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The Importance of Play in Early Childhood Education

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Abstract

While the origins and purpose of childhood play has been discovered and documented for some time, the inclusion of play in early childhood education is a concept which has not found its way into the core structure of early childhood classrooms until more recent years. As the need for early learning programs continues to grow, so does the need for developmentally appropriate and beneficial early childhood learning intervention. In this paper, we will review prominent theories and recent research on stages of childhood development and learning, the purpose of early childhood education in the U.S., the nature of play and the forms it can take, and the role of the educator in facilitating play. Through this literature review, we can conclude that learning for infants and children is an active, multi-sensory, experience-oriented process that looks different in every stage of development. Learning can begin before birth and infancy and early childhood are a person's most formative years. By engaging in play, children learn about and come to terms with their environment, develop normal sensory and motor function, develop social and life skills, develop independence of movement and thought, and learn behaviors that allow them to satisfy wants and needs in a safe, practical, socially acceptable way.

Introduction

Early childhood education relates to educating children from birth up to the age of eight. Typically, an eight-year-old is in third grade. In early childhood education, the domains focused on are social, emotional, physical, cognitive and language development. In early childhood education children do not learn a great deal from sitting at a desk and listening to lectures. They learn through play and experiences. One means to provide opportunities for children to explore their environment and develop live skills is “play”.

While free play has not always a large part of the classroom experience educators are beginning to realize the positive effects, play has on child development, and they are beginning to center their classrooms around free play (Arrow, 2019). Play is an important role in the development of children. Play provides young children opportunities to gain experiences, learn and develop. Through play children learn to the social skills they need to interact with their peers and the world around them. They engage in activities that allow them to experience competition and develop their physical fitness. Children also engage in activities that allows them to learn to manipulate objects within their world, solve problems, and tap into their imagination.

Incorporating play into a child’s early education been shown to have a positive impact on the child as they grow and mature into young adults. This means that early childhood education influences communities and society. Through the life lessons taught and skills developed play is an important factor within a child’s development. As such researchers have debated the place of play within an early childhood classroom. New research suggests play is becoming very important component of early childhood education.

Because play is a vital part of early childhood education this paper explores the nature of play, and the benefits children drive as they progress through the different stages of play. The

examination begins with a basic understanding of early childhood education in the United States. We then move to explaining the nature and forms of play. Finally, the paper explores the five theorists who contribute to our understanding of play within early childhood education.

Early Childhood Education

The services early childhood education bestows on young children and their families are endless. Many benefits come from the participation in early childhood education. The experiences that come from participating in early childhood education are everlasting. Early childhood education is the learning that takes place from birth to eight years old (Zigler & Styfco, 2000).

Zigler and Styfco (2000) suggest an enormous impact can and will be made in the first eight years of learning. The youngest age group in early childhood education is infants and toddlers. In the recent years there has been an expansion in infant and toddler programs. Actually, infant and toddler programs have been the fastest growing program in early childhood education. The public is beginning to realize that learning can commence at birth. This is one reason there is an increase of infant and toddler programs in the United States. Children living in poverty is one of the main purposes of starting infant and toddler programs. These programs offer early intervention for children living in poverty. Early Head Start is a program that serves children birth to three (Zigler & Styfco, 2000).

Many do not realize that the primary grades, such as first and second grades, are also included in early childhood education, along with preschool and kindergarten. It is important that society realizes these primary grades are also a vital part of early childhood education. Children attending preschool make up the majority of early childhood education. Most preschool

programs begin enrolling children at three years old. Each preschool program is unique and teach different curriculums. Preschool can be a full day or only a half day setting (Zigler & Styfco, 2000).

The government is now funding early childhood education, and they have even started to fund childcare services in some states. The impact federal and state governments have had on early childhood education is vital. Head start might sound familiar to you because it is a well-known, public supported program. The benefits children and families receive from Head Start are limitless. Some of these benefits include family support programs, health and nutrition needs, as well as the general education (Zigler & Styfco, 2000).

Head start was founded in 1964 when the abilities of the children entering school became concerning (Zigler & Styfco, 2000). Originally, the goal for Head Start was to interrupt the poverty cycle that many children were facing. The United States contains many Head Start programs which meet the needs of children and families all over. Head Start serves roughly one million children a year and approximately 27 million children since it was founded in 1964 (Zigler & Styfco, 2000).

Head Start programs labor to meet needs of children and their families in all areas of life. Head Start provides resources to families and takes care of the child's health and needs and also strives to build good rapport with families. While attending Head Start children are provided with healthy meals and snacks, and appropriate health checkups (Bracken & Crawford, 2009).

In early childhood education, everything taught should be developmentally appropriate for the child's age. A victorious early childhood educator understands how each child learns and the potential of each child. Planned lessons and activities that are relevant to the child's age can make the biggest difference in the education of a young child. Hands on activities and

developmentally appropriate lessons and units can make a vast difference in a child's early childhood education experience.

An essential part of early childhood education is the educators, or the teachers and staff. It is disappointing that early childhood teacher turnover rates are almost thirty percent (Castle, 2013). This rate could be rising for various reasons. Some of these reasons might include working conditions, low wages, minimal advancement opportunities and burnout. Frequent turnovers are not in the best interest of the students. Turnovers can decrease the instructional quality within a school, cause staff instability, and classroom disruption (Castle, 2013). Also, interaction between a teacher and a child is essential to building healthy relationships. It is important for a child to bond with the adults in the classroom to begin learning.

All levels of education are important and always will be. Early childhood education roots go all the way back to the 1500s; however, it really came into sight in 1965 when President Lyndon B. Johnson founded Head Start (Bruce, 2015). After Head Start was created, people really became interested in early childhood education, including the government. In the 1800s, Kindergarten was established, and programs began to assist in child development. Over the years, kindergarten has begun to be based on content and not as much skills needed (Bruce, 2015). Several hours a week are spent on basic content areas. Literacy is the content area with a high focus. It is the center of a kindergarten classroom. When children develop early literacy skills, it is easier for them to begin to read sooner than the average age to read. Reading is imperative for success throughout school and later in life.

Education is an integral part of our society. Our country has worked tirelessly develop a well-rounded education system. American education is the basis for who we are. Interesting enough, each state in American is allowed to develop their own, overall educational standards.

The United States is ranked eleventh in the most educated countries in the world (Amos 2010). It is one of the strongest aspects of our culture. People who are lacking in the area of education find it harder to discover a prosperous job. In America, free, quality education is offered to all individuals regardless of race, gender or social status. The overall purpose of education is to give children the skills they need in order to develop in an orderly, sequential way and to develop as a productive member of our society. Without education, society would be unable to flourish or grow, because its people would not have the intelligence to promote growth.

Early childhood education has the potential to influence the success of a child throughout the rest of their academic career. As the field of early childhood education continues to grow, it is important to develop effective educational interventions. Play is a natural activity for young children and has the ability to be adapted to fit the developmental needs of each child in early childhood classrooms.

Play

Play is an important part of early childhood education. This topic is often debated. There are many benefits of play during early childhood. A lot of early childhood centers and classrooms are centered around play (Armstrong, 2019). Play is better understood after knowing the definition. Every theorist defines play differently, and there are several definitions in Webster's dictionary. Below are a few different definitions that will help individuals understand and define play. The webster dictionary describes play as the action of a game or spontaneous activity of children (Merriam, Webster n.d.).

Researchers have identified several important stages of childhood play. (Armstrong, 2019). The first identified stage of play is unoccupied play. This occurs in infants to three months. Unoccupied play does not look typical childhood play. Most of the time, this stage of

play looks like children are sitting and not really involved in anything. An example of this type of play is children exploring materials without organization. During this stage, children practice manipulating toys and materials and begin to master self-control. Unoccupied play is beginning of all stages of play. Adults play an important role in supporting unoccupied play by simply playing along with children, modeling play or even discussing play with children. When adults are involved in unoccupied play, children are aware that adults are interested in them and respect their decisions as they play (Admin, 2020).

The next stage of play is solitary play, which is sometimes called independent play. This is also an early stage of play. During this stage, a child usually plays alone, because they have not yet developed adequate social skills. This stage will assist a child in becoming self-sufficient. Children become engaged in solitary play around the age of two years. During this stage, children begin to move more by reaching for and manipulating objects. They are exploring objects within their reach. When children are engaged in solitary play, they learn how to entertain themselves, which can sometimes be helpful to adults. Solitary play is a foundation for future independence. Children develop many of their unique qualities as they participate in solitary play. Solitary play fosters a sense of capability (Admin, 2020). Adults can offer children various toys, such as blocks, a train set, play-doh, animals and dolls, but the children are left to make decisions on what to do with these objects. Imagination is developed when children play alone. Creativity is also fostered during this solitary play. Children create their own scene and develop their own characters when engaged in solitary play. Children also set the stage and create action as they see fit. Solitary play allows children to gain confidence and feel secure in many roles. It allows children to work through problems in their own lives and also to develop

solutions. This type of play can help in conflicts throughout the events of their life. It is important that parents and guardians let children have independence to engage in solitary play.

