervention: providing services within natural learning opportunities. *OT Practice*, 12(6), 26-31.

Abstract:

Lee Ann Jung shows how using a consultative model addresses occupational performance needs in the child's natural environments.

Summary/Significance:

This article addresses the current natural environments being provided in early intervention and the benefits of collaborating with families in terms of consulting to broaden and enhance services. This article initially focuses on the natural environments defined by IDEA which, “mandates that all early intervention must be provided in natural environment, defined as home and community settings in which children without disabilities are present.” Therapists today are still shifting their delivery of services as defined by The IDEA act of 2004. It was typical 10 years ago to complete all therapy in clinics through appointments on a weekly-monthly basis however today early intervention service is typically provided in the home or community center. The article stressed the importance of when providing services in the home/school environment it is still needed to remain “naturalistic.” There is not any benefit to pulling a child to a separate room at a childcare facility or providing services in the home when the parent is upstairs. As the article states even though situations mentioned are in a naturalistic setting (school or home), services are not meeting the purpose of the IDEA law. It is important for a therapist to understand the importance of collaborating with caregivers in these naturalistic environments and to maximize natural learning opportunities. As the article states, therapists need to work with caregivers to evaluate the setting and embed

therapeutic opportunities in a typical occupation or routine. Even if a therapist visits for an hour, by teaching and providing strategies for the caregiver, this session can carry into numerous learning opportunities provided by the caregiver. This article supports a parent and infant program by stating that therapists can work with parents to “provide strategies that embed therapeutic principles into natural learning opportunities and enhance the parent-child interactions.” Therapists can help parents realize learning or bonding opportunities that can occur in everyday occupations like bathing, eating, and playing. This article suggests that the most effective route for any early intervention is to support the caregivers’ ability to insert interventions into routines that already exist.

Magill-Evans, J., Harrison, M.J., Rempel, G., & Slater, L. (2006). Interventions with fathers of young children: systematic literature review. *Journal of Advanced Nursing*, 55(2), 248-264.

Abstract:

Interventions with fathers of young children: systematic literature review
 Aim. This paper reports a systematic review of the effectiveness of interventions for fathers with infants or toddlers. Background. Nurses and other healthcare professionals work closely with families of infants and young children. This contact provides an opportunity to promote positive parent–child interactions and optimal child development. Previous research has demonstrated that interventions with mothers of infants can be effective in promoting sensitive, responsive parent–child interactions and positive child development. Recent research has indicated that fathers also contribute to child development, but little is known about what types of interventions with fathers are effective in promoting sensitive, responsive father–child interactions. Methods. Literature from 1983 to 2003 in the Medline, CINAHL, and PsycINFO databases was searched to locate intervention studies published in English that included a control group or used a pretest and post-test design; measured an aspect of father–child interaction; analyzed father outcomes separately from mother outcomes; had a sample greater than one; and included infants or toddlers. Additional studies were located by cross-checking reference lists. Results. Fourteen papers describing 12 interventions met the inclusion criteria. The interventions included infant massage, observation and modeling of behavior with infant, kangaroo care, participation with child in a preschool program, discussion groups, and parent training programs. Conclusion. Although the number of intervention studies is

limited, there is evidence that, if interventions involve active participation with or observation of the father's own child, the intervention may be effective in enhancing the father's interactions with the child and a positive perception of the child. There is less information on how interventions influence child development. More research is needed to determine the influence of interventions over time, the differential influence on mothers and fathers, and the optimal dose of intervention required.

Summary/Significance:

The conclusion of this literature review article found evidence that fathers who actively participated with their own child in activities such as infant massage, observation and modeling of behavior with their infant, participation in preschool or community programs, discussion groups, and parent training programs developed a positive perception of their child and that involvement implies a strong parent/infant bond. In my own observations, I noticed more and more fathers participating in community activities such as Kindermusik, library story time, and the YMCA/JCC sponsored recreational activities (pool time). With more and more opportunities for fathers to take an active role in the lives and progress of their child, fathers will have a better understanding as to the ways one may interpret a child's behavior and contribute to positive and secure social development as they mature. I feel confident including this article in my research because the article's implications show that some interventions for fathers that incorporate active participation enhance father-child interactions and the more times the father involves himself in such activities the more likely the father will develop a strong relationship with his child. Literature also suggests that interventions should be cognizant of cultural values and be aware that some cultures do not put as much emphasis on the father's role as nurturer or caregiver. As a health care provider, it is important to recognize and

identify parents that need early intervention and help them develop the skills that may influence optimal growth and development for their children.

Maulik, P.K. (2009). Community-based interventions to optimize early childhood development in low resource settings. *Journal of Perinatology*, 29(8), 531-542.

Abstract:

OBJECTIVE: Interventions targeting the early childhood period (0 to 3 years) help to improve neuro-cognitive functioning throughout life. Some of the more low cost, low resource-intensive community practices for this age-group are play, reading, music and tactile stimulation. This research was conducted to summarize the evidence regarding the effectiveness of such strategies on child development, with particular focus on techniques that may be transferable to developing countries and to children at risk of developing secondary impairments. **STUDY DESIGN:** PubMed, PsycInfo, Embase, ERIC, CINAHL and Cochrane were searched for studies involving the above strategies for early intervention. Reference lists of these studies were scanned and other studies were incorporated based on snow-balling. **RESULT:** Overall, 76 articles corresponding to 53 studies, 24 of which were randomized controlled trials, were identified. Sixteen of those studies were from low- and middle-income countries. Play and reading were the two commonest interventions and showed positive impact on intellectual development of the child. Music was evaluated primarily in intensive care settings. Kangaroo Mother Care, and to a lesser extent massage, also showed beneficial effects. Improvement in parent-child interaction was common to all the interventions. **CONCLUSION:** Play and reading were effective interventions for early childhood interventions in low- and middle-income countries. More research is needed to judge the effectiveness of music. Kangaroo Mother Care is effective for low birth weight babies in resource poor settings, but further research is needed in community settings. Massage is useful, but needs more rigorous research prior to being advocated for community-level interventions.

Summary/Significance:

This study's main goal was to investigate and find past research articles throughout five databases to establish the role of early intervention and the affect that it has on early child development. The study pointed out that many reviews found look at topics involving nutritional support, immunization, and proper maternal care. This study however, wanted to focus on finding articles that research the effectiveness of play, cognitive stimulation, and massage on childhood development. Many studies proved that

the role of early home intervention that includes supportive parenting skills can increase intellectual growth for the developing infant. Other studies discussed the effectiveness of creating safe home atmospheres, screening for at-risk families, and providing services through community supports. This study stated that parents that received support with their infant/child were more aware of their child's well-being and increase knowledge about child-rearing practices and decrease risk of developmental delay. These collections of studies stated that parent/child interaction through reading, massage, and play weigh heavy on a child's overall development. This article review supports the need for a parent- infant program for parent/infants that are at high-risk and need extra support to prevent development, intellectual, or psychosocial delay in their children.

Mayer, M.L., White, B.P., Ward, J.D., & Barnaby, E.M. (2002). Therapists'

perceptions about making a difference in parent-child relationships in early intervention occupational therapy services. *American Journal of Occupational Therapy*, 56(4), 411-421.

