Students Mental Health and Learning Performance: The Moderating Impact of College Games

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Abstract

This study aims to examine the relationship between the mental health (MH) of Indonesian students and their academic performance, taking into account the significant significance of college sports. The Indonesian government's educational strategies have neglected the educational sector of sports. However, European nations are incorporating athletics into education to enhance student achievement. The participants in this study are students from several Indonesian public colleges. The study evaluated whether indoor and outdoor games for the development of mental health have an excellent effect on student performance. This research has supported a novel learning performance model that significantly contributes to knowledge. This research's theoretical development is essential for comprehending the connection between students' mental health and academic success. This study offered the Indonesian government recommendations for reforming the educational policy and incorporating the vital function of sports into the educational system. Finally, the research has outlined the directions for future investigations by other academics that will add to the body of knowledge.

Keywords. Student mental health, learning performance, indoor games, outdoor games, college sports

1. Introduction

Indonesian schools and colleges are developed over time by constructing new facilities and catering to students' educational needs (Gross et al., 2018). Students in Indonesian institutions find the policies of the education sector department to be satisfactory (Allagui, 2014). Indonesia's education policy is undergoing progressive modernization (Teng, Qin, & Wang, 2022). Indonesia has adopted the European educational system to improve its pupils' academic performance (Rau, Gao, & Wu, 2008). Reforms in the educational sector are implemented to build new infrastructure to give students better learning and performance-enhancing environments (Rau et al., 2008). The students in these educational institutions in Indonesia are also pleased with the government's changes because they have witnessed the modernization of the educational sector for the students' optimal performance (Hew et al., 2020).

Nonetheless, these policies are taken in modern nations about the performance of the educational sector, but they are ignored within the context of the Indonesian education system (Tsiakmaki et al., 2020). Less emphasis on sports culture in Indonesia's educational institutions has posed a barrier to the Indonesian government's efforts to increase the productivity of educational institutions (Zainuddin, 2018). Moreover, the Indonesian government's education policies do not account for the function of education within the education sector (Cheng, 2011).

In Indonesia, students attend various educational institutions that lack sports facilities. The neglect of sports in the educational sector has caused multiple student issues. According to Rocamora et al. (2019), when pupils do not have access to athletic activities during learning, their mental growth and freshness become problematic. The study by Soulliard et al. (2019) also argued that students should have access to improved sports facilities in the school sector since educational institutions in European nations offer similar possibilities to students. Undoubtedly, each government has a unique set of policies, but Indonesia's private education sector provides kids with the required sports instruction for improved learning and performance. According to the study by Cid et al. (2019), the educational amenities offered to students in the provider sector are not available to students in public sector institutes. As a result, various challenges have arisen for students in educational institutions. According to Araújo et al. (2019) research, the lack of educational facilities for Indonesian students has made it difficult for them to improve their performance constructively. The lack of sports activities in Indonesian educational systems has become a challenge for students attending public institutions.

Van Slingerland et al. (2019) found that when students have access to their lecturers and course materials, their learning performance improves. Gross et al. (2018) show that students can learn more effectively when their parents motivate them. According to the research by Jiang et al.

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(2018), to improve student learning, instructors must tailor the course content to students' cognitive abilities. According to the research of Zainuddin (2018), the academic performance of students who lack a suitable mindset for learning is diminished. The study conducted by Farsani, Beikmohammadi, and Mohebbi (2014) revealed that students' understanding becomes valuable when they have access to the resources necessary to improve their performance. Cheng (2011) concluded in her study that teachers should encourage students with negative attitudes to improve their academic performance. Similarly, Clark and Post (2021) concluded that students' learning could be enhanced if they are mentally engaged to improve their critical learning performance. The research conducted by Waheed et al. (2020) revealed that students' learning performance would improve if they developed a more productive attitude toward their better learning. According to Teng (2020) research, students' learning performance can be significantly enhanced by establishing explicit instructional objectives.

Consequently, the examined study revealed that the learning performance of Indonesian students had become a concern and that government policies have disregarded mental health (MH) and sports policies for public sector education. In addition, the examined papers revealed that any substantial research does not address this gap. To shed light on this gap in the literature, the purpose of this study is to examine the relationship between the mental health of Indonesian students and their academic performance, taking into account the significance of college sports. This research has supported a novel model of learning performance that is an essential contribution to knowledge. Similarly, the theoretical expansion of this research is necessary to comprehend the connection between the students' mental health and their learning performance. In addition, this study presented the Indonesian government with practical recommendations for reforming the educational policy and incorporating the vital function of sports into the educational system. Similarly, the research has outlined the directions for future studies by other academics to increase the body of knowledge.

