



Determinants of Team Sport Participation Decision in the Wake of the Pandemic Among University Youth

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RESEARCH

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ABSTRACT

The COVID-19 pandemic has affected sport participation at universities around the world. The decision to participate among sport-minded youth at university is influenced by numerous factors. The study was conducted to investigate a certain salient factors determining decision-making by university youth about participating in team sport. The sample was represented by 324 members of university youth who were selected using a multi-stage sampling method. They voluntarily responded to an electronic survey with no remunerations. Binary logistic regression was chosen as the statistical technique used to evaluate the hypotheses. The results revealed that team sport participation could be significantly predicted by these explanatory variables. The study provided a reference for promoting participation in sports, exercise, and physical activity for the university youth cohort. University administrators gained insights from the findings in planning their intramural sports events. Future sport management research could further investigate the mechanisms underlying this model and other potential factors.

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COVID-19, formally known as coronavirus disease-2019, is an illness triggered by a variant of the coronavirus known as “severe acute respiratory syndrome coronavirus 2” or “SARS-CoV-2,” for short. The World Health Organization labeled it a global pandemic on March 11, 2020. Some have even claimed that it is the most destructive worldwide emergency since World War II (Elliott et al., 2021). The pandemic affects our lives in many areas that definitely include sport and recreation. Sport has a vital role in our lives—either as an individual, as a family, or as a community. Sport at all levels is acknowledged for its ability to foster beneficial results on a variety of fronts, including the social, the emotional, the cultural, and the economic (Elliott et al., 2021).

Unarguably, COVID-19 is conducive to the frequent and long-term cancellation of sport matches, the occurrence of which in turn causes youth athletes to experience health problems, including weight gain and childhood obesity (An, 2020). The pandemic impacted sport participation and visiting sport facilities (Terason et al., 2022) among youth because parents are wary of letting their children engage in sports, having weighed up the pros and cons of sport participation in the wake of the global pandemic. Athletes reported higher mental issues and less emotional well-being compared to normal pre-COVID rates (McGuine et al., 2022). Some families experienced loss of employment, so they needed to cut expenditures on food, utilities, rent, health care, and other living costs.

Amid the pandemic, Thailand’s Ministry of Public Health (2019) devised a string of measures to support youth in sport activities, including physical distancing guidelines, no-spectator guidelines, and COVID-19 testing protocols for athletes and volunteers upon entering sport facilities. Thai universities, making an effort to continue their collegiate sport activities—both intramural and intermural, instituted numerous measures, including non-pharmaceutical interventions such as wearing a face mask or covering, maintaining physical space when in public areas, installing structural barriers where physical distancing was not possible, keeping hands clean, avoiding crowded, or poorly ventilated areas and enclosed settings, following proper cleaning and disinfection protocols, or even ordering take-outs instead of indoor dining for food service. Furthermore, all universities initiated a protocol for body temperature screening of students, faculty members, staff, on-campus residents, and visiting guests before gaining entry to any congregate spaces, such as classrooms, sport facilities, common dining areas, laboratories, study rooms, and student living quarters.

Not only can sport improve the mental and psychological health of an individual, but it can also stave off the person’s negative states of mind, such as stress, anxiety, depression, tension, confusion, anger, loneliness, and neuroticism (Eigenschenk et al., 2019). In the social context, sport can contribute to the degree to which an individual player is healthy, comfortable, and able to participate in or enjoy life events, coping with problems, and feelings of revitalization (Anderson-Butcher, 2019). Youth sport participation has several well-recognized benefits. Physical benefits include enhancing cardiovascular function, diminishing obesity, blood pressure and heart rate, and minimizing the risk of diseases, such as diabetes, cancer, and stroke (Barbosa et al., 2020; McKay et al., 2019). Youth sport has also been deemed a means toward social development (Anderson-Butcher, 2019). However, participation in any type of sport entails the risk of injuries to ligaments, muscles, and bones, such as sprains, strains, stress fractures, and damage to musculoskeletal growth and maturation (McKay et al., 2019; Nyland & Pyle, 2022).

During the pandemic, the sport sector was shattered by cancellations of most activities. On the global scale, many sport leagues, clubs, and teams faced huge losses (Madray, 2020), especially as a result of declining ticket sales revenue (Drewes et al., 2021). Bringing people together for a sporting event was considered a high-risk venture in terms of disease prevention and mass or cluster infection. The impact of the spread of COVID-19 has changed Thailand’s sport landscape in many ways. For example, sport events and matches were preempted, disrupted, or even cancelled.

Nevertheless, the Thai government has taken the role of the main supporter for some sport events in terms of funding and resources provision. The government support came with health and safety protection protocols. For example, medical authorities were sent from the Ministry

of Public Health to monitor foreign athletes groups and to ensure that the athletes' health were protected and the prevention protocols were properly implemented.

