

Participation of Shy Children during the Teaching and Learning of Basic Psychomotor Skill

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ABSTRACT

Shy behaviour during the teaching and learning of basic psychomotor skills could affect the development of children's skills. This study was undertaken to examine the relationship between shyness and children's participation during the teaching and learning of basic psychomotor skills in early education. The samples for this study were $n=118$ (55 boys, 63 girls) shy preschool children who enrolled in the Segamat Preschool, Ministry of Education (MOE) Malaysia who were nominated by their teachers during the primary stage of data collection. The children were then rated by their teachers in terms of their shyness level and participation during the teaching and learning of basic psychomotor skills. The analysis showed that the children's level of shyness was high ($M=3.73$, $SD=0.642$) whereas the children's participation was low ($M=2.40$, $SD=0.731$). There was no significant difference in the level of shyness between boys and girls. However, there was a strong negative correlation between the level of shyness and the student's participation in the teaching and learning of basic psychomotor skills.

Keywords: Basic psychomotor skills, classroom, participation, shyness, teaching and learning

INTRODUCTION

Most of the teaching and learning in early education focusses on the skills that emphasize on children's hand-eye coordination while promoting thinking skills and creativity among children. Learning psychomotor skills requires optimum participation from children to master the skills competently. It is pivotal for children

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to enhance their basic skills in preparation for elementary school where they will learn more advanced skills. Learning basic psychomotor skills includes mastering the process of asking and answering questions, participating in discussion and performing tasks in groups, being involved in hands-on activities, as well as presenting the final work orally. Learning basic psychomotor skills emphasizes on the ability to use the imagination, creativity and talents and to show appreciation; most important is the ability to use these skills independently.

However, it is not easy for children to participate in the teaching and learning of basic psychomotor skills due to the different emotions shown by children. Among the emotions that cause the teaching and learning of basic psychomotor skills to become less effective is shyness. According to Zimbardo, Pilkonis and Noorwood (1977), shy children avoid classroom learning situations, especially when asked to demonstrate the skills due to wariness of negative evaluation and fear of making mistakes or failing to perform the skills correctly. Shy children feel ashamed of their own behaviour and always underestimate their social competence (Crozier, 2005; Schlenker & Leary, 1982).

Shyness causes preschool children to become inactive during the teaching and learning of basic psychomotor skills. Moreover, shyness makes the learning objectives hard to achieve. Durmuş (2007) defined shyness as a trait, character, attitude or state of inhibition. Shyness is a reaction of social interaction that causes discomfort,

where the individual becomes preoccupied with something else or feels ashamed of his or her own behaviour. Shy behaviour can cause negative reactions that reduce one's self-confidence (Wadman, Durkin, & Conti-Ramsden, 2008). Lack of self-confidence causes children to demonstrate passive behaviour during the teaching and learning of basic psychomotor skills and makes them refuse to participate in group and classroom activities.

Classroom participation

According to Sayadi (2007), active participation in the classroom can improve one's skills. There are two types of class participation: verbal participation and non-verbal participation (Sayadi, 2007). Verbal participation requires students to talk, ask and answer the questions, give comments or views and also participate in class or group discussion during the teaching and learning session (Lee, 2005). Non-verbal participation includes students' actions or behaviour like paying attention, participating in activities, making eye contact, raising the hand, engaging in hands-on activities and also cooperating in group tasks (Lee, 2005; Sayadi, 2007). Masek (2016) defined students' participation in a matrix that shows patterns of students' interactions. There are four constructs based on the matrix, which are behaviour (active/passive), oral (talkative/silent), group skills (excellent/poor) and confidence level (high/low). Referring to the matrix, a shy student will demonstrate passive behaviour, keep

silent, display poor group skills and show low self-confidence.