2. Review of Literature

2.1 Learning Performance

Students' academic performance depends on their diligence and cognitive abilities (Allagui, 2014). Students with positive mental attitudes perform better because they believe their abilities are enough to enhance their learning (Reinholz et al., 2022). Indeed, students with poor MH are not better because they believe learning is complex (Teng et al., 2022). Students can learn when proper resources are employed to enhance their education (Rau et al., 2008). Furthermore, the students' MH influence on their learning performance cannot be overlooked because MH is regarded as crucial for enhancing learning performance (Hew et al., 2020).

2.2 Mental Health

MH is students' capacity to facilitate their learning (Tsiakmaki et al., 2020). The pupils with the highest MH achieve the highest grades. MH activity is a crucial feature that enhances learning (Jiang et al., 2018). Health literacy should be made available to kids to ensure they harness their mental health to improve their academic achievement (Zainuddin, 2018). The student's interest in their MH motivates them to work productively by boosting their learning skills (Farsani et al., 2014). Active MH is seen as an appropriate method for improving learners' MH (Cheng, 2011).

2.3 Indoor and Outdoor Games

Indoor and outdoor games are suitable for pupils since they enhance their mental acuity and capacity for critical thought (Jia et al., 2022). The significance of outdoor games is that they contribute to physical fitness (Huang, Kuo, & Chen, 2020). Diverse athletes and students play outdoor games to refresh their minds and foster the development of their minds in a positive manner (LePine, LePine, & Jackson, 2004). The importance of outdoor games to labor-intensive tasks cannot be overstated. In addition, outdoor games are a source of MH improvement because many trainers and physicians believe that outdoor sports increase MH learning (Sung & Hwang, 2013).

Similarly, the value of indoor games cannot be overlooked, as these activities are essential for the players' critical thinking (Clark & Post, 2021). The challenging tasks to be accomplished by the players in indoor games are crucial for the better education of the pupils, and many sorts of critical activities are conducted based on these games (Jiang et al., 2018). In addition, mental acuity and mental fitness are achievable with the help of indoor games, provided that these activities are inventive and do not harm the players (Hew et al., 2020). Both indoor and outdoor games enhance the participants' capacity to think critically (Zainuddin, 2018).

3. Framework

According to the research conducted by Allagui (2014), the MH of the students is crucial for improved classroom outcomes. Similarly, Reinholz et al. (2022) found that

students who received places in-class activities are actively studying to improve their academic performance. Researchers Teng et al. (2022) concluded that pupils' learning performance is enhanced when they think critically and have a strong mind. Rau et al. (2008) concluded that students' ability to learn more effectively would be improved if they did not engage in mental disputes. According to the research of Hew et al. (2020), the mental conflicts of students prevent them from performing successfully since they do not make the appropriate decisions at the right time. Tsiakmaki et al. (2020) found that pupils' thinking capacity is enhanced with strong reasoning, which is only attainable with increased MH. The research conducted by Jiang et al. (2018) concluded that the factor of strong MH should not be removed from students' capabilities since it motivates students to do well. According to research by Zainuddin (2018), students' mental health (MH) attitudes improve when they know about MH. The study by Farsani et al. (2014) also suggested that students who believe their employment should enhance their mental health (MH) are required to work on their MH under the supervision of doctors. According to Teng (2020) research, the MH factor is crucial to kids' academic success. Cheng (2011) found that the MH of female students is more vital than that of male students due to the absence of mental conflicts. Similarly, Clark and Post's research indicated that students with beautiful MH are more motivated to perform well in their academic tasks than other students. According to the study of Waheed et al. (2020), the MH of the students is crucial to their performance, which makes them performance-minded.

The research conducted by Boakes (2021) revealed that sports strongly affect kids' academic achievement. According to the study by Abrantes, Seabra, and Lages (2007), athletics have enhanced the kids' MH and cognitive capacity. According to Bindra (1974) research, based on diverse sports activities, pupils complete several tasks that are essential to their learning. Similarly, Zhang, Beckmann, and Beckmann (2020) stated that the students' athletic performance is significant because their mental thinking abilities motivate them to perform well. According to the research conducted by Tortella et al. (2021), pupils who perform well in their games also perform well in the classroom. According to the research conducted by Nejad et al. (2022), instructors believe that sports are essential for children since their mental health (MH) grows organically as a result of their participation in sports. According to Wang, Fang, and Gu (2020) study, sports performance is vital for students since those who do not participate in sports are not psychologically healthy. The research conducted by Jia et al. (2022) revealed that modern colleges and institutions should offer students the chance to participate in sports since this opportunity is essential for enhancing their academic performance. The research conducted by Huang et al. (2020) concluded that indoor games are vital because they assist students in learning more effectively. The study conducted by LePine et al. (2004) revealed that kids who have the option to participate in indoor sports would develop a favorable mental attitude toward these games, which is essential for their improved learning in an appropriate manner. According to the research conducted by Sung and Hwang (2013), students' learning is necessary for improved performance, and game-based activities are essential for enhancing their learning.