In the university context, to resume and maintain academic productivity, information technology equipment and online connectivity were made an available option to students and staff. For those who decided to be on site, a safety policy was implemented to manage all teaching, research, learning, and other academic activities in a safe and secure fashion. This policy was directed at all faculty, staff, students, visitors, and guests, as well as other individuals who were authorized to live, work, teach, study, or conduct research on campus. In addition, it applied to all on-campus activities and events. Furthermore, in moving classes online, many universities further executed plans to prevent the risk of the transmission of the virus through personal contact.

THEORETICAL FRAMEWORK

The involvement of parents in their children's sporting activities is an essential component of the whole experience (Bonavolontà et al., 2021; D'Elia et al., 2020). They take the responsibility for introducing their children to sport and physical activities, so their influence is considered to be linked to the initial stages of a child's sport participation. Factors such as role modeling, beliefs, and the provision of experiences for youth were believed to affect a child's perceptions of sport competence, participation, and value (Fredricks et al., 2005). Furthermore, the parents' beliefs in their children's ability make the most influential and unique contribution to a child's beliefs and their sport participation immediately and gradually over a prolonged period (Fredricks et al., 2005).

It is commonly acknowledged that parents have a vital role in the sporting experience as well as the mental development of their child. When parental behavior is perceived as positive, a child is more likely to enjoy the games than when the behavior is perceived as negative. With regard to child development, positive parental involvement can help improve self-esteem, boost motivation, and develop social skills. These important skills derived from sporting experience have been revealed to transfer to other areas of life, such as academics, work, and extra-curricular activities (Jones & Lavallee, 2009).

Parents could be the factor influencing a decision by youth during the pandemic in that they can allow or disallow, encourage, or discourage their children to participate in sport. Such a decision by youth could affect strategies to be deployed for the sake of safe participation in team sports. In times of COVID-19, Post et al. (2022) reported that children spent less time in youth sport participation but would likely resume playing sport soon. Parents interviewed were concerned about safety, fear, and normalcy, and tended to take these domains under consideration when they had to decide whether they should encourage their children to play sport. In the study by Post (2022), parents revealed their children's sport involvement had come to a standstill due to cancellations caused by the pandemic. The shutdown was ascribed to parental concerns or fears relative to the likely impact of COVID-19 on their child's health (Abuhammad, 2020; Courtney et al., 2020). Thus, it was posited as follows:

H1: Parental influence significantly predicts team sport participation among university youth.

Throughout the pandemic, Thai universities have developed guidelines in accordance with government policy to ensure continuation of the universities' missions in teaching, research, community service, and arts and cultural preservation. A list of policies has been issued and implemented during this time concerning numerous topics, such as in-person classes, on-campus living, off-campus housing, non-pharmaceutical interventions, periodic asymptomatic surveillance and screening, and self-isolation and quarantine protocols.

For example, Pollock et al. (2021) confirmed that a university policy that was grounded on public interest, if well understood by the community, could minimize some local concerns about campus transmission or new outbreaks. Effective cooperation by a university's faculty, staff, and students would make operations and in-person instruction possible (Stankiewicz & Feuer, 2020).

Sport participation is another form of campus activity that is likely to resume normal operation especially where university students perceived the handling of the pandemic situation as well-planned and properly implemented by the university (Anderson-Butcher, 2019). The safety measures involved precautions, such as wearing a face covering, maintaining physical space, keeping good personal hygiene, and other guidelines that can alleviate fear among the parents of sport-oriented youth (Anderson-Butcher, 2019; Eigenschenk et al., 2019). Thus, it was posited as follows:

H2: University policy significantly predicts team sport participation among university youth.

Academic achievement is assessed based on grade point average (GPA), persistence, and retention (Seidman, 2005). The GPA indicates how well or how high a student has scored in the courses on average. The term “persistence” refers to a student’s purpose and activity to remain inside the system of higher education from the first year of enrollment all the way through the completion of the prerequisites for a degree. The capacity of a higher education institution to keep a student enrolled from the time of that student’s initial admission until the time that student earns a degree is one definition of “retention.”

Sport participation is claimed to enhance academic achievement and learning results (Dyer et al., 2017). Routine engagement in various sports and physical activities is positively related to levels of attentiveness in classrooms and positively impacts academic performance because a student is better able to concentrate on, absorb, and recall learning materials and subject content. Adolescents joining one or more sport teams throughout the past year also attained higher academic achievement (Barbosa et al., 2020; Burns et al., 2020).

