

**ZSUZSA ROSEMOND<sup>1</sup>****The Importance of Serve and Return in the Infant Classroom Settings<sup>2</sup>**

*The aim of this article is to explore the importance of early childhood education focusing on infant care by using serve and return, which is undeniably one of the most important components of infant education. It is a proven fact, that healthy relationships between children and their caregivers are extremely important for developing a strong brain. Starting with infancy, the bond between children and their caregivers builds a strong foundation for development focusing on serve – and – return interactions. Babies are extremely responsive to emotions, reactions to activities and social interactions that they receive from the world around them.*

The foundation of a child's development is based on three things: genetics, environment and experience which are the interaction between the child and their environment. All the early experiences help in shaping children's future and their ability to learn. Therefore it is essential that an infant caregiver would fully embrace all possible interaction with the children under their care throughout the day. There are opportunities to utilize serve – and – return during a diaper change, while feeding a bottle or playing on the floor. Without constant interaction between a teacher and the child, there are missed opportunities to lay a solid foundation of future brain development. After an overview of serve - and – return and the current literature, it is very important to show examples of how it is used in the infant classrooms throughout the day. These best practices are used at the facility, where I have been observing consistent serve-and – return practices for 5 years.

**Serve – and – Return**

The Harvard University Center on the Developing Child has been studying brain architectures and how young children develop in an environment full of relationships. "Serve and return

---

<sup>1</sup> Center Director; KinderCare Learning Center, Stoneham, Massachusetts, the USA, [srosemond@kindercare.com](mailto:srosemond@kindercare.com)

<sup>2</sup> The described work/article/presentation\* was carried out as part of the „Roadmap for Structural Changes of the University of Sopron" - nr. 32388-2/2017 INTFIN. The Ministry of Human Capacities of the Hungarian Government supported the realization of this project.

interactions shape brain architecture. When an infant or young child babbles, gestures, or cries, and an adult responds appropriately with eye contact, words, or a hug, neural connections are built and strengthened in the child's brain that support the development of communication and social skills. Much like a lively game of tennis, volleyball, or Ping-Pong, this back-and-forth is both fun and capacity-building. When caregivers are sensitive and responsive to a young child's signals and needs, they provide an environment rich in serve and return experiences." In an infant classroom setting, opportunities are consistently arise to practice verbal and non- verbal communication throughout the day. It is essential to dedicate as much time as possible and value all parts of an infant's daily schedule to support their brain development by consistent positive interactions. "If newborns and infants have only limited possibilities to experience themselves and their environment with their parents, the appropriate neural network may not develop properly, thus their ability to address the world properly may get damaged. Addressing the world is the school of human learning" (Varga, 2017). Over the last five years, I had been able to follow children's development from 12 weeks old through 8 years old. These early years are the most important foundation to every child's life. "Due care and education at early years influence the build – up of the brain network and structure to a great extent. From birth to the eights year of existence brain behaves like a magic sponge, it absorbs everything. This is the most sensitive phase of development of the mind, a window for opportunities; this is the time when we learn the most from our environment. However this window is not open for a long time, and the age of 8 it slowly starts to close and the building – up process slowly comes to an end" (Varga, 2017). Serve and return had become an inadmissible part of education in early childhood education. There are ongoing researches on early brain development and based on continuous data it is essential that scientists, scholars, teachers are all collaborate to foster the importance of early childhood education. According to Dr. Laszlo Varga, the latest international researches focusing on how childhood is a key factor in every person's life. Children's education and overall development has a strong connection with every nation economic and social growth, based on the fact that only "happy, well-balanced, talented children are able to build a prospering and sustainable society" (Varga, 2017).