There are very strong connections between classroom participation and students' academic and skill competencies. Students' participation in a classroom (Gomez, Arai, & Lowe, 1995; Tsou, 2005) and small groups (Masek, 2016) is very important for achieving learning objectives and allowing effective learning to take place. Skinner, Kindermann and Furrer (2009) in their study on students' engagement in classroom learning stressed that anxiety and shyness are disaffected emotions whereas disengagement and passivity in the learning activities are types of disaffected behaviour. According to the researchers, both disaffected emotion and disaffected behaviour bring negative impact on students' participation in classroom activities. Lack of classroom participation will lead to a poor process of teaching and learning and will cause failure in achieving teachers' learning goals. This will affect students' ability to master the skills (Skinner et al., 2009).

Shy students' participation in the teaching and learning session

According to Holbrook (1987), university lecturers identified a decrease in student involvement during the teaching and learning session where students' shy behaviour led to an increase of unasked questions. This situation indicated that students had trouble understanding the topic and would, therefore, face problems during the practical session. According to Anderson (1993), students were embarrassed to speak

or ask questions during the teaching and learning session due to fear that they would ask inappropriate questions and be laughed at or be underestimated by others. Students rarely start the discussion of a topic, fear to challenge the teacher, rarely ask for clarification, do not respond voluntarily, avoid generating new topics and are shy to demonstrate their skills and perform practical activities (Anderson, 1993). Due to the lack of classroom and group interaction, passive learning situations exist unnoticed although active learning is deemed essential in the learning of basic skills.

A study conducted by Cowden (2009) found that students who were shy felt less confident of their ability, believing that other students were smarter and more skilled. The lack of self-confidence also caused shy students to have low self-esteem (Cowden, 2009). The low level of confidence caused students to feel embarrassed to raise their hand, afraid to go up to the front; consequently, they did not dare to try to answer questions or do tasks. In terms of academic achievement and skill competencies, shy students are left behind because they keep silent in discussions and remain inactive in other activities; thus, teachers also take a longer time to get to know them (Coplan, Hughes, Bosacki, & Rose-Krasnor, 2011). A study carried out by Coplan, Prakash, O'Neil and Armer (2004) found that shy students refused to talk because they were not ready or lacked knowledge. According to this study, shy students acted only as passive observers in group activities and this limited their chance

to learn better. The failure of shy students to communicate and to actively participate in classroom learning affects their academic ability and results and skill competencies (Coplan et al., 2004). The researchers stressed that shy students talk less during the teaching and learning session and even if they do talk, their comments are very few and they take longer to respond.

This study was supported by Friedman (1980), who found that the difficulty of shy students to communicate affected the learning session, whereby students freeze and cannot answer questions posed by teachers, are unable to give an opinion or ask the teacher about matters that they are not sure of, in addition to being silent observers and letting other students engage in group activities. Sallinen-Kuparinen, McCroskey and Richmond (1991) viewed shyness as negative behaviour resulting from many factors such as skill deficiencies, social isolation, ethnic/cultural divergence, social introversion, unfamiliarity with academic discourse, lack of confidence in subject matter and communication apprehension, all of which affect students' participation in class.

Although many studies reported the negative effects of being shy, Bosacki, Coplan, Rose-Krasnor and Hughes (2011), on the other hand, mentioned that shy students demonstrate positive behaviour in the classroom such as being obedient to the teacher, never making noise and never interrupting teachers' conversations. Shy

children simply listen when the lesson is being carried out and behave demonstrate greater passive behaviour and are more polite than their peers. However, such passive behaviour causes passive participation (Phillips, Sponsor, & Morgan, 1998) and it is not a good sign in the learning of basic psychomotor skills in the classroom. Shy students often avoid taking part in activities because they fear to communicate and interact with the teacher and peers during classroom learning. Furthermore, shy students often refuse to get involved in hands-on activities, group activities and also discussion as they believe that they are drawing the attention of others (Crozier, 2005; Gökhan, 2010; Rimmer, Good, Harris, & Balaam, 2011), they are unskilled (Skinner et al., 2009; Zimbardo et al., 1977) and they might do something wrong or say something silly (Anderson, 1993).

PRESENT STUDY

The main goal of this study was to examine links between emotion and children's participation in the teaching and learning of basic psychomotor skills in preschool physical education. Drawing upon previous studies, we expected shyness to be negatively associated with children's participation. We also sought to explore the children's level of shyness and the impact of gender differences on the children's shyness' level. Finally, we also explored the children's participation in a learning session of basic psychomotor skills.