Onlooker play is the next stage of play. During this stage, a child will observe other children playing, but they do not participate. Children engage in onlooker play between the ages of two and three. A child may participate in forms of social interaction, such as observing conversation between others, without joining in. Through the stage of onlooker play, children gain self-knowledge. By observing other children, they construct their own self confidence. Children exercise interaction and grasp how to cooperate with other children (Admin, 2020). These skills of cooperation will benefit children throughout their childhood by teaching them social skills.

The next stage of play is parallel play. During this stage, children play side by side, with their own toys or objects. This type of play normally begins around two years old (Admin, 2020). An example of parallel play is one child playing with blocks, while another child plays with dolls. The children do not have conversations with each other, and neither child would try to influence the other. Parallel play is important in teaching children how to interact with other children. It assists children in learning about peer regulation, observation skills, cooperating with others as well as working independently. This stage of play also assists children in social development which is essential to child development and is also a lifelong skill.

Associative play is the next stage. Children enter this play stage beginning around the age of four years. During this stage, children typically play with the same toys, and they engage in conversation, however, they play independently. Some examples of associative play are children playing dress up, children using the same playground structures or children playing with the same toy kitchen set. Each child typically has their own focus, interest and creativity.

Associative play is essential in brain development, because children use imagination for exploration of the world and to create their own imaginary setting. This stage of play assists in the development of resiliency to conquer challenges throughout life. When a child is engaged in associative play, parents and guardians can encourage the children to begin to relate to their peers and interact (Admin, 2020). These are crucial skills all children need to develop.

The last stage of play is cooperative play. Children begin engaging in cooperative play around the age of five. During this stage, the unoccupied stage, solitary stage, onlooker stage, parallel stage and associative stage are all combined, and children begin playing and interacting with each other. During this stage of play, the children usually develop a common goal. Cooperative play is important, because children learn how to share, take turns, cooperate with others and learn to problem solve with their peers (Admin, 2020). This type of play fosters the idea of meaningful friendships. This is a lifelong and beneficial skill.

As children progress through each play stage important life lessons and skills are developed. Each play stage is connected to a stage in the child's development. While the different stages of play are important to early childhood development, various types of play are noticed when children begin engaging in cooperative play and include five different types within this stage. In order to have a clear understanding of play, you must know and understand each type of play (Admin, 2020).

Rock (2016) found when a person refers to a child playing, it could mean many different forms of play that introduce children to new experiences. These experiences include activities that allow children to compete with others, manipulate and construct, engage in dramatic activities or fantasy, and participate in physical activity. The first type of play is competitive play. When a child is engaged in competitive play, they are typically playing a board game,

playing a sport, running a race of something of that nature. Winning and losing comes into effect during competitive play. During this type of play children are working to strengthen their imagination, learning to take turns, learning to be a team player, along with other, important life lessons (Rock, 2016). Competitive play also assists in emotional regulation.

Constructive play is next. During this type of play children learn and practice manipulating and building different things. When children are engaged in constructive play they are typically playing with toys like trains, Legos, blocks, Lincoln logs and magnets. Children may even participate in building a fort with chairs or pillows and blankets. This would be considered constructive play. Constructive play aides in a child's cognitive development which is essential in early childhood education (Rock, 2016). A situation, in which a child's cognitive development is forming, may be building a tower with blocks, the tower falling and the child figuring out the best way to build the tower for it to stand strong.

Another type of play is dramatic play or fantasy play. A few examples of dramatic play are a child pretending to be a doctor, teacher, mother, spy, waitress or playing dress up with different outfits. During this type of play a child is expanding its imagination, learning cooperation skills, learning to take turns, and language development (Rock, 2016). Through role-play children learn about different functions of the community.

Next is physical play. This type of play strengthens a child's fine motor and gross motor skills. Fine motor skills focus on the coordination of small muscle movements and gross motor skills focus on large muscle movements (Rock, 2016). When a child throws a ball, jump ropes, climbs a structure, jumps on a trampoline, balances on a balance beam, or rides a bike, they are participating in physical play. Physical play allows a child to gain fitness skills and a healthy lifestyle.

The last type of play is symbolic play. Symbolic play includes vocal activities such as singing or joke telling, artwork such as drawing, coloring or painting, counting or making music with different instruments. Symbolic play allows a child to express their feelings, ideas and emotions, and process their experiences (Rock, 2016).

Along with many other things, play allows a child to explore new themes within the environment, expression of different emotions, role-playing, and symbolization, and new ideas. These qualities of play foster developmental learning from the sensorimotor stage. Many children with disabilities find it difficult to input sensory. These specific children may need assistance gaining sensory practice, motor exploration and the connection needed to experience formulation of ideas to develop skills to play (The Importance of Play in the Development of Children with Disabilities, n.d.). The relationship between each child's initiative, emotions and expression are strong keys to the evolution of play.

When a child repetitively practices sensory input, the brain creates patterns and an increased understanding of the world. (The Importance of Play in the Development of Children with Disabilities, n.d.). This is incorporated with our emotions and movements to build basic skills. As the ideas stretch, the brain establishes new pathways and new experiences arise. When the brain of a child creates new patterns, adults may see a significant change in behavior. A child's language and cognitive skills will start to have symbolic representations. Children will adapt to new social skills and the combining and building new ideas. With these qualities comes the exposure of play which will assist the children who don't play.

Movement and play are important to development. The mixture of familiar development traditions and currently lengthened methods may provide the teacher with tools to help children

overcome great obstacles to development and learning. (The Importance of Play in the Development of Children with Disabilities, n.d.).

Each type of play discussed is natural, engaging, and beneficial to infants and children. Along with the developmental benefits already discussed, play is especially beneficial to the social and emotional development of infants and children. Whether or not a child reaches typical social and emotional developmental milestones affects how they ultimately perceive and interact with their world and the people in it.

Social Development

Play, in early childhood education, is vital in the development of a young child, because it increases a child's social development. Social development is the process of a child learning to interconnect with their peers. As children grow, they consider their own uniqueness within different environments. They also gain communication skills to interact with people around them. Social development also indicates how a person maintains friendships and relationships, and how a person solves problems in the world around them (McDermott, 2012). Social development effects a lot of other forms of development a child will encounter. The ability a child has to successfully interact with their peers can impact such a broad range from a child learning shapes as a toddler, to being able to decipher between right and wrong as a secondary student, to flourishing through the trials of adulthood. Positive social development can assist a child in the development of language skills, build self-esteem, strengthen learning skills, become a problem solver, and maintaining a positive attitude.

When a child has the ability to interact with peers, it allows for many opportunities to increase their speech and language skills. This is a helpful cycle, because as a child’s speech and language skills improve, it becomes easier for a child to react to various situations in different environments (McDermott, 2012). Communication skills are an integral part in early childhood

and throughout life. Without basic communication skills, we cannot express our wants and needs to others. Having good speech and language skills corresponds with a satisfactory imagination in the years to come. Teachers play a huge role in assisting children in the learning process of communicating with others. Some ways to help children improve their communication skills are; encouraging and manipulating true conversation, asking open-ended questions and using non-verbal communication (McDermott, 2012).

High quality social development builds positive self-esteem. Self-esteem is how individuals assess themselves. Children with positive self-esteem feel assertive and effective. They are proud of themselves and the things they can and will accomplish. When children have a high self-esteem, they usually develop a growth mindset. They are capable of maintaining intrinsic motivation and motivating their peers. Individuals with a positive self-esteem are typically good at voicing their opinions and asking for help when needed (McDermott, 2012). A few ways to encourage positive self-esteem in children are; respecting them, giving responsibility, offering choices, instilling a feeling a resiliency and ensuring healthy relationships.

Social development strengthens a child's learning skills. Children, who have trouble building good rapport with their peers, are more likely to struggle with academics later in life. Early childhood education is the foundation a child needs for a future of success in academics areas. It is imperative that a child has sufficient learning skills because the concepts a child retains in the early years of life will impact their education in the future. When a child is learning, their mind and body stay engaged. Learning helps children gain knowledge, perspectives and skills in the world in which they live (McDermott, 2012).

Strong social development can ultimately lead to resiliency and efficient problem-solving skills. Children who are problem solvers are typically happier, confident, and independent. Problem solving skills construct how children think, sense, view and understand the world around them, making it important for early childhood development. Problem solving is vital, because is teaches and illuminates discernment. This assists in the distinguishment of a solvable problem. Children with adequate problem-solving skills are able to weigh actions and consequences to steer their decisions throughout the day (McDermott, 2012). Problem solving becomes a cycle of learning when mistakes are made, and various solutions are tested. Individuals who address challenges or problems on their own, or in a group tend to become resilient. Resilient means to be able to withstand or recover quickly from difficult conditions. Resiliency is a beneficial attribute to attain because it allows for understanding that life is full of unforeseen challenges (McDermott, 2012). When children become efficient problem solvers, they are more comfortable taking risks. When students take risks in a classroom, there are more opportunities to explore new ideas.