Child development experts have always been captivated by children’s academic achievements. Physical activity is said to aid children’s academic performance. The correlation between physical activity and academic success is founded on a link between physical activity and cognition (Dyer et al., 2017; Puterman et al., 2010). Neuroscientists have found evidence of a relationship between physical activity and cognitive development in children. It implies that physical activity actively allocates brain resources and promotes faster cognitive processing via stimulus encoding (Hillman et al., 2008). Furthermore, physical activity can improve cell stability and mitigate the negative effects of stress on the body (Puterman et al., 2010). This has particularly serious implications for youngsters, whose brains are still developing. Thus, it was posited as follows:

H3: Academic achievement significantly predicts team sport participation among university youth.

Nevertheless, Astin’s (1999) theory of involvement maintains it also hinges on a student’s connection and involvement with the university. In other words, this theory postulates that Participation in activities that require the expenditure of one’s physical and mental resources in the form of energy happens along a continuum that may be characterized quantitatively and qualitatively, while student learning and professional development vary with involvement quantity and quality.

Astin’s theory has been used as a theoretical paradigm concerning student involvement in activities in the classroom, and outside a classroom. According to the theory, involvement can be characterized as an expenditure of both physical and mental energy that takes place along a continuum and is said to contain both quantitative (such as the amount of time spent) and qualitative (such as the amount of focus or depth) characteristics.

According to Astin (1999), an involved student is one who exerts substantial energy in one’s study and schoolwork, tends to spend considerable time on the school campus, takes part in activities organized by student organizations, and collaborates with teachers and other fellow students on projects. Some factors in the university environment were found to affect a student’s determination to complete study in college. The Involvement theory is conceptualized on the basis of the Freudian concept of cathexis which refers to placing an excessive amount of one’s mental and emotional focus and energy on a single person, object, or concept (Laplanche & Pontalis, 1973), and the learning-theorist concept of vigilance which is described as the capacity to sustain one’s attention for extended periods of time with uninterrupted concentration (Warm et al., 2008). The difference lies in the former refers to psychological

energy while the latter is a measurement of time someone spends on an activity. Nowadays the theory of involvement has been applied to developing programs, modifying curriculums, making administrative decisions, and conducting research.

In addition to helping one's mental health, physical activity has many other benefits. Being physically active can minimize health risks, such as cardiovascular disease, diabetes, stroke, and cancer. It can even prevent participants from premature death (Harvey et al., 2010; Reiner et al., 2013). In fact, physical activity has been found to improve our mental health in many ways, such as decreasing anxiety and stress, increasing mood and self-esteem, and boosting cognitive functioning (Harvey et al., 2010).

Youths' symptoms of anxiety (feelings of worry, nervousness, or unease) and depression (feelings of extreme despondency and dejection) may have been lessened and their physical activity abilities and quality of life may have been enhanced if they had played sports during the COVID-19 pandemic as opposed to those who opted not to (McGuine et al., 2022; Watson et al., 2022). Actually, physical activity engagement is generally believed to be beneficial for children. Thus, it was posited as follows:

H4: Physical activity significantly predicts team sport participation among university youth.

The relationships under study can be delineated using a schematic diagram, as in Figure 1. It depicts four relationships between four predictors and one criterion variable. The study was aimed to estimate the likelihood that participation would occur, based on a given set of these predicting variables.

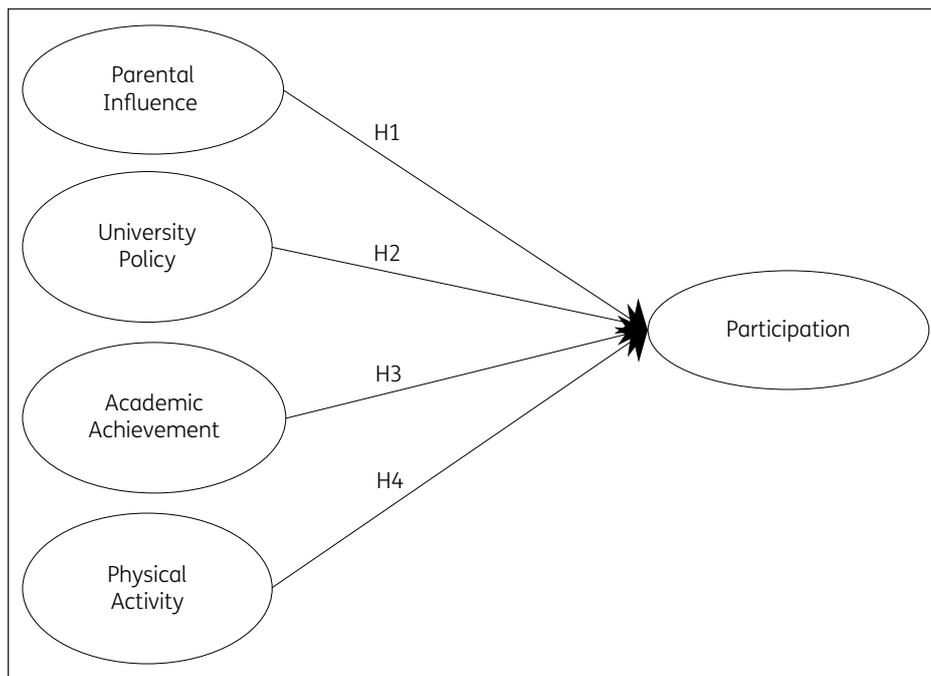


Figure 1 Conceptual Framework.