Abstract

OBJECTIVE: The purpose of this study was to better understand occupational therapists' experiences of making a difference in parent-child relationships. **METHOD:** In this qualitative, instrumental case study, occupational therapists working in early intervention were asked to reflect on and describe occasions in which they believed that they made a real difference in parent-child relationships. The primary investigator interviewed nine experienced pediatric occupational therapists. **RESULTS:** All nine therapists highly valued the parent-child relationship and focused on these relationships in therapy. Eight themes emerged that described the therapists' practice insights and methods by which the therapists facilitated the parent-child relationship. **CONCLUSION:** The occupational therapists in this study reflected insights that resonate with the literature regarding the role of the parent-child relationship in the development of children. The authors raise the question about the adequacy of instruction at the pre-service level that prepares therapists to both assess and facilitate the parent-child relationship in early intervention.

Summary/Significance:

The purpose of this study was to determine the effectiveness of the occupational therapists' role in making an impact in parent-child relationships. The significant difference within this study was that effectiveness was determined through the eyes of the therapist and how they viewed their part. Using a qualitative study method, the therapists were interviewed and asked to focus on parent-child relationships during the intervention service. They were asked to describe and examine how they perceived the success of their program. Each occupational therapist participant was asked to tell a story relating to their intervention and to answer the following questions based on guidelines revised from Niehues, Bundy, Mattingly, and Lawlor (1991); how did you develop your relationship with your client; any restrictions or limitations to that development; what circumstance stood out in your memory to ensure your success? The purpose of asking questions in this manner was help the therapist reflect on his or her experience and make time and space for thinking and describing (Bentz & Shapiro, 1998). The literature on early intervention generally finds positive relationships between the child and parent to be instrumental in rearing children with higher IQ scores, more resiliency, better coping skills, and high-level sensorimotor functions. This study found that therapists agree with this approach and support the research confirming the relevance of positive parental-infant attachment. To make interventions more successful, therapists attempted to reassure parents of their dedication by holding or praising their child. Therapists also noted that their attitudes and approach to intervention also changed as they gained more experience, methods of practice were modified, or they had a child of their own. As I implement the concept of the PAIR Program, some of my hours are spent at the St. Charles YMCA Child Development Center and part of my participation time does consist of childcare. I take

the opportunity to make social contacts among the parents and staff, getting down on the floor for playtime with the children and holding, changing, feeding the infants. All these activities increase my awareness of the importance of early intervention and the need to become more interactive with the parents.

Mendelsohn, A.L., Huberman, H.S., Berkule, S.B., Brockmeyer, C.A., Morrow, L.M., & Dreyer, B.P. (2011). Primary care strategies for promoting parent-child interactions and school readiness in at-risk families: the bellevue project for early language, literacy, and education success. *Archives of Pediatrics & Adolescent Medicine*, 165(1), 33-41.

Abstract:

Objective: To determine the effects of pediatric primary care interventions on parent-child interactions in families with low socioeconomic status. *Design:* In this randomized controlled trial, participants were randomized to 1 of 2 interventions (Video Interaction Project [VIP] or Building Blocks [BB]) or the control group. *Setting:* Urban public hospital pediatric primary care clinic. *Participants:* Mother-newborn dyads enrolled post partum from November 1, 2005, through October 31, 2008. *Interventions:* In the VIP group, mothers and newborns participated in 1-on-1 sessions with a child development specialist who facilitated interactions in play and shared reading by reviewing videos made of the parent and child on primary care visit days; learning materials and parenting pamphlets were also provided. In the BB group, parenting materials, including age-specific newsletters suggesting interactive activities, learning materials, and parent-completed developmental questionnaires, were mailed to the mothers. *Main Outcome Measures:* Parent-child interactions were assessed at 6 months with the StimQ-Infant and a 24-hour shared reading recall diary. *Results:* A total of 410 families were assessed. The VIP group had a higher increased StimQ score (mean difference, 3.6 points; 95% confidence interval, 1.5 to 5.6 points; Cohen d, 0.51; 0.22 to 0.81) and more reading activities compared to the control group. The BB group also had an increased overall StimQ score compared with the control group (Cohen d, 0.31; 95% confidence interval, 0.03 to 0.60). The greatest effects for the VIP group were found for mothers with a ninth-grade or higher reading level (Cohen d, 0.68; 95% confidence interval, 0.33 to 1.03). *Conclusions:* The VIP and BB groups each led to increased parent-child interactions. Pediatric primary care represents a significant opportunity for enhancing developmental trajectories in at-risk children.

Summary/Significance:

Although the program being created for my capstone transcends any one particular population, it has been developed to meet the needs of working parents and those that may experience lower socioeconomic status. This article recognized that there are disparities in school readiness between those children that have not had significant verbal interactions between themselves and their parents in the context of play and shared activities and those that have received a substantial amount of interaction time. This article focused on the need to identify poverty-related issues that may cause a child to fall behind in his or her cognitive or psychological development. As with the a parent and infant Program, this article supports the need for early childhood preventative interventions to promote early parent-child interactions. Two separate groups were established in this project. The statistical data shows differences, but the criteria for each group was the same in that it observed infants from birth to 3 years, provided learning materials, and expected feedback from the parents through pamphlets or questionnaires which were distributed to further encourage observation of the children. Although there were differences in each study group, the overall result was an enhanced parent-child bonding which is critical for early development. One important outcome from this study that validates the necessity of the my capstone program showed that pediatricians should consider intervening with families in early infancy to enhance development. The parent and infant program emphasizes the need to begin bonding with one's infant as soon as he or she is born, and like this project, I will use questionnaires, observe the parent-infant bond through home visits, and provide learning materials and other sources for further education.

Nelson, A., Copley, J., Flanigan, K., & Underwood, K. (2009). Occupational therapists prefer combining multiple intervention approaches for children with learning difficulties. *Australian Occupational Therapy Journal*, 56(1), 51-62.

Abstract:

Background/aim: Research to date has not fully explored how occupational therapists provide intervention for children with learning difficulties in their day-to-day practice. The purpose of this study was to provide an in-depth description of the approaches and techniques used and how they are applied and combined to meet the complex and multifaceted needs of these children.

Methods: In-depth interviews and short questionnaires were completed by seven occupational therapists who had provided intervention to children with learning difficulties. Observations of therapy sessions were also conducted. Thematic analysis gained insight into the approaches and techniques therapists used and how these were applied in practice.

Results: Therapists use a wide range of approaches in various combinations because they feel that these best meet the needs of individual children. Sensory-based and cognitive approaches were most frequently drawn from and combined with other approaches such as visual information analysis, biomechanical and psychosocial approaches added for particular purposes. Approaches were usually combined simultaneously within an activity or session.

Conclusions: Therapists create their own 'multimodel' approach in order to best meet the needs of their clients. They are able to articulate the theoretical basis behind these choices, although lack of clarity exists about the frames of reference being used.

Significance:

This article is significant to the PAIR program because it identifies the vast difference among children and their needs. Also, this article addresses children with learning difficulties and that a wide spectrum of interventions are needed along with a combination of different models of practice. Even though the PAIR program does not specifically address children with learning disabilities it looks at infants that may be at-risk. This article also validates the need that a multimodel approach is a helpful to be prepared to help infant's individual needs on a case-to-case basis.

Peterander, F. (2000). The best quality cooperation between parents and experts in early intervention. *Infants & Young Children: An Interdisciplinary Journal of Special Care Practices*, 12(3), 32-45.