Social development helps establish and maintain a positive attitude. In return, a positive attitude leads to superior relationships with peers and elevated levels of confidence. When students possess a positive attitude, they are able to relax, remember, focus and retain information as they learn (McDermott, 2012). Students tend to appreciate new knowledge and skills. A positive attitude will assist individuals in coping more easily with the trials of life. A positive attitude allows a child to welcome optimism and easily avoid negativity. Teachers, parents/guardians and mentors can encourage a positive attitude by being an example and modeling positivity, creating a productive learning space, assisting in the visualization of outcomes, eliminating negativity, incorporating rewards, following a routine and focusing on

solutions and not just problems. When children maintain positive attitudes, they are successful in the years to come (McDermott, 2012).

Overall, early childhood education plays a huge role in the social development of a young child. When a child is participating in some form of early childhood education, they are given opportunities to increase their social development by building language skills, building self-esteem, strengthening learning skills/strategies, resolving conflicts and maintaining a positive attitude (McDermott, 2012).Children will be able to reach various milestones such as, cooperation with peers, expressing fear and/or anxiety in a healthy way, investigating independently, manifesting affection, and being more aware of others' emotions (McDermott, 2012).

Emotional Development

Play is a vital role in a child's emotional development. From ages three to five typically children are faced with a new social environment. This provides opportunities for growth but creates some new challenges. Children are expected to share with peers, listen to adults and play with other children, all of which can cause strife between children. Since they cannot rely on their parents all of the time anymore, children must learn coping skills and manage their emotions on their own. Caregivers, teachers, parents/guardians and mentors play a huge role in emotional development as they create a safe place and provide guidance. To foster emotional development growth teachers can have realistic expectations, provide children with strategies and give children validation. Emotional development is vital in assisting children grow into well adaptive adults. When children are emotionally healthy, their awareness increases, have few disciplinary issues, they are able to identify feelings and express them, and process tough emotions (Gibson et al., 2017).

Awareness is a key element in education. Awareness qualifies a child to consider opinions and perspectives of others and understand their needs. Social awareness assists children in strengthening their social skills by interacting with classmates and peers from diverse backgrounds (Gibson et al., 2017). Students who are aware can acknowledge any resources at hand and use them to tackle needs in the environment. Social awareness plays a crucial role in the way a child behaves at home, in a classroom or in public places. Children with strong awareness skills can easily build positive relationships throughout life and maintain good morale (Gibson et al., 2017).

Similar to adults, children have to develop a plan of action for managing their emotions. As adults we can encourage and support this plan by asking them how they feel throughout the day, talking about emotions appropriately, mention how people might feel in different situations, define feelings when children find it difficult to express themselves. When children express their emotions, it is important for adults to support their attempt to regulate their emotions so they will successfully be able to discuss their feelings (Gibson et al., 2017).

Role of Adults in Play

Ginsburg (2007) believes since play is an essential part of child development children should be encouraged to play. Adults should take steps to facilitate childhood play. Giving children adequate space and time are two ways to foster environments that encourage play. This environment then allows children to engage in the activities that develops life skills, develops imagination, and strengthen muscles (Ginsburg, 2007).

A key element of a child's play can happen outside. Outdoor play offers ample opportunities that indoor play doesn't offer. Outdoor play enhances body development of a child. Research on outdoor play has determined that outdoor play is an essential part of childhood

(NAEYC, n.d.).Children are able to explore their environment with their peers through outdoor play. Recently, it has become concerning that the majority of children are not spending enough time outdoors. There are a variety of reasons for this. Some include the increased interest and addiction to screen-based entertainment, caretakers' work schedules, limited space and increased traffic and fear of child safety. Because of these reasons, children are often limited to indoor activities. There is a growing concern that children are being deprived of the experience of outdoor play. With this limited time spent outside, there is an increased concern that more children may develop nature deficit disorder. Nature deficit disorder is a wide range of behavioral problems caused by the lack of time spent in nature. This is not a medical diagnosis; however, it is a metaphor that describes an increased amount of behavioral issues. Public schools have also had funding cuts that effect the area of outdoor activities. Even outdoor recess play in public schools is limited to short periods of time in order to spend more time in the classroom focusing on content and curriculum. Liability issues have been a concern that has caused schools to remove playground equipment. For an increased understanding that outdoor play is an integral part of a child's development, they must first understand that outdoors can and should be a part of the early childhood classroom. Some adults see outdoor playtime as a break from learning, however the outdoor area offers just as much learning experiences as the indoor classroom.

Outdoor play allows young children to explore and learn about their environment with few limitations. This freedom in important in outdoor play, because it gives children unlimited opportunities for growth in gross motor skills, problem solving, self-control, safe risk taking and improved overall health. Outdoor play can also increase the appreciation and regard for the environment and promote a deeper understanding of the world.

The National Association of Sport and Physical Education suggests six standards that young children should obtain during physical education. These include skills that children should develop throughout early childhood years. The first standard states that a child should demonstrate the ability to perform physical activities and motor skills (NAEYC, n.d.). The purpose of this standard is to develop skills to enjoy participation in physical activities.
The second standard states that a child should demonstrate understanding of movement concepts and the strategies and principles as they apply to the performance of physical activities. The purpose of this standard is guidance of child's ability to use cognitive information to enhance motor skill performance. Standard three states that children should regularly participate in physical activities. The purpose of this standard is to develop patterns for regular involvement in physical activity. Standard four states that children should obtain a health enhancing level of physical fitness. The purpose of this standard is for growth in a child's knowledge, skills and desire to accept responsibility for personal fitness in order to have an active, healthy lifestyle. Standard five states that children should demonstrate personal and social behavior, in physical activity settings, that respects self and others. The purpose of this standard is the achievement of voluntary behaviors that encourage personal and group success in activities. Standard six states that children should values physical activity for reasons such as health, recreation, self-expression and/or social interaction. The purpose of this standard is the growth of awareness of the intrinsic values and benefits of participation in physical activity that provides personal meaning. When implemented, these standards will ensure that young children receive physical activity needed during the early years of learning. The increase in physical health can decrease obesity, increase energy levels, improve balance and range of movement, improve muscle development and strengthen the immune system.

It is concerning that in our Western modern culture, children are growing more disconnected from their natural environment. Nature play is a large part of outdoor play and the development of a young child. Nature play assists children in the development of their senses, which in turn, help them learn more about their environment (NAEYC, n.d.). It is essential for children to form a relationship with nature, and outdoor play will allow children to do so. This relationship between the child and nature allows for the development in the attachment to the outdoors.

When children have the opportunity to play outdoors, they learn more about living things in nature, they are provided with different stimulation, have the opportunity for thought provoking situations, and this type of play reduces stress and fatigue. This type of play in nature also provides regulation sensory input for the nervous system, which prevents Nature deficit disorder. Play in nature can also reduce ADHD symptoms, therefore improving self-regulation skills for children who suffer from ADHD (NAEYC, n.d.).

Parents and guardians play a huge role in providing children with opportunities to engage in each type of play. There are a few points each parent should know to understand play in depth. Play is important for a child to learn. Play gives children an opportunity to learn without pencil and paper. Play provides a child with rich learning experiences, which will strengthen a child's self-esteem and increase their ability to have a successful future (Ginsburg, 2007). Adults should trust and depend on their own playful instincts. Play comes natural to most children. Children need to play outside. Outdoor activities allow children to strengthen their gross motor skills and create fun memories. Play and learning are not separate activities, they go hand-in-hand. Adults must make time for children to play. Parents and guardians are a child's biggest supporter of their learning. If adults are making sure children have enough time to play, a child's cognitive,

language, physical, social and emotional development will come naturally. Play is simple yet complex. It is healthy. Play reduces stress and will help a child grow emotionally. Do not underestimate its great value. Most theorists will agree that play is educational and makes a huge impact on children and how they learn (Ginsburg, 2007).

In order to understand the benefits of play, it is important to understand *why* children play. The insights taken from prominent theorists, discussed in the following sections, outline the typical developmental stages in infants in children. Play takes an important role in each stage. Theorists conclude that play is a contributing factor in how a child learns and interacts with their world, forms relationships, gains independence, and communicates with others.

Freud

Sigmund Freud was an Austrian psychoanalyst who lived and worked during the late 19th and early 20th centuries. His creation of psychoanalysis was a theory of the human psyche as well as therapy for a variety of psychoanalytic illnesses and an interpretation of culture and society. He graduated from the University of Vienna and spent his early career working with Ernst von Bruke, a leading physiologist, and conducting research and lecturing in neuropathology. His developed theories give important insight into human development and the origin of our behaviors and what drives human desires (Jay, 2021). This section will focus specifically on Freud's theories of libido, erotogenic zones, cathexis and anti-cathexis, ego, and pleasure and how they contribute to the argument for the benefits of play in early childhood learning and development.