Similarly, Nácher et al. (2021) found that the students' learning performance is a source of their improved performance but that their MH capability plays a crucial part in this regard. According to Allagui (2014) study, a healthy attitude is vital for students' better learning. Still, it should be enhanced with sports activities, which have become crucial for developing their cognitive ability.

In addition, Reinholz et al. (2022)'s research enriched the literature by demonstrating that the students' learning performance is crucial to their learning performance. The study by Teng et al. (2022) showed that students' activities at the sports complex motivate them to perform better. The research conducted by Rau et al. (2008) revealed that a sports complex should be constructed for the children to ensure that they are studying well. Hew et al. (2020) demonstrated that student learning is crucial to their performance, and based on this learning, students are achieving their objectives. According to Tsiakmaki et al. (2020)'s study, modern college students engage in outdoor activities that contribute to the positive development of their mental health and attitudes.

Similarly, Jiang et al. (2018) argued that student learning is how their performance improves but that the significance of mental health in student learning performance can be overlooked. According to Zainuddin (2018) study, the academic performance of kids who participate in outdoor sports like football and baseball is significantly higher than that of other students. The research conducted by Farsani et al. (2014) revealed that students are required to participate in sports since the culture of sports favors them. According to a study by Teng (2020), the mental activity and sharpness of students who do not participate in sports are at risk. Cheng (2011) concluded in his study that students must be allowed to learn better and improve their critical thinking capacity, which is essential for their mental health and productive job. In addition, the research

of Clark and Post (2021) revealed that learning performance is required for students to attain success and that it is possible for them to perform better in normal activities if they are mentally robust.

Figure 1 illustrates the structure of this study, which is based on the students' findings mentioned above. In addition, the hypotheses of this study are formed using the support and recommendations of these investigations.

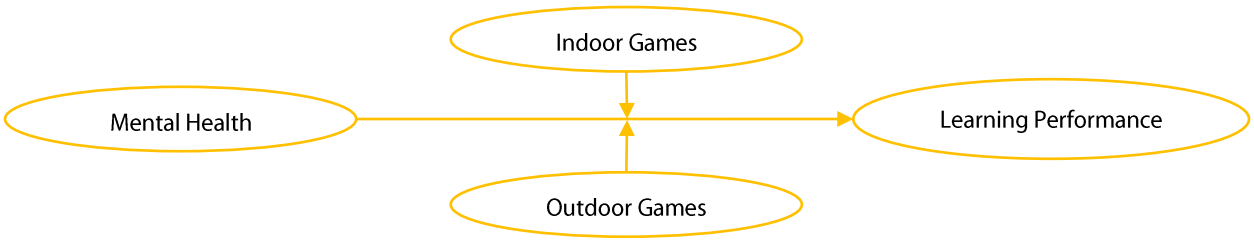

Figure 1. Learning Performance Model

Hypothesis 1: *MH has an impact on learning performance.*
Hypothesis 2: *Indoor games moderate the relationship between MH and learning performance.*
Hypothesis 3: *Outdoor games moderates the relationship between MH and learning performance.*