Abstract:

The process of early intervention, both for children with delayed development and for those with disabilities, depends to a great extent on parent-expert cooperation. Based on an analysis of literature, this article describes the main challenges facing successful parental cooperation and what is to be achieved by it. The results of a survey of 984 mothers in Bavaria are used to illustrate the personal views of mothers regarding cooperation and what they expect to achieve from parent-expert partnerships. The indicators for effective parent-expert collaboration that became apparent from this survey can and should be used in the development of systematic cooperation diagnostics for early intervention.

Summary/Significance:

This article establishes the important collaboration between professionals and parents to create a client centered approach in terms of early intervention. It was interesting to discover that in today's early intervention parents and "experts" do not fully take responsibility in terms of their child's therapy. Parents express feelings that therapists just delegating list of activities to "deal" with their child's developmental delays. If parents were feeling this way, not only are they not going to be receptive, therapists are not doing their job. It is important to establish a rapport with the parent/therapist relationship and develop a respectful attitude with one main focus: The child and their healthy developmental growth. This article pointed out important indicators for successful cooperation. One is strengthening parental competence; this can be through numerous resources, discussion, and advice from experts. This section discussed creating a stable environment that not only meets your child's needs but also the family as a unit. Parental Counseling is another great opportunity for parents to

express the reality of what their life is like and how to cope with day-to-day problems. Another indicator is the creation of a family environment that is conducive to a child's development. Living conditions is a huge factor in the positive development of a child; if they are being raised in an unhealthy and un-stimulating environment it can have lasting effects. This factor is also important in the PAIR program at St. Charles, parents need to understand the importance of creating a supportive, positive, and loving environment filled with learning opportunities. Beginning from birth children are taking in experiences. Parent/infant program that are being created needs to educate parents on these effects that can occur if an environment is unstable or unsupportive to their development. As a therapist it is important to be actively involved in the child's intervention to ensure that parents will continue to be actively involved in their child's development. If a parent and profession can establish a collaborative relationship, parents will be more involved, create a beneficial family environment, and early intervention will have long-term effects. Most parents want to be more involved so it is important to realize this when creating a parent/infant program to involve parents and much as possible to ensure more benefits for the child.

Wang, M., Summers, J.A., Little, T., Turnbull, A., Poston, D., & Mannan, H. (2006).

Perspectives of fathers and mothers of children in early intervention programmes in assessing family quality of life. *Journal of Intellectual Disability Research*, 50(Part 12), 977-988.

Abstract

Background Family quality of life (FQOL), as a family outcome measure of early intervention and other services, has increasingly drawn attention of researchers, policymakers and service providers. Developing an index of family QOL requires a measure suitable for use with multiple family members. The purpose of this study was to

test whether mothers and fathers similarly view the conceptual model of FQOL embodied in one measure. **Method** This study involved fathers and mothers of 107 families who have a young child (birth to five) with a disability enrolled in an early intervention programme. Data from couples completing the Beach Center FQOL measure were analysed using structural equation modelling (SEM) to determine similarities or differences between fathers and mothers with respect to their assessment of FQOL. **Results** The analysis of measurement invariance of the FQOL construct across the father and mother groups indicates that the Beach Center FQOL Scale measures equally the underlying FQOL construct across fathers and mothers in this sample. Fathers do not differ from mothers in perceived importance of factors related to FQOL items, nor did they differ in their overall satisfaction with FQOL. **Conclusion** These results suggest that fathers and mothers respond similarly to the latent constructs within the Beach Center FQOL Scale; therefore, it holds promise for use with both fathers and mothers in assessing FQOL across multiple family members. Further implications for research and practice are discussed.

Summary/Significance:

The article initially focused on the importance of a family centered practice meaning inclusion of all family members can increase infant mental development and overall increase rate of success for a healthy family unit. As stated in the article, “The principle of family centered practice embraces the concept that young children are best serviced in the context of the whole family, which implies both empowering families to working partnership with professionals, and enhancing the capacities of the family to meet the needs of the child (Wang, 2006). This statement poses huge significance to a parent- infant program. Research has shown to assess an infant holistically, a professional needs to acknowledge the family as a whole. In this article, mothers and fathers (total of 1409 families) were given the opportunity to express and evaluate their families’ quality of life. An important result that presented itself was that there were no significant differences between mothers and fathers and their perceptions of families’ quality of life. It is important to mention this because many time professional may only address the mother, this statistic indicates that both the mothers and fathers rate the families’ quality

of life as a very important aspect in their lives and as professionals we need to respect both parenting roles and their importance to their infant.

Parent Education

Akister, J. (2009). Protecting children through supporting parents. *Journal of Public Mental Health*, 8(4), 11-17.

Abstract:

All parents need social and emotional support to ensure optimal outcomes for children. For the majority of families, this support comes through family and social networks and the institutions of education and health. The challenge for society is to protect and assist parents and children when things are going wrong. Although there are known indicators for risk, it can be hard to be sure of when and how to intervene in family life to protect children and support parents. Such interventions may have to be made in relation to episodic events, for example a recurrence of a depression in one of the parents, and in the face of continuing difficulties, for example poverty or social exclusion. This paper examines two, quite different, challenges for professionals trying to support parents. First, it makes some suggestions about how it is that professionals can fail to recognise signs of child maltreatment. The identification of child maltreatment is critical in taking appropriate steps to protect children. Second, it considers the complexity of the task of supporting parents, including whether support should be based on the parents views about services that they would like, or on professional and policy-makers judgements about how to meet the parents' needs.

Summary/Significance:

This article provided good information for health care professionals creating a program centered around a family. Engaging parents and providing information regarding support and social services reassures health care professionals that they are doing their best to protect children. When a child is at risk and there are difficulties within the family environment, the therapist must develop services that perform within a diverse family framework. The therapist must be mindful of his or her relationship with the parent and not let personalities or external influences take attention away from the child's

intervention. Services are available but clients may feel threatened, insecure, or not trusting of those offering assistance. Preventative services, including early intervention, should be readily available and this article suggested that a “one-stop-shop” that is easily accessible would help parents find appropriate help for their children. Those parents who seek help no longer are isolated and the progress of their child can be monitored to insure the best possible treatment. According to this study, use of services by the family increase visibility and the assessment of risk and maltreatment can be identified and referred to therapy treatment. The program, “Every Child Matters” understands that family and caregivers are the most important influence in a child’s upbringing, so providing benefits and support to ensure a good outcome is critical (Department of Education and Skills, 2003). Child rearing is a very challenging responsibility and all parents need emotional and social guidance and support. Sometimes the challenge is simply being able to inform the parents of such services because they are unaware such assistance exists. This article also points out that, in some instances, it is difficult for clinicians to observe and interpret what they see and it may be difficult to identify abuse or high risk children. To define effective parenting, one must consider the behavior of the parent and their perception of their infant, the infant’s response to the parent’s cues, and the family environment. Sometimes, the therapist can misread these signals and families that have multiple problems may be afraid that their difficulties will cause additional troubles or that therapy for one child will not be beneficial to the welfare of the family unit. I feel the PAIR Program establishes a link between the parent/infant/ and occupational therapist in a neutral setting before home visits are set up so that the caregivers become comfortable with the benefits of the program. A level of trust through interactions, suggestions,

material, and conversation is created so that all participants contribute to the early intervention. Each individual should be a partner in the program and the occupational therapist observes the parent/infant relationship in a non-threatening home environment once confidence in the program has been reinforced.

Blackwell, P. (2005). Parent source: a practice in enrichment. *Zero to Three*, 26(1), 4- 8.