According to Freud, all psychic energy is generated by the libido. Libido is a physical sexual energy gratified by stimulation, friction, and even the sight of erotogenic zones and whose

pleasure is a full body experience (Valls, 2019). It is important to note before moving forward in this section that within Freudian theory, the gratification of sexual energy does not necessarily mean the performance of sexual acts (while this does hold truth later in development and in adulthood), but is what drives and satisfies our biologic and psychologic desires throughout our development. Throughout development, different erotogenic zones become dominant and drive what we desire, how we achieve pleasure, and how we interact with the world around us.

Any bodily zone has the potential to send sexual stimuli that affects physical behavior, and therefore the entire body is erotogenic. Full body erotogenicity often involves highly stressful events, such as physical illness, in which the body is focused on itself and its survival before all else. In most other cases, the body is comprised of specific erotogenic zones which are dominant at different points in development. The three main phases of erotogenic dominance in childhood are oral, anal, and phallic. These zones create object links early in development, helping us learn what kind of stimulation is pleasurable and what is traumatic to our body. These object links also help to form ego and decide the amount of energy we expend on certain physical actions that will pleasure each erotogenic zone. This leads to the development of personal preferences, such as what objects we like to interact with, what people we seek connections with, and what physical activities we exert energy on (Valls, 2019).

The first predominant erotogenic zone is the mouth. It is stimulated mostly by the act of sucking and biting (Valls, 2019). This is easily seen in infants through the actions of non-nutritive sucking (NNS) and chewing. As discussed by Standley and Walworth (2010), the act of NNS is very soothing to an infant. By sucking on a pacifier or their own hands, infants are able to soothe themselves during and after traumatic events such as medical procedures, illness, hunger, and over-stimulation. As teeth begin to form, infants engage in chewing on objects, such

as teething toys, because it both soothes painful gums and is physically satisfying. It is in this stage that infants first discover the concept of pleasure and the realization that it can come from outside their own body, i.e., sucking is a soothing action and sucking from a bottle or mother's breast relieves the pain of hunger (Valls, 2019).

As muscle control increases, infants enter the anal period of erotogenic pleasure. During this phase, an infant is further enforced in the idea that physical pleasure is derived from outside one's own body. An infant's first experiences with personal action and reaction is through defecation. When an infant defecates, the parent (or parental figure) changes the diaper and makes them clean. This is a physically pleasing and nurturing act for an infant. To an infant, the act of defecating and in response receiving attention and nurture is symbolic of giving a "gift" and receiving love and human connection in return. This is also when an infant becomes cognizant of object loss (in this context, object can refer to a physical object or human connection) and the anxiety that comes from it. During the anal phase, an infant's muscles become more highly developed and they gain more control over their motor functions. While the anus is the main focus of Freud's theory, the entire muscular system is affected and relevant. As muscles develop, infants and toddlers become more equipped to control bodily functions, such as defecation, and motor movements. They will begin to perform physical actions that prevent traumatic events and object loss (Valls, 2019). In an example provided by Valls (2019) infants and toddlers learn to control their sphincter muscles and delay defecation until they are in an environment that is safe and clean, for example in the presence of their caregivers (for infants in diapers) or in a bathroom (for potty-training toddlers). Other examples of physical acts of trauma and object loss avoidance could include grabbing and holding onto favorite objects and people and physically moving away from things that are over-stimulating.

The third phase of erotogenic zone dominance is the phallic phase, usually coming on after toddler age and continuing into a child's adolescent years. During this phase, a child's erotogenic zone is in their genitals. It is at this time that a child discovers sexuality, sexual difference, biologic wants rather than biologic needs, and gains the recognition of a person as entirely separate from themselves (Valls, 2019). While Freud describes this phase in a highly sexual context that is mostly inapplicable to the topic of this paper, the general themes are insightful to the motivations and behaviors of children at this time. During the phallic phase, males generally develop a sense of rivalry with other males and engage in dominance and success driven behaviors that are typically based in physical action. Females generally become aware of their biologic function of reproduction and engage in nurturing and interpersonal relationship forming behaviors. While there are no firm rules or outcomes, it is at this time that children begin to develop a sense of self in relation to biologic sex and gender. It is also at this time that they experience envy of others, engage in more complex, goal-oriented acts to achieve desires, and learn that other people have desires and goals different and separate from their own. They learn that they must either dominate over or work with others to gain their own pleasure (Valls, 2019).

While oral, anal, and phallic are the main groupings of erotogenic zones, these zones exist throughout the whole body, including but not limited to vision, hearing, and skin. Skin is arguably the most influential zone as it is involved with most other zones and, as discussed by Courtney (2020), touch is a highly stimulating and pleasurable experience. All erotogenic zones, though not necessarily the most dominant, are vital in the development of desires and behaviors in children (Valls, 2019).

Erotogenic zones are involved not only in the learning of recognizing and seeking pleasurable experiences, but in the recognition and avoidance of anxiety and stress as well. Just as infants and children learn what they like, they also learn what they don't like. Traumatic experiences occurring at erotogenic zones can influence behaviors later in life. For example, infants who have problems with gastrointestinal reflux experience trauma related to the oral zone. This is due to the infant frequently gagging, vomiting, etc. when they eat from a bottle or breast and suck on a pacifier. This often leads to infants with reflux avoiding having things in their mouth and cause them to take longer to develop a healthy NNS and learn how to eat orally (Standley and Walworth, 2010). While it is not clearly stated, it can be theorized using Freud's erotogenic phases that the infant would exhibit oral avoidance behaviors throughout their life.

As previously stated, libido is energy that drives our desires, achieving pleasure through the stimulation of erotogenic zones. According to Freud, the libido's energy causes conflict in our mind, affecting our ego. Ego is formed from life experiences and is the presentation of our desires and how we are driven to achieve them through our words and actions (Valls, 2019). Freud suggests that our mental states are influenced by two competing forces: cathexis and anti-cathexis. Cathexis is "the investment of psychic energy in a person or object connected with the gratification of instincts." It is what drives us to the preference and selection of specific objects and people. For example, one of an infant's first cathected (preferred) objects is its mother's breast. Cathexes are involved in anxiety and trauma avoidance and the repression of undesired memories. We strongly desire cathectic objects and experience anxiety and stress when we are separated from them. In the absence of these objects or persons, we will engage in seeking behaviors that help ease the stress and anxiety we feel (Longe, 2016). For example, if you are hungry and are not able to immediately eat, you might picture your favorite meal or watch the

cooking channel. If you are separated from a loved one for a significant length of time, you might call them or write them a letter.

Anti-cathexis involves blocking our socially unacceptable needs and desires. It is generated internally and cannot occur until a person has experienced external frustration, for example, parental discipline. Once we are subjected to external controls, we are able to develop internal ones. Repressing urges and desires is a common form of anti-cathexis (Longe, 2016). For example, if you are hungry and standing in the middle of a grocery store, a young child who does not know better might grab food off the shelf and immediately begin eating it. An older child or adult who has experienced discipline and understands what is socially acceptable, however, is able to control their urges long enough to finish their shopping, pay for the food, and leave the store before eating it.

Cathexis and anti-cathexis direct the energy derived from the libido, and ego is the presentation of how we achieve those desires. Ego is the compromise between two subsections of ego: id ego and superego. The id ego is the most primitive structure of ego and is the source of all libidinal energy. It operates entirely unconsciously and is concerned with the instant gratification of our most basic wants and needs (Drake & Myers, 2006). It is the part of our psyche that tells the hungry child in the grocery store to grab food off of the shelf and eat it right away. The id ego knows no judgements and has no morality, no sense of good and evil. It is generational and carries with it all of the phylogenetic baggage of the experiences of one's ancestors. It is shaped by the cultural, racial, and personal experiences of both the child and their lineage (Valls, 2019).

The superego is concerned with social rules and morals. It is often referred to as a person's "conscience" or "moral compass." It develops as a child learns what their culture and

community consider to be right and wrong (Drake & Myers, 2006). Superego is the part of our psyche that tells us that even though we are hungry now, it is wrong to steal food from the store. It is contributed to by parental discipline, unacceptance from peers, and cultural discipline (such as being sent to prison). It involves stages of preconscious, conscious, and unconscious thought. We preconsciously understand right and wrong, consciously make the decision to suppress our urges, and unconsciously feel guilt and shame if we act against societal rules. However, if the id ego and superego are involved at the same time, and the desire for immediate gratification is stronger than our obligation to our morals, id ego wins out over superego (Valls, 2019).

