Why is group physical activity better? Empirical Evidence from Indonesian Islamic Primary Students

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Abstract:  
This study aims to generate correlational-predictive knowledge for active participation in voluntary sports of Madrasah Ibtidaiyah (Islamic Primary School) students in Indonesia. This secondary study utilizes one of the newest collections of big data at the Center for Physical Literacy and Sports Education Studies, Postgraduate School of IKIP Budi Utomo. Of the 6,576 respondents to the sports culture survey for Indonesian students, 335 of them were Madrasah Ibtidaiyah students. From the proposed causal model, personal awareness, group norms, social support, and active participation in voluntary sports were selected for further analysis. The path analysis strategy found that the direct contribution of personal awareness to active sports participation was insignificant (0.020). The contribution of personal awareness indirectly, through social support (0.022), with a significant total effect (0.042). The findings of this study support the proposition about the importance of group norms and social support in improving voluntary sports for madrasah students.

Keywords:  
Personal Awareness; Group Norms; Social Support; Active Participation in Sports; Madrasah Ibtidaiyah

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Introduction

For two decades from 1992 to 2012, there are findings which state that young people’s physical fitness worldwide has decreased. This decline in physical fitness has raised widespread concern around the world because the physical health of children is an essential resource for a country’s future development (Lian et al., 2021). National Report Sport Development Index (SDI) 2021, shows that the level of physical fitness of the Indonesian people is relatively low, namely 53.63% is very poor, 22.68% is in the poor category, and only 5.86% is categorized as very good (Maksum & Akbar, 2021). Other surveys also show the fact that the level of physical fitness of Madrasrah Ibtidaiyah (Islamic Primary School) students in several areas is categorized as low. In Ngrambe District, Ngawi Regency, 34% is in the very bad category, 60% is in the bad category, 6% is in the medium category, and 0% is in the good and very good category (Firdyawan & Syafii, 2022). While in Wates District, Kediri Regency, it shows 50% very poor, 30% poor, 20% moderate, 0% good, and 0% very good (Damayanti et al., 2022). This condition is caused by a lack of active participation in sports and increased sedentary behavior, because the better a person’s physical activity, the better the level of physical fitness (Alghozi, 2021).

The decrease in children’s physical activity was also affected by the COVID-19 outbreak (Corona Virus Disease 2019) which appeared for the first time on December 19, 2019, in Wuhan China (Rothen & Byrraedd, 2020), and on March 11, 2020, it was declared a pandemic by the World Health Organization (WHO) which make sedentary behavior increase. This sedentary behavior must be addressed immediately, because children’s physical activity behavior has a long-term impact on their physical activity habits for life (Sallis et al., 2020). Indonesia is one of several countries affected by the Covid-19 pandemic. Because the transmission is very fast and deadly, the government is trying to prevent and stop the spread by applying 5M to the community, namely menggunakan masker (using masks), mencuci tangan (washing hands), menjaga jarak (keeping distance), menjauhi kerumunan (staying away from crowds), and mengurangi mobilitasi (reducing mobility). (Rizal Fadli, 2021). With the 5M policy, school activities must be carried out online, and sports subjects that should be carried out in the field by students are reduced so that students’ active sports participation decreases. Even though the physical fitness of students will be better if obtained from the many physical activities carried out. The role of the PJOK (physical education) teacher is also very important in influencing the level of physical activity and physical fitness of students (Rohmah & Muhammad, 2021). So it is necessary to make improvements to sports learning in schools so that an active culture of sports is created in students (Mashud, 2015). However, based on the observations of researchers and data on the need for sports teachers at Sympathetic in 2022, at Madrasah Ibtidaiyah (Islamic Primary School) there is still a shortage of sports teachers according to their majors. Based on the problems above, it is strongly suspected that personal awareness, knowledge, and the level of active sports participation of Islamic Primary students in Indonesia is low.

