

Management Education & Emerging Technology

The Effects of Socioeconomic Status on the Level of Physical Activity Group Environment of PUP Athletes

Arielle D. Diomampo¹, Joshua M. Chua², Amilhussin M. Jairin³, Dr. Ferdie T. Lubis⁴

1,2,3,4 Department of Sports Science/Polytechnic University of the Philippines, Philippines

Abstract Article Info

This study aimed to determine the effects of socioeconomic status on the level of physical activity group environment of PUP athletes. Random sampling was used to select the 179 athletes from different types of sports. This study utilized quantitative methods through a survey questionnaire which was composed of two parts: the socioeconomic status questionnaire and the adopted physical activity group environment questionnaire. It was found out that there is a significant difference in the level of physical activity group environment of PUP athletes who are grouped according to their social class. In addition, results showed that athletes from high- income classes have the highest level of physical activity group environment, while athletes from low-income classes have the lowest level of physical activity group environment.

Keywords:

Socioeconomic Status,
Physical Activity Group
Environment, Team
Sports, Dual Sports,
Individual Sports,
Quantitative
Method, High- Income
Class, Low- Income
Class.

Date of Submission: 20/3/2024 Date of Review: 29/04/2024 Date of Acceptance: 13/05/2024 IJMEET / Volume 2, Issue 2, 2024

INTRODUCTION

Team chemistry has been discussed as a great tool to achieve team success. It was considered one of the crucial elements that athletes must have. This was supported by Benjamin Houghton (2022)1, who agreed with this idea and outlined the importance of team chemistry. Meanwhile, in 2021, Mertens2 and his colleagues discussed one attribute of building team chemistry: leadership. They believed that it would benefit the athletes and even the coaches. They also emphasize the job of the leader, which is to have a strong connection with their teammates, which will enhance the team's functioning and performance.

However, building team chemistry is not an easy task, as there are a lot of things to consider. In 2016, Gershgoren L.3 and his colleagues identified four components that couldaffect the team chemistry: (1) members' characteristics (i.e., demographic data, on field characteristics, and member's ego), (2) coach—players interactions (i.e., professional interaction and emotional intelligence of coaches), (3) interactions among the players (i.e.,professional understanding, efficacy beliefs, team cohesion, players' emotional intelligence, team roles, and goals), and (4) interactions with environmental factors (i.e., owners, management, fans, and media). However, the demographic data that researchers discussed were only the culture and experiences of the players. Thus, it is not clear if and how the socioeconomic status of the athletes affects their team chemistry. According to the American Psychological Association (2017)4, a person's socioeconomic status affects the quality of their life and the privileges they gain from society. One of these is the ability of the children to participate in an organized sport, which could enhance their social skills, which is one of the important elements of building chemistry with other people. This assertion is supported by Logan K. et al. (2019)5 and Cairney et al. (2018)6, who both concluded that participating in organized sports has a significant impact on a child's social health and overall development.

Determining the effects of socioeconomic status on the level of physical activity group environment of PUP athletes. With this, it can help raise public awareness about the effects of socioeconomic status on an athlete's team chemistry. This study will also contribute to the expansion of knowledge about team chemistry. With, this can serve as a related study for future researchers who will explore the same topic.

LITERATURE REVIEW

Good decision-making is crucial for athletes, as their actions affect not only them but also the people around them. According to Sheehy-Skeffington J. (2020), low-income groups are often harming their long- term lives because of their decision-making. And if a team sports athlete makes poor decisions, not only their personal life will be affected by this but also the team's perception of them. Another facet of an athlete's life that is influenced by socioeconomic background is their academic success. The academic performance of many pupils is significantly influenced by socioeconomic circumstances, according to a prior study by Barry (2008) of Wichita State University. A number of socioeconomic factors, according to the National Statistical Coordination Board (2016), have an impact on how students' academic life unfolds. Due to the Philippines' multicultural makeup, numerous studies have concentrated on the links between socioeconomic development, poverty alleviation, and education.

