



## THE EFFECTS OF RELATIONAL PSYCHOMOTRICITY ON PRE-SCHOOL CHILDREN

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### ABSTRACT:

This presentation will focus on the discussion regarding the application of relational psychomotricity as part of a study involving preschool children.

The literature shows that psychomotricity is a practice that witnesses the implantation of the symbolic in the body and it's pleasurable affects through an invitation to understand our internal world through motricity. It is a method that utilizes the unity of body and mind integrating the cognitive, emotional-affective, symbolical and physical interactions in the individual's capacity to be and to act in a psycho-socio-cultural context.

The concepts discussed in this paper are based on the work of pioneers Bernard Aucouturier and André Lapiere who developed a practice based on the externalization of expression of psycho-affective difficulties through ludic activities accentuated in a relationship between the subject and his environment.

We discuss the observations of the interaction between the children and four objects utilized during relational psychomotricity sessions. The symbolic representations of the ludic activities are also subject of reflection as is the role of the adult figure working as an instrument favorable to transform the pleasure of acting into the pleasure of thinking.

**KEY-WORDS:** Relational Psychomotricity, Motor Skills, Pre-school children, Proprioceptive System; Sensory Integration.



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### I – INTRODUCTION

As affirmed by Lapierre (2002), psychomotricity is a practice that witnesses the implantation of the symbolic in the body and its pleasurable affects through an invitation to understand our internal world through motricity.

Our body is a receptacle of senses that operates much on the same premises of that of a sponge, absorbing necessary nutrient, converting it, and expelling it through energy in the form of both emotional and intellectual growth. Many of the senses are already implemented and in use at birth (Ayres, 1991). There, development and growth of synapses strongly lies within the mothers hold. The mother-infant bond is essential for a child's brain development. As Winnicott (1953) affirms when explaining the importance of the holding environment, the sense of touch in particular is important because it implants the beginning origins of emotional satisfaction.

A human being ability to maximize his maturity and grow depends on his susceptibility to stimulation, and incorporates it into an adaptive response. An infant reared in a stimulating environment of trial and error gives him a healthy dose of perfecting his abilities through interaction with his surroundings. The result of this freedom in exposure results, in most cases, in an increase of interaction, and an increase of interaction leads to a more pronounced tendency in development of the senses through sensory integration.

As evidenced by the work of Ayres (1991), sensory integration plays a key role in child development in that it represents the organization of senses. The integration of senses such as hearing, sight, tasting, touching, and feeling, as well as the process of movement and gravity is known as sensory integration. Through sensory integration, the many parts of the nervous system work together so that a person can interact with the environment effectively and experience appropriate satisfaction. It occurs when a child is able to take in the sensorial input and organize it through means of adaptive response to a sensation. It is the child that is challenged to organize and adapts his sensory that grows. As Ayres stated "it is fun to integrate sensations and form adaptive responses" (Ayres, 1991 p.14).

Human development relies on our senses to guide us through means of propulsion from an achieved state of self definition in order to produce and reproduce in securing our rank through survival of fittest by means of motility. A child that interacts is stimulated through a relationship with his environment to adapt and he can only adapt if he is able to sensory integrate which results in the most basic principle and acquisition of knowledge and intellect which is organization.

### II - OBJECT OF STUDY

We can affirm that one important aspect of a child's development is expressed by the way he takes control of the world utilizing his body. It is through motricity that he can interact with the environment, manipulate objects that are part of it, adapt to it, and sometimes try to change it. While it is easy to determine if a child can or cannot do a particular physical skill it can be difficult to decide if this is an exclusively physical problem or if it is a result of other factors.

Developmental levels give you an indication of where your child is in relation to other children, organizing knowledge and competencies into age groupings. As Ajuriaguerra affirmed the affirmed that children's development cannot be separated from the sensory motor (Ajuriaguerra, 1992). Each child develops differently but there are certain skills that are expected to be acquired. Psychomotricity is a practice that respects the very essence of this concept and takes it one step further by utilizing play to divulge the child's qualities in his constant balance between body and mind.