Physical activity has many health benefits (Guthold et al., 2020), besides making the body healthy and fit (Priyantono et al., 2022), indirectly can also reduce mortality and also avoid various chronic diseases (Wen et al., 2011). Exercising can also prevent mental illnesses such as anxiety and depression (Mammen & Faulkner, 2013). It is also beneficial for children’s brain health, including to improve cognitive function and reduce symptoms of depression (Pratama et al., 2021). There is evidence that moderate to high physical activity can optimize the intellectual function of memory, executive function, processing speed, attention, and academic achievement for these children.
One of the serious problems emerging in the 21st century is obesity in children, adolescents, and adults (Güngör, 2014). Children who lack physical activity, have a risk of developing obesity (Azzahra & Anggraini, 2022). Experience and motor skills as well as physical fitness of children who are obese are limited and underdeveloped, this is due to the tendency to be lazy to move and do physical activity (Nurcahyo, 2015). So it can be said that physical activity or exercise can be used as a solution for public health.

The aims of this study were to produce predictive-correlational knowledge: 1) the relationship between personal awareness and group sports norms for Islamic Primary students in Indonesia, 2) the relationship between personal awareness and social support for sports both directly and indirectly through group norms for Islamic Primary students in Indonesia, and 3) the relationship between personal awareness and active participation in sports both directly and indirectly through group norms and social support for Islamic Primary students in Indonesia.

Humans are social creatures, so personal knowledge and awareness cannot be separated from other influences. There is friction and social interaction, causing individual behavior or culture to form. John Honigmann (1959) stated that any particular social situation is influenced by three overlapping cultural components, namely ideology, technology, and social organization (Hockings, 2015). Awareness influences one’s perception to determine a decision (Nicholson, 2017).

Personal awareness about sports can be obtained through (1) reading sports news in various print, electronic/internet, (2) listening to or listening to sports news, (3) watching competitions or sports matches, and (4) by learning process at school (Wang John C. K. et al., 2011). Conscious about exercise means knowing and understanding the benefits of exercise and also the impact of sedentary behavior. With good knowledge about sports, exercise awareness will increase, so that involvement in physical activities and sports also increases, in accordance with the use of the meaning of knowledge the second is the capacity to action.

Norm is a basic concept in social sciences. Norms make an important contribution to social order (Horne et al., 2018). Norms are defined as rules or standards that determine appropriate behavior in a group, the generality of group members that is used to regulate their activities (Johnson, 2012). Norms also play an important role in shaping group dynamics (Cai et al., 2022). A group is a collection of two or more people who are motivated, interact with each other, and each member is aware of themselves in a group and is interdependent on other members (Maksum, 2008). Furthermore, Maksum identifies certain characteristics in the group, namely: (1) there are two or more people, (2) there is interpersonal interaction, (3) interdependence, and (4) there is a purpose. Carron & Eyes defines group norms as the behavior, beliefs, and moral standards expected of members of the Eyes group (Kleinert et al., 2012). Planting beliefs and shared attitudes among members of a group results in the emergence of norms. Group norms are the general beliefs of a group regarding appropriate behavior for its members. For examples respect, discipline, responsibility, etcetera (Zulkarnain, 2013).

Group norms are not created all at once, but develop over time and through ongoing interaction between all members. Group norms in sports have been examined primarily in relation to performance and moral behavior (Kleinert et al., 2012). Group influence is often considered a key factor influencing behavior. This is relevant in sport, where norm presence is developed through important interactions with others (Crozier et al., 2022). When individuals gather and interact, they will form into groups.

Wills (1991) states that social support is defined as a response or experience in that someone is loved and cared for, respected and valued, and becomes part of a social network of mutual assistance and obligation (Taylor et al., 2004). Individual
development cannot be solely due to factors from within themselves, social and environmental factors can also affect a person’s existence. The human social environment includes the immediate physical environment, social relations, and cultural environment in which certain groups of people function and interact (Barnett & Casper, 2001).

Peer interaction, socioeconomic indicators, and parental support play an important role in increasing participation in sports activities for children. Parental support and access to sports facilities are determining factors for youth involvement in sports behavior. In addition to the family environment, teenagers spend time in the school environment. Schools and physical education have an important role in increasing adolescents' preference for physical activity. Children who are raised by families with an interest in sports can increase their likelihood of participating in sports. The characteristics of the family environment are related to participation in sports activities. The family is a system, where the family consists of a group of individuals, and when all individuals interact with each other, it will bring up responses and forms of behavior that will one day affect the whole family. Factors that influence sports behavior in adolescents are family, community, school, and self.