METHODOLOGY

This study was conducted in two phases of data collection. The first phase was carried out to obtain the population figure of shy preschool children. This was done using an identification cut form via Google forms that involved preschool teachers. We did not attach labels, providing only short behavioural descriptions of shy children in their classroom. The second phase of this study involved the distribution of questionnaires to the teachers.

Participants

Using the convenience sampling technique, we obtained data from 118 preschool children aged 5 and 6 years. The children were enrolled in the Ministry of Education (MOE) Preschool in Segamat and were selected by their teachers during the first phase of data collection.

MEASURES

Teacher ratings

A questionnaire consisting of three-part items was developed and approved by experts. Sixty-five teachers were asked to rate the nominated children based on a

5-point Likert scale. The first part of this questionnaire was the demographic section. The second part contained 13 items and was adapted from the Children's Behaviour Questionnaire or CBQ (Rothbart, Ahadi, Hershey, & Fisher, 2001) to assess the children's level of shyness. The last section of the questionnaire contained 19 items that assessed the children's participation during the teaching and learning of basic psychomotor skills.

RESULTS

The children's demographics were analysed. The sample included 63 girls (53.4%) and 55 boys (46.6%). Sixty samples (50.8%) were 5 years of age whereas 58 samples (49.2%) were 6 years old.

Level of shyness

The children's level of shyness was analysed using mean scores and standard deviation. The analyses shown in Table 1 indicated a high overall mean score ($M=3.73$, $SD=0.642$). "Is shy to give opinions" was the highest mean score item ($M=3.90$), whereas "does not make eye contact with group members" showed the lowest mean score ($M=3.08$).

Table 1
Children's level of shyness

Item	Mean	Standard deviation
Gets embarrassed when getting attention while performing the activities	3.66	1.019
Is shy to give opinions	3.90	1.089
Sometimes seems nervous when talking to the teacher	3.82	1.146
Acts shy when talking to his/her friends	3.76	1.252
Hard to speak on the learning topic	3.85	1.198
Does not make eye contact with group members	3.08	1.221
Sometimes prefers to watch rather than join others in group activities	3.76	1.145
Feels uncomfortable when taking part in group activities	3.68	1.189
Feels uncomfortable when discussing with others	3.75	1.172
Seems to be unfriendly during group discussion	3.84	1.049
Hard to mix with others, especially in the group	3.85	1.159
Is uncomfortable to ask others to perform group activities together	3.77	1.077
Hard to adapt to other groups	3.79	1.110
Total Mean Score	3.73	0.642

Gender differences for level of shyness

As shown in Table 2, the girls' level of shyness was reported to have a higher mean score than that of the boys ($M_{girls}=3.77$, $SD_{girls}=0.96$; $M_{boys}=3.69$, $SD_{boys}=0.92$).

Table 2
Gender differences for level of shyness

Gender	N	Mean	SD
Girls	63	3.77	0.96
Boys	55	3.69	0.92

Further analysis from an independent t-test shown in Table 3 found that there was no statistically significant difference

between the boys and girls, $t(116)=-0.64$, $p=0.53$.

Table 3
Independent t-Test for shyness level of girls and boys

	F	Sig	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	0.88	0.35	-0.64	116	0.53	-0.076	0.12	-0.31	0.16
Equal variances not assumed			-0.63	109.7	0.53	-0.076	0.12	-0.31	0.16

Participation

The children's participation was also analysed using mean scores and standard deviation as shown in Table 4. The children were found to have a low level of participation ($M=2.40$, $SD=0.731$) during the teaching and learning of basic psychomotor skills. "Brave to give opinions" was the item with

the lowest mean score ($M=2.03$). This shows that the children did not actively participate in contributing their ideas and opinions. Meanwhile, "listen carefully to the teacher" was the item with the highest mean score ($M=2.69$, $SD=1.106$), suggesting that shy children could listen attentively.