Overall, the purposes of this study were to determine how well parental influence, university policy, academic achievement, and physical activity could predict team sport participation among university youth, how much the variance in sport participation scores can be explained by scores on these four scales, and which of these variables can best predict team sport participation among university youth.

METHOD

PARTICIPANTS

While logistic regression was the chosen analytical method in the study, it requires a larger sample than does ordinary least squares regression to warrant valid interpretation of the results (Meyers et al., 2017). Pedhazur (1997) recommends, as a rule of thumb for sample size calculation, a minimum size of 30 times as many cases as parameters to be approximated. However, we exceeded his recommended sample size and managed to acquire 53 anonymous

participants who had played any team sport prior to the pandemic. We solicited voluntary pro-bono cooperation for the completion of a questionnaire from an originally expected sample of 553 university students, of whom ultimately 324 took part in the survey—a 58.59% response rate.

The data for the current study were gathered from a pool of university students who were regularly active in sports. This sample was drawn using a multi-stage sampling technique. Initially, a random sample of universities in Thailand was selected; then, a subgroup of entities was taken from within each selected institution. Finally, a sample of students were recruited as respondents from the chosen institutions based on simple random sampling of schools or faculties and then we drew the students from those subunits using purposive sampling.

In the sample, there were more males (57.1%) than females (42.9%). The participants were randomly drawn from all class standings in equal numbers, with the majority (32.1%) being in the senior year and the graduate school. Most respondents in the sample (63.2%) had obtained a grade point average of 1.99 or below. Virtually all the university youth respondents (94.3%) lived outside the university compound. The demographic profile of the sample is summarized in [Table 1](#).

CHARACTERISTIC	<i>n</i>	%
Gender		
Male	185	57.1
Female	139	42.9
Class		
First-year	67	20.8
Sophomore	52	16.0
Junior	101	31.1
Senior and over	104	32.1
GPA		
3.00 +	67	20.8
2.00–2.99	52	16.0
1.99 or below	205	63.2
Place of residence		
On-campus	18	05.7
Off-campus	306	94.3

Table 1 Demographics of Participants (N = 324).

INSTRUMENT

The measures specifically developed for this study covered parental influence, university policy, academic achievement, physical activity, and team sport participation. The measures for the regressors had a quantitative feature known as Likert scale. It was designed to present the respondents with a statement and to ask them to rate the extent to which they agreed with it. They were asked to choose from a range of possible responses to a specific statement. Responses included “strongly agree,” “agree,” “neutral,” “disagree,” and “strongly disagree.” The categories of response were coded numerically, such as 1 = strongly disagree, 2 = disagree, and so on. The regressand had a qualitative characteristic. Content validity and internal consistency reliability were assessed for these measures. We asked a panel of recognized subject matter experts to evaluate whether the scales in fact assessed the intended contents. The content validity ratios amounted to .75 as a minimum, meeting the criterion by Lawshe (1975). The coefficient alphas (.67–.81) exhibited adequate-to-good reliability (Cho, 2016).

The parental influence measure is represented by a three-item rating scale ranging from one to five. The higher the scores, the higher the parental influence on youth sport participation.

Example statements are “My parent introduced me to sports;” “My parent let me improve my sporting skill.”

The university policy measure is a three-item rating scale, ranging from one to five. A high score indicates the university had adopted rigid measures on sport participation during the pandemic. Example statements are “The university is concerned about the safety of sport participation among students;” “The university institutes necessarily measures to guarantee students’ sport safety.”

The academic achievement scale consisted of one question item on grade point average (GPA), and two statement items on persistence, and retention (Seidman, 2005). The GPA is the actual score the respondent obtains from the course of study, having a range from zero to four. However, to facilitate the calculation, we converted a reported score and assigned it to be one of five approximately equal categories, i.e., poor (= 0.00–0.80), fair (= 0.81–1.60), average (= 1.61–2.40), good (= 2.41–3.20), and excellent (= 3.21–4.00). The other two statement items concern persistence and retention. An example is “I intend to keep matriculated until you complete.” The Likert-type response to these statements is a rating scale with five levels. The higher the scores, the higher achievement a participant can attain while at university.

