

The Effect of a Group Psychomotor Therapy on Self-Perception of Ability and on Social Acceptance of Children 5–6 Years Old

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Abstract

Group Psychomotor Therapy (GPT) has a positive effect on the development of pre-school age children. The purpose of the study was to examine the effect of a GPT on self-perception of ability and on social acceptance of children 5-6 years of age. The sample was 81 children and randomly assigned to the Experimental Group (EG) and Control Group (CG). Children were measured with the Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA) in Greek version. Children of the EG presented higher improvement on self-perception of ability and on social acceptance compared to those of the CG. The results confirm that GPT affects self-perception of ability but also the social acceptance. It is necessary, the Greek Health System include GPT because it can provide additional support in traditional treatments.

Keywords: Group Psychomotor Therapy, Pictorial Scale of Perceived Competence and Social Acceptance, pre-school age

Introduction

In the current literature, even though most surveys are related to education, existing research already associates motor characteristics to the child's cognitive, social, and psychological development (Cardeal et al., 2013; Kashfi et al., 2019; Stein et al., 2017; Valentini, 2002; Zaragas et al., 2019; Zaragas, & Pliogou, 2020).

According to Corsario (1985), the preschool period is a particularly important time for the development of social skills and afterwards, children begin to expand their social interactions beyond their parents and take on the developmental task of building relationships and acceptance with their peers (Denham & Burton, 2003; Denham & Holt, 1993; Howes, 1987). Peer groups constitute one of the most important socialization contexts in which children are involved (Bukowski et al., 1996; Corsario, 1985; Harris, 1995; Hartup, 1996). The preschool age development is also enculturated, cultural norms shape social interactions between child of preschool age and other guides of parental child-rearing practices (Adolph & Hoch, 2019).

Preschool children's interaction with their friends promotes cognitive and learning skills in ways that their interaction with other individuals does not (Azmitia & Montgomery, 1993) while young children's play with good friends is more complex and cognitively sophisticated than their play with

others (Howes, 1987). Delays of social competence during the preschool years tend to remain stable and continue to predict difficulties in the early school setting (Campbell et al., 1994; Winsler et al., 2000).

Children's peer competence during early childhood is predictive of their later school adjustment, attitudes toward school, academic performance, peer rejection in the early school years and school withdrawal (Coie et al., 1990; Ladd, 1990; Ladd & Price, 1987).

The importance of self-perception and social competence in early childhood has been recognized in numerous intervention efforts towards increasing the self-perception and social acceptance of preschoolers in classroom settings (Chesebrough et al., 2004; Denham & Burton, 2003; Denham & Weissberg, 2004; Hyson, 2004; Joseph & Strain, 2003). Perceived self-perception of ability is important because those with high perceptions of self-perception tend to have more positive performance in sport and school than those who feel less competent (Weiss & Ebbeck, 2002).

The differences exist in the performances made by children who differ in their perceived motor ability (Weiss et al., 1990). As expected, children with high self-perception of motor ability give internal, stable, and controllable reasons for their

successes. Their performance for success is more stable and their future expectations for success are higher than those children with low self-perception motor ability (Haywood & Getchell, 2020).

Children showed development and progress on motor and cognitive domain through play time and socialization (Lillard, 2002; Saracho & Spodek, 2003; Sutton-Smith, 1997). The Group Psychomotor Therapy (GPT) is based on the three categories of experiences identified by (Zimmer, 2006): body experiences, social experiences, and material experiences that promote the personal competence, social competence, material competence (Hanne-Behnke, 2001). Motor development and early movement influence social, cognitive, and perceptual development (Babik et al., 2017).

Improving the motor competence and the development of ideas necessary for the school's readiness like cooperation with peers is carried out through the Psychomotor Intervention Program (ElGarhy & Liu, 2016). Probst and his colleagues (2010) and Zimmer (2006) reported that Psychomotor Intervention Program has a positive influence on students' mental well-being, motivation and self-perception.

The GPT functions as a team that interfaces with other approaches as an exercise, such as communication and collaboration (Kambas & Venetsanou, 2021). A lot of studies examined the effects of GPT on visual-motor skill performance (Kambas et al., 2010), on body awareness (Simons et al., 2011), on motor development (Da Silva et al., 2017) and on self-perception (Ponce et al., 2011) of children 3-10 years of age.

The purpose of the study was to examine the effect of a GPT, on self-perception of ability and on social acceptance of children 5-6 years of age.

Method

Participants

Eighty-one children aged between 59-71 months participated in the study, from 2 Kindergartens located in Ioannina, without any diagnosed neurological, sensory or motor problems, prior to their participation in the study, according to their teachers and peers. The sample was randomly assigned to the Experimental Group (EG) and the Control Group (CG). All the participants were required to bring a consent form written and signed by their parents prior to their participation in the study.

Measurements

The Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA) in Greek version (Makri-Botsari, 2001) is a psychometric instrument with pictures to assess the self-perception of first, second and third grade students in individual areas of their lives and categorized in four scales: *school ability*, *motor ability*, *relations with peers* and *relationship with mother*. The scores of the five questions in each subscale are summed to obtain the mean of each subscale (range 1-4). Furthermore, the scores of the scales of school

and motor ability yield the mean of self-perception of ability, and the scores of the scales of peer acceptance and relationship with mother yield the mean of social acceptance. Finally, the average of all 20 questions constitutes the total score of the PSPCSA in Greek version (range 4-16) with higher total scores indicating more positive self-perception and acceptance.

