SPORTS-BASED INTERVENTION AS A TOOL FOR SOCIAL INCLUSION?

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**Abstract:** There is international enthusiasm for the idea that sport can contribute towards social inclusion for students with special needs. Research has shown that students with special needs with the best social and emotional development are those who take part in sports. Sport now features in various targeted inclusion initiatives, including ‘the Buddy Club’: a sports-based intervention tool currently operating in 10 special education integrated program schools in Malaysia. The processes through which this ‘sports-based intervention’ might promote social inclusion require, however, further investigation. There is relatively little systemic ‘hard’ research into the efficacy of sports-based interventions in contributing to social inclusion of students with special needs. Drawing on teachers’ perception on the relationship between sports as an intervention tool and social inclusion for students with SEN, the article critically analyses this ‘sports-based intervention’ initiative with reference to three main themes: ‘its co-curriculum’, ‘its influence’ and ‘its benefits’ towards the development of social inclusion of students with SEN in three themes: ‘students’ friendship’, ‘students’ interaction’ and ‘students’ acceptance by classmates’. This study adopted a quantitative research design, where data were collected from teachers that comprised of questionnaires. Results showed that teachers rated highest equally on the influence and benefits of the buddy club and rated highest on students’ acceptance by classmates. The relationship between the effectiveness of the buddy club and students’ social inclusion was significant. A significant regression equation was found where the effectiveness of the buddy club contributes to 16.1% of the change in students’ level of social inclusion. This article draws upon recent empirical evidence about social inclusion development among students with special educational needs and their typically developing peers thus potentially providing an important link for Malaysia’s goal towards 75% of students with special needs enrolled in inclusive education programs by 2025.

**Keywords:** sports-based intervention, social inclusion, inclusive education, buddy club.

**INTRODUCTION**

The route towards an inclusive education seems to be progressing at different rates in developed and developing nations (Adams, et. al., 2017; Toran et al. 2016; Schwab et al. 2015; Schwab et al. 2013; Helldin et al. 2011; Lee, 2010) and has consistently been an international agenda since the 1990s (UNESCO, 1994; 1999; Yeo & Teng, 2015). Malaysia in its Malaysian Education Act 1996 (1998) advocated an inclusive education and equal educational opportunity for students with special educational needs (SEN) after its signatory on the Salamanca Statement on Principles, Policy and Practice in Special Needs Education (UNESCO, 1994). A reform initiative by the Ministry of Education of Malaysia to increase awareness and to educate the community on the educational rights of students with SEN saw the integration of these students into the national schools (Jelas, & Ali, 2012) with appropriate facilities and support provided to meet the needs of these students (Adams et al. 2016; Lee, 2010). Despite emerging inclusion policies, reformation and implementation, Malaysia are still faced with the challenge to make all classrooms inclusive. Currently, only 6% of students with special needs are in inclusive programs. Some 89% attend integrated...
Inclusive education has been proven to assist students with SEN build their self-confidence, social interaction and gain acceptance with their peers (Adams, et. al., 2017; Adams, 2017; Jelas, & Ali, 2012; Yasin et al., 2014; Lee, 2010). There is a threefold benefit to inclusive education. Firstly; all students regardless of their abilities and disabilities have the fundamental right to equal education; secondly, opportunities to develop their social skills and thirdly; an access to quality education (Allen & Cowdery, 2005). However, many of these benefits came increasingly questionable as the appreciation of diversity is still relatively low.

Social inclusion of students with SEN remains an important aim (Koster et al., 2007). However, there is relatively little evidence on social inclusion in developing nations such as Malaysia (Adams, et. al., 2017). Social inclusion has been relatively uneven (Ferguson 2008), however, in terms of sports, the outcomes have been somewhat more hopeful especially for children with SEN (Siperstein et al., 2009). It is important, therefore, to focus on one factor, the understanding of sports-based interventions as a tool that could influence the social inclusion of students with SEN. Sports has the potential key factor towards social inclusion of students with SEN. The empirical evidence about sports as an intervention tool, its influence, and indeed the importance of sports as an intervention tool for social inclusion in Malaysia will be outlined, the research methods will then be explained, and subsequently the findings from the data analysis will be presented and discussed. The findings from this research highlights the important role of sports as an intervention tool for social inclusion in Malaysia.