The physical activity scale was composed of three statement items. The respondent replies to each item with a Likert-type response with five levels. A high score signifies habitual active sporting participation. Example statement items are “I dislike sedentary work;” “I am quite active in outdoor sport.”

The team sport participation scale was characterized by one dichotomous response question, asking whether the respondent has voluntarily and actively participated in any team sport during the pandemic. The respondent is supposed to answer either “yes” or “no” for this scale.

DATA ANALYSIS

Logistic regression was applied to evaluate the relationship between one outcome variable and multiple predictor variables (Hair et al., 2018; Meyers et al., 2017). The only criterion variable in this study is university youth’s decision to participate in team sports. It has a binary attribute or is considered to possess two levels—in this case, whether a respondent has participated in any team sport event during the pandemic. However, the predictors include four continuous variables. This method enabled us to estimate the odds of an event (one level of the response variable) occurring based on the values of the regressor variables. The IBM SPSS software was used to undertake the statistical analysis in the study.

RESULTS

In order to model the binary variable of participation (no participation event was used as the reference category), a standard binary logistic regression was used so as to assess the impact of these factors on the likelihood that university youth would participate in a team sport event during the pandemic. The model contained four explanatory variables: parental influence, university policy, academic achievement, and physical activity.

We performed preliminary analyses to warrant there was no breach of the assumptions regarding normal distribution, linearity, and multicollinearity. Specifically, we found an absence of multicollinearity, no specification errors, the predictor variables were measured at the summative response scale and were linearly related to the log odds, and there was no dependence of the observation errors.

Table 2 displays correlations between the predictors and the criterion variable, and among the predictors. All coefficients were significant at the .01 level. The predictors were correlated with participation; nonetheless, the correlations between regressor variables were found to be not too high (<.7), showing no sign of multicollinearity. Thus, we retained all the explanatory variables. No tolerance value was less than 10, suggesting the multicollinearity assumption had not been violated. This was also supported by the variance inflation factor or VIF of 1.82, which was well below the cut-off of 10 (Hair et al., 2018).

MEASURE	1	2	3	4
1. Parental influence	–			
2. University policy	.67**	–		
3. Academic achievement	.54**	.80**	–	
4. Physical activity	.76**	.72**	.66**	–

The average estimates of the explanatory factors as a function of the choice to participate in team sports are shown in Table 3. The respondents, who totaled 324 students from different universities, were split into two groups. Those in the first group participated in team sport at least once during the pandemic, whereas the those in the second group did not. The *t* values suggested the two groups differed significantly in all four areas.

VARIABLE	PARTICIPATION	NO PARTICIPATION	t(210)	p
Parental influence	4.31	2.33	1.40	<.001
University policy	3.29	3.01	1.01	<.001
Academic achievement	1.69	2.01	2.01	0.002
Physical activity	3.28	3.99	1.88	<.001

Table 2 Intercorrelations for Predictor Variables.
Note: * $p < .05$. ** $p < .01$.

Table 3 Mean Values for Predictor Variables as a Function of Team Sport Participation.

Note: Participation coded as 1 = participation, 0 = no participation.

The classification accuracy was moderately high based on the cutoff value for predicting membership in the participation group, with an overall correct prediction rate of 75.3 percent, with the correct prediction rate being 61.1 percent for the participation group and 41.1 percent for the no participation group. The classification accuracy was based on the cutoff value (.5) for predicting membership in the participation group.

An omnibus test of model coefficients was used performed to measure the validity of the model. The model chi square was used to test the null hypothesis indicating all the coefficients were zero. The results of the analysis revealed that the four-predictor model provided a statistically significant prediction of team sport participation, $\chi^2(3, N = 324) = 76.02, p < .001$. The significant chi-square statistic allowed us to conclude that the set of regressors improved the prediction of the outcome over the situation where they were not included. This suggested that the model was able to distinguish between the respondents who participated in team sport at least once during the pandemic and those who did not.

The pseudo R^2 in logistic regression is defined as $(1 - L_{full}) / L_{reduced}$, where $L_{reduced}$ represents the log likelihood for the constant only model and L_{full} is the log likelihood for the full model with constant and predictors (Meyers et al., 2017). Overall, the predictors overall accounted for between 27.1% (Cox and Snell R^2) and 36.3% (Nagelkerke R^2) of the total variance in team sport participation.

Table 4 presents the partial regression coefficients, the Wald statistics, the odds ratios [Exp(B)], and the 95% confidence intervals (CI) for the odds ratios for each predictor. As shown here, the Wald statistics suggested that parental influence, university policy, academic achievement, and physical activity were statistically significant predictors of whether youth participated in team sport. Strictly speaking, all the predictor variables made a unique statistically significant contribution to the hypothesized conceptual framework.