Table 4
Children's participation

Item	Mean	Standard deviation
Brave to answer the questions	2.32	1.069
Come to the front voluntarily	2.35	1.159
Often asks about matters he/she is not sure of	2.11	1.204
Discusses the learning topics actively	2.63	1.146
Brave to raise a hand	2.36	1.196
Readily cooperates during group activities	2.66	1.156
Takes part in all activities actively	2.47	1.123
Brave to demonstrate his/her skills in front of others	2.31	1.106
Brave to give opinions	2.03	1.113
Demonstrates good behaviour during the teaching and learning	2.46	1.159
Readily follows instructions	2.56	1.129
Listens carefully to the teacher	2.69	1.106
Takes shorter time to respond	2.42	1.097
Gives relevant comments	2.16	1.140
Brave to present own work in front of the class	2.58	1.120
Brave to talk about own work in front of the class	2.23	1.049
The effectiveness of the learning session is high	2.42	1.089
Teacher's teaching objectives become easy to achieve	2.58	1.120
Teaching and learning session becomes active	2.46	1.107
Total Mean Score	2.40	0.731

Link between shyness and participation

The correlation between the level of shyness and the children's participation was calculated. As shown in Table 5, there was a strong negative correlation

between both variables, $r=-0.805$, $n=118$, $p=0.000$, which suggested that the higher the level of shyness, the lower the children's participation in the teaching and learning of the basic psychomotor skill.

Table 5
Correlation between level of shyness and children's participation

	Shyness level		Participation
	Pearson Correlation	1	-0.805**
	Sig. (2-tailed)		0.000
	N	118	118
Participation	Pearson Correlation	-0.805**	1
	Sig. (2-tailed)	0.000	
	N	118	118

** . P< 0.01

DISCUSSION

Results from the present study showed that the children had a high level of shyness, which supported the studies by Balda and Duhan (2010), Coplan et al. (2004), Coplan et al. (2011), Coplan and Weeks (2009) and Henderson, Zimbardo and Carducci (2010) that shyness is universal and exists from a young age. Shyness makes children become inactive during teaching and learning and affects their basic skill competencies. This happens because when the children become passive and do not participate in learning activities, their psychomotor skills cannot be developed and improved. The results also support previous studies (Balda & Duhan, 2010; Coplan et al., 2011; Rimmer et al., 2011) that proved that shyness happens in social situations including during teaching and learning sessions. It happens when the children do not trust their ability and think of others as being more skilled than they. Shy children also lose out on opportunities to highlight their skills and talents. Besides bringing a bad impact on children's skill ability, shyness causes the teaching and learning process to become derailed and

ineffective, obstructing a smooth teaching and learning process. It also blocks the teacher's achievement of teaching objectives and the student's achievement of learning objectives.

This study also found that children experience the highest level of shyness when they are asked to give their opinion during a discussion. This is because they are afraid that others will underestimate them if they say something wrong or irrelevant, as proved by Holbrook (1987). Meanwhile, this study found that the children could maintain eye contact with members of the group at a moderate level. This was due to this item only measuring children's ability to communicate non-verbally. Furthermore, the children already knew their peers by the time this study was conducted. This study also showed that even though the children had a high level of shyness, they could still interact non-verbally using body language such as nodding, shaking the head and making hand gestures or signals like pointing with a finger. This finding supported the study by Sayadi (2007), who stated that there are two types of classroom involvement, verbal

participation and non-verbal participation. However, although the learning of basic psychomotor skill focusses on hands-on activities, non-verbal participation is less effective than verbal participation as it can lead to misunderstandings among group members. Group members might also have problems such as lack of ideas during group discussion as shy children only participate non-verbally.