4. Methodology

For the finalization of its findings, this study employed "quantitative data" from "primary resources." The study has been designed to provide "empirical evidence" regarding the learning of Indonesian college students; hence, college students are considered the "population" of this study. In addition, this study selected college students of public sector institutions because private sector institutions already have sports education plans and are replete with sports facilities. Indeed, the purpose of this study is to determine the relationship between many elements that significantly influence the learning performance of Indonesian college students; hence, a "seven-point Likert scale" questionnaire has been devised. This questionnaire is designed to gather data for this study because earlier studies identified in the literature employed the same strategy of collecting "primary data" from the student "population." In this way, the methodological approach of this study is comparable to the methodology utilized in prior studies on the academic performance of pupils. In addition, a "cross-sectional" data collection method was employed, as this method is commonly used in "social sciences" research, and the "population" of this study is also known. In addition, the gender, age, and income status of respondents were not considered in the data-gathering process for this study. However, the "survey" method of data collection is commonly employed in social science research. In addition, the "measurement items" for each study variable have been adapted from prior research on learners' performance. Thus, these "items" are validated and substantially supported by these investigations. However, this study evaluated the "face validity" of the items by soliciting endorsements from many researchers. In this procedure, the operational definition of each construct was considered, and the "face validity" of the scale items utilized in this study was confirmed by academics. Thus, the items for this research are finalized, and the questionnaire for data collection is printed. Meo et al. (2020) altered the scale to measure the direct influence of MH on learning performance. In addition, Ju and Adam (2018) changed the scale to examine the impact of MH on learning performance with the moderation of indoor activities. The student learning performance elements were taken from Sung and Hwang (2013). Linda Rikard and Banville (2006) altered the scale to examine the impact of MH on learning performance with the moderation of outdoor games. These "scale items" are given considerable weight in the questionnaire.

In addition, the researchers visited other colleges in Jakarta and, with the administration's approval, provided respondents with concise information on the study's goal. In addition, the respondents were given questionnaires to obtain their responses. The total number of issued surveys was 640. However, only 418 were returned with answers. However, the surveys' missing values were examined, and 11 questionnaires were disqualified due to missing responses. This study has also evaluated the "sample size" of 407 questionnaires finalized for data collection from respondents. In addition, the "sample size" for data processing and empirical findings in the previous research literature was between 400 and 500 replies. In addition, "Smart PLS 3.0" was utilized for data analysis of the "measurement model" and "structural model" in this study.

5. Data Analysis and Results

In the initial phase of the study, the "normality of data" was examined. The study examined "kurtosis and skewness" values for the data normality test. According to Royston (1992), "skewness is a measure of symmetry, or more precisely the absence of symmetry, and kurtosis is a measure

of whether the data have heavy or light tails relative to a normal distribution." In fact, according to Field (2013), "a general rule of thumb for skewness is that if the number is greater than +1 or less than –1, this indicates a significantly skewed distribution, and for kurtosis if the number is greater than +1, the distribution is too peaked." Consequently, the findings demonstrate that the research has "normality of data" as shown in Table 1.

Table 1

Data Normality

Indicators	Mean	Standard Deviation	Excess Kurtosis	Skewness
ML1	3.253	1.494	-0.406	0.097
ML2	3.245	1.798	-0.559	0.459
ML3	3.502	1.882	-0.787	0.331
ML4	3.467	1.887	-0.768	0.391
ML5	3.507	1.679	-0.402	0.295
ML6	3.485	1.787	-0.648	0.259
ML7	3.480	1.835	-0.880	0.166
LP1	3.659	1.850	-0.760	0.204
LP2	3.690	1.840	-0.710	0.315
LP3	3.651	1.897	-0.708	0.372
LP4	3.520	1.856	-0.668	0.385
LP5	3.555	1.822	-0.566	0.369
LP6	3.576	1.864	-0.714	0.335
LP7	3.459	1.764	-0.460	0.429
IG1	3.520	1.894	-0.874	0.226
IG2	3.463	1.784	-0.589	0.307
IG3	3.664	1.730	-0.542	0.259
IG4	3.035	1.471	-0.026	0.635
IG5	3.127	1.500	0.564	0.939
OG1	3.205	1.432	0.905	0.956
OG2	3.114	1.449	0.545	0.797
OG3	3.092	1.382	0.595	0.684
OG4	3.162	1.500	0.414	0.738
OG5	3.105	1.444	0.708	0.884

The study has therefore determined the "validity and reliability" of the data. According to Hair et al. (2012), "factor loading (FL) indicates how accurately an item represents the underlying construct; it must be greater than 0.70." According to Table 2, the research contains substantial FL.