	B	SE	OR	95% CI	W	p
PG	1.33	0.81	3.69	[0.01, 0.88]	3.01	.001
UP	0.45	0.55	3.22	[1.01, 1.88]	1.11	.003
AA	0.90	0.56	0.42	[1.01, 1.88]	2.98	.001
PA	0.10	0.77	1.99	[1.01, 2.88]	0.09	.008

Table 4 Logistic Regression Predicting Team Sport Participation.

Note: PG = parental influence; UP = university policy; AA = academic achievement; PA = physical activity; CI = confidence interval for odds ratio (OR).

The strongest predictor of whether a university youth would participate in a team sport event was parental influence, recording an odds ratio of 3.69. This value implied that respondents

who agreed to university measures were over three times more likely to participate in an event than those who did not accept or concede university measures were appropriate, adjusting for all other factors in the model. In contrast, the odds ratio of .42 for academic achievement was weakest, demonstrating that for every additional unit of academic achievement, respondents were less than one times more likely to participate, controlling for other factors in the model.

DISCUSSION

The present study sought to determine whether parental influence, university policy, academic achievement, and physical activity had a direct influence on university youth's team sport participation. The hypotheses were supported by the analytical results. That is, parental influence, university policy, academic achievement, and physical activity were significant predictors of team sport participation during the pandemic among university youth. Youth influenced by parents demonstrated a direct association with their decision to participate in team sport events. The parents, no matter what, seem to be influential regarding children's decision making as was also reported by Bonavolontà et al (2021).

Once their university had instituted a policy on safety protection and public health restrictions, youth tended to be willing to participate in a team sport of their choice. Perhaps this was because they felt safe while doing so. This was in line with Anderson-Butcher (2019) who confirmed that fear of infection through contact sport could be mitigated by enforcing safety measures.

Academic attainment seemed to have little to do with the decision to participate in team sport, as reflected in this study. In other words, it had only a slight, though significant, relationship with team sport participation, even though there is claimed to be an association between physical activity and cognitive learning (Dyer et al., 2017; Puterman et al., 2010), higher academic achievement did not translate into an increased rate of team sport participation—at least during the pandemic.

Physical activity and sport participation seemed to go hand in hand in most cases. We learned that the former could significantly predict the latter to a great extent in the same way this point was reiterated by Reiner et al. (2013) and Watson et al. (2022) that sport participation was closely related to the physical activity tendency in a person.

There are certain constraints to our work that should be mentioned. First, it relied on the perception of youth to the university policy regarding virus transmission. This may have resulted in personal bias or inconsistency among respondents. The pandemic may have impacted some on-campus youth students more severely than those in off-campus housing. Second, the survey was undertaken online to avoid in-person contact. The completion of the questionnaire could not be guaranteed, generating some incomplete or non-responses. Additionally, the data collection went on for one month during the COVID-19 pandemic; we were not able to determine how or if university policy changed since then or whether it became more lenient or was tightened as the circumstances of the pandemic unfolded.

It is beneficial for sport administrators in institutions of higher education to recognize the mechanism influencing decision of university youth in taking part in the sport during the lockdown so that strategies can be utilized to promote team sport participation. We can predict participation in team sport on the basis of parental influence, the university's safety precautions, self-reported academic achievement, and youth's physical activity.

The epidemic resulted in the postponement or cancellation of the majority of collegiate sporting activities. Students may lose their feeling of closeness to one another and may be deprived of the potential benefits to their social, mental, and physical health if they are absent from participating in team sports for an extended period of time. Therefore, it is essential to continue encouraging and revitalizing participation in team sports among students at educational institutions in order to maintain the importance of social connectivity after the intensity of the epidemic has subsided. After the pandemic, higher education institutions and the government need to provide more resources to ensure that college athletics can be revitalized. This is necessary in order for there to be a successful recovery.

1.	My parent introduced me to sports.
2.	My parent let me improve my sporting skill.
3.	My decision to participate in sport was associated with my parent's opinion.
4.	The university are concerned about the safety of sport participation among students.
5.	The university instituted necessary measures to guarantee students' sport safety.
6.	I feel safe due to the university policy on COVID-19.
7.	What is your grade point average (GPA)?
8.	I intend to keep matriculated until I complete.
9.	My university helps to keep me here until I graduate.
10.	I dislike sedentary work.
11.	I am quite active in outdoor sport and activities.
12.	I tend to engage in physical activity at my leisure.
13.	I participated in team sport at least once a month during the pandemic.

COMPETING INTERESTS

The authors have no competing interests to declare.