"Healthy brain architecture depends on a sturdy foundation built by appropriate input from a child's senses and stable, responsive relationships with caring adults. If an adult's responses to a child are unreliable, inappropriate, or simply absent, the developing architecture of the brain may be disrupted, and subsequent physical, mental, and emotional health may be impaired. The persistent absence of serve and return interaction acts as a "double whammy" for healthy development: not only does the brain not receive the positive stimulation it needs, but

the body's stress response is activated, flooding the developing brain with potentially harmful stress hormones" (Developing Child, ) The lack of attention, caring and neglect causes toxic stress which will lead to lifelong consequences with learning, behavior challenges. Toxic stress will also affect both physical and mental health not just in childhood but follow through adult life as well. "The brain grows at an amazing speed; by the age of three will be more than a thousand trillion connections between different neurons. The type of care that the child receives in his/her early life will decide the information of neuron network "(Varga 2017).

One of the most essential experiences in shaping the architecture of the developing brain is serve and return interaction between children and significant adults in their lives. Young children naturally reach out for interaction through babbling, facial expressions, and gestures and adults respond with the same kind of vocalizing and gesturing back at them. This back-and-forth process is fundamental to the wiring of the brain, especially in the earliest years.

Dr. Tronick's "Still Face" experiment provides information on what happens when a child does not receive the attention they seeking. The experiment provides evidence of what happens when a mother of a year old infant denies the attention that the child's looking for. Even with the short period time we can see, the long term effects on the lack of serve and return in a child's life. Babies are extremely responsive to the emotions, the reactivity and the social interaction that they get from the world around them. In the video what the mother did is sat down and she was playing, interacting with verbal and non – verbal cues. She was greeting the baby, and the baby was responding back to her. They were working on coordinating their emotions and their intentions, what they wanted to do. That is the normal exchange what all babies should be used to. Next, the mother had stopped responding to the baby's cues and the child had quickly picked up on this. She uses all her abilities to try to get her mother's attention back. She points; she smiles, puts her hands up, makes a screeching sound and finally starts screaming and crying. Even in this short period of time if they don't get the needed attention they will react with negative emotions and causing stress. They actually lose control of their posture because of the stress they are experiencing. Dr. Tronick compares this to the good, the bad and the ugly. The good is the normal things we do with our children, the bad when something bad happens but they can overcome it and the ugly is when the child do not have a chance to get back to the good and there is no reparation, they are stuck. It is evident that how important are the early ages in everybody's life. Without the positive interaction, consistent attention and nurturing environment, we can cause lifelong challenges in a child's life. "Early years teachers are

supposed to help children in this most sensitive period of their lives to construct themselves and to be able to see the world with their own eyes” (Varga, 2017).

### **Infant Care in the United States**

Maternity leave in the United States is regulated by the US labor law. The Family and Medical Leave Act 1993 (FMLA) requires 12 weeks of unpaid leave annually for most mothers of newborn or adopted children after that period their job is not protected, unless the individual company have a more family oriented maternity plan in place. With the current regulation, most families are looking for high quality infant care if both parents are to work full time. Finding the best care for your most prized possession, your baby, is one of the hardest decisions to make especially when it comes to first time parents. There are several options that are available for parents. Some of the options are: private nanny at home, in home family daycare, large group child care centers.

Our infant program is designed to provide a nurturing, creative world for infants, one that helps foster the daily development of their minds and bodies. When infants start their learning journey, teachers work with families to make the transition smooth to ensure a great start for the infants. It is essential to create a strong bond with each child and offer the families a “home away from home” environment (KinderCare Education LLC, 2017). I found it extremely important that infant teachers have daily one on one communication with the families whether by phone, daily notes or in person.

### **Serve and Return in the Classroom**

Curriculum is everything that happens in the classrooms; for example how the adults interact with children, the choices the children are offered through the day, meal times, transition times, diapering and toileting, etc. The curriculum is designed to focus on the development of the whole child with the following developmental domains: cognitive development, creative expression, executive function, language and literacy development, physical development and wellness and social and emotional development. Our infant programs focusing on a wide array of things during their day, such as using the five senses to explore the world all around them, “copying the simple actions of others, experimenting with toy instruments, exploring different textures, discovering colors, developing memory skills, learning a variety of words and sounds, and interacting with other children” (KinderCare Education LLC, 2017).