Table 2

Factor Loadings

Constructs	Indicators	Description	FL
Indoor Games	IG1	Indoor games are interesting to participate in sports.	0.890
	IG2	I like only indoor games.	0.899
	IG3	Indoor games help improve MH.	0.886
	IG4	Indoor games are necessary for improvement in critical thinking.	0.753
	IG5	Indoor games are helpful for physical fitness.	0.789
Learning Performance	LP1	The role of MH is essential in learning performance.	0.877
	LP2	The learning performance is improved with better MH.	0.910
	LP3	Learning performance is critical for me to improve my grades.	0.917
	LP4	My teachers believe in my learning output.	0.914
	LP5	Learning performance is a way forward to achieving high goals.	0.880
	LP6	The learning performance of students is appropriately supported by mental growth.	0.907
	LP7	Health literacy helps to improve learning performance.	0.894
MH	ML1	MH growth is necessary for me.	0.889
	ML2	I believe participation in sports activities is helpful for better MH.	0.901
	ML3	My MH is influencing my class performance.	0.895
	ML4	MH improvement is essential for students.	0.872
	ML5	The student's MH needs to be monitored.	0.898
	ML6	MH is reflected in the behavior of students.	0.911
	ML7	Classroom participation is improved with better MH.	0.904
Outdoor Games	OG1	Playing football improves my stamina and MH.	0.897
	OG2	The outdoor games opportunities are helpful for students.	0.891
	OG3	The students must have opportunities for outdoor games.	0.909
	OG4	The students have access to outdoor games.	0.933
	OG5	My institute held sports events for outdoor games.	0.936

Also, the research has trusted "Cronbach's alpha (α)." "composite reliability (CR)," "and average variance extracted (AVE)" for validity and reliability. As per Tavakol and Dennick (2011), "Cronbach's alpha (α > 0.70) is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability." Moreover, as per Raykov (1997), "composite reliability (CR > 0.70) is a measure of internal consistency in scale items, much like Cronbach's alpha." Furthermore, as per dos Santos and Cirillo (2021), "average variance extracted (AVE > 0.50) is a measure of the amount of variance that is captured by a construct about the amount of variance due to measurement error." The significant findings of "reliability & validity" are reported in Table 3.

Table 3

Reliability and Validity

Constructs	α	CR	AVE
Indoor Games	0.901	0.926	0.715
Learning Performance	0.961	0.968	0.810
MH	0.959	0.966	0.803
Outdoor Games	0.950	0.962	0.834

According to Ab Hamid, Sami, and Sidek (2017), "discriminant validity tests whether concepts or measurements that are not supposed to be related are unrelated." Similarly, Heteritrait-Monotrait (HTMT) is a measure of similarity between latent variables, according to Ab Hamid et al. (2017). Gold, Malhotra, and Segars (2001) state that "the HTMT threshold is debatable; the majority of publications recommend a value below 0.90." Table 4 summarizes the significant findings.

Table 4

Discriminant Validity

Constructs	Indoor Games	Learning Performance	MH	Outdoor Games
Indoor Games				
Learning Performance	0.842			
MH	0.766	0.671		
Outdoor Games	0.692	0.691	0.758	

The investigation concluded by determining the findings of several paths produced within the scope of this research (see Figure 2). Wong (2013) reports that the approved results of the structural model are "t > 1.96 and p <0.05.". The study examined whether the direct influence of mental health influences the learning performance of Indonesian students, and hypothesis 1 of this research is essential. Moreover, the study evaluated whether the learning performance of students in Indonesia is affected by the influence of MH with indoor games playing a moderating function, and hypothesis 2 of this study is significant. Lastly, the study evaluated whether the learning performance of Indonesian children is altered by the influence of MH, with outdoor games playing a moderating function; Hypothesis 3 of this study is significant. The results of the paths are provided in Table 5.