**Sports for Social Inclusion:** There is international enthusiasm for the idea that sport can contribute towards social inclusion for students with special needs (McConkey et al., 2013; Siperstein et al. 2009; Coalter, 2010). Anecdotal evidence certainly suggests that when applied correctly, sport can create bridges where boundaries usually exist, giving participants a lesson in teamwork, empathy for their teammates and respect for their opponents (Sports as a Tool for Social Inclusion and Social Change, 2016).

Knowing how play can help develop and shape minds and hearts, it isn’t an unreasonable leap to think sports might be an instrument for social inclusion and social change, especially for students with special needs.

“Social inclusion can be defined in relational terms, such as a sense of social acceptance” (Bailey, 2008: pg. 89). The literature has consistently shown that inclusion of students with SEN in a mainstream school does not spontaneously lead to friendship and positive contacts with their typical counterparts (Guralnick et al., 2006; Guralnick et al., 2007). Research shows students with SEN in regular mainstream schools often find it difficult to participate socially. They are often neglected by their peers and have low acceptance rate by their peers (Pijl et al., 2008).

Participation of students with special needs in sports seems a fruitful idea in which to promote social inclusion and this has received increasing attention in mainstream sports studies (Coalter, 2010). Sports has a major potential as a tool for promoting social inclusion (European Commission, 2007). However, from the limited number of empirically based studies that do exist it seems that when compared to their able peers, students with SEN, regardless of gender, tend to participate less than their mainstream, do fewer and spend less time undertaking particular kinds of sports (Fitzgerald, 2012; Fitzgerald, 2006).

Research has shown that students with special needs with the best social and emotional development are those who take part in sports. Participation in sports can result in increased physical fitness (Eime, et al., 2013), the development of social skills (Holt, et al., 2011), mastery of emotion, growing in confidence (Linver, et al., 2009) and benefit students with SEN socially, emotionally and psychologically (Vickerman, 2012; Coates, 2011). Policy-
makers, too, have started to embrace a wider role for sport. The Council of Europe’s study of ‘Diversity and Cohesion’ claims the influence of sports as:

“The role of sport in promoting social integration, in particular of young people, is widely recognized. Sport...is a recognized social phenomenon. Sports offer a common language. Finally, sport plays its part to limit social exclusion of...and minority groups” (Niessen, 2000: pg. 14).

These are bold claims, and attribute sport a distinctive role in the realization of social inclusion and to limit social exclusion. A limitation though is inequality of access to sport by students with special needs (Liu, 2009). One response has been the development of the Buddy Support System, better known as the ‘Buddy Club’ in schools in 2013 by the Ministry of Education, PEMANDU and Challenges Magazine. The ‘Buddy Club’ is to support the initiative of social inclusion between students with SEN with their able peers through fitness and sports sessions (Kulasagaran, 2013).

Sports in its full potential as a powerful, low-cost means to foster greater inclusion and well-being for students with special needs is only beginning to be realized (Fitzgerald, 2012; Parnes & Hashemi, 2007). The ‘Buddy Club’ is a sports-based intervention tool currently operating in 10 special education integrated program schools in Malaysia. It will be implemented as a co-curricular programme to help shape and enhance the overall educational experience for students with SEN via extra-curricular football sessions with their able peers to encourage the integration of special needs students within the mainstream schooling system (Star Online, 2013).

Able peers act as ‘coaches’ and rotate roles as activities change and are required to work on a variety of sports activities such as football. Clear co-curriculum instructional activities are required to be planned in advance by the teacher and parents based on a syllabus. The procedures and routines for working in pairs are taught and monitored by the teachers. This will also allow the student with SEN to spend more time in a least restrictive environment and accelerate their achievement. The support of appropriate coaching for students with SEN will influence these students to become active members in the educational process rather than passive recipients of a set message.