Abstract:

Community-based parenting education programs have a unique role to play in the promotion of infant mental health. In contrast to classes that seek to accelerate child development, the author describes enrichment programs that promote parent--child bonding and healthy social and emotional development. The ParentSource program was developed on the belief that relationships are the foundation for healthy infant development. ParentSource began as an infant massage course and has grown into 3 separate components: (1) a 6-week sensory-based class for parents and babies from birth to 12 months of age that emphasizes the importance of parent--infant interaction as the foundation of infant development; (2) a 6-week class for parents and toddlers that focuses on the language and mobility skills of toddlers as well as positive discipline techniques and helping toddlers play together; and (3) on-site parenting consultation at the pediatrician's office, infant massage instruction, and parenting seminars. The author shares strategies for developing a successful early enrichment practice for developmentalists who wish to work in a meaningful way with families as they seek to best support their child's development.

Summary/Significance:

ParentSource has created a program that is focused around the term enrichment; to enhance infant mental health to create a healthy foundation for an infant's development. The ParentSource validated the importance of creating a program that focuses on infant health promotion, prevention, and intervention. The PAIR program is also aiming to create a program that has a preventative approach. Infant mental health can be impacted by lack of parental interaction, environmental barriers, and lack of learning opportunities. The ParentSource article explains that even though prevention and health promotion is the best approach it may not always be funded. It is worthy to research

grants that would support a parent infant program especially to help support infants that may be a higher- risk due to stresses of the low-income families. Finally, this article provides could insight in reaching out to families through community supports. An great community resource that parents attend frequently are YMCAs, by using these resources and talking to parents about their concerns provide more evidence that these programs are needed. The ParentSource encourages the need for programs to prevent children to acquire developmental delays; intervention does not need to start after an infant has a delay or disability.

Bohr, Y., Halpert, B., Chan, J., Lishak, V., & Brightling, L. (2010). Community-based parenting training: do adapted evidence-based programs improve parent-infant interactions? *Journal of Reproductive & Infant Psychology*, 28(1), 1-12.

Abstract:

Evidence based parenting program frequently undergo modification when delivered to community mental health centers. Adaptations are made to the original curriculum due to clientele demographics, practitioner judgment and resource restrictions. It is thus important to evaluate whether adapted interventions successfully meet their expected goals once they are implemented in the community. The current pilot study examined the effectiveness of an attachment- focused parent group training program that was based on an empirically validated parenting course (Right from the Start), but adapted for use in a children's mental health clinic with a diverse client population. Twenty-two caregiver-child dyads participated, with children's ages ranging from 4 to 41 months. As expected, following completion of the intervention, parenting stress had decreased, parenting confidence had improved and caregivers' cognitive growth fostering skills had increased. However, the program did not meet its primary goal of improving maternal sensitivity. Implications and directions for future research are discussed.

Summary/Significance:

This study examines the disparities between evidence-based interventions, those that are developed, controlled, and evaluated in a university or hospital setting, and community-based interventions that introduce restrictions and challenges that might not

meet the goals of the early intervention or have not been foreseen by healthcare clinicians. Such constraints are often influenced by social status such as single parent, lower income level which could affect transportation to the clinic and additional childcare, and attrition rates that may cause feelings of being overwhelmed with the responsibilities of parenting. This study concentrated on the effectiveness of an attachment-focused parent training program using a course that could be validated through observation. The primary goals of this intervention were to increase maternal sensitivity and infant security. This study referenced Ainsworth, Bell, and Stayton (1974) as defining maternal sensitivity as the mother's ability to respond to her infant's signals as quickly and as adequately as possible. Research infers that such responses help a child to nurture life-long, healthy, socio-emotional, and psychological development (Bowlby, 1969). After completing the intervention and reviewing the data collected, it was determined that the intervention was successful in decreasing parental stress, providing caregivers ways to improve the child's cognitive skills, and gave the parents more confidence in their ability to raise a child. However, the main goals of the intervention were not met because there was no measurable evidence that maternal sensitivity had improved. This information showed the need to modify empirically supported interventions in a community-based setting whether that modification is realized through a different training plan to reach a more diverse group or if more emphasis should be placed on the original evidence-based program. This development-focused study shows that therapists and their agencies need to be accountable and provide the interventions that reach the goals that were set forth. For me, this study showed that one needs to be flexible in providing care and although an intervention may appear to have a natural

validity or desired outcome, real-life diversity may require compromise. One of the components of the PAIR Program was a parental questionnaire designed to provide more information on parental understanding, involvement, and commitment. I placed the questionnaires in the parent mailboxes and set up a table at the entry to provide another means of distribution and to answer any questions or receive comments. I also provided an incentive for taking the time to fill out the survey in the form of an instruction sheet suggesting fun activities to do with their infant and a small toy for their child. I expected the questionnaires to be returned within the week and it took over a month to obtain a workable amount of data. My university experience had me believing that all elements of my research and preparation would be readily accepted by the parents, when in reality, the parents had to deal with other issues and not everyone was cooperative or open to my early intervention.

Graham, F., Rodger, S., & Ziviani, J. (2009). Coaching parents to enable children's participation: an approach for working with parents and their children. *Australian Occupational Therapy Journal*, 56(1), 16-23.

Abstract:

In this paper, Occupational Performance Coaching (OPC) is presented as a means whereby occupational therapists can support parents in achieving goals for themselves and their children. OPC is a coaching intervention that assists parents to recognize and implement social and physical environment changes that support more successful occupational performance for themselves and their children. OPC utilizes collaborative problem-solving within a coaching relationship in which parents are guided towards identifying and implementing effective, autonomous solutions to occupational performance dilemmas. OPC is described in relation to the principles of contemporary practice; in particular that intervention is both family and occupation-centered, and leads, as directly as possible, to the enablement of children's participation at home and in the community. Tentative empirical support for coaching parents draws on the supporting evidence for similar interventions in cognate disciplines. The unique features of OPC, namely, overt collaborative analysis of performance with parents and parent-initiated solution finding, are highlighted and their potential contributions to interventions

currently employed by therapists are outlined. Recommendations are advanced as to how further research can support the adoption of this intervention strategy.

Summary/Significance:

A new program called OPC, or Occupational Performance Coaching, discussed a new approach in client-centered occupational therapy to address working with parents and their children. This model advocates for assisting parents in creating achievable goals that are more meaningful for their child. It further discusses the need for programs to embed family-centered practice to ensure that appropriate and realistic goals are made that value the family as a unit. It is important for parents to be able to evaluate the situation and to picture their child's ideal performance in a certain occupation. In family centered practice, the occupational therapist can take the role of the coach and help guide the family to their goals within the context of their environment. For infants, parents and caregivers impact their performance and environment greatly, therefore families need to have a collaborative input. "It is important that interventions used by occupational therapists clearly and directly enable participation of clients in life situations that they value." This article clearly addresses a very important approach that could be used in the PAIR program. Since many of the children that could be enrolled in the program may be at "high risk", and have not received a diagnosis, "Coaching" may be an ideal approach to this type of family centered practice.

Sensory Model of Practice & Coping Model of Practice

Cohn, E. (2001). Parent perspectives of occupational therapy using a sensory integration approach. *American Journal of Occupational Therapy*, 55(3), 285-294.