As stated previously, ego is the result of a compromise between the id ego and superego and is typically how we most frequently present and act on our desires. The ego is rational and pragmatic and is both conscious and unconscious. It is where we consciously choose to direct libidinal energy. Freud considered ego to be the "self" and has the job of balancing the demands of the id ego and superego in the contexts of reality in a way that is practical, safe, and socially acceptable. In the grocery store analogy, ego is the part of our psyche that tells us to purchase the food and leave the store before eating it. It may be frustrating to your id ego to wait before satisfying your hunger, but your ego decides that the sacrifice is worth avoiding an uncomfortable social situation and potential feelings of guilt and shame. Freud believed that these three levels of ego are in constant battle and that our personality and behaviors can be found in the outcomes of this internal struggle (Drake & Myers, 2006).

In chapter two of "Beyond the Pleasure Principle" (1920), Freud focuses on the topic of child's play. He describes an example of a game played by a 1-1/2-year-old child. The child has a spool of thread and plays by throwing it away from him and pulling it back. As he throws it away, he babbles "oooh." As he pulls it back, he babbles "da." These babblings could be

interpreted as “it went away” and “it came back.” Upon observation, the return of the toy is seemingly the most pleasurable part of the game to the child. The theme of the game is simple: leaving and returning. Freud concludes that the game is symbolic of the child’s mother leaving and returning. By using an object that the child feels is symbolic of his mother (the spool of thread), the child is creating a fantasy situation in which when his mother leaves, she returns (Freud, 1920).

Through this game, the child is able to learn to accept the departure of his mother. When his mother leaves, it causes the child stress and creates a cathectic desire for her return. It is possible that in the past, the child threw a tantrum when his mother departed and was reprimanded or was withheld affection, creating an anti-cathexis. The child has now learned that he can compensate for the lack of his mother’s presence with a game that replicates the feelings of pleasure her return would bring in a way that is self-soothing and socially acceptable. While the return of his mother still brings pleasure, the game has helped the child control his desires and deal with a stressful experience, gaining independence and shaping future behaviors and personality (Freud, 1920).

Freud relates this example of child’s play to the pleasure principal, developed by him. As discussed earlier, pleasure is derived when our erotogenic zones are stimulated, and our desires and urges are satisfied. Pleasure is achieved through specific actions, often involving other people, physical objects, or both. While narcissistic (self) pleasure is possible, pleasure is almost always greater when it is derived from other people or objects. The pleasure principle is a physically functioning tendency that attracts humans to people, objects, or actions that are pleasurable and drives us to avoid those that are unpleasurable. The presence of pleasure creates a sense of well-being in both our bodies and minds. By this principle, humans, children

especially, will seek out things that bring pleasure, avoid things that are stressful, and become indifferent to things that are neither as they gain more experiences (Valls, 2019).

Freud offers another possible theory as to the purpose of the game. Freud observes that the child throws the toy away much more than he pulls the toy back, enhancing the experience of departure and limiting the pleasure of return. Freud questions why the child would choose to experience symbolized stress over pleasure. Up until this point, the game follows the pleasure principle outlined by Freud. Once the child begins to act out a stressful experience more frequently than a pleasurable one, however, it can no longer be described as a pleasure-seeking behavior. From this observation, Freud concludes that pleasure is not the sole guiding factor of play. The game could be a result of repetition compulsions of a traumatic experience, in which the child is purposely replicating his trauma over and over (Freud, 1920).

So why do children play? According to Freud, children play because they must. Through play, children are able to appropriate their world through symbols and the stories connected to them to either repeat or change them. Children repeatedly play out pleasurable scenarios in order to continue the feeling of pleasure derived from them. Children play out stressful or traumatic scenarios in order to provide themselves with a feeling of autonomy and control over situations they cannot control, either changing the scenario to fit an idealized version or practicing how they might respond to that scenario in the future. Children's early experiences of their erotogenic zones dictate what they find pleasurable and stressful and influences how they play and who and what they play with. Engaging in play also allows children to experiment, learning what they like and don't like, how to accomplish their goals and desires, societal rules, and how to interact and work with others. Through this, children practice compromising the id ego and superego, forming the ego, a sense of self, and ultimately the behaviors and personality that will carry over

into their adult life. Play is also a form of communication for children, giving insight to others on who they are, their wants and needs, and their current well-being.

Freud's erotogenic phases outline what type of development occurs at different ages. He believed that play was an expression of cognitive development taking place. Another theorist, Piaget, did not believe that play and cognition were related. Where these two theorists did align is that children go through stages. Piaget's theories outline the different stages of play a child goes through and how this influences how they interact with their environment.

Piaget

Jean Piaget was an early childhood theorist. Piaget was native to Switzerland and was born on August 9, 1896 and died on September 16, 1980 (Boeree, n.d.). In his early years, he became interested in zoology. He even published an article about his is observations of an albino sparrow. This was not the only article he published during his interest in zoology. By fifteen years old he had published several articles and gained an outstanding reputation among zoologists in Europe. Piaget studied zoology and philosophy at the University of Neuchatel. Soon, after he earned his doctorate degree, he became interested in psychology, and this was the beginning of his career as an early childhood theorist. While studying psychology in Paris, Piaget was intrigued by the errors school children made during reading tests. This led him to explore the reasons why these children made such errors.

Jean Piaget did not think that play and cognitive development were related (Mcleod, 2018). He grouped play into four stages. Sensorimotor was the first stage, second was preoperational, next was concrete operational and last was formal operational. Each stage is integrated into a child's development.

Piaget explained that during a child's first two years of life, they are in the sensorimotor stage. During this stage, a child becomes aware of himself/herself as a separate physical structure, and the child also realizes that the objects around also have a separate physical structure (Mcleod 2018). Children begin to learn about the world by exploring with their senses and interacting with the environment. During the sensorimotor stage, a child watches other children and repeats the activity. Most of these activities pertain to physical activity.

The next stage of development is the preoperational stage, which is when a child begins to engage in symbolic activity (Mcleod 2018). This can begin as early as eighteen months and can last until ages six or seven. During this stage of development, a child will begin to talk and learn how to symbolically manipulate and explore the environment. As their language becomes more mature, they develop memory and imagination, which will help a child understand the concepts of past and future. Children accomplish this through inner representations or thoughts about the world in which we live. A child will discover that you can represent different objects with words and mentally manipulate words, just like you can physically manipulate objects. This is when children begin to tell stories and create things. During symbolic play, a child does not have to play with a physical object or toy, however the child might pretend they are playing with something physical. An example of symbolic play is a child using their hand to pretend to talk on the telephone, or even using a banana in place of an actual phone. Throughout a child's life, sensorimotor and symbolic play decreases.

After the preoperational stage is the concrete operational stage. The concrete operational stage begins around the age seven and can last until about age eleven or twelve (Mcleod, 2018). During this stage, children begin to have logical and organized thoughts and thought processes, but a child can only apply logic to physical objects. Children also begin to classify objects by the

similarities and differences. During this stage, children also begin to grasp the concept of time and numbers. When a child is in the concrete operational stage, their perspectives begin to change. Often, during this stage, children play with rules. Children during this stage will begin to reason with one another. Another example of a situation in this stage is a child being able to understand that there is the same amount of liquid in a short, wide glass and a tall, skinny glass.

Lastly, the formal operational stage is when children or young adults begin thinking abstractly, making hypotheses and considering the opinions of others. Children and young adults become more flexible, and they tend to explore the world mentally (Mcleod, 2018). Teenagers tend to think about political, ethical, and social problems. This stage begins around twelve years old. When a child reaches this stage, they are capable of orderly thinking, and they have mastered logical thought.

After Piaget constructed the theory of the four stages of child development, there was much reevaluating of ideas on children and how they learn (Libretexts, 2021). Piaget gained his conclusions about child development through conducting his research and observations with his own children, as well as others. He asked the children creative questions about issues, and he was able to form his theory by his own children's mistakes in the responses. This allowed him to figure out how these children viewed the world around them.

Piaget focused mostly on cognitive development. He finally pronounced that intellectual development is the outcome of developmentally appropriate interactions of both hereditary and environmental factors (Libretexts, 2021). He explained that knowledge cannot be passed on verbally. It must be assembled and reassembled by the learner. Piaget also explained that for a child to gain knowledge, the child must use objects and manipulatives then a child will gain knowledge of such objects. Of course, the ability to learn content depends on a child's stage of

intellectual development. When a child is at a certain age, he/she cannot be taught any content that is of a higher stage. There are three corresponding processes to intellectual growth. They include assimilation, accommodation, and equilibration.

Mcleod (2018) suggests assimilation occurs when we change new information to fit what we already know. While accommodation involves changing existing ideas as a result of new knowledge. Finally, equilibration, which means balance. When a child's expectations based on prior knowledge fits the new knowledge, they are experiencing equilibration. Piaget taught that equilibration is the key factor in why a few children advance faster in their cognitive development (Mcleod 2018).

The theorist Vygotsky lived and worked during the same period as Piaget. While they shared several ideas, Vygotsky took a more comprehensive approach to development and learning, rather than breaking it down into stages. Vygotsky's research also further explores the role of peers in learning.