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In a brief history about the development of this practice we highlight the work of author's Lapierre and Aucouturier. They introduced the so-called *education-by-experience*, and connected body movements with the abstract side of the side brain. For them, language and emotions were represented through the body, and this idea became the basis of a therapeutic approach known as Relational Psychomotricity (RP) (Lapierre & Aucouturier, 1984).

It must be clear for our purposes that psychomotricity is not a practice for treatment underlying diagnosis or consciously create awareness of deep imbedded issues. It is instead proposed as an assistive intervention that provides a child with a space where he feels pleasure through support allowing a "giving away" to the imaginary with the purpose of symbolic communication.

A child who was, for some determined reason fragmented, split, and traumatized, and has weak motor skills learns through decentralizing techniques to define and break through his narcissistic second skin to appreciate himself and therefore able to appreciate the other, the basic foundation of socialization.

In observing preschool children, we can affirm that they will take on the role of an explorer discovering the parameters and horizon of his world. As they grow, they adjust from *taking a stand* to *making a stand* in the world for them are no longer solely concern in recovering their lost stature through the acquisition of height, lost from the fall or associated with taking the stand but rather to push and pull their existence, stretch and reach out to their world. They merge into both, physical and psychological context through being able to be on solid footing associated with making the stand. It is not until the children are able to dominate and control both their horizontal and lateral zone can they truly appreciate the other and share their existence through object relations. Basically, this means that they know how to take the best advantage of their senses.

One aspect of this developmental system calls the attention of this study as it deals with body position. If works properly, we will know where our own body is and how its moving. It is known as the proprioceptive system and it involve in the sensations caused by stretching or contracting of muscles and by compressing or stretching ligaments and joints (Kranowitz, 2005).

The proprioceptive system allows us to sit down onto a chair without falling, walk without watching our feet and many other routines activities. Considering that a children's motor development has a crucial influence on their physical and mental equilibrium and that psychomotricity attempts to expose this balance, we ask the central question of this study which is how this practice could affect pre-school age children?

It is known that when the proprioceptive system is disturbed it will affect our motricity or motor planning which leads to problems. Symptoms include low muscle tone, tactile defensiveness, decrease body awareness and poor bilateral coordination and children often present with difficulty using the hands together, crossing mid-line and developing hand dominance.

As professionals we should promote skills that strengthen the proprioceptive system by developing both fine and gross motor activities such as shaping play dough or clay (Neto, 2002). Simple activities like that provide a good deal of proprioceptive sensory input because the muscle has to work hard to manipulate the materials. Hand activities that are fun, bilateral, build strength and promote sensory awareness will help children to develop manipulation and writing skills. It is our belief that the ludic material and activities used in psychomotricity sessions would also stimulate the proprioceptive system therefore improving the children's motor skills.

When a child plays or plays games he is not only utilizing one role or representation but various, alternating the activity and representation, allowing for a comprehension of the affective processes through observation of the subject in contact with the world through his relationship with his body, and his affective connections with the other (Santos, 2004).

The ludic body serves as a lever for self understanding because it serves for the subject to externalize his expression through symbolic representation which is accentuated through ludic activity.



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This activity allows for expression through movement charged with desires. He learns to know himself through sharing space with others which allows for him to find his place in the world. Through relational psychometricity a child not only chooses an activity for functional pleasure but for relational pleasure with his material.

### II.1 The role of Sensory Integration on Motor Development

When discussing how many senses the human has, Draper (2005) indicates that real perception is all about integrating information across senses, time and space if you are (as is normal) in movement in order to perceive better.