Abstract:

This qualitative study explored parents' points of view regarding their children's participation in occupational therapy using a sensory integration approach. Data were collected through parent interviews and were analyzed using grounded theory methods. The parents' perceptions of the benefits of therapy for their children were categorized into three interrelated constructs: abilities, activities, and reconstruction of self-worth. For themselves, parents valued understanding their children's behavior in new ways, which facilitated a shift in expectations for themselves and their children, having their parenting experience validated, and being able to support and advocate for their children. Implications for family-centered intervention and future research are proposed.

Summary/Significance:

Parents in this article were given the opportunity to speak freely on their perspective on the use of sensory integration methods used in occupational therapy. Parents were asked to describe a typical day with their child, why their child was referred to occupational therapy, changes they have seen, and changes they had hoped to see. The outcomes of parent's responses were categorized in abilities, activities, and self-worth. Even though abilities and involvement in activities is more noticeable to be observed, self-worth was most valued by parents for their child. Even though this article did provide valuable narratives, it was subjective to this sample and did not go into great detail of sensory integration. The main model of practice used in the PAIR program is the Sensory integration theory and this article underlines that parents may not fully understand the theory of this model. This article also addressed using the sensory integration framework however did not discuss how interventions were implemented. Also this article does not necessarily support my program because it focused more on older children to adolescents.

Day, S. (1982). Mother-infant activities as providers of sensory stimulation. *The American Journal of Occupational Therapy*, 36 (9), 579-585.

Abstract

A descriptive study was conducted to determine types and amounts of stimulation to five sensory systems of an Infant that occurred as a result of everyday mother-Infant activities. The Infant studied was between 4 and 6 weeks of age. Results demonstrated that, overall, the baby received more tactile stimulation than any other type, followed by proprioceptive, auditory, visual, and vestibular stimulation. When activities were compared on a daily basis, feeding was found to provide the greatest amount of stimulation followed by playing, holding/carrying, bathing and changing. When compared on a per minute basis, playing was found to provide more stimulation than any other activity, followed by holding/carrying, bathing, changing, and feeding. The manner in which the various activities were earned out had a strong influence on the types and amounts of stimulation that resulted. Characteristics of both the infant and the mother appeared to be important Influences on the types and amounts of stimulation the Infant received. It was concluded that both mother and infant should be considered in planning therapeutic programs.

Summary/Significance:

Mother- infants occupations are the focus of this article with attention given to occupations and experiences that fit the needs of the child based on age, stage of development, and capabilities. This article asked important questions for the occupational therapist to consider, “What are appropriate types and amount of sensory stimulation for week-old infants? What provides stimulation? How can this be determined?” The answer to these questions is discovery; this can be done through the infant’s occupations of daily living. It will be important for the occupational therapist to educate parents in the PAIR program on occupations and sensory techniques. It is the parents’ role to read their child’s cues while stimulating them during a bath with tactile touch or music. Stimulation should be very mild for an infant but responsive enough to create a bond. The PAIR program will integrate tactile stimulation in infant occupations due to the fact that tactile touch is the first to develop and one sense that is highly stimulated through a parent’s touch. Tactile touch can enhance the parent-infant relationship, the goal of the PAIR program. Proprioceptive stimulation can occur by responses to pressure or swaddling a

child. Finally auditory and visual stimulation can be stimulated in the first few weeks of birth. This article stresses the importance of stimulation; babies who are deprived from a stimulated environment fail to grow normally in height and weight and have decreased emotional and social development. A therapist can help a parent in a parent/infant program to provide a stimulated environment through tactile stimulation while partaking in their everyday activities with their infant.

Law, M., in Case-Smith, J. (2001). *Occupational Therapy for Children (4th Edition)*. St. Louis: C.V. Mosby.

Summary/Significance of Sensory Integration and Coping Model of Practice

As Ayres states in Chapter 3, sensory integration theory... “seeks to provide children with enhanced opportunities for controlled sensory input, with a particular emphasis on vestibular, proprioceptive, and tactile input in the context of a meaningful activity” (Law, 2001). Some children may not receive sensory input from their environment for this reason; children can develop learning difficulties because he/she is unable to organize sensory input. The sensory integration theory focuses on explaining behaviors in children based on neural functioning and motor training. If problems arise in sensory modulation children may have difficulty regulating their environment as well as learning and accepting new information. It is important for parents to understand that children need opportunities for sensory experiences. It is also important to observe and interpret a child’s adaptive responses to sensory input. As stated in chapter 3, using the SI model can form an intense bond between the child, parent and/or therapist. Also, the SIT is useful when understanding a child’s behavior, when a family understands a child’s sensory needs it can lead to a more positive view of the child.

In chapter 4, Jane case- Smith discusses the impact an environment can have on a child. It is evident that an environment typically begins to change as a child matures. However this may not be true for every family when comparing the families' structure, beliefs, values, and socioeconomic status. Even though more research is needed in this area... "it is believed that the materials and spaces available to a child to highly explore relate to the course of development of a child" (Case- Smith, 2001). If caregivers have cannot afford toys or play items for a child, it is important to provide adequate play space and be creative with inexpensive items to allow the child to engage in a play occupation.

The coping model of practice focuses on creating challenges in the environment and assisting the child in adapting to these challenges. The goal of a coping model of practice is to increase a child's ability to cope with stress in terms of meeting personal needs and learning how to adapt to the environment. If a child is able to cope in their environment it will allow the child to feel success in daily accomplishments (Law, 2001). Furthermore, this can increase their self-esteem to handle or cope with new challenges or other stressors that occur. If children face stressors due to physical, emotional, or cognitive barriers it is important to provide family support to help alleviate stress; however motivate a child to internally cope to feel successful. Effective coping can begin as early as infancy. Parents can begin to develop environments that allow the child to feel safe and organized and provide challenges that allow a child to be intrinsically motivated to participate (Law, 2001). Parents may not be aware of stressors that an infant faces due to the communication barrier. Therefore it is important for parents to observe infant cues to develop an understanding of the infant's needs to further help them cope and adapt in the environment.

Weatherson, D.J. (2002). Becoming whole: Combining infant mental health and occupational therapy on behalf of a toddler with sensory integration of difficulties and his family. *Infant and Young Children: An Interdisciplinary Journal of Special Care Practices*, 15 (1), 19-28.

Abstract

More than a quarter-century ago, Selma Fraiberg, a clinical social worker, and her colleagues in Ann Arbor, Michigan crafted an extraordinary approach to strengthening the development and well-being of infants and young children within secure and nurturing parent-child relationships. Fraiberg called the practice Infant Mental Health (IMH). Parent and infant were seen together, most frequently in their own homes, for the early identification of risk and treatment of the development attachment relationship. This article introduces fundamental beliefs and strategies that guide IMH practice in Michigan. The focus is on the emotional health and development of both parent and child. Key words: early intervention, early relationship development, Fraiberg, occupational therapy, sensory integration.

Summary/Significance:

Occupational therapy can assist parents with early identification in relationship disturbances. It is important to have a stable child-parent interaction to increase a child “mental health.” “Mental health” is defined in this article as addressing domain socially, emotionally, and cognitively. This article provides relevant guidelines when creating a child-infant program such as the PAIR program. The guidelines include the ideas that optimal growth and development can occur in nurturing relationships and how early years can affect the course of development. This article also provides a list of skills for an occupational therapist working with infants and families. This list includes meeting with infant and parent in their natural setting, sharing your observations, and creating opportunities to interact through infant occupation. The PAIR program will use this suggested list when working with families. Parents and infants will be observed in their

home and school, discussed observations will occur after each session, and sensory integration techniques through infant occupations will be created to enhance the parent-infant relationship.