Socioeconomic status also has some effects on someone's development and social skills. These two aspects, especially the social skills, have a significant impact on an athlete. It will teach them skills that will make them more comfortable working with others, allowing them to easily build strong connections within the team and maintain the team's chemistry. According to Marmot M. (2014), socioeconomic status influenced one's functional complexity, social domain, and compatibility skills which are all important skill that an athlete must possessed. Children development was further explained by Zheng J. et al. (2021), she discussed how socioeconomic status affects their mental development. It includes children's vision, observation, memory, creativity, introspection, problem-solving ability, and intellect. Meanwhile, de Moura DR. (2013), Spencer N. (2013), Sajjadi H. (2015), and Bradley RH. (2016), are all discussed the effects of low socioeconomic status of the children. They believed that low SES increase the chance of children having mental health disorders, negatively affect their intellectual growth, academic achievement, unhealthy and behavioral problems, as well as access to cognitive experiences and stimulations and because of these children are more likely to experience developmental delays.

If these effects of socioeconomic status were experienced by the athlete in their childhood, they will have a hard time communicating with and connecting with other people in their chosen sport, which can compromise

their chemistry, which plays an important role in achieving success. According to Chelladurai (2014), in achieving team success members of a team must understand that everyone on the team must show up for practice, adhere to coaches' instructions, and put in their all during each session. He also believed that by collaborating with one another, support the feeling of "groupness" among athletes on a team.

However, team success cannot be achieved if the team has no chemistry. According to Kao C. (2019), team chemistry affects team performance and gives students skills they can use in future social settings. This idea about team chemistry has been further established by Bloom (2015). He believed that when team members collaborate and put forth a concerted effort to achieve the goals and objectives of the group, a group dynamic is created. Additionally, Doumit (2018) and Levine (2015) highlighted an important attribute of having team chemistry that could have a significant impact on how well their teammates perform, and that is maintaining balance and harmony and having a charismatic leader while for Klausner and Hoch, (2013) they highlighted that each team member must be aware of their particular contribution to how the group is approaching the task which can result to a strong sense of team identity and complete dedication to the organization's mission.

Moreover, Ohio University (2020) points out another essential component of team chemistry: communication. They maintained that coaches play a big role in the team's deliberate effort to achieve a common goal rather than engaging in selfish pursuits when they speak of strong or positive team chemistry. Furthermore, Ohio University (2020) also added that building a culture of equality, open communication, and trust among team members strengthens the team's bond and promotes success. Lastly, Ohio University (2020) discussed the importance of integrity in building team chemistry. They wrote that it is important for athletes to uphold each other's integrity rather than turn against one another or doubt themselves after losses.

DATA AND METHODOLOGY

This study used quantitative methods. The respondents of this study are composed of 179 athletes from different types of sports, such as team sports, dual sports, and individual sports. The respondents were selected through random sampling and the only requirement that the researchers used is that the athletes must be enrolled in the university for the academic year 2022-2023. To obtain the data needed from the selected PUP athletes, the researchers of this study used a survey questionnaire as the major instrument, which composed of two parts: the profile of the respondents and the adopted Physical Activity Group Environment Questionnaire. The data gathered through survey method were statistically treated using frequency and percentage, weighted mean, and ANOVA.

RESULTS AND DISCUSSION

Most of the respondents belong to low-income class with a frequency of eighty-three (83) and 46.3%, it is followed by middle-income class with a frequency of sixty-four (64) and a percentage of 35.7, while high-income class has the lowest number of respondents with a frequency of thirty-two (32) or 17.9%.

In terms of the level of physical activity group environment of PUP athletes, PUP athletes have the highest level of physical activity group environment in terms of Group Integration—Task with a general weighted mean of 3.29 or a verbal interpretation of Strongly Agree (Table 3). It is followed by Individual Attractions to the Group—Social and Individual Attractions to the Group—Task with a general weighted mean of 3.28 and 3.26 with a verbal interpretation of Strongly Agree and Agree, respectively (Table 2 and Table 1). Meanwhile, in terms of Group Integration—Social, PUP athletes have the lowest level of physical activity group environment with a general weighted mean of 3.25 and verbal interpretation of Agree (Table 4).