Children display their motility and divulge their bottle up emotions through behavior on the playground where they test their equilibrium by demonstrating the most defiant acts all under the real threat of the anxiety of falling. They swing as high as they can until the chains buckle under stress; climb the jungle gym exploring the definition of in and out under the immediate danger of falling. They climb the ropes in the gym and learn to develop confidence by relying on all limbs for support. They learn to balance on the sea-saw and understand the interdependency of sharing with a friend while trying to find balance. Children will spin themselves into a state of stupor by whipping around on a “merry-go-around” with the eventual understanding that when it stops they will feel dizzy and fall to the ground laughing.

They will climb trees to explore the thrill of regaining the height that they so suddenly lost as infants when they tumbled to the ground. In short this playground is what the child learns to substitute for the comforts of the holding environment and learn to develop and express what was taught during the holding environment through the representation of motility. It is a place that a child yells out his existence as he impatiently waits to hear his echo and respond to it through expunging his psychological conflicts through the answer of his body. When he learns to stretch touch and extend through trial and error, the resilience to try again under the pretexts that “practice makes perfect”, and to stretch the confines of his body physically that he begins to develop a relationship with himself. He not only appreciates the extent of his abilities but also his limitations. A relationship where he can tire his frustrations, or exhibit his aggression, and express through body what he feels at that particular moment for it ultimately represents the beginning relationship between mind and body that will shape his being physically and determine our definition in his exploration, as he ventures away.

## III – METHODOLOGY

### III.1 – Study type, Participants and Procedures

The sessions here discussed were part of a descriptive but also an experimental and comparative study that is examining the effects of RP on pre-school children’s motor expression. It integrates both a qualitative – quantitative methodology using a sample of forty-five pre-school children of both gender with ages four and five.

The children were divided into a study group and the control group. All of them received a battery of four different tests which are:

reaction time – A biopac in conjunction with the computer software program Aknowledge 100 W was utilized to measure the children’s reaction time through simple choice and Flanker power point arrangements programs (Erickson, C.W. and Schultz, D.W.(1974).

discrimination weight test – subjects were asked to distinguished between weights (varying from 75,80,85,90,95,105,115,120 and 120ml) against a control weight of 100ml;

imitation of gestures - use a set of finger, hand, and arm “simple gestures” from Bergès and Lézine (1981).



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The human figure test – used the Goodenough-Harris draw a person test with the intention to illustrate the children's ability to express their gross and fine motor skills.

Only the study group received three months of RP sessions. We used the balls, the swords, the hula-hoops and cardboard boxes in a total of twelve sessions twice a week for approximately 40 minutes. The RP sessions were broken up into four components: start up, play, wind down and wrap up.

Start-up (5 minutes): Upon entering the room the children were directed to a carpet area in a central location in the room. The carpet is presented to as “a safe place.” It is emphasized as a place to be respected and utilized if they are tired, hurt, don't want to participate, or simply wanted to relax. Four basic rules were then explained to them; to be careful not to hurt themselves or others, to use the carpet as a rest place or a safe haven and slow down when relaxation starts. Once informing the children of the theme topic of play, the music is turned on and the material distributed.

Play (20 minutes): During the play the adult presence in the room becomes discrete. The children engage in non- imposing, spontaneous, non-verbal, ludic activity free of guilt or imposed restrictions. I respond to the play only when asked to join in which usually happens within the first ten minutes. I follow their lead and attempt, as a conduit, to encourage their motility, activity, and symbolic expression. The only time I impose a limit or a restriction is when an issue with safety arises. In these situations I will make a gesticulated sound and use my eyes or hand gesture to transmit a “not allowed” signal. If necessary I will remind a child who becomes overly irritated or aroused about the rules stipulated.

Relaxation-wind down (5-10 minutes): Light are turned down and music changes from a jubilant to a soothing rhythm. The children are instructed to slow down until they are relaxed and calm on the floor, the objective being to promote a smooth transition from RP to ensuing structure of the classroom environment.