The PSPCSA in Greek version consists of 20 illustrated pages, which are presented to the child. Each response is scored from 1 to 4, with 4 indicating that the child feels very competent or accepted. Finally, the average of all 20 questions constitutes the total score of the PSPCSA in Greek version. The administration of the PSPCSA takes approximately 10-15 minutes. The reliability with Cronbach's Alpha test has been calculated for school ability at $\alpha=.78$, for motor ability at $\alpha=.75$, for relation with peers at $\alpha=.80$, for relationship with mother at $\alpha=.72$ and the PSPCSA is reliable.

Procedures

Measurements were taken place indoors in kindergartens. The first measurement was carried out during the same period in both kindergartens of Ioannina, in the last week of October, while the second measurement was carried out during the same period in both kindergartens of Ioannina, in the first week of May. The PSPCSA in Greek Version was administered from a trained evaluator.

Group Psychomotor Therapy

GPT design is based on individual developmental characteristics of each participant (Zimmer & Cicurs, 1993; Zimmer, 2019) and follows six principles: 1) participation is a personal decision; 2) stimuli for action are provided by children; 3) only few necessary rules are adopted; 4) self-action is promoted, whereas evaluative feedback on participants' performance is avoided; 5) limits are set in agreement with children; 6) "bridges" are employed in order to approach situations/children (Zimmer, 2006).

The children of the EG attended 45 minutes GPT sessions, 3 days a week for 6 months, while children of the CG did not participate in any extracurricular program. GPT involved 72 sessions for a total period of eight months. Each session, lasted approximately 45 minutes, consisted of the awakening part, the therapeutic core and the relaxation rituals.

Statistical Analysis

A two-way analysis of variance (ANOVA) for repeated measurements was employed for the statistical treatment of the data. The factorial model was 2x2 (2 groups x 2 measurements). Post-hoc comparisons were made with the Sidak test and the level of significance was set at $\alpha=.001$.

Results

The results showed a statistically significant interaction between the "measurement" and the "group" factors, improvement in the EG after the GPT was found for the scales: school ability ($F_{1,79}=278.54$, $p<.001$), relations with peers ($F_{1,79}=314.08$, $p<.001$), motor ability ($F_{1,79}=306.03$, $p<.001$) and relationship

with mother ($F_{1,79}=642.53, p<.001$). On the contrary, for the children of the CG, no statistically significant differences were observed between the pre and post measurements, in the scores of the items (Tables 1 and 2).

Self-perception				
	Motor Ability		School Ability	
	EG	CG	EG	CG
1 st Measurement	1,56	1,44	1,64	3,04
2 nd Measurement	3,20	1,55	1,67	1,70

Table 1: Means of the children's pre- and post-measurement scores of self-perception of ability.

Social acceptance				
	Relationship with mother		Relationship with peers	
	EG	CG	EG	CG
1 st Measurement	1,76	1,68	1,63	1,73
2 nd Measurement	3,16	1,65	3,06	1,74

Table 2: Means of the children's pre- and post-measurement scores of social acceptance.

Discussion

This study aimed to examine the effect of a GPT, on self-perception of ability and on social acceptance of children 5-6 years of age. The children of EG improved statistically significant the 4 scales of PSCSA, school ability, motor ability, relations with peers and relationship with mother. In contrast, for the children who did not follow a GPT, no statistically significant differences were observed between the pre and post measurements, in the scores of the scales. Our results indicated that children who participate in a GPT demonstrate improvement on self-perception of ability and on social acceptance.

Additionally, current findings are similar with studies that studied the correlation between physical activity and perceived motor and school ability (Planinšec & Fošnarič, 2005), the effect of a GPT on social competence (Grivas et al., 2019) and in children's social skills (Cro & Pinho, 2016).

Practice and experience are compelling concerning attentional focus and motor learning. Even if children would demonstrate some characteristics that could influence this process, the practice had a superior effect on it (Pereira-Júnior et al., 2022). Children would lack experience, unfamiliarity with tasks, limited motor repertoire, difficulties focusing their attention during motor performance, and restricted working memory (Emanuel et al., 2008; Krajenbrink et al., 2018; van Abswoude et al., 2018).

Children with positive self-perceptions tend to perform better on standardized school tests and receive positive evaluations from their teachers for their academic performance, while on the contrary children with low self-perception rate their

cognitive ability as less positive (Mantzicopoulos, 2006). Many studies involving children have found that participation in team sports leads to greater enhancement on self-perception of ability (Morano et al., 2011; Slutzky & Simpkins, 2009). Positive self-perception and social interactions, correlate with adaptive cognitive, emotional and behavioral outcomes such as intrinsic motivation, enjoyment and continued participation in physical activities (Crocker et al., 2008; Horn, 2004; Kipp & Weiss, 2013).

Addition, Coplan, Schneider, Mathesona and Graham (2010), investigated the effect of a play skills-based intervention program on the social competence of 40 preschool children. After the implementation of intervention program, children who participated in the program sessions showed a significantly improvement in social competence and social behavior in kindergarten. These results confirm that statistically significant changes can occur in children's relations with peers and relationship with mother affective skills and attitudes.

GPT is designed to improve self-control through movement, social skills and emotions using the body and the development of physical skills (Zimmer, 2005). A child's social skills are developed through play (Zimmer, 2006) and children's social progress depends on their relations with their peers (Hampton & Fantuzzo, 2003). According to Spence (2003), the degree of satisfactory social competence depends on behavioral, cognitive, emotional and environmental factors. The acquisition of social skills is necessary to address many psychological disorders. The GPT effects child development, such as school, social competence. Pre-school teachers should take into account that the implementation of GPT contributes to improving the development of concepts essential for their lives (Moschos & Pollatou, 2022).

In conclusion, GPT for children with behavioral problems is prescribed within the health systems of most European countries. However, GPT should be included in the prescription-procedure within the Greek Health System, to provide additional support in traditional methods and treatments.

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