Table 1

Level of Physical Activity Group Environment of PUP Athletes in terms of Individual Attractions to the Group—Task

Individual Attractions to the Group—Task	Weighted Mean	Verbal Interpretation
IT1	3.17	Agree
IT2	3.31	Strongly Agree
IT3	3.25	Agree
IT4	3.37	Strongly Agree
IT5	3.18	Agree
IT6	3.26	Agree
IT7	3.23	Agree
IT8	3.31	Strongly Agree
IT9	3.23	Agree
General Weighted Mean	3.26	Agree

Table 2

Level of Physical Activity Group Environment of PUP Athletes in terms of

Individual Attractions to the Group—Social

Individual Attractions to the Weighted Verbal Group—Social Interpretation Mean 3.25 Agree IS1 IS2 3.26 Agree Strongly Agree IS3 3.36 Strongly Agree 3.27 IS4 IS5 3.29 Strongly Agree IS6 3.34 Strongly Agree IS7 3.26 Strongly Agree IS8 3.21 Agree IS9 3.30 Strongly Agree 3.31 IS10 Strongly Agree General Weighted Mean 3.28 Strongly Agree

Table 3

Level of Physical Activity Group Environment of PUP Athletes in terms of Group

Integration—Task

Group Integration—Task	Weighted Mean	Verbal Interpretation
GI1	3.26	Strongly Agree
GI2	3.45	Strongly Agree
GI3	3.25	Agree
GI4	3.30	Strongly Agree
GI5	3.21	Agree
GI6	3.35	Strongly Agree
GI7	3.19	Agree
GI8	3.35	Strongly Agree
GI9	3.23	Agree
General Weighted Mean	3.29	Strongly Agree

Table 4

Level of Physical Activity Group Environment of PUP Athletes in terms of Group

Integration—Social

Group Integration – Social	Weighted Mean	Verbal Interpretation
GS1	3.25	Agree
GS2	3.24	Agree
GS3	3.13	Agree
GS4	3.32	Strongly Agree
GS5	3.22	Agree
GS6	3.27	Strongly Agree
GS7	3.31	Strongly Agree
General Weighted Mean	3.25	Agree

The results also reveal the level of physical activity group environment of PUP athletes who are grouped according to their socio-economic profile. In terms of Individual Attractions to the Group—Task, respondents belonging to high-income class have the highest level of physical activity group environment with a general weighted mean of 3.94. It is followed by middle-income class and low-income class with a weighted mean of 3.62 and 2.69, respectively.

In terms of Individual Attractions to the Group—Social, respondents belonging to high-income class have the highest level of physical activity group environment with a general weighted mean of 3.93, while respondents

belonging to middle-income class and low-income class have the lowest level of physical activity group environment with a general weighted mean of 3.52 and 2.82, respectively.

Table 5
Individual Attractions to the Group—Task of Grouped Respondents

	Income Class						
Individual Attractions to the Group—Task		Low Income Class		Middle Income Class		High Income Class	
	Mean	VI	Mean	VI	Mean	VI	
I like the amount of physical activity I get in this program.	2.59	Agree	3.49	Strongly Agree	3.94	Strongly Agree	
I am happy with the amount of time I spend developing my strength in this physical activity group.	2.71	Agree	3.74	Strongly Agree	3.97	Strongly Agree	
 This physical activity group provides me with a good opportunity to improve in areas of fitness I consider important. 	2.67	Agree	3.60	Strongly Agree	3.94	Strongly Agree	
 I am happy with the intensity of the physical activity in this program. 	2.89	Agree	3.68	Strongly Agree	3.94	Strongly Agree	
I like the program of physical activities done in this group.	2.55	Agree	3.58	Strongly Agree	3.94	Strongly Agree	
This physical activity group gives me an opportunity to improve my physical wellbeing.	2.75	Agree	3.53	Strongly Agree	3.94	Strongly Agree	
 I enjoy new exercises done in this physical activity group. 	2.64	Agree	3.60	Strongly Agree	3.97	Strongly Agree	
This physical activity group provides me with good opportunities to improve my personal fitness.	2.72	Agree	3.72	Strongly Agree	3.94	Strongly Agree	
 I like the progress I make when I stick to the activities in this physical activity group. 	2.69	Agree	3.61	Strongly Agree	3.83	Strongly Agree	
General Weighted Mean	2.69	Agree	3.62	Strongly Agree	3.94	Strongl y Agree	

In terms of Individual Attractions to the Group—Social, respondents belonging to high-income class have the highest level of physical activity group environment with a general weighted mean of 3.93, while respondents belonging to middle-income class and low-income class have the lowest level of physical activity group environment with a general weighted mean of 3.52 and 2.82, respectively.