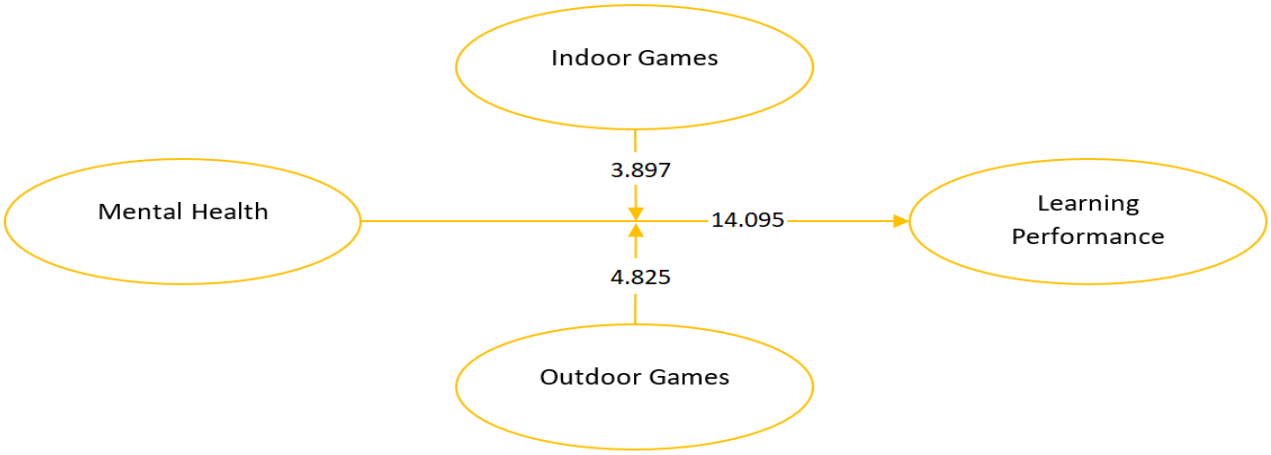

Figure 2. Structural Model

Similarly, this study evaluated whether the moderating effect of indoor games strengthens the beneficial association between mental health and learning performance, as shown in Figure 3.

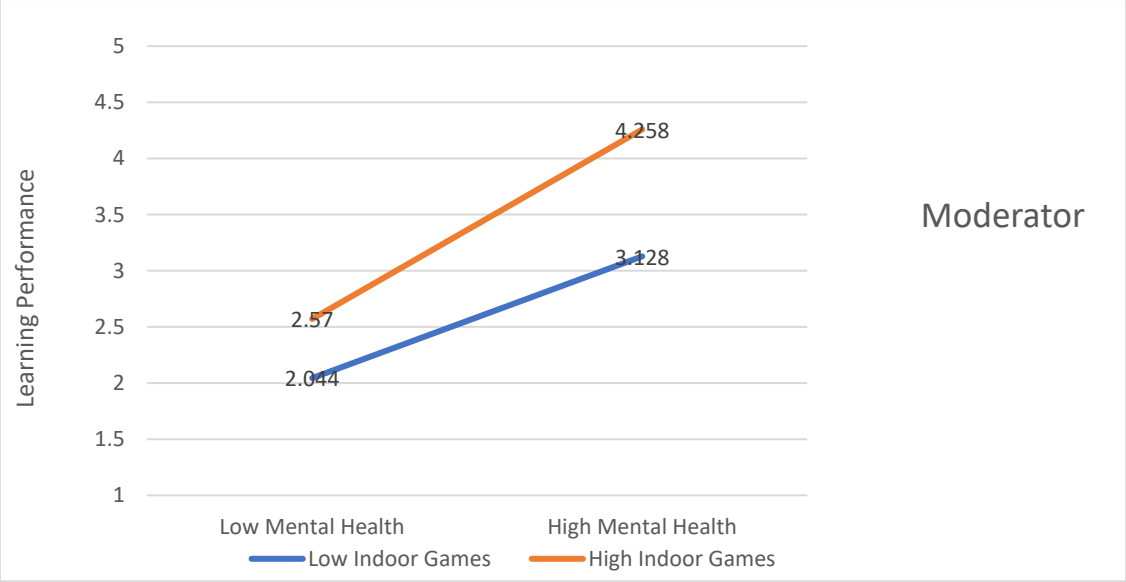

Figure 3. Indoor Games Moderation

In addition, this study evaluated whether the moderating effect of outdoor games strengthens the beneficial association between mental health and learning performance, as shown in Figure 4.