White-Traut, R.C., Schwertz, D., McFarlin, B., & Kogan, J. (2009). Salivary cortisol and behavioral state responses of healthy newborn infants to tactile-only and multisensory interventions. *JOGNN: Journal of Obstetric, Gynecologic & Neonatal Nursing*, 38(1), 22-34.

Abstract:

Objective: To compare changes in stress reactivity (measured via the biomarker salivary cortisol) and behavioral state in healthy newborn infants immediately following 1 of 2 interventions: (1) tactile-only stimulation or (2) a multisensory, auditory, tactile, visual, and vestibular stimulation with a control group. **Design:** A randomized prospective design pilot study. **Setting:** Normal newborn nurseries of 2 midwestern perinatal centers. **Participants:** Forty healthy newborn infants receiving standard nursing care. **Methods:** Infants were randomly assigned to receive 15 minutes of tactile-only, auditory, tactile, visual, and vestibular, or no stimulation 30 minutes before feeding. Saliva samples were collected before, immediately following, and 10 minutes postintervention. Behavioral state was judged every minute. **Results:** Tactile-only group infants had the largest increase in cortisol levels, followed by control group infants. In contrast, infants who received the multisensory intervention showed a significant steady decline in cortisol. Asleep was the predominant state for all 3 groups and cry was minimal. **Conclusions:** Tactile-only stimulation may increase infant stress reactivity while the benefit of the multisensory auditory, tactile, visual, and vestibular intervention may be in the reduction of infant stress reactivity. Interventions appeared to have minimal effect on stress reactivity based on behavioral state.

Significance:

This study investigated the stress reactivity in infants by measuring the elevated cortisol levels with use of sensory intervention techniques. The techniques used in this particular study compared tactile only stimulation group, multisensory group, and a control group. This article provided rich resources describing the different type of methods used to decrease infant stress. For example previous research discusses that

vocalizations along with rocking help decrease crying more than rocking alone. Also, discussed in this article is the power of eye contact. Simply by looking at an infant in their eyes and talking helps to decrease cortisol levels and stress. In addition, the article states that decreased stress reactivity increase infant memory and learning. If an infant is stressed it can affect healthy brain development. In the early stages of development infants are not independently able to sooth themselves. An infant need to be soothed by caregivers through a mother's touch, talking, eye contact, swaddling, and rocking to name a few. A child will eventually learn to self regulate stress but in the initial months of development it is crucial that the caregiver nurture the infant's environment and stress levels to increase a healthy behavioral state. This article proves that easy caretaking strategies like eye contact and talking can help regulate an infant's behavior and support healthy development. Also, it was pointed out that many infants face daily stressors and may benefit from maternal soothing efforts through a multisensory approach. I think that this article is a great resource to share with parents because it has valid evidence that certain parenting styles are crucial to implement in a daily routine. I have experienced some parent reluctant to get on the floor with their child, sing, or even talk to their child feeling that it may be silly because of the lack of understanding. This article confirms that simple approaches like vocalizations, affection, and eye contact can impact a child, their temperament, and their stress levels. And in turn can effect their social and emotional development.

The results of this study show that a multisensory approach using vestibular, proprioceptive, and tactile interventions show the most benefit in reducing stress levels in

infants. Therefore, in my program it is important to implement a multisensory approach with all children where the need exists.

Sensory Based Techniques- Infant Massage

Beyer, K. (2002). Infant massage programs may assist in decreasing parental perceived stress levels in new parents. *Occupational Therapy in Health Care*, 16(4), 53-68.

Abstract:

A qualitative study was conducted to determine whether there is a relationship between the perceived stress levels of new parents in interacting with their infant and the parental implementation of infant massage techniques. A sample of four new parents demonstrated decreased perceived stress levels following involvement in a month long infant massage program, indicating an enhanced perception of their individual parenting abilities. The results of the study indicate that infant massage training is an effective tool to be used in assisting parents/caregivers in the acquisition of the parenting role and the development of role related skills.

Summary/Significance:

This qualitative study was to investigate the relationship between perceived stress levels in parents, how this stress affect their infants, and to see if infant massage is an efficient technique to use in therapy. The I.D.E.A act of 1990 specifies that occupational therapy needs to address the infant and family as a unit. Infant massage can address this need however through occupationally based theory. This article describes how attachment and bonding with an infant significantly decreases due to stress levels in parents. These stress levels were due to working conditions, financial hardships, or other personal issues. The PAIR program will be created for parents under these certain conditions. Techniques created in the PAIR program is directed toward stressful parents and the goal of reducing stress and increasing positive relationships. The article states,

“Attachment is crucial to the survival and development of the infant.” Parent-infant interactions can be developed during typical infant occupations such as bathing, dressing, or playtime. Necessary behaviors should be incorporated when doing these occupations. These behaviors can include touching, talking, and expressing feelings either verbally or through body language. The therapist can serve as a social support for the parent and infant, educate the parent on infant cues, increase confidence in parenting skills, enhance bonding, and decrease stress levels in parents. Many of these elements will be incorporated in the PAIR program.

Case-Smith, J., & Holland, T. (2009). Making decisions about service delivery in early childhood programs. *Language, Speech & Hearing Services in Schools, 40*(4), 416-423.

Abstract:

This article presents a rationale for specialized services personnel to use fluid models of service delivery and explains how specialized services personnel make decisions about the blend of service delivery methods that will best serve a child. **METHOD:** The literature on occupational therapy, physical therapy, and speech-language pathology service delivery in early childhood programs is reviewed, synthesized, and applied to current practice. The literature explains that direct and consultative services provide unique benefits to children and should be flexibly scheduled based on each child's current priorities. Flexible service delivery models allow therapists to meet the evolving needs of children within dynamic environments. **CONCLUSION:** To establish fluid service delivery models, therapists need to (a) plan collaboratively with teachers so that the model selected meets the teacher's preferences, (b) design flexible scheduling systems that emphasize inclusive practice, and (c) maintain precise documentation about when and how services are provided.

Summary/Significance:

This article addresses services provided for children with disabilities in community settings and or school settings. This article focuses more on the therapist and child's relationship unlike the family centered practice as previous articles have stressed. This article more so discusses the importance of a therapist helping assist a child with a

disability to be involved and included with typical peers and how those services are carried out. This article does provide valuable information in terms of therapist's relationship when supporting the child. It defines social emotional growth as, "sustained reciprocal interaction and responsive communication between the therapist and the child." It elaborates by explaining that to develop a foundation for a successful relationship, interactions are playful and not evaluative, motivating, engaging, letting the child take lead while also providing the just right challenge. This is perfect advice when working with infants on a more individualized basis or modeling interaction for families.

Christakis, D.A., & Rivara, F.P. (2010). Influence of experiences from birth to 5 years of age on emotional and psychological health. *Archives of Pediatrics & Adolescent Medicine*, 164(5), 491-492.

No abstract

Summary/Significance:

This article emphasizes that environmental influences can significantly effect infant and childhood development and make a difference in the health of an individual over the course of his/her lifetime. This article states negative factors affecting the fetus include exposure to drugs, toxins, and cigarettes smoke during the mother's pregnancy and low weight at birth. Infant and young children exposed to hours of television may difficulty engaging in other in the classroom and risk obesity as a result of inactivity. Articles in this issue point out that lower socioeconomic standing may cause emotional and physiological health concerns but changes to the environment can positively effect children. This article supports early intervention with implicating evidence that early experiences matter and that positively early learning lasts a lifetime. Although a specific program for early intervention was not mention the article focuses on the importance of

establishing a healthy routine within a family setting.