In the socio-ecological model, Bronfenbrenner (1979) regards the individual as the central system, surrounded by four concentric systems or layers, each representing a different aspect of the environment and influencing individual behavior. Bronfenbrenner describes these four layers, or levels, with the deepest system representing the individual, which is affected by different concentric environmental systems (Bronfenbrenner, 2009).

There are four concentric systems, the first of which is a microsystem, which is a complex of relationships in the direct setting in which an individual lives, for example, the family, workplace, school, and peers. The second is the mesosystem, for example, the social environment, the third is the exosystem, for example, the physical environment and the macro system, for example, the policy environment and national characteristics. Although individuals are seen as rational beings, individual behavior is guided and constrained, and individual thinking is structured by the surrounding systems at the micro, meso, exo, and macro levels.

With regard to sports behavior, social support from family and close friends as well as health professionals is very important for engaging in physical activity and one’s sport (Cañada et al., 2021). Clarity of knowledge about environmental and psychosocial factors that support children’s motivation in physical activity plays an important role in promoting physical activity related to health, knowledge, quality of life, and well-being (Gu et al., 2018). Support from a positive social environment, namely by exercising with family, relatives, and friends in the neighborhood or in the village. For the school environment, namely exercising with school friends during class hours and outside PJOK (Physical Education) class hours, and also in sports clubs.

Active participation in sports means involvement in sports activities, for competition, health, and recreational purposes (Rosidi, 2022). Sports participation is applied as sports club membership, frequency of sports participation, individual sports versus team sports, and indoor sports versus outdoor sports. Research shows that children should be encouraged to be physically active or exercise regularly because the frequency of exercise is more relevant than the form of sports participation (Moeijes et al., 2019).

Sports consist of formal sports such as football, as well as non-formal ones, such as traditional sports. The nature of sports that are carried out can be recreational, competitive, and sports for health and fitness. For example, you like to exercise because it can encourage you to always rise above obstacles, you like to exercise because you believe it will help you stay healthy and fit, and you are active
in sports because it is beneficial for mental well-being and avoids stress. Whether or not an individual is involved in physical activity is not only influenced by a person’s lifestyle but also by the environment in the individual life or work (Ferdinand et al., 2012; Sallis et al., 2006).

**Research Methods**

This research is of a secondary-quantitative type, with an internet-mediated survey approach (*internet-mediated research*). Secondary research utilizes data collected from other researchers to achieve a goal and can answer current theoretical questions (Johnston, 2017). Internet-mediated research (*IMR*) is research conducted via the Internet. IMR has many advantages over direct data collection, including increased efficiency and the ability to reach a wider audience (Prince et al., 2012). Data sourced from the Center for the Study of Physical Education and Sports Education, Postgraduate School of IKIP Budi Utomo Malang. Of the 6,576 respondents to the sports culture survey of Indonesian students, 335 of them were Islamic Primary students who were the population of this study. From the proposed causal model, personal awareness, group norms, social support, and active participation in voluntary sports were selected for further analysis.

Several main variable measuring instruments were adapted from *Sporting Culture Inventory* (Wang John C. K. et al., 2011). This research design uses a correlational design whose purpose is to link between two or more variables.

![Figure 1: Initial Theoretical Model of Relationships Between Variables](image)

**Figure 1: Initial Theoretical Model of Relationships Between Variables**

**Information:**
1. Personal Awareness
2. Group Norms
3. Social Support
4. Active Participation in Sports

This study uses a path analysis technique which is an extension of multiple linear regression, and which allows analysis of more complicated forms (Streiner, 2005) with the help of the SPSS application for Windows version 20. The results of the analysis are the standardized coefficient beta ($\beta$) $\geq 0.05$, then it is considered meaningful, if it is below 0.05, it shows a relationship but is not significant, or the relationship is not meaningful (Pedhazur, 1997).

Bivariate correlation analysis was carried out beforehand between all variables as a condition for path analysis. The paths that show a significant coefficient relationship above 0.001 will be maintained and then included in the main analysis.
However, if the paths do not show a significant correlation coefficient, they will be removed from the initial model.