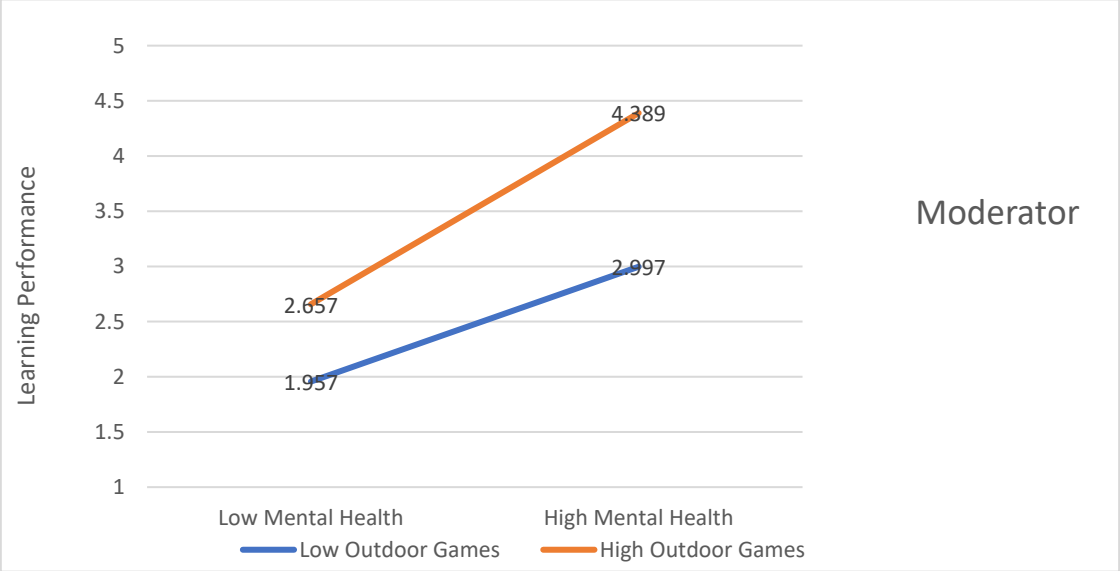

Figure 4. Outdoor Games Moderation

Table 5

Path Findings

Path	β	SD	t	p
MH -> Learning Performance	0.693	0.049	14.095	0
Moderating Effect of Indoor Games -> Learning Performance	0.151	0.039	3.897	0
Moderating Effect of Outdoor Games -> Learning Performance	0.173	0.036	4.825	0

6. Discussion

Significantly, the links developed by this research represent substantial and valuable contributions to the body of knowledge. The data analysis revealed that this study's conclusions are acknowledged. In this way, the first hypothesis of this study has been confirmed: MH severely affects the learning performance of college students in Indonesia. To corroborate these findings in the literature, however, a comparison of previous studies examining this

link is performed. According to the study by Van Slingerland et al. (2019), children with superior MH and excellent reasoning have outstanding cognitive skills. According to the research of Gross et al. (2018), strong MH is a motivational factor for students to perform well; hence, it should not be taken away from their potential. According to the research of Teng et al. (2022), when students have a better understanding of mental health, their attitudes toward it also improve.

Further, the research by Rau et al. (2008) asserted that students who believe that focusing on their mental health can enhance it must do so under the supervision of medical professionals in a manner that is helpful to them. According to the research conducted by Hew et al. (2020), a student's MH has a substantial effect on their academic performance. Due to the absence of mental conflicts, Jiang et al. (2018) discovered that the MH of female students is greater than that of male students. Similarly, Zainuddin (2018) found that children with healthy mental health are more likely to participate in class activities than their peers. According to Cheng (2011) research, students' mental health is essential to their performance since it enables them to maintain concentration. According to the study conducted by Farsani et al. (2014), the higher academic performance of students is contingent upon their emotional health. Following this, Clark and Post (2021) found that students who were given leadership responsibilities in classroom activities actively engaged in performance enhancement. Cheng (2011) suggested that students improve their academic performance when they use critical thinking effectively. According to the research of Waheed et al. (2020), when students are not involved in any mental conflict, their learning attempts are boosted. According to the study by Sung and Hwang (2013), students' mental conflicts hinder their performance since they impede them from making the right decisions at the right time. Comparing these findings with past studies revealed that this research has provided substantial empirical support for the first hypothesis.

The second hypothesis of this study is supported by the significant findings indicating the learning performance of college students in Indonesia is influenced by their MH with the moderating role of indoor gaming. To corroborate these findings in the literature, however, a comparison of previous studies examining this link is conducted. Allagui (2014) stated that professors concur that sports involvement is good for kids because it naturally improves their MH. The inquiry Reinholz et al. (2022) continued by saying that engagement in sports is necessary for students since those who do not participate are not psychologically healthy. That is the case. Teng et al. (2022) underlined the need for modern institutions and schools to allow children to participate in athletics because it is believed that doing so improves student performance. According to studies by Rau et al. (2008), indoor activities are necessary for students to learn more efficiently.

Hew et al. (2020) study revealed that children with access to indoor sports would develop a positive mental attitude toward them, which is crucial for their enhanced learning. The research conducted by Tsiakmaki et al. (2020) demonstrated the relationship between student learning and increased performance and the importance of game-based learning activities. Similarly, Jiang et al. (2018) found that while children's academic achievement is a factor in their increased performance, their MH capacity also plays a significant role in this improvement. According to the study by Zainuddin (2018), students' healthy attitudes are essential for increased learning. Still, they should also engage in more athletics, which has become a crucial factor in enhancing their cognitive ability. The study by Farsani et al. (2014) demonstrated the importance of athletics on students' academic success. According to Cheng (2011) analysis, sports participation has improved children's MH and cognitive function. According to the research of Teng (2020), students engage in a variety of sports-related activities that necessitate the completion of academically significant tasks.