Underdown, A., Barlow, J., & Stewart-Brown, S. (2010). Tactile stimulation in physically healthy infants: results of a systematic review. *Journal of Reproductive & Infant Psychology*, 28(1), 11-29.

Abstract:

Touch establishes powerful physical and emotional connections between infants and their caregivers, and plays an essential role in development. The objective of this systematic review was to identify published research to ascertain whether tactile stimulation is an effective intervention to support mental and physical health in physically healthy infants. Twenty-two studies of healthy infants with a median age of six months or less met our inclusion criteria. The limited evidence suggests that infant massage may have beneficial effects on sleeping and crying patterns, infants' physiological responses to stress (including reductions in serum levels of norepinephrine and epinephrine, and urinary cortisol levels), establishing circadian rhythms through an increase in the secretion of melatonin, improving interaction between mother-infant dyads in which the mother is postnatally depressed, and promoting growth and reducing illness for limited populations (i.e. infants in an orphanage where routine tactile stimulation is low). The only other evidence of a significant impact of massage on growth in infants living in families was obtained from a group of studies regarded to be at high risk of bias which we have reported separately. There is no evidence of a beneficial effect on infant temperament, attachment or cognitive development. There is, therefore, some evidence of benefits on mother-infant interaction, sleeping and crying, and on hormones influencing stress levels. In the absence of evidence of harm, these findings support the use of infant massage in the community, particularly in contexts where infant stimulation is poor. Further research is needed, however, before it will be possible to recommend universal provision.

Summary/Significance:

This article focuses on the importance of touch and the powerful effects tactile stimulation can have on an infant. Many times the significance of touch is overlooked because it occurs within an infant's everyday occupation like bathing, dressing, eating etc. Every day routines involve many tactile experiences however as the article discusses cultures may have different views on the amount or type of tactile interaction. In many

cultures techniques like infant massage are used in every day routine, this is a skill that is a natural part of care giving.

There is a lack of evidence on infant massage due to the fact that it has been used for several different reasons, such as promoting parental-infant interactions, sleep patterns, respiration, and physical and motor development. Many times infant massage is also used for parents suffering from depression or infants that were at high-risk or low birth weights. Due to the large spectrum of use, infant massage history of research does not have one focus instead many avenues of study causing lack of valid evidence for its true benefits. Infant massage is obviously done in the early stages of child development and evidence is also lacking due to the fact that researchers would need to have years of evidence proving its significance. This article completed a meta-analysis however to prove that tactile stimulation does pose impact on an infant's overall development. A collaboration of results only found small groups of confirmation verifying that infant massage promotes physical and emotional development, outside of high risk infants, however evidence across the board attests that tactile stimulation does not bring harm to the infant. Evidence also proves that even if attachment and parental-interaction proves helpful that infant massage is a valid technique to use for all caregivers to establish a healthy foundational bond. A bond that initiates the relationship between a caregiver and their infant. This article shows significance for a parent/infant program because even though evidence for physical and social growth is difficult to present, the relationship that can develop between an infant and parent through touch is priceless.

Continuing Ed Course focusing on a sensory integration technique; Infant Massage
Continuing Ed Course Title: "Baby's First Massage"
Course information provided by Teresa Kirkpatrick Ramsey, BSN, LMT

Summary/Significance:

The continuing education course was a part of my mentored studies and almost 20 hours were dedicated to watching videos, reading manual, and completing practice courses with 3 infants and their parents. Included in the following pages is an outline that describes an infant massage course that I created (an outline of an actual class) as well as the post test that was needed to receive certification. This information is significant to the program because it could be used to as an effective tool to help a parent bond with their infant. The course provided benefits of massage for your newborn, learning how to read infant cues, ways to calm your baby, and 15 massage techniques to perform with an infant. Through all 3 practice course I completed all of the parents were very pleased and happy with the outcomes and information they gained from the course. Research has shown that infant massage is helpful for newborn or premature infants but the as this course indicates, the power of touch can be very nurturing for an infant as they grow. Many parents in the PAIR program could benefit from a course like this. It not only informs parents of ways to massage their infant but also could educate parents on early child development and an infant's need for emotional and social interaction. The course focuses on the importance of interacting and communicating with the infant during massage. This creates the ability for parents to read infant cues and to bond with them on a deeper level. Finally, this course is also beneficial for parents because it can be a calming and relaxing time for them. Due to the non-stop busy lifestyle of the contemporary parent; this experience can be both very supportive for the infant and parent to take this moment to just be together in a non-stressful environment. Again, this could be one tool that could be used in promoting a parent and infant bond for PAIR

participants.

Post Test Question and Answer Sheet for Baby's First Massage

1. How does the newborn massage help prevent abuse?
 - a. When a newborn is welcomed into a family it is a wonderful experience but this a newborn dramatically impacts a family and their new caregiving roles. This new life brings an overwhelming amount of stress and at times can lead to post partum depression. Newborn massage is a relaxing and beneficial technique to use with you and your infant. To manage stress, create bonding experiences, communicate with your infant, and overall has positive interactions. Feelings of despair, depression, and stress can lead to abuse; massage can decrease these feeling thus preventing abuse.
2. What are the forms of communication (primarily) from a newborn?
 - a. Primary forms of communication include fistled hands, raising eyebrows, flexing forearms, increased facial tone, infant looking or not looking at parent's face, maintain eye- contact
3. List 3 ways newborn massage is different from infant massage.
 - a. Direction- Newborn massage using cephalocaudal, while infant massage uses both cephalocaudal and caudocephalic.
 - b. Duration- Newborn massage between 5-10 (depending) and infant massage can begin at 30 minutes.
 - c. Newborn Massage infant need a blanket to prevent exposed areas and promote energy conservation, infant massage- most of the body is exposed to the environment.

4. Baby's First Massage is an introductory course to infant massage.
5. Is the skin really an extension of the brain? Give documentation for your answer.
 - a. Yes, as Dr. Deane Juhan discusses, the skin is an extension of the brain and informs the brain when sensory stimulation occurs through the use of touch. Skin is the largest organ and when we physically touch something our nerve receptors inform the brain internally; what is occurring or what we feel externally. Also as stated in the manual, "the sensory system is developed from the same embryonic germ layer, the ectoderm, as the brain and the nervous system.
6. Why is it advantageous to enhance the parasympathetic outflow?
 - a. Advantages of enhancing the parasympathetic outflow can affect an infant through adulthood. By developing a good balance between the nervous systems, this can teach an infant to learn how to socialize, adapt, bond, trust, and regulate and react to experiences and environments when they occur.
7. List some signs of a disorganized nervous system in early hours after birth.
 - a. Often gagging and spitting or having difficult sucking/swallowing
 - b. Confused or unable to master the rooting reflex
 - c. Having irregular sleep patterns
8. What cranial nerves arteries most of the parasympathetic outflow?
 - a. The Vagus nerve is responsible for 80% of the parasympathetic nerve flow. Other cranial nerves that interact with the vagus nerve include the oculomotor, Facial, Glossopharyngeal, and accessory.