Results and Discussion

Preliminary Analysis

Preliminary analysis was carried out as a condition of path analysis, namely the bivariate correlation analysis technique between all variables. The result is:

Table 1. Correlation Matrix Between Variables

<table>
<thead>
<tr>
<th></th>
<th>Group Norms</th>
<th>Social Supports</th>
<th>Active Participation in Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Awareness</td>
<td>0.598</td>
<td>0.583</td>
<td>0.598</td>
</tr>
<tr>
<td>Group Norms</td>
<td>0.560</td>
<td>0.955</td>
<td></td>
</tr>
<tr>
<td>Social Supports</td>
<td>0.579</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the preliminary analysis show that all variables are significantly related, namely > 0.01, so it is feasible to be included in the main analysis. Thus the theoretical model for further analysis is as follows:

Figure 2: Post-Test Model of Covariation Prerequisites

Information:
1. Personal Awareness
2. Group Norms
3. Social Supports
4. Active Participation in Sports

Main analysis

The results of the main analysis with multiregression are as follows:
The first hypothesis to be tested after the covariation prerequisite test is carried out is: There is a significant relationship between personal awareness and group sports norms. Testing the first hypothesis, using linear regression analysis, the results are in accordance with Tables 1 and 2. The results of the analysis show that the path coefficient for the relationship between the two variables is the same as the correlation coefficient, which is 0.598 which is significant at the 0.01 level. Thus, it can be said that there is a significant relationship between personal awareness and group sports norms.

Thus the theoretical model after the first hypothesis test is as follows:

![Diagram](attachment:image.png)

**Figure 3: Post-Test Model of the First Hypothesis Regression**

Information:
1. Personal Awareness
2. Group Sport Norms

From the results that have been described, it can be said that the higher the child’s personal awareness, the higher the sports norms of the children’s group. In accordance with Nicholson’s statement (2017) that personal awareness influences a person’s perception in determining decisions because the perception will also make individuals carry out an activity, namely exercising because the correct perception will determine the action of that person (Noe, 2004). That means someone who has...
personal awareness and knowledge of exercising will influence his friends in his
group so that in a group that is aware of exercising, rules or sports norms are formed
in the group.

The second hypothesis that will be analyzed after the covariation prerequisite
test is carried out, namely: There is a significant relationship between personal
awareness and social support for sports, both directly and indirectly through sports
norms for MI students in Indonesia. The results of the analysis in Table 2 show that
the $R^2$ value in Table 2 is 0.409. This illustrates the magnitude of the influence
of $X_1$ and $X_2$ on $X_3$, which is 40.9%, while the remaining 59.1% is a contribution
from other variables not included in the study. While the formula used to find the
value of $a$ is: $a = \sqrt{1-0.409} = 0.769$

The standardized coefficient ($\beta$) shown in the table, from social support for
personal sports awareness is 0.386 and the standardized regression coefficient ($\beta$) for
social support for group sports norms is 0.330. If both coefficients ($\beta \geq 0.05$), then
they are considered significant (meaningful). Thus, it means that there is a significant
relationship between personal awareness and social sports support, both directly and
indirectly through group norms.

The direct effect of the personal awareness variable on sports social support is
0.386. Whereas the indirect effect through group sports norms is $(0.598 \times 0.330) =
0.197$, for the total effect is $(0.386 + 0.197) = 0.583$.

Thus the post-test theoretical model of the second hypothesis is as follows:

**Figure 4 : Post-Test Model of the Second Hypothesis Regression**

Information:
1. Personal Awareness
2. Group Norms
3. Social Supports

Based on the results of the second hypothesis analysis, there is a significant
relationship between variables, both directly and indirectly, this shows that the social
environment greatly influences individuals. In accordance with the statement of
Barnett & Casper (2001) that the existence of interactions and functions in the social
environment which includes the closest physical environment, social relations, and
cultural environment, will affect individuals, including in sports. Interaction with
friends, adequate economy, and parental support also plays an important role in
increasing active participation in sports for children. Parents who have good personal
awareness of exercising will show support for their children in exercising, such as a
survey in Canada (2010), stated that parents who are actively involved in sports, 90% of
their children are also actively involved in sports, while parents who are not
involved, only 66% of children are actively exercising (Canadian Heritage., 2013).

The third hypothesis that will be analyzed after the covariation prerequisite
test is carried out, namely: There is a significant relationship between sports
knowledge and awareness and active participation in sports, both directly and indirectly through group sports norms and sports social support.