Similarly, Clark and Post (2021) study indicated that children's athletic achievements are essential because their cognitive thinking skills motivate them to compete effectively. According to the study by Waheed et al. (2020), students who excel in their games also excel in their academic projects. Indeed, the comparison of these findings with those of past studies revealed that this research has greatly strengthened the empirical support for the second hypothesis.

This research has conclusively demonstrated that the learning performance of college students in Indonesia is influenced by their MH, with outdoor games serving as a moderator, thereby accepting the third hypothesis. To corroborate these findings in the literature, however, a comparison of previous studies examining this link is conducted. According to the study by Teng et al. (2022), modern college students engage in outdoor activities that positively affect their mental health (MH) and attitude. Similarly, Waheed et al. (2020) found that while students' learning improves their performance, the relevance of their mental health can be underestimated. According to the research conducted by Boakes (2021), students who participate in outdoor sports such as football and baseball perform significantly better academically than their peers. The study by Abrantes et al. (2007) made it evident that

students must participate in sports since the culture of sports encourages student participation. According to research conducted by Bindra (1974), students who do not engage in physical activities risk losing their mental clarity and sharpness. According to Zhang et al. (2020) .'s study, it is crucial to allow youngsters to learn more effectively and hone their critical thinking skills because doing so will improve their mental health and enable them to work more actively. In addition, Jia et al. (2022) found that for children to be successful, they must perform well in the classroom. They may serve better in their daily activities when they are psychologically healthy. In addition, Huang et al. (2020) added to the body of literature concerning the significance of student learning performance to that performance. According to Sung and Hwang (2013) research, involvement in complex sports activities motivates students to work more. The LePine et al. (2004) study demonstrated that a sports complex should be constructed for students to ensure they are learning well. Reinholz et al. (2022) showed that students' learning is vital to their performance and that, as a result of their learning, they achieve their goals. Comparing these findings with past studies revealed that this research has strengthened the empirical support for the third hypothesis.

7. Implications

This research has theoretically established a novel learning performance model that significantly contributes to the corpus of knowledge. In addition, it is essential to understand the relationship between the MH of the students and their learning performance, which this research contributes to theorizing. This study contributed to the body of knowledge by proving that students' learning performance can be improved when they have access to MH development opportunities. Indeed, this association was not confirmed by the studies relevant to this research, and this direct relationship represents a significant literary advance and contribution. Similarly, this study contributed to the body of knowledge by proving that students' learning performance can be improved when they have access to develop their mental health under the moderating influence of constructive indoor activities. In addition, this moderating relationship was not demonstrated by the studies relevant to this study project, even though it represents a significant literary advance and contribution. In addition, this study contributed to the body of knowledge by indicating that students' learning performance can be enhanced when they have access to strengthen their mental health through outdoor games. Similarly, this moderating link was not demonstrated by the studies relevant to the current work, and this moderating relationship is a significant literary advance and addition.

Similar to the theoretical implications, the current research has revealed significant practical implications for enhancing the academic performance of college students in Indonesia. According to the study's findings, the Indonesian government must adopt policies that are crucial to improving students' mental health. The infrastructure for indoor and outdoor activities should be established in Indonesian colleges to strengthen students' MH and critical thinking skills. In addition, the research revealed that the government of Indonesia must adopt policies for bi-annual sports competitions and challenges in government-sector universities, as students' MH would improve if they developed a good attitude toward sports and games. In addition to the policies, the government must promote mental health literacy among college students because their awareness of these policies would be a means to enhance their mental health. Indeed, the research also indicated that parents and teachers are essential to encourage students to participate in indoor and outdoor sports activities to develop their MH positively and improve their academic performance.

8. Future Directions

Nevertheless, this research has supported a novel learning performance model that significantly contributes to knowledge. In addition, it is essential to understand the relationship between the MH of the students and their learning performance, which this research contributes to theorizing. Similarly, this research presented practical implications for the Indonesian government to modify the educational policy and incorporate the vital function of sports into the educational system. Nonetheless, the research has outlined the directions for future studies by other academics to improve the body of knowledge. The results suggest that scholars must explore the moderating effect of MH awareness on the relationship between health fitness and academic achievement.

Similarly, the researchers suggest that scholars explore the moderating influence of student health behavior between students' health, fitness, and academic achievement. Thirdly, the findings suggest that scholars must explore the moderating effect of parental motivation on the relationship between students' health, fitness, and academic success. Finally, the results suggest that scholars must examine the role of sports education as a mediator between students' health, fitness, and academic success. Consequently, academics can improve learner performance by focusing on these areas.

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