9. How much pressure is used in the massage strokes for this program?
 - a. Gentle pressure should be applied making good contact with the skin, gliding over the skin with caution not to drag the skin.
10. List the 3 aspects of the Polyvagal Theory.
 - a. Immobilization/behavioral shut down
 - b. Mobilization- fight/flight activity involving increased heart rate and metabolic activity
 - c. Social Communication- facial expression, vocalization, listening, engagement behaviors.
11. What does it mean to listen when you touch.
 - a. As described in the manual, it is important to use a “listening touch” that combines listening and touching. When starting a massage it is important to feel/listen for the infant’s body temperature, texture, softens, curves etc. Observe and listen for noises, cues, and body language. During this time parents and infants can establish trust and create a bonding experience.
12. Why Is the abdomen given special emphasis in the stroking?
 - a. Due to times and amount of food an infant receives the abdomen can be very sensitive when stroking. It is important to be aware that an infant can have discomfort in this area and when stroking could cause the infant to spit/throw up. It important to know when it is appropriate to massage your infant.
13. How do you empower a parent to do this skill of newborn massage?

- a. I think the most important technique to empower a parent, as demonstrated in the Baby First Massage video, is to allow the parents to tell their story and share experiences with you about your infant. Providing support, encouragement, helpful suggestions, positive reinforcement can all help to increase a parent's confidence.
14. What is the most potent time out signal?
- a. Gaze Aversion
15. List the timeout cues most often seen with a medically stable newborn?
- a. Arching
 - b. Finger splays
 - c. Gaze aversion
 - d. Hiccupping and spitting- (not related to eating)
 - e. Crying - inconsolable
16. Why is containment so calming?
- a. Containment provides safety, security, and trust for an infant. When providing containment, we are recreating the feeling of being back in the womb, an environment that is familiar and comfortable to the infant creating a calming affect.
17. What are the benefits of newborn massage?
- a. There are many benefits that can result from newborn massage, the manual includes improved weight gain, better performance on neurological assessment scales, better sleep wake behaviors, greater

soothability, and improved growth and development including infants exposed to cocaine, or having neurological damage.

18. What direction do you move in massage strokes with the newborn?
 - a. Cephalocaudal Strokes- moving from head to toe, proximal to distal
19. What 4 research summaries appeal to you? List the titles only.
 - a. Infant massage improve mother-infant interaction for mothers with postnatal depression
 - b. Touch, attachment, and health: is there a relationship?
 - c. Anticipatory guidance of parents of new infants: potential contribution of the internal working parent
 - d. Toward prevention of developmental disorders
20. Which do you think Baby's First Massage emphasizes most: touch stimulation or communication?
 - a. I believe that Baby's First Massage places more emphasis on communication. At the beginning of life infants are learning how to communicate and experimenting with expressing their needs. It is the role of the caregiver to listen to those needs with all of our senses including touch. When a parent communicates with their infant they are creating a bond and trust within each other that will have lasting effects on a child's psychological, intellectual, and emotional development. Even though touch stimulation or the massage is the main focus, the underlying foundation Baby's First Massage is communicating through touch.

21. Do you see any similarities in yourself when you are disorganized and when a newborn is disorganized.

- a. Of course, I think that infants have many reasons to feel disorganized when coming into this world (question 7). They are expected to adapt when they are not sure what changes are occurring. These disorganized feelings of (scared, confused, unaware) happens throughout the course of life. Moving homes, changing jobs, loosing a loved one, even as an adult you can feel lost. When I have personally have gone through these changes in my life you need to find a coping method or “anchor” that assists you adapting to become organized and calm.

for Baby’s First Massage- Created by Abby Enser

- I. Building rapport- quick introduction (my credentials) and getting to know caregiver and infant (share experience of birth, weight, name etc)
- II. Discuss benefits of infant massage
 - a. Bonding experiences
 - b. Teaches early communication between caregiver and infant- creating a positive/trusting relationship
 - c. Teaches caregiver how to comfort the baby
 - d. Introduces and enhances the baby’s sensory stimulation
 - e. Promotes rest and relaxation
 - f. Increases circulation and assists in healing process

- i. When the cord was removed circulation requires adaptation- new blood vessels are being formed, the heart/lung circulation has changed and healing is occurring in duct in aorta.
- ii. Circumcision can take 7-14 to heal
- iii. Iatrogenic (caused by forceps during birth)

III. Gather necessary supplies and prepare environment (can occur after or before introduction)

- a. Create a calm room meaning soft lighting, warm in temperature, limited noise (quiet room), avoiding distractions
- b. Gather oils that the infant is not sensitive too, allow parents to choose their preference and use their personal supply if available
- c. Gather a pillow that has edges on both sides, put a soft blanket over pillow
- d. Gather extra towel, diapers, wipes etc.
- e. Baby's First Massage Booklet

IV. Prior to beginning massage sequences step by step- go over basic technique,

- pressure, duration, precautions, time out cues
- a. Use baby doll to demonstrate technique- "little C's" in a cephalocaudal strokes- stroking head to toes- proximal/distal
 - b. Gentle pressure on arms, leg, head etc; use firmer pressure on palms, soles, abdominal area, lips, & face
 - c. Massage time will vary depending what the infant can tolerate (5-10 min)

i. Time Out cues

1. Gaze aversion
2. Arching of back
3. Splaying of fingers
4. Spitting or hiccupping not from eating
5. “I need help” cry versus talking cry

V. Prepare for massage

- a. Allow caregiver to wash hands with warm water (create warm hands),
- b. Place infant on pillow (not exposed to environment, wrapped or swaddle infant in blanket)

VI. Prior to Massage Sequence- Discuss Calming techniques

- a. Place both hands on the baby for a minute or two, providing a calm and reassuring presence
- b. Place the baby in fetal position- cupping one hand on head and one on the buttocks
- c. Use pacifier or bring hands to mouth
- d. Put infant close to your left shoulder so they can hear your heart beat
- e. Bounce the baby on lap with the baby facing away from you
- f. Walk with the baby
- g. Allow the baby to hear “white noise”- hair dryer, lullabies (waves), soft singing
- h. Keep the newborn warm- use towels out of the dryer

- VII. Prior to beginning massage ask for permission, “Are you ready for your massage?”
- a. Observe readiness signals- this will not appear initially but when it become a routine your infant will be anticipating it. (gazing, making eye contact, sitting very quiet and still)
 - b. Make positive affirmations to your infant- create a positive environment
 - c. Remind caregivers this is a time to really listen your infant through touch, feel their temperature, texture, tone, curves- let the baby feel the positive/ calming/trusting energy you are expressing through your touch.
- VIII. 15 steps of Baby’s First Massage Sequence
- a. Opening Stretch (rolling hip motion)
 - b. The Legs (little C’s)
 - c. Abdominal reflex stroking (spiraling-clockwise motion)
 - d. Spider Walk abdominal reflex stroking
 - e. Roking the Hara for gas relief
 - f. “I love U” for the Abdomen
 - g. The Chest (keep one hand still while moving other)
 - h. The Arms
 - i. The Scalp
 - j. The Back- (begin at should and stoke down keeping one hand still)
 - k. The Back (keeping one hand still, move hand down in circular motion)
 - l. The Legs- One more time
 - m. The Face- Keep one hand behind the head to stroke forehead and cheek)

- n. The Face- “S”- inner corner of high and up and over ear
- o. The Mouth- Firm pressure-tracing around the baby’s mouth