Most studies have found that girls exhibit more shyness than boys (Balda & Duhan, 2010; Crozier, 2005; Rubin & Coplan, 2004) due to the nature that boys are more dominant and girls are known to be more polite and gentle. This study also supported previous studies in which girls showed a higher mean of shyness level than boys. This suggested that during the teaching and learning of basic psychomotor skills, girls tend to be more passive than boys. However, our analysis from an independent t-test found that even though the girls' mean of shyness level was higher than that of the boys, there was no statistically significant difference between these two groups of children in terms of gender variables. This finding supported the research carried out by Gökhan (2010), who also reported that statistically significant differences between girls and boys were not found. This may be due to the fact that the samples were very young i.e. their shyness' levels were at the early stage, and therefore, high. With teenagers, in whom shyness has already developed and increased, shyness is displayed towards peers or others of the opposite gender.

The results also led us to surmise that shy children's participation in the teaching and learning of basic psychomotors is very low, suggesting that shy children do not actively participate in skill learning sessions. This finding supports the research carried out by Zimbardo et al. (1977), who found that students who were shy avoided learning situations whenever possible, especially when the teacher asked them to perform the skills they had learnt in front of the class. This was due to the fear of negative evaluation by others and worrying that they might fail to demonstrate good skills. When there was no active participation from the children during the learning session, children's skills could not be evaluated, improved and developed by the teacher. Basic skills are important for equipping children with good skill competencies for the future. If children do not gain competence in basic skills during the preschool years, they will most probably encounter problems with self-management and demonstrate low psychomotor skills in elementary school.

In addition, the findings show that the children's participation in giving opinion was at the lowest level whereby creative ideas could not be channelled outwards and developed to produce meaningful and creative products or outputs. However, shy children in this study could listen to their teacher easily, and this supported the study by Bosacki et al. (2011), who argued that even though shy children do not actively participate in teaching and learning, they are actually good listeners and do not have behavioural problems during lessons.

Unfortunately, passive behaviour is not conducive for the teaching and learning of basic psychomotor skills because without active participation, skills learning cannot succeed.

Results from the correlation test found that there was a strong negative significant correlation between shyness level and participation during the teaching and learning of basic psychomotor skills, suggesting that the higher the shyness level of a child, the lower the participation he/she might show. This finding is in line with previous studies by Friedman (1980) and Valiente, Swanson and Lemery-Chalfant (2012), who also found a negative significant correlation between the two variables. According to Bosacki et al. (2011), shy children have low self-esteem. The lower the children's self-esteem, the greater shyness they feel to raise their hand, go up to the front and respond to challenges.

In this study, it was undeniable that the children had a high level of shyness and their participation in the teaching and learning of basic psychomotor skills was low i.e. there was a strong relationship between the two variables. Children who are emotionally shy will demonstrate physical unfitnes or weakness. This condition will cause children to avoid engaging or becoming involved in activities during the teaching and learning session. Shy children will only observe their peers and not be active while performing hands-on activities. This finding is consistent with the matrix of interaction in the study of Masek (2016), who described shy students as those having passive behaviour, being

introverted, having low self-confidence and demonstrating poor teamwork skills. Thus, children's participation during the teaching and learning of basic psychomotor skills is crucial and can be affected by emotions that are not required for mastering the skills.

The strong negative correlation between the children's participation in the teaching and learning of basic psychomotor skills and their shyness level also shows that the emotional manifestation of shyness is dominant in relation to the children's participation i.e. the children were unable to engage actively in the learning session due to being restrained by shyness. When this happens, children will face difficulty in asking and answering questions and will avoid engaging in individual and group activities, will be afraid to demonstrate the skills they have learnt and will not dare to present their work in front of the class.

CONCLUSION

The present study supported previous research that showed that children's level of shyness during the teaching and learning of basic psychomotor skills was high. Although many research studies found that girls tended to be shyer than boys, our findings did not show any statistically significant difference between the two variables. This study did not differ from any other research that found that the participation of shy children in the teaching and learning of basic psychomotor skills was low, whereas the relationship between the children's level of shyness and their participation was high. This study also proved that it is important to increase

the self-esteem of shy, emotional children. This will help them to actively participate in teaching and learning activities so that they will be able to master basic psychomotor skills before they learn more advanced skills in their later school years. We believe that our findings have implications for teachers who wish to eliminate shyness-related problems in the classroom and increase students' participation.

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