Wrap-Up- (5 minutes): The children are asked to take their place in a semi circle formation on the carpet. This time is reserved for each one of the children to express how they felt during the session. I also take this opportunity to introduce what we will play in the next RP session. The children are then instructed to leave the RP session room and escorted back to the classroom.

We were attentive to three areas of observation during the development of RP sessions in order to gather information to answer the main question of the study:

1. Interaction – In observing interaction it is first suggested to do a preliminary scan of the children during “start-up”. This interaction is both verbal and is utilize primarily to gage a baseline of attention, affect, and attitude towards the adult. It is also observed how the children interact with the object (balls, hula hoops, boxes, swords and), among themselves and with their peers.

2. Spacial – In the spacial setting the importance of the observation was given to the awareness of the space utilized to play as well as the awareness of individual space (horizontal and vertical), respect for the peers though the awareness of the space between them and the other children, the voluntary utilization of the carpet area and ability to relax.

3. Duration – The duration of the interaction between the children and the object utilized was also observed. The manner in which the children were able to manipulate and dominate the object (dominant hand), maintaining and holding while following the rules were noted.

The observations were extracted from video images collected during the sessions. This qualitative method using the technique of audio/video recording secured the documentation of verbal and



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non verbal data. The children's participation was voluntary and a parent consent form was signed for the participants. All ethical aspects and safeguard of the children's identity were assured by the researchers involved in the investigation.

### III.2 – Results

The results indicated and discussed here are only partial. These qualitative findings and considerations are based on the observation from the RP sessions with the study group.

In general, the children were observed excited and motivated to engage in each of the weekly planned activities. They arrived to each session consistently displaying generally the same attitude. The children seemed to respond differently depending on the object implemented. For this group in particular was observed that they all used the balls, sponge swords, and Hula-Hoops, with an element of aggression. The boxes, on the other hand, symbolically appeared to promote the idea of construct. In more details, the notes about the general observation in each session are described as following:

1. Balls - During the sessions with balls the children remained active and attentive to the object. As soon as the balls were tossed into the room they all clearly were able to manage the ball in a hold. During this initial period the ball was retained while the children interacted between themselves through from a distance. They seemed to retain the object initially hesitant to toss the ball or use to "hit" me or their peers. The ball was not being used as feeling each other out gave way to projecting the object towards the surroundings, mainly the wall. At first they bumped into one another. This progressed into "tossing the ball" which later progressed into the "throw". As a group they appeared to be comfortable and excited with the both the object and interaction with the other.

Despite the intention to wait for the children's invitation to play, I was instantaneously invited into the children's game. The general game was to dominate the adult figure by either getting on top of my body using their weight to pin me to the ground or use the ball to secure me in this horizontal position. It was observed that the adult body took on a central role in this session which Lapierre highlighted as desirable when referring to the psychometrician's attitude facing the play (Lapierre, 2002).

2. Sponge Swords - As the balls, the swords are also a very effective tool for bringing out aggression. They are interpreted and used mainly for one reason: to "battle". It brings out the warrior, the ability to defend or conquer the opposition. In the group of children, it was observed to be a joyful session where there was great amount of interaction between the children as they use their peers as their opponents. It seems to be a useful instrument of socialization.

The children seemed to enjoy the session based on the observation of the interaction with each other. Generally they displayed spontaneous movement and what was interpreted as excited affect in giggling, screaming, laughing, smiling and jumping. They were observed comfortable to give and receive; to construct and destruct playing according to their imagination.

3. Hula hoops - The children grabbed onto the material as soon as it was displaced it across the room. They boys were observed utilizing the material pretending they were cars. They followed one another parading through the imaginary streets of the room. At one point one of the children beeped his horn and waved his hand for me to drive behind him which was interpreted as an invitation to join in. The girls used the object twirling it around their waste in a solitaire play as others collect the hula hoops as possessions proceeding to drop them over their own bodies. They began to seek me the adult figure including me more and more as the focus of the play placing the object over my head laughing as they surround me. They began to tilt me back and forth as if they were attempting to tip over an "overgrown tree" as what seems to be an attempt to conquer.