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REFERENCES

- Abuhammad, S.** (2020). Barriers to distance learning during the COVID-19 outbreak: A qualitative review from parents' perspective. *Heliyon*, 6(11), e05482. DOI: <https://doi.org/10.1016/j.heliyon.2020.e05482>
- An, R.** (2020). Projecting the impact of the coronavirus disease-2019 pandemic on childhood obesity in the United States: A microsimulation model. *Journal of Sport and Health Science*, 9(4), 302–312. DOI: <https://doi.org/10.1016/j.jshs.2020.05.006>
- Anderson-Butcher, D.** (2019). Youth sport as a vehicle for social development. *Kinesiology Review*, 8(3), 180–187. DOI: <https://doi.org/10.1123/kr.2019-0029>
- Astin, A. W.** (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25, 297–308. <https://eric.ed.gov/?id=EJ309521>
- Barbosa, A., Whiting, S., Simmonds, P., Moreno, R. S., Mendes, R., & Breda, J.** (2020). Physical activity and academic achievement: An umbrella review. *International Journal of Environmental Research and Public Health*, 17(16), 5972. DOI: <https://doi.org/10.3390/ijerph17165972>
- Bonavolontà, V., Cataldi, S., Latino, F., Carvutto, R., De Candia, M., Mastroilli, G., Messina, G., Patti, A., & Fischetti, F.** (2021). The role of parental involvement in youth sport experience: Perceived and desired behavior by male soccer players. *International Journal of Environmental Research and Public Health*, 18(16), 8698. DOI: <https://doi.org/10.3390/ijerph18168698>
- Burns, R. D., Brusseau, T. A., Pfladderer, C. D., & Fu, Y.** (2020). Sports participation correlates with academic achievement: Results from a large adolescent sample within the 2017 U.S. National Youth Risk Behavior Survey. *Perceptual and Motor Skills*, 127(2), 448–467. DOI: <https://doi.org/10.1177/0031512519900055>

- Cho, E.** (2016). Making reliability reliable: A systematic approach to reliability coefficients. *Organizational Research Methods*, 19(4), 651–682. DOI: <https://doi.org/10.1177/1094428116656239>
- Courtney, D., Watson, P., Battaglia, M., Mulsant, B. H., & Szatmari, P.** (2020). COVID-19 impacts on child and youth anxiety and depression: Challenges and opportunities. *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie*, 65(10), 688–691. DOI: <https://doi.org/10.1177/0706743720935646>
- Drewes, M., Daumann, F., & Follert, F.** (2021). Exploring the sports economic impact of COVID-19 on professional soccer. *Soccer & Society*, 22(1–2), 125–137. DOI: <https://doi.org/10.1080/14660970.2020.1802256>
- Dyer, A. M., Kristjansson, A. L., Mann, M. J., Smith, M. L., & Allegrante, J. P.** (2017). Sport Participation and academic achievement: A longitudinal study. *American Journal of Health Behavior*, 41(2), 179–185. DOI: <https://doi.org/10.5993/AJHB.41.2.9>
- D’Elia, F., Tortella, P., Sannicandro, I., & D’Isanto, T.** (2020). Design and teaching of physical education for children and youth. *Journal of Human Sport and Exercise*, 15(Proc4), S1527–S1533. DOI: <https://doi.org/10.14198/jhse.2020.15.Proc4.48>
- Eigenschenk, B., Thomann, A., McClure, M., Davies, L., Gregory, M., Dettweiler, U., & Inglés, E.** (2019). Benefits of outdoor sports for society: A systematic literature review and reflections on evidence. *International Journal of Environmental Research and Public Health*, 16(6). DOI: <https://doi.org/10.3390/ijerph16060937>
- Elliott, S., Drummond, M. J., Prichard, I., Eime, R., Drummond, C., & Mason, R.** (2021). Understanding the impact of COVID-19 on youth sport in Australia and consequences for future participation and retention. *BMC Public Health*, 21, 448. DOI: <https://doi.org/10.1186/s12889-021-10505-5>
- Fredricks, J. A., & Eccles, J. S.** (2005). Family socialization, gender, and sport motivation and involvement. *Journal of Sport and Exercise Psychology*, 27(1), 3–31. <https://journals.humankinetics.com/view/journals/jsep/27/1/article-p3.xml>. DOI: <https://doi.org/10.1123/jsep.27.1.3>
- Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C.** (2018). *Multivariate data analysis* (8th ed.). Cengage.
- Harvey, S. B., Hotopf, M., Overland, S., & Mykletun, A.** (2010). Physical activity and common mental disorders. *The British Journal of Psychiatry*, 197, 357–364. DOI: <https://doi.org/10.1192/bjp.bp.109.075176>
- Hillman, C. H., Erickson, K. I., & Kramer, A. F.** (2008). Be smart, exercise your heart: Exercise effects on brain and cognition. *Nature Reviews Neuroscience*, 9, 58–65. DOI: <https://doi.org/10.1038/nrn2298>
- Jones, M. I., & Lavallee, D.** (2009). Exploring the life skills needs of British adolescent athletes. *Psychology of Sport and Exercise*, 10(1), 159–167. DOI: <https://doi.org/10.1080/19398440802567931>
- Laplanche, J., & Pontalis, J.** (1973). *The language of psycho-analysis*. Karnac Books.
- Lawshe, C. H.** (1975). A quantitative approach to content validity. *Personnel Psychology*, 28(4), 563–575. DOI: <https://doi.org/10.1111/j.1744-6570.1975.tb01393.x>
- Madray, J. S.** (2020). The impact of COVID-19 on event management industry. *International Journal of Engineering, Applied Sciences and Technology*, 5(3), 533–535. DOI: <https://doi.org/10.33564/IJEAST.2020.v05i03.089>
- McGuine, T. A., Biese, K. M., Hetzel, S. J., Schwarz, A., Kliethermes, S., Reardon, C. L., Bell, D. R., Brooks, M. A., & Watson, A. M.** (2022). High school sports during the COVID-19 pandemic: The effect of sport participation on the health of adolescents. *Journal of Athletic Training*, 57(1), 51–58. DOI: <https://doi.org/10.4085/1062-6050-0121.21>
- McKay, C. D., Cumming, S. P., & Blake, T.** (2019). Youth sport: Friend or foe? Best practice & research. *Clinical Rheumatology*, 33(1), 141–157. DOI: <https://doi.org/10.1016/j.berh.2019.01.017>
- Meyers, L. S., Gamst, G., & Guarino, A. J.** (2017). *Applied multivariate research: Design and interpretation* (3rd ed.). Sage.
- Ministry of Public Health.** (2019). Definitions and Guidelines for Management of Close Contacts of COVID-19 Probable/Confirmed Case. https://ddc.moph.go.th/viralpneumonia/eng/file/guidelines/g_DGM_21Jan22.pdf
- Nyland, J., & Pyle, B.** (2022). Self-identity and adolescent return to sports post-ACL injury and rehabilitation: Will anyone listen? *Arthroscopy, Sports Medicine, and Rehabilitation*, 4(1), e287–e294. DOI: <https://doi.org/10.1016/j.asmr.2021.09.042>
- Pedhazur, E. J.** (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). Harcourt Brace.
- Pollock, B. H., Kilpatrick, A. M., Eisenman, D. P., Elton, K. L., Rutherford, G. W., Boden-Albala, B. M., Souleles, D. M., Polito, L. E., Martin, N. K., & Byington, C. L.** (2021). Safe reopening of university campuses during COVID-19: The University of California experience in Fall 2020. *PLOS One*, 16(11), e0258738. DOI: <https://doi.org/10.1371/journal.pone.0258738>
- Post, E. G., Rivera, M. J., Doss, D., & Eberman, L. E.** (2022). Parent decision-making regarding youth sport participation during the COVID-19 pandemic. *Journal of Community Health*, 1–10. DOI: <https://doi.org/10.1007/s10900-022-01078-4>