Vygotsky

Team (2011) explained that Lev Vygotsky was born in Orsha on November 17, 1896. He graduated Moscow State University, in 1917, with a degree in law. He studied a variety of subjects while attending Moscow State University. Some of these included sociology, linguistics, psychology and philosophy. In 1924, Vygotsky enrolled in the Institute of Psychology in Moscow. It wasn't until then that he began formal work in psychology. In 1925, he finished his dissertation on the psychology of art. Vygotsky began researching different subjects, such as language, attention and memory, with the help of young students. He was an abundant writer, who published six books in ten years. He kept his interest diverse, but frequently centered his

writing toward issues of child development and education. Lev Vygotsky idea that a child's cognitive development was greatly impacted by play. He believed that play assisted in building cognitive skills (Team, 2011). This was different than many other theorists.

Vygotsky's research explained that the zone of proximal development is the gap between the measure of development, as defined by independent problem solving, and the measure of potential development, as defined by problem solving with adult direction or in partnership with more advanced peers (Mcleod, n.d.). In other words, the zone is the distance between the knowledge a child already has and the knowledge they will learn in the future.

When parents, guardians and teachers provide educational opportunities that are in a child's zone of proximal development, they foster effective learning. Children also learn an abundance of information and skills from their peers. Teachers can encourage this process by grouping children who are less knowledgeable with children who are more advanced. Children are more likely to be more interested in what their peers know and are doing than the adults surrounding them. Children can watch and learn, along with imitating guided instruction, to gain new skills and knowledge. Vygotsky also implied that human development is a result of unique interactions between individuals and society (Mcleod, n.d.). When involved in these interactions, children learn from parents and teachers gradually and continuously. However, it's not only people that society impacts, but also people impact society. After the death of Vygotsky, his work continued to grow, specifically in the areas of developmental and educational society. Vygotsky's work has become significant in the area of education.

Lev Vygotsky and Jean Piaget had some similar ideas incorporated with many different ideas. Piaget broke development down into stages, but Vygotsky failed to do this. Vygotsky emphasized that culture plays an important role in the development of a child, however Piaget

emphasized that development is comprehensive. Piaget focused his theory on peer interaction, while Vygotsky focused his theory on the importance of the presence of more knowledgeable adults and peers. Vygotsky's theory included the importance of the role that language plays in development, and this is something that Piaget neglected to study (Mcleod, n.d.).

One thing that Freud, Piaget, and Vygotsky collectively neglected in their research is the role of adults and environment in play. Children enjoy play that is based on reality. This type of play is accomplished through a well-adapted environment and adult example. The theorist Montessori outlines these concepts and how the elements of play encompass body, mind, and environmental factors**.**

Montessori

Alliance Charter School (n.d.) found that Maria Montessori was born in Chiaravalle, Italy, on August 31, 1870 Montessori registered at the University of Rome in 1980 to study physics, mathematics and natural sciences. She was one of the first women in Italy to enter the faculty of medicine at the University of Rome. Throughout her time at the University of Rome, she won a series of scholarships to pay for most of her medical schooling. She became one of the first female doctors in Italy in 1896. She graduated with high distinction and become known across the country. Throughout her work, at a psychiatric clinic, she often visited asylums throughout Rome. These asylums provided care for children with mental disorders. While working in these asylums, she became interested in children with learning disabilities. Maria Montessori initiated a new theory of a teaching method. This is known as the Montessori teaching method. The key principles of the Montessori method of teaching are independence,

observation, following the child, correcting the child, prepared environment and absorbent mind (Alliance Charter School, n.d.).

Independence is a constant goal in Montessori education. It is important to foster independence in children inside and outside the classroom. To achieve independence, children should be given opportunities to move, dress, choose and help adults with tasks. When a child is capable of being independent, they have an increased self-esteem, self- confidence and self-belief (The Montessori Method, n.d.).

Observation is important for parents and teachers to accomplish. It is during this observation time that adults identify sensitive periods for each child and provide the manipulatives or resources needed for the child to progress. A sensitive period is a time in which children are more ready to master certain skills. It is not difficult to master this observation. Adults can spend many hours watching children's actions. Through observations, adults learn about child. When an adult follows a child, the child will show the adult what areas need challenges. In Montessori education, if a child wants to climb a tree, they should be given the opportunity to do so, without the adult being over-protective (The Montessori Method, n.d.). Following the child also means being non-directive and giving them freedom with many options.

Respect for the child is vital in the Montessori method of education (The Montessori Method, n.d.). It is an important principle. Respect can be shown by allowing uninterrupted concentration time. Respect is also shown by giving children choices and freedom.

Children will make many mistakes. According to the Montessori theory of teaching, correcting the child as they make these mistakes should be done calmly and without the adult yelling or losing their temper (The Montessori Method, n.d.). If the child spills something, the adult should simply recognize the issue and give a suggestion on how to fix this problem. The

adult should not state the obvious, however, they should find a better way to help the child realize the mistake.

A prepared environment is an essential part of Montessori education. A prepared environment is set up for success by allowing freedom of movement and choice. It includes child-sized furniture, engaging and welcoming colors that are inviting for the children. Montessori refers to work as play (The Montessori Method, n.d.). She identifies play as work, because the children are creating themselves through play.

Auto education is the same as self-education, and it is one of the most important beliefs in Montessori education. During auto education, adults provide the guidance, encouragement, inspiration and the appropriate environment for children to educate themselves (The Montessori Method, n.d.).

Through Montessori education, children, under the age of three, do not need organized lessons in order to learn. The belief is that the child will take in everything in their surrounding by their experiences. It is important that the environment is created in a developmentally appropriate manner, because this is what the child will absorb (The Montessori Method, n.d.). In this type of environment, play is effective.

Maria Montessori's opinion of play was based on her research. She explained that play is the work of the child, and the child can learn and grow through play. Montessori noticed that children favored play based on reality and also enjoyed play more when using real materials that produced real outcomes. She also found that children love to imitate adults and do what they do in reality, not just pretending to do these things (The Montessori Method, n.d.). Children, under the age of seven, use mostly their imagination to play.

Through the Montessori teaching method, it is believed that creativity, learning and intelligence do not originate from the brain alone. These things are accomplished through the entire body, and movement combinations increase the memory and sequencing skills. It is believed that there are many positive effects on children's development through music and movement (The Montessori Method, n.d.).

Frobel

Friedrich Wilhelm August Froebel was born in 1782 and died in 1852. Froebel studied at the University of Jena and the University of Gottingen (Early Childhood, n.d.). He was a German, who established a basis for modern education based on the thought that children have individual needs and capabilities. Froebel believed that play can be the highest expression in the development of humans and that play is the free expression of the child's soul. Froebel was the creator of kindergartens and a pioneer of early childhood education. His writing and work changed the traditional way of thinking about early childhood. He believed that children are whole beings, and their thoughts, actions and feelings are linked. He believed that young children learn in a holistic way and their learning experiences should never be compartmentalize, because everything is connected. His work has since become an integral part of early childhood education practices today. According to Froebel, when children play, they build their understanding of the world through direct experience with the world. He advised against the traditional school model and was in favor of free discipline in schools. Froebel was one of the first to acknowledge that significant brain development occurs between the ages of birth to three.

He believed that by playing, children imitate adult economic and social activities, and they are gradually led into the bigger world of group life. Freud taught that every child is unique, and we should focus on what the child can do rather than what they cannot do, because that is the

beginning point for their learning process. Children learn by action and doing things independently. In this way, they can learn from experience and become more aware of their learning process. Freud believed that adults should help children reflect on their learning.

There are ten principles that correlate with Frobel's theory which include, childhood is an important part of life and prepares a person for adulthood, education is viewed as the present and not just preparation for later. The entire child is essential. A child's health (physical and mental) is stressed. The importance of feelings and thoughts is also included. Learning is not categorized, everything is connected. A child's intrinsic motivation is highly valued along with self-discipline, this results in self-directed activity. Throughout the different stages in development there are periods when a child is more receptive of learning. The starting point of education is what a child can do rather than what they cannot do. Within each child, there is an inner life when begins to show under favorable conditions. The most important aspect in child development is the people who the child interacts with. Lastly, good education is about three things, the child, the context in which learning takes place and understanding which the child develops and learns (Early Childhood, n.d).

Some people say that Frobel's most important contribution to his educational theory is his belief in self activity and play. He believed that the teacher is not supposed to drill the students but instead encourage the students to use their self-expression through play, whether that be in group settings or in individual settings (Early Childhood n.d.). He designed circles, spheres and other toys which he referred to as "gifts or "occupations." These items and toys were essentially designed to stimulate learning through different play activities partnered with songs or music.

Because of Frobel's passion for early education, he worked tirelessly on his new ideas. Most of our modern-day techniques used in early childhood education are indebted to Friedrich Froebel.