The processes through which this ‘sports-based intervention’ might promote social inclusion require, however, further investigation (Donnelly & Coakley, 2002). There is relatively little systemic ‘hard’ research into the efficacy of sports-based interventions in contributing to social inclusion of students with special needs. Drawing on teachers’ perception, the article analyses this sports-based intervention tool initiative with reference to three main themes: ‘its co-curriculum’, ‘its influence’ and ‘its benefits’ towards the development of social inclusion of students with SEN in three themes: ‘students’ friendship’, ‘students’ interaction’ and ‘students’ acceptance by classmates’.

METHODOLOGY

Population and Sample: The total population was 111 teachers who were involved in the Buddy Support System from ten Malaysian, government funded primary and secondary schools located in the Klang Valley, Malaysia. Out of this population, a survey instrument was administered to a sample of 95 teachers from seven schools. This selection was based on their active running and implementation of the buddy club programs in the schools. Teacher respondents from the remaining three schools were not selected as the buddy club programs in these schools were no longer active.

The criteria for selection of these schools was based on the active running and implementation of the Buddy club programs and integrated education practices that includes special educational provisions to students in the Learning Disabilities category (Attention Deficit Hyperactivity Disorder (ADHD), Minimal Retardation, Dyslexia, Down’s Syndrome and Autism).

Instruments: A survey instrument was used consisting of three parts. One demographic questionnaire and two standardised questionnaires: the effectiveness of the Buddy Support System questionnaire and the students’ social inclusion questionnaire. The effectiveness of the Buddy Support System questionnaire consists of 13 items in three main themes: ‘its co-curriculum’, ‘its influence’ and ‘its benefits’.

The students’ social inclusion questionnaire consists of 16 items in three main themes: ‘students’ friendship’, ‘students’ interaction’ and ‘students’ acceptance by classmates’; and a demographic questionnaire which was developed specifically for this study. The instrument consists a total of 29 items using a five Point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).
Data Collection and Analysis: The questionnaires were administered to elicit teachers’ feedback on the effectiveness of the buddy support system on the development of students’ social inclusion. The questionnaires consist of a series of Likert-type questions that when combined measures a particular trait, thus creating a Likert scale (Boone & Boone, 2012). Teacher responses to the questionnaires were analysed using Statistical Package for the Social Sciences (SPSS) version 23.

The analysis was carried out as follows. Firstly, Descriptive statistics consisting of mean and standard deviation were used to analyse data relating to the effectiveness of the Buddy Support System in three main themes: (i) its co-curriculum; (ii) its influence; and (iii) its benefits towards students’ social inclusion in three main themes: (i) students’ friendship; (ii) students’ interaction; and (iii) students’ acceptance by classmates.

The interpretation to the effectiveness of the Buddy Support System and students’ social inclusion was based on the following set of descriptors: 1.00 – 2.40 (low level); 2.41 – 3.80 (moderate level); and 3.81 – 5.00 (high level). Data were analysed descriptively (i.e. they were ranked from the highest level to the lowest level).

Secondly, Pearson’s correlation coefficient (r) was used to measure the strength of the association between the effectiveness of the Buddy Support System and students’ social inclusion for students with SEN. Finally, simple linear regression was used to determine how much variance the independent variable, the Buddy Support System explains in the dependent variable, that is, students’ social inclusion for students with SEN. Linear regression models are used to show or predict the relationship between two variables.

RESULTS
This section of the article explores the relationship between the effectiveness of the Buddy Support System, as a sports intervention tool, and students’ social inclusion for students with SEN and the extend sports as an intervention tool could significantly predict social inclusion for students with SEN. The descriptive statistics are presented in Table 1 depicting 95 teachers who completed the questionnaire.