- Puterman, E., Lin, J., Blackburn, E., O'Donovan, A., Adler, N., & Epel, E.** (2010). The power of exercise: Buffering the effect of chronic stress on telomere length. *PLoS One*, 5, e10837. DOI: <https://doi.org/10.1371/journal.pone.0010837>
- Reiner, M., Niermann, C., Jekauc, D., & Woll, A.** (2013). Long-term health benefits of physical activity: A systematic review of longitudinal studies. *BMC Public Health*, 13, 813. DOI: <https://doi.org/10.1186/1471-2458-13-813>
- Stankiewicz, K., & Feuer, W.** (2020). Students are heading back to campus and so is the coronavirus as universities scramble to cancel in-person classes. <https://www.cnbc.com/2020/08/19/students-are-heading-back-to-campus-and-so-is-the-coronavirus-as-universitiesscramble-to-cancel-in-person-classes.html>.
- Terason, S., Tiwari, S., Pattanayanon, P., & Kulwanich, A.** (2022). The mediating effect of perceived value on the relationship between motivated consumer innovativeness and sports facility revisit intentions. *ABAC Journal*, 42(2), 89–106. DOI: <https://doi.org/10.14456/abacj.2022.6>
- Warm, J. S., Parasuraman, R., & Matthews, G.** (2008). Vigilance requires hard mental work and is stressful. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 50(3), 433–441. DOI: <https://doi.org/10.1518/001872008X312152>
- Watson, A. M., Biese, K., Reardon, C., Schwarz, A., Haraldsdottir, K., Brooks, M. A., Bell, D. R., & McGuine, T.** (2022). The psychosocial benefits of sport participation during COVID-19 are only partially explained by increased physical activity. DOI: <https://doi.org/10.1101/2022.01.11.22269077>

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