Infants

Infant play is a beneficial resource for the normal development and mental health of infants and children under the age of three (Courtney, 2020). Play has a therapeutic role in a variety of areas including developmental trauma, parent-infant attachment relationships, neurosensory development, perinatal depression, and sociocultural factors. Courtney (2020) describes how the field of infant mental health has grown exponentially in recent years. Contrary to past societal myths, infants experience trauma which can have negative effects carrying over through childhood and into adulthood. Courtney (2020) also describes childhood and infant maltreatment as any risk of physical and emotional harm including physical and emotional abuse, sexual abuse, neglect, and exposure to domestic violence. The unfortunate truth for infant maltreatment is that infants, unlike children and adults, are incapable of blocking or escaping abuse or communicating that they are being harmed. Trauma is a whole body, sensory experience that infants are particularly susceptible to due to their immature nervous systems. Neuroscience literature concludes that infant developmental trauma alters the brain and can result in lasting executive function, emotional, behavioral, cognitive, social and physical challenges (Courtney, 2020).

Historically, play therapy has been designed for children older than 4 to play out their inner worries, anger, trauma, etc. using carefully designed play environments. The issue with traditional models of play therapy when it comes to infants is that there are certain developmental differences, as well as the ethical and efficacy issues that arise from having

parents out of the room like you would with children, when providing play therapy for infants. Courtney (2020) defines Infant Play Therapy in three separate models: 1) adapted current known evidence-based play therapy modalities, 2) developing new infant-based play therapy models, and 3) training in existing infant mental health models that utilize play. These three models fall under the larger umbrella of infant mental health interventions (Courtney 2020).

Neurobiology has informed much of the evidence-based knowledge supporting infant play therapy. For example, recent neurobiological research has found the existence of mechanosensory nerves in the skin that respond preferentially to touch experienced with close physical contact. When stimulated, theses nerves generate an extremely rewarding sensation. This has led to the conclusion that touch derived from close physical contact is essential for the development of a healthy mind and body. Touch is the first sensory stimulus we experience from the world around us. It is essential to physical, cognitive, and emotional growth and is an important aspect of play. From research of animals, it is known that rearing animals in close proximity to their littermates promotes brain growth and development and higher levels of success in various areas. Play, especially in close proximity, is important to social, emotional, and cognitive development in humans of all developmental ages. On a biological level, play affects the development of the hippocampus (which is involved in memory and spatial navigation) and stimulates the brain to make connections between nerve cells. Play and social joy promotes engagement in young animals and humans in physical activities, helping them to bond socially which is an intrinsic function of all animals (Courtney 2020).

In most primates, social isolation early in life has devastating effects, including depression and lack of social skills. It requires no learning, but we gain much from it. During development, humans are sensitive to social information. It teaches us about our own abilities in

comparison to others and develop social and life skills. Parents generally guide play behaviors and introduces other behaviors and skills. For example, the more physical, unpredictable play that fathers tend to engage in strengthen problem solving skills by teaching children how to deal with unexpected events. The way that parents interact with their infants (and children) affect who they will turn out to be and their dominant behaviors. Engaging in forms of physical play helps infants form attachments and learn beginning social behaviors such as eye contact, facial affect, and self-regulation. The human face is especially stimulating to infants. Parents can convey and teach emotions to infants through facial expressions (Courtney, 2020).

Sensory development begins in the womb, therefore play can and is beneficial to begin before birth, during the second and third trimesters. Responding to preborn infants' kicks by placing a hand over or patting the area they kick while saying phrases such as "hello there," "there you are," or "kick, kick, kick" provides the infant with vibration and words in response to their action. It helps them associate their movements with responses from their parents and teaches that their actions illicit responses, as well as establishing early two-way communication. Placing a drum over the abdomen and lightly tapping it rhythmically provides soothing vibrations and sounds that help any overstimulation the infant may be experiencing (Courtney, 2020).

Once an infant is born, play can facilitate social emotional engagement that shapes emotion, links emotional expression to heart regulation, and creates memory circuits. One example of a possible play-based intervention is nurturing caring touch. Instinctive infant touch such as holding, carrying, cuddling, rocking, jiggling, swinging, walking, and massaging release neurochemicals in infants' brains that help soothe and lower stress hormones. Mirroring infants' sounds and rhythmic movements, talking in higher pitches, and initiating eye contact helps

infants learn social behaviors, distinguish different sounds in language, recognize and associate emotions and facial expressions, promote focus and attention, and soothe and calm (Courtney, 2020).

Once an infant is older, from 4-6 months, play based interventions help nurture parent-infant relationships, shape neural rhythms, and regulate hormone levels, cardiovascular function, sleep rhythms, immune function, and stress response system. An infant's brain is shaped by interpersonal experiences. Play helps them learn to manage stress and overcome trauma. Giving an infant tummy time can help to soothe them, as well as help build muscle tone needed for crawling, standing, walking, and supporting their head on their own. Playing peek-a-boo helps infants learn to deal with unexpected events and self-regulate their level of stimulation. Pointing to and naming body parts on the infant help develop bodily and spatial awareness and associate their physical body with their mental existence (Courtney, 2020).

Research suggests that play-based interventions are also beneficial thanks to the multi-modal approach many of these interventions take. Fantasia, Fasullo, Costall, and Lopez (2014) conducted a study of infants' participation in response to unexpected changes in a familiar social game. The study notes previous research which states that infants learn not only how to deal with others' expectations and feelings, but their own feelings, goals and desires. Being engaged and maintaining engagement during a social game is both a developmental milestone for infants and a tool for development. Engaging in familiar social games, ones that are expected and understood, help infants learn to be cooperative and attune to the feelings, goals, and desires of others (Fantasia, Fasulo, Costall, &Lopez, 2014).

For this study, researchers recruited 20 mothers and their 3-month-old infants. The Bayley Scales of Infant Development were used to determine the equivalency of their motor and

cognitive skills and developmental age. The mother-infant dyads were observed in a quiet, spacious room so as to eliminate any excess stimuli. It contained a mat, table with chairs, sofas, and a few toys. Mothers were asked to perform a familiar game or routine with their infants as they would normally perform it as to establish control conditions. Then, the same game/routine was performed in 2 separate experimental conditions: 1) without sounds and 2) without motor gestures. These encounters were recorded, and the infant's limb movements, gaze, and facial expressions were coded to determine engagement. Infants gaze at things they find interesting and stimulating and tend to look away from things that are less stimulating, such as a neutral face expression. Infants' body movements are indicative of their discrimination of others' intentional vs. unintentional actions, such as preparing their body to be picked up. Finally, infants are capable of expressing several emotions at 3 months of age and their facial expressions are reliable indicators of their understanding, familiarity, and feelings of a situation (Fantasia et al., 2014).

The games/routines performed by the mothers were all very similar in structure. They consisted of a series of sequenced actions performed with vocalizations and gestures. They were developmentally age appropriate and familiar to the infants. The study found that overall, infants' engagement was significantly decreased in the altered experimental conditions. In the altered conditions, infants exhibited less smiling and laughing, body movements, and an increase of stunned expressions. This could be due to infants' confusion at experiencing unexpected changes to a familiar activity. The researchers theorize, however, that the more likely explanation is that the altered conditions were less stimulating and therefore less engaging. Researchers found that the original adaptations of the games/routines had more opportunities for infant engagement. This leads to the conclusion that 1) multimodal game structures capture and

maintain infants' attention for longer periods of time and 2) infants are capable of being active participants in joint routines rather than passive recipients of the actions performed on them. These familiar games/routines may also carry the benefit of cognitive developmental function by learning to conceive a routine as a sequence of recognizable tasks (Fantasia et al., 2014).

In further discussion of multimodal sensory activities, music is an effective tool for multimodal play. It carries both the capability of providing multimodal input and can be adapted to be developmentally age appropriate. The field of music therapy has, through decades of research, developed an effective model for the use of music with premature infants, specifically. Premature infants are not developmentally mature enough to meet the stimulatory demands of the world outside the womb. They often have not developed the functions needed to eat orally, regulate their stress, or regulate their physiological factors. This means they are especially susceptible to medical complications and infant trauma that can affect premature infants into adulthood (Standley & Walworth, 2010).

One of the most common and well-developed music therapy interventions for premature infants is the Pacifier Activated Lullaby (PAL). A newborn's ability to suck is critical for both neurological development and survival. Due to its rhythmic nature, non-nutritive sucking (NNS) helps facilitate internally regulated rhythms, such as sleep cycles. Premature infants' oral motor skills are also usually underdeveloped and not coordinated enough to perform oral feeds. Practicing NNS while in the NICU holds many benefits, including increasing oxygenation, coordinating suck-swallow-breath patterns, regulating internal rhythms, and strengthening oral muscles (Standley & Walworth, 2010).