I have previously stated that serve and return is an organic part of teachers' everyday life in our learning center. I had multiple discussions with my infant team on their daily activities and here are a few examples that Miss Julie Porter (Lead Infant Teacher) had referenced during our interview. The biggest opportunities for one on one interaction are bottle feeding times and diaper changing. These are happening multiple times a day and an essential parts of each infant's life. On the changing table there is always a time to sing a song, playing small games, like saying nose and touch the child's nose, saying mouth and touch their mouth etc. and most importantly using nonverbal communication such as smiling is an essential part of this experience. Bottle feeding or mealtimes are another important time for individual exchanges. Offering a bottle and allowing the infants to be positioned comfortably on the caregiver's arms in the rocking chair allows private moments for bonding. Older infants have the opportunity to experiment with new food items, and teachers can support their mealtime with simple conversations, and encourage using their five senses to explore their meals. It is very important to engage with children on their eye level, so most of the playtime activities happen on the floor in an infant setting. Teachers can sit on the floor and play discovery games with a few chosen items. Older infants enjoy peek a boo games, such as hiding toys and reviling them one by one or holding up a toy, name it and then hide it will allow them to work on early memory skills. Singing, reading books aloud, playing with puppets or experiment with musical instrument all plays are part of a strong serve and return bond between the teachers and infants in their care. It is very important to understand how important a caregiver's role is during the first year of a child's life. Simple actions like using natural opportunities to be physically close and comforting, use a warm calming voice have family photos or certain items that connect the school with home or acknowledge and mirror the child's emotions will all support a strong relationship allowing the teachers to be responsive and interactive with the children.

## **Conclusion**

The importance of continuous research and collaboration in early brain development is undeniable. The last 30-40 years has offered breakthrough in research and proved that infants are very much capable of social interactions, more importantly it is a foundation of adult life. "Windows of opportunity are sensitive periods in children's life, when specific types of learning take place. Information flows easily into the brain through 'windows' that are open for only a short duration. Then the 'windows' close, and much of the fundamental architecture of the brain

is completed and probably not going to change very much” (Varga 2017). With this in mind, the responsibility of an early childhood educator is to offer high quality care, and establish a happy life which offers a starting point in every child’s life. Serve and return will continue to dominate in early childhood education, and hopefully will advance into teacher education as an integral pedagogical approach. The need for quality infant and toddler teachers is significant, with an increasing demand for infant care. Student teachers should be able to experience and observe strong interactions between the children and the caregivers. More focus on training facilities would allow a strong workforce of teachers able to practice serve and return interactions to support early brain development. More importantly, high quality and engaged teachers have an ongoing passion and love for their job, which is one of the most important thing, one can ask for.

#### REFERENCES

- BabySparks. (2017). *Serve & Return: Brain-Shaping Back-and-Forth with Your Baby – BabySparks*. [online] Available at: <https://babysparks.com/2017/06/04/serve-return-brain-shaping-back-and-forth-with-your-baby/> [Accessed 27 Nov. 2018].
- Center on the Developing Child at Harvard University. (2018). *Serve and Return*. [online] Available at: <https://developingchild.harvard.edu/science/key-concepts/serve-and-return/> [Accessed 27 Nov. 2018].
- Day 1 – Elanna Yalow: Our Impact on Children - Serve & Return. (2014). [video] Available at: <https://vimeo.com/111459801> [Accessed 27 Nov. 2018].
- KinderCare Education LLC (2017) *Early Foundation at – a – glance*
- Still Face Experiment: Dr. Edward Tronick. (2009). [video] Available at: <https://www.youtube.com/watch?v=apzXGEbZht0> [Accessed 27 Nov. 2018].
- Varga, L. (2017). New Dimensions in the Interpretation of Early Childhood. *Képzés és Gyakorlat : neveléstudományi folyóirat*, 15(3), sz. pp. 149–156. DOI: [10.17165/tp.2017.3.14](https://doi.org/10.17165/tp.2017.3.14)