Table 6
Individual Attractions to the Group—Social of Grouped Respondents

	Income Class					
Individual Attractions to the Group—	Low Income			e Income		Income
Social	Class		Class			lass
	Mean	VI	Mean	VI	Mean	VI
 Some of my good friends are in this physical activity group. 	2.75	Agree	3.51	Strongly Agree	3.94	Strongly Agree
This physical activity group is an important social unit for me.	2.72	Agree	3.60	Strongly Agree	3.89	Strongly Agree
I enjoy my social interactions within this physical activity group.	2.88	Agree	3.63	Strongly Agree	3.97	Strongly Agree
 I like meeting the people who come to this physical activity group. 	2.76	Agree	3.56	Strongly Agree	3.92	Strongly Agree
I have good friends in this physical activity group.	2.87	Agree	3.49	Strongly Agree	3.89	Strongly Agree
If this program was to end, I would miss my contact with the other participants.	2.88	Agree	3.60	Strongly Agree	3.92	Strongly Agree
I enjoy the opportunity, within this physical activity group, to share experiences with others who are similar to me.	2.77	Agree	3.53	Strongly Agree	3.92	Strongly Agree
In terms of the social experiences in my life, this physical activity group is very important.	2.84	Agree	3.25	Agree	3.94	Strongly Agree
The social interactions I have in this physical activity group are important to me.	2.94	Agree	3.42	Strongly Agree	3.89	Strongly Agree
 I enjoy the feedback from the instructor in this physical activity group. 	2.76	Agree	3.65	Strongly Agree	3.97	Strongly Agree
General Weighted Mean	2.82	Agree	3.52	Strongly Agree	3.93	Strongly Agree

In terms of Group Integration—Task, high-income class have the highest level of physical activity group environment with a general weighted mean of 3.94, followed by middle-income class with 3.45 general weighted mean, and the low-income class which had a general weighted mean of 2.87 being the lowest among the three classes.

Table 7
Group Integration—Task of Grouped Respondents

Income Class						
Group Integration—Task		Low Income Class		Middle Income Class		Income lass
	Mean	VI	Mean	VI	Mean	VI
 Members of our group have similar interests regarding the program of physical activity. 	2.86	Agree	3.37	Strongly Agree	3.97	Strongly Agree
Our group is united in its beliefs about the benefits of the physical activities offered in this program.	3.12	Agree	3.60	Strongly Agree	3.94	Strongly Agree
Our group in agreement about the program of physical activities that should be offered.	2.90	Agree	3.28	Strongly Agree	3.92	Strongly Agree
Members of our group enjoy the type(s) of physical activities offered.	2.84	Agree	3.53	Strongly Agree	3.94	Strongly Agree
Members of our group are satisfied with the intensity of physical activity in this program.	2.84	Agree	3.26	Strongly Agree	3.89	Strongly Agree
We help each other develop new skills in our physical activity in group.	2.96	Agree	3.51	Strongly Agree	3.92	Strongly Agree
Members of our physical group enjoy sharing information.	2.59	Agree	3.53	Strongly Agree	3.97	Strongly Agree
Members of our group enjoy helping if work needs to be done to prepare for the activity sessions.	2.96	Agree	3.49	Strongly Agree	3.97	Strongly Agree
We encourage each other in order to get the most out of the program.	2.75	Agree	3.46	Strongly Agree	3.92	Strongly Agree
General Weighted Mean	2.87	Agree	3.45	Strongl y Agree	3.94	Strongl y Agree

And in terms of Group Integration—Social, high-income class have the highest-level physical activity group environment with a general weighted mean of 3.95, followed by middle-income class and lowincome with a general weighted meain of 3.39 and 2.82, respectively.