The PAL is beneficial for NNS because it rewards the action of NNS. Music is intrinsically motivating and, when the correct musical elements are used, is easy for a premature

infant to process. The PAL is a device that connects a control machine with a speaker to a pacifier with a sensor. When an infant sucks on the pacifier strong enough to trigger the sensor, the infant is rewarded with 10 seconds of pleasing lullaby music. The number of sucks and strength of sucks required to activate the PAL can be increased as the infant's NNS improve in order to further challenge them and help them learn and develop. The ideal NNS is a consistent pattern of longer suck bursts with short pauses in between for the infant to breath. Studies have shown that infants using the PAL to practice NNS began to bottle feed on average 2.9 days sooner and their hospital stay was decreased by an average of 6.3 days. It was also found that the PAL was effective in soothing infants following procedures (Standley & Walworth, 2010).

Another common music therapy intervention for premature infants is Multimodal Neurological Enhancement (MNE). As previously stated, premature infants are not equipped to handle the amount of stimulation present outside of the womb. This can cause further medical complications, as infants are prone to have episodes of bradycardia and desaturation when they become overstimulated. MNE combines the use of auditory, tactile, and vestibular stimulatory input to help gently accustom infants to be able to handle multiple types of stimulation at once. The NICU environment is also not ideal for normal bonding and learning opportunities which, as stated in previously discussed research, can be detrimental to the overall cognitive, emotional, and physical development of infants (Standley & Walworth, 2010).

When providing MNE to a premature infant, it is important to make sure infants feel safe and supported. This is accomplished by swaddling the infant if holding the infant during MNE, or providing containment at the feet/butt and head of the infant if providing MNE in the infant's crib/isolette. MNE starts by slowly introducing auditory input. Research shows that female infants tend to respond better to live lullaby singing paired with guitar and male infants respond

better to live lullaby singing alone. MNE starts first with introducing soft guitar playing (this part is for female infants only). Then, you introduce live lullaby singing by first humming (this is the starting place for males) and then singing with lyrics. Next, tactile input is introduced by providing a full body touch sequence while continuing singing (and playing guitar). Finally, vestibular input is introduced by rocking the infant while singing (and playing guitar) and providing the touch sequence (Standley & Walworth, 2010).

Throughout the MNE intervention, it is important to look for signs of overstimulation in the infant. These signs include but are not limited to splayed fingers, crying, frowning, arched back, yawning, sneezing, hiccups, and negative physiological reactions. If any of these signs are noted, the last input introduced is immediately paused and you do not move onto the next step of the intervention until the infant has proven they can handle that step without overstimulation. The practice of providing multimodal stimulatory input helps infants learn to handle multiple types of stimulation and regulate their stress. While all infants in trial studies had positive results from the use of MNE, female infants responded especially well, with the average hospital stay decreasing by 11.9 days and daily average weight gain increasing by an average of 5.5 grams (Standley & Walworth, 2010).

Music is also a useful tool for facilitating parent-infant bonding in the NICU. As music is easily manipulated by a trained professional, it is able to be adapted to fit the specific constraints of the NICU environment and provide opportunities for bonding otherwise less available. Parents can be engaged in MNE as much or as little as they feel comfortable. By providing the touch sequence, parents are able to bond with their infants through touch, stimulating the nerves that release hormones in the body that are rewarding and reduce stress. This is both calming for the infant and empowers the parents to bond with their baby and be active in their care. Parents

singing to their infants is also beneficial, both for preterm and term infants. An infant's favorite sound is its mother's voice. Singing provides a variety of benefits that include but are not limited to sensory integration, soothing stress, developing hearing, and learning early communication and language skills (Standley & Walworth, 2010).

Symbolic play in infants has been linked to communicative development. Symbolic play promotes symbolic development, conceptualizing one object as another, and cooperative thinking between 2 minds. Quinn and Kidd (2018) conducted a study that examined infant-caregiver reactions during symbolic play and how it relates to interactions during functional play. The study included 54 caregivers and their 18-month-old infants. All infants were monolingual and typically developed. The study first engaged the dyads in symbolic play. The toys chosen for symbolic play included a saucepan, spoon, teapot, teacups, teaspoons, teddy bear, and toy phone. After about 10 minutes of the dyads playing with the toys meant for symbolic play, an examiner stepped in and switched out the toys for ones intended for functional play. Functional play was defined as using an object for its intended purpose. The toys chosen for functional play included a magnetic drawing board, magnetic stamps, peg and hammer set, animal block puzzle, maraca, and castanet. The dyads then engaged with this new set of toys for about 10 minutes.

The play sessions lasted for approximately 20 minutes, split in half between the 2 toy groups. Joint attention duration and frequency were measured and compared for differences between the 2 play conditions. The study found that significantly more joint attention occurred during symbolic play. This suggests that symbolic play helps infants understand the use of others as intentional social agents. More gestures were also observed in symbolic play. This suggests that in early development, before infants develop the use of spoken language, in hand gestures are an efficient method for naming and describing of objects. This study highlights the

effectiveness of symbolic play to elicit and cultivate foundational communication skills (Quinn &Kidd, 2018).

So far, several methods of play have been discussed for children ages 2 and up. The developmental benefits of play and play therapy is well established in the context of early childhood education. This section of research review, however, finds support for the use of play even earlier than childhood, in infancy and even before birth. Development begins at 6 weeks gestation and continues into adulthood (Courtney, 2020). It is important to take advantage of as much development time as possible, because brain functions that are not used during these crucial developmental times will be lost and affect many areas of functioning later in life. There are many considerations to be had with infant play, including the use of touch, music, and symbolic play. Infant play is crucial for the development of many cognitive, emotional, social, and physical functions including but not limited to communication and language, attachment and relationships, cooperative thinking, emotional regulation, stress regulation, spatial awareness, oral feeding, and more discussed in this section. These considerations are important for any educator finding themselves working in daycares and education centers for infants, with expecting mothers, mothers with infants, etc.

Conclusion

The benefits of play have not always been recognized in early childhood education. Thanks to the insights and research from prominent educators, academics, and theorists, these benefits are now more fully recognized and the transition from desks and lectures to classrooms centered around play is more common than ever before. Early childhood education serves children and their families by tending to their health, providing important social interaction, developing positive parent-educator relationships, and setting children up for success as they

enter their later school years. As early childhood education programs continue to expand, it is important that educators understand the needs of the children and families they serve and are able to provide educational experiences, such as play, that are developmentally appropriate and beneficial.

Thanks to the insights from theorists like Piaget, Vygotsky, Montessori, Frobel and Freud, educators can obtain a well-informed knowledge of childhood development and what needs exist at each stage. Infants and children go through several stages of development. During each stage, children are a sponge for information. Piaget's theory of the four stages of childhood development aligns closely with Freud's theory of erotogenic zones. Children begin by using their senses to explore and interact the world around them, followed by learning control over their own body and how to manipulate their environment. Children then begin to develop complex thought processes and learn goal-oriented actions, how to apply logic and reason, and a sense of self. Finally, children gain consideration of others and the larger communities they belong to and how these things relate to them as an individual.

Vygotsky outlines how children's development and learning are constantly changing and progressing. There are defined windows of opportunity for learning in children. Vygotsky's theory of the zone of proximal development emphasizes how these opportunities must challenge a child without going too far beyond their current level of development and understanding. It is the job of educators to closely observe children, evaluating their individual levels of knowledge. Educators must then create a learning experience that includes adult instruction, learning from peers, and independent practice. Montessori also emphasizes the importance of independence in children, achieved by allowing children to practice skills on their own, move freely, make choices, and creating an environment that sets children up for success. Centering a classroom

around play allows educators to observe children and allows children to interact with and learn from their peers and practice independence.

One concept Freud discusses that other theorists leave out is the importance of pleasure. Providing experiences that are engaging, fun, and rewarding contribute to a child's sense of well-being and ensures a positive view of their educational experiences. When educators create a learning environment that makes children feel safe and incorporates a large variety of play-centered activities, children are empowered to engage in their known interests and explore new ones. This attributes to sense of self and a child's confidence.

The process of learning begins even before birth. Infants fall into the category of development in which the senses are used in constant exploration of the world around them. During infancy is when we begin to learn how to deal with stressful experiences and the foundations for social skills are laid. It is during infancy that our brain contains more neurons than at any other point in our life and if they are not regularly used, we will lose them. At a time when spoken language and motor movement is developmentally limited or inaccessible, play provides an adapted method of learning in which infants are introduced to new things and provided opportunities to explore the world around them.

Infants and young children learn best through active experiences rather than lectures and rigid rules. For them, the act of playing is natural form of learning and communication. When children are allowed to play freely in a safe, engaging environment, they are able to learn about and come to terms with their environment, practice social and life skills, discover interests and talents, and develop independence of body and thought. It is the job of an educator to introduce new experiences and ideas and support children in their exploration of them. In doing so,

children's developmental needs are met, and educators can guide children to develop behaviors that will help them be successful in their future learning and adult life.

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