As shown in Table 1, it is interesting to note from this table that majority of the teachers had a Bachelor Degree academic qualification with 78%, and teachers in this study were largely very experience with 30.5% had 6 to 8 years of experience working in the special education field.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Variables</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>Male</td>
<td>16.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>82.1</td>
</tr>
<tr>
<td>Highest academic qualification</td>
<td>Diploma</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Bachelor Degree</td>
<td>78.9</td>
</tr>
<tr>
<td></td>
<td>Master Degree</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>11</td>
</tr>
<tr>
<td>Worked in special education field</td>
<td>Less than 3 years</td>
<td>21.1</td>
</tr>
<tr>
<td></td>
<td>3 to 5 years</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>6 to 8 years</td>
<td>30.5</td>
</tr>
<tr>
<td></td>
<td>9 to 11 years</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>More than 12 years</td>
<td>13.7</td>
</tr>
</tbody>
</table>

The effectiveness level of the buddy support system
Table 2 below indicates which of the three effectiveness of the buddy support system constructs was the most prevalent among teachers. Based on the overall mean, it can be observed that teachers (n=95) rated themselves highest equally on the buddy support system’s influence (M=3.70, SD=0.54) and its benefits (M=3.70, SD=0.54) followed by teachers’ understanding of the co-curriculum (M=3.56, SD=0.51), respectively. These findings suggest that, teachers perceived the buddy support system’s influence and its benefits as equally important on students with SEN.
Table 2: Effectiveness level of the buddy support system

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence on student with SEN</td>
<td>3.70</td>
<td>0.54</td>
</tr>
<tr>
<td>Benefits on students with SEN</td>
<td>3.70</td>
<td>0.54</td>
</tr>
<tr>
<td>Understanding of the co-curriculum</td>
<td>3.56</td>
<td>0.51</td>
</tr>
</tbody>
</table>

**SEN students’ level of social inclusion**

Table 3 below indicates which of the three SEN students’ social inclusion constructs was the most prevalent among teachers. Based on the overall mean, it can be observed that teachers (n=95) rated themselves highest on students’ acceptance by classmates (M= 3.76, SD= 0.25), followed by students’ friendship (M= 3.56, SD= 0.29), and students' interactions (M= 3.55, SD= 0.23), respectively. These findings suggest that teachers perceived students’ acceptance by classmates as the most important construct on social inclusion for students with SEN.

Table 3: students' level of social inclusion

<table>
<thead>
<tr>
<th>Construct</th>
<th>mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance by classmates</td>
<td>3.76</td>
<td>0.25</td>
</tr>
<tr>
<td>Friendships</td>
<td>3.56</td>
<td>0.29</td>
</tr>
<tr>
<td>Interactions</td>
<td>3.55</td>
<td>0.23</td>
</tr>
</tbody>
</table>

**Relationship between sports as an intervention tool and social inclusion for students with SEN**

Table 4 reports that the relationship between the effectiveness of the Buddy Support System, as a sports intervention tool, and students’ social inclusion for students with SEN relationships are significant (p<0.001). These findings suggest that the strongest relationship is between the benefits of the Buddy Support System on students’ social inclusion. The second strongest relationship is between teachers’ understanding of the Buddy Support System’s co-curriculum on students’ social inclusion. The weakest relationship is between the influence of the Buddy Support System on students’ social inclusion.

Table 4: Correlation matrix of variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ social inclusion</td>
<td>1</td>
<td>.368**</td>
<td>.350**</td>
<td>.393**</td>
</tr>
<tr>
<td>Co-curriculum</td>
<td>.368**</td>
<td>1</td>
<td>.794**</td>
<td>.850**</td>
</tr>
<tr>
<td>Influence</td>
<td>.350**</td>
<td>.794**</td>
<td>1</td>
<td>.718**</td>
</tr>
<tr>
<td>Benefits</td>
<td>.393**</td>
<td>.850**</td>
<td>.718**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Statistically significant at the specified level of **<0.01.

**The extend sports as an intervention tool could significantly predict social inclusion for students with SEN**

Table 5 reports the results whether the effectiveness of the Buddy Support System, a sports intervention tool could significantly predict social inclusion for students with SEN. Pearson’s correlation coefficient (r) results revealed the relationship are significant (r= .40, p <.001).

A simple liner regression was calculated to predict students’ level of social inclusion based on the effectiveness of the Buddy Support System, a sports intervention tool. A significant regression equation was found [F (1, 91) = 17.484, p < .000], with an R² of 0.161 and an adjusted R² of 0.152. The effectiveness of the Buddy Support System contributes to 16.1% of the change in the level of students’ social inclusion. Students’ level of social inclusion is equal to 34.874 + 0.490 when the effectiveness level of the Buddy Support System is measured. Students’ level of social inclusion increased 0.490 for each effectiveness level of the buddy support system.