Table 8

Group Integration – Social of Grouped Respondents

	Income Class					
Group Integration – Social	Low Income Class		Middle Income Class		High Income Class	
	Mean	VI	Mean	VI	Mean	VI
 We enjoy each other's company in our physical activity group. 	2.77	Agree	3.42	Strongly Agree	4.00	Strongly Agree
Members of our physical activity group often socialize during exercise time.	2.86	Agree	3.33	Strongly Agree	3.92	Strongly Agree
 Members of our physical activity group would likely spend time together if the program were to end. 	2.46	Disagree	3.56	Strongly Agree	3.92	Strongly Agree
We are good friends in this physical activity group.	2.93	Agree	3.46	Strongly Agree	3.94	Strongly Agree
A valuable aspect of our physical activity group in social interactions.	2.72	Agree	3.44	Strongly Agree	3.97	Strongly Agree
Members of our group sometime socialize together outside of activity time.	2.95	Agree	3.28	Strongly Agree	3.94	Strongly Agree
 We spend time socializing with each other before and after our activity sessions. 	3.05	Agree	3.25	Agree	3.97	Strongly Agree
General Weighted Mean	2.82	Agree	3.39	Strongly Agree	3.95	Strongly Agree

The results below also indicate that there is a significant difference on the level of physical activity group environment of PUP athletes who are grouped according to their socioeconomic status. It can be supported by the fact that all variables; individual attractions to the group—task, individual attractions to the group—social, group integration—task, and group integration—social, generated a p-value of (0.0000) which is less than the level of significance (0.5).

Table 9

Significant Difference on the Level of Physical Activity Group Environment of PUP

Athletes

Variable	Income Class	Weighted Mean	F-value	p-value	Decision	Remarks
Individual	Low Income Class	2.69				
Attractions to the Group—	Middle Income Class	3.62	150.7915	0.0000	Reject Ho	Significant
Task	High Income Class	3.94				
Individual	Low Income Class	2.82			Reject Ho	
Attractions to the Group—	Middle Income Class	3.52	103.8813	0.0000		Significant
Social	High Income Class	3.93				
Group	Low Income Class	2.87				
Integration—	Middle Income Class	3.45	81.3636	0.0000	Reject Ho	Significant
Task	High Income Class	3.94				
Group	Low Income Class	2.82			Dojost	
Integration –	Middle Income Class	3.39	83.2953	0.0000	Reject Ho	Significant
Social	High Income Class	3.95				

CONCLUSION

1.According to the athlete's parent's combined monthly income, majority of the respondents belonged to low-income class, followed by middle-income class, and high-income class. These classes were

identified based on Univariate Measure where only one variable was used to determine the athlete's socioeconomic status.

- 2. The PUP Athletes have highest level of physical activity group environment in terms of Group Integration—Task, next is the Individual Attractions to the Group—Social and Individual Attractions to the Group—Task, while in terms of Group Integration—Social, PUP Athletes have the lowest level of physical activity group environment.
- 3. There is a significant difference on the level of Physical Activity Group Environment among PUP athletes who are grouped according to their socioeconomic profile.

REFERENCES

Cairney, J., Rheanna Bulten, King-Dowling, S., & Arbour-Nicitopoulos, K. P. (2018). A

Longitudinal Study of the Effect of Organized Physical Activity on Free Active Play. 50(9), 1772–1779. https://doi.org/10.1249/mss.000000000001633

Gershgoren, L., Basevitch, I., Filho, E., Gershgoren, A., Brill, Y. S., Schinke, R. J., & Tenenbaum,

G. (2016). Expertise in soccer teams: A thematic inquiry into the role of Shared Mental Models within team chemistry.

Psychology of Sport and

Exercise, 24, 128–139.

https://doi.org/10.1016/j.psychsport.2015.12.002

Houghton, B. (2022, October 16). Chemistry is the key to success in team sports - Loquitur.

Loquitur. https://theloquitur.com/the-relationship-betweenchemistry-and-success-in-team-sports/

Logan, K., Cuff, S., LaBella, C. R., Brooks, M. A., Canty, G., Diamond, A. B., Hennrikus, W., Moffatt, K., Nemeth, B. A., Pengel, K. B., Peterson, A. R., & Stricker, P. R. (2019). Organized Sports for Children, Preadolescents, and Adolescents. Pediatrics, 143(6).

https://doi.org/10.1542/peds.2019-0997

Mertens, N., Boen, F., Steffens, N. K., Haslam, S. A., & Fransen, K. (2021). Will the real leaders please stand up? The emergence of shared leadership in semiprofessional soccer teams. Journal of Science and Medicine in Sport, 24(3), 281–290. https://doi.org/10.1016/j.jsams.2020.09.007