The children began to throw the hula hoops around using the object to lash out and express their aggression. The hula hoop now became a Frisbee being flung intentionally at the ceiling, at me





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and at each other. The children needed to be reminded of the rules and redirected through my intervention but it appeared that they paid little mind after I had been toppled. They unleashed their energy which impressed me with aggression it carried.

4. Card board boxes - Lapierre (2002) refers to card board boxes as an essential component in RP. He expresses that they are "holes" or cavities where children feel the desire to enter into. It was evident through the observation in the session that the children used the boxes to contain their own bodies. They seemed to utilize the material as a place to hide or close themselves into also using it to climb on. On the other hand some used the boxes as a means of transportation representing either a car to be push around or a boat.

The sessions with the cardboard boxes were much more geared towards constructive activities where creativity replaced aggression. The need to possess, control or topple the adult figure was much less apparent as they the role served more as a supportive aid.

## V - CONCLUSIONS

It seems appropriate that we use the practice of RP due to its capacity to effectively captivate our senses through behavior and allow the children to unconsciously construct and destruct in a symbolical representation of love and hate through ludic, pleasurable, spontaneous and non-verbal interaction.

The observations from the sessions also support the affirmation that this practice gives the children the opportunity to freely and spontaneously expel the energy accumulated through play. Creativity and pleasure are what is brought out through this ludic interaction. We do believe that the RP session promoted the expression of children's motor skills but we do not have at this stage enough data to support any improvement in regards to their awareness of functions associated with the proprioceptive system.

Another important aspect observed during the sessions is in regards to the role of the adult figure. It was highlighted by Aucouturier and Lapierre (1984) that the role of the psychomotrician is to be fully aware of the children and their interaction within the environment.

During the sessions the metaphor offered by Aucouturier (2007) in which he describes human drives as "torrents of water rushing violently down a mountain to be eventually dammed up and converted to alternative energy" is often remembered. Much to this metaphor, the children's energy seems to be expelled in the sessions as a rushing stream and sometimes as a torrent to pass through as if we (the adult figure) were only a conduit. The consequence of being carried off by this torrent is similar to what Lapierre (2002) had stated as to be destroyed as a feared adult and born again as a trusted friend and play mate.

As the many personality types blends into a group, it is important to recognize their individuality and unique attributes that makes up that particular group. Children were not always easy especially when they behaved as "torrents". It is just natural to categorize these children as difficult or un-manageable which often leads to the adult desire to impose restrictions. It is crucial for the psychomotrician to go with the flow and allow the children to display their creative capacity in a free play environment. A reminder of the rules or a signal of disapproval when limits of safety are compromised is an indication of respect and can be done in a manner to avoid ridicule or condescension to the children, therefore promoting a healthy play environment.

In RP sessions, the carpet area was observed to be used as mainly a place to set the sessions or to be used when the children feel tired, hurt, or simply to relax. It is a suggestion to avoid any possessive meaning to the carpet (such as my, theirs, ours) and be very attentive to physical boundaries due to the fact that for many children, the symbolic representation of the carpet as a house could carry a negative connotation or more dramatically, remind them about traumatic experiences.



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In such a scenario this would jeopardize the well being and best interest of the children by provoking dissociation, or post traumatic stress disorder.

The session in RP encompasses all what transpires from “start up” to the end of the “play” activity. The rest is done clearly to assist the child acclimate back into the structure environment of the classroom or homes. Through experience, we learned to expect the unexpected and to plan ahead the best way possible by carrying extra materials or arrive early to predict and improvise.

The closures of sessions are another important phase for the psychomotrician and the children. We suggest an end where the play is reviewed facilitating the expression of feelings and motivating the exchange of opinions about the play. The children participation is appreciated by the psychomotrician and they should be validated in their effort to play together.

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