Table 5: Model summary of students’ level of social inclusion with the predictor variable

<table>
<thead>
<tr>
<th>Model</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>SE of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.161</td>
<td>0.152</td>
<td>6.939</td>
</tr>
</tbody>
</table>

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DISCUSSION
This study has explored the effectiveness level of the Buddy Support System, a sports-based intervention tool for social inclusion, the SEN students’ level of social inclusion, the relationship between sports as an intervention tool and social inclusion for students with SEN, and the extend sports as an intervention tool could significantly predict social inclusion for students with SEN as perceived by teachers in Malaysia. The data from the empirical analysis showed that teachers rated the buddy support system’s influence highest in encouraging play between SEN students and their peers. Teachers also rated its benefits in successfully creating social inclusion between mainstream students and the students with SEN. These findings are similar to (Goodwin & Watkinson, 2000) study. These included seeing friends, getting exercise, having fun and teamwork. Lopes (2015) similarly revealed sports can promote physical wellbeing, combat emotional and social discrimination, build confidence, as well as play an important role in the healing and rehabilitation process for students with SEN. According to Cambra and Silvestre (2003), One of the factors which plays an important role in social inclusion is ‘peer group socialization’. Teachers also observed students’ acceptance by classmates was the most prevalent in the social inclusion for students with SEN. There is a sense of acceptance between mainstream students and the SEN students. This finding is contrary to a research on social inclusion by Wiener and Tardif (2004), where the results shows that students with SEN are less accepted than their mainstream peers. However, Hwang and Evans (2011) study revealed mainstream students learned to accept and understand SEN students who were different from them. Pijl et al. (2008) emphasise the importance of peer acceptance for social inclusion. They define peer acceptance as the ability to interact with peers, make friends with peers and be accepted by peers. Empirical evidence in this study shows the strongest relationship is between the benefits of the Buddy Support System on students’ social inclusion. The effectiveness of the Buddy Support System has a significant relationship and contributes to 16.1% of the change in the level of students’ social inclusion. ‘The relational contribution of sport to social inclusion is plausible... Sport contributes to social inclusion’ (Bailey, 2008: pg. 89, 90). Coates (2011) study illuminates through sport, students with SEN can learn vital social interaction skills. Social interactions between students with SEN and their able peers is an essential part of a social inclusion process (Bossaert et al., 2013; Lambert & Fredericksen, 2015). Given that students with SEN may be less involved in extracurricular activities than their typically developing peers (Solish, Perry, & Minnes, 2010), sports may play a crucial role for these students’ social inclusion development.

CONCLUSION
This study has sought to examine the plausibility and justification of a sports-based intervention tool for the social inclusion of students with SEN in Malaysia. The goal of the buddy support system is to provide a pathway for students with SEN to enter into and become accepted into the school’s social networks. This study therefore highlights what is required for this goal to be practically achieved and points towards the importance of sports between students with SEN and their able peers.

An inclusive classroom cannot be successfully created without positive social inclusion outcome. The sample of teachers in this study were not representative but indicative and serve as a point of reference for educators and policy-makers interested in enhancing inclusive education practices in Malaysia. This study on a sport-based intervention tool for the development of social inclusion of students with SEN attempts to fill a gap in knowledge. The views of teachers provide interesting insights into how social inclusion development had taken place at the selected sample schools through sports. This study provides evidence in support of the claim that sports-based intervention tool can contribute to the social inclusion of students with SEN in Malaysia. As a relatively new area of research, further information is required before we can talk with confidence about the precise nature of this contribution, and it is especially important to examine the conditions under which sporting activities lead to positive social inclusion outcomes. Nevertheless, initial findings are encouraging enough to warrant further inquiry thus potentially providing an important link for Malaysia’s goal towards 75% of students with SEN enrolled in inclusive education programs by 2025.

REFERENCES


The Star Online. (2013). *Chance for special kids to play football*. Retrieved from