The results of the analysis in table 2, the value of R square in table 2 is 0.915, this illustrates the magnitude of the influence of X1, X2, and X3 on X4 which is 91.5%, while the remaining 8.5% is a contribution from other variables not included in the study. The value of b is found by the formula: $b = \sqrt{(1 - 0.915)} = 0.291$

Based on the results of the analysis, the standardized regression coefficient ($\beta$) of active sports participation on personal awareness of sports is 0.020, while the standardized regression coefficient ($\beta$) of active sports participation on group sports norms is 0.911, and the standardized regression coefficient ($\beta$) of active sports participation on sports social support is 0.058. The direct effect of sports personal awareness variable on active participation in sports is 0.020, the indirect effect through group sports norms is 0.544, and the total effect is 0.564. For indirect influence through sports social support of 0.022, the total effect is 0.042.

Can the coefficient values ($\beta$) of the three be said to be meaningful? According to Pedhazur (1997: 807) the critical value for the $\beta$ coefficient if it is equal to or greater than 0.05 is considered significant (meaningful). From the results that have been described, there is a non-significant relationship, namely the variable of personal awareness of sports to active participation in sports.

Thus the image of the model after being analyzed is as follows:

![Figure 5: Post-Analysis Model of the Third Hypothesis Regression](image)

Information:
1. Personal Awareness
2. Group Norms
3. Social Supports
4. Active Participation in Sports

The results of the third hypothesis analysis show that there is a weak relationship between personal awareness of exercising and active participation in sports. Children who are aware of exercising, do not necessarily want to do sports activities. Many factors cause reluctance to do activities, including an unsupportive environment, inadequate and inaccessible sports facilities, and boredom. At school, sports learning is less interesting and varied, so children's interest in sports becomes less and seems boring. This is because the teachers who teach sports subjects are not professional. As explained in the introductory section, there are many sports teachers in Islamic Primary Schools who are not in accordance with their majors or are not linear. According to the results of observations by researchers in a district, of the 36 private Islamic Primary Schools that were observed, there were only 6 teachers who were linear or according to sports majors. The same thing is also found in Simpatika data from the Ministry of Religion for 2022, out of 36 Islamic Primary Schools in Indonesia that we randomly selected, out of 77 registered teachers, only 8
teachers were said to be professionals (Madrasa Teacher Needs Analysis Information Data, 2022). The role of the teacher in shaping student awareness and knowledge is very important. Apart from reading sports news in various print, electronic, or internet media, listening to or listening to sports news, personal awareness about sports can also be obtained through the learning process at school (Wang John C. K. et al., 2011). Through the learning process at this school, the role of a professional teacher is needed to raise students' awareness and knowledge of sports. As also stated by Sheridan, Coffee & Lavallee (2014) that trainers are identified as the most common providers of social support by offering participants real, informational, emotional, and reward support. Furthermore, the support of coaches, parents, and peers plays an important role in shaping youth's sports experience (Sheridan et al., 2014).

Based on the results and discussion that has been described, education practitioners, especially in the field of sports, can take advantage of existing student groups by providing a stimulus in sports activities in the form of interesting facilities and games, as well as providing motivation to exercise. In addition, families who are the closest part of children, always encourage their families to exercise. It is hoped that the active participation of students in sports will increase, which in turn will increase the physical fitness of students. By increasing student fitness, it is hoped that productivity in learning will also be optimal.

In this study, the strong factors that influence students' active sports participation are social support and group norms. Meanwhile, personal awareness has a weak effect. Through the factors mentioned, it is hoped that the Directorate General of Islamic Education, Ministry of Religion of the Republic of Indonesia, will make the results of this research as material for reviewing the physical education curriculum at Islamic Primary School, namely in the field of human resources, especially sports teachers. This will help all students to be actively involved in sports activities, both in the social environment and at school.

There are several limitations in this study, namely: 1) the number of respondents can be said to be still lacking, namely 335 on a national scale, so it is not optimal in describing the real situation, 2) in the data collection process using a questionnaire, so that sometimes respondents are not honest in providing information.

The results of this study can be used as a reference and basis for subsequent researchers to deepen further research with other models, so as to refine and cover up the shortcomings of this research.

Conclusion

It can be concluded that social support such as both parents, siblings or relatives, friends, teachers, and physical activities in groups are better at supporting children's participation in physical activities or sports than children who are aware and have high insight about sports.

References


Why is group physical activity better...


