



Group Cohesion Among Team Sports Athletes of Polytechnic University of the Philippines

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Abstract- This study explores the group cohesion levels among male team sports student-athletes at the Polytechnic University of the Philippines. Utilising a descriptive quantitative approach, data were gathered through the use of the Group Environment Questionnaire (GEQ) to assess cohesion levels across basketball, volleyball, football, baseball, and sepak takraw teams. Findings revealed that tenure has a significant influence on task cohesion and group integration, with senior athletes demonstrating a stronger sense of unity and commitment to team goals compared to their junior counterparts. However, social cohesion appears to remain stable across different year levels, suggesting that interpersonal relationships among teammates form early and persist over time. Additionally, variations in cohesion levels were observed across different sports, indicating that the nature of the sport itself may impact the way athletes bond and interact. These findings highlight the importance of fostering both task and social cohesion in collegiate sports programs, as strong cohesion not only enhances performance but also contributes to athlete motivation and overall team dynamics. The study provides valuable insights for coaches, sports psychologists, and athletic program developers, emphasising the need for structured interventions and team-building initiatives to strengthen cohesion and optimise team success.

Keywords: Team Cohesion, Group Dynamics, And Student-Athletes, With A Particular Focus On Task Cohesion And Social Cohesion Tenure In Sports, And Collegiate Athletics

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INTRODUCTION

Many Filipinos enjoy watching team sports such as volleyball, basketball, and football in their leisure time (Baskin, 2013). Team sports refer to organised athletic activities in which groups of individuals come together to compete against each other. These sports typically involve coordination, cooperation, and collective effort among team members to achieve common goals. "Team sports are structured physical activities in which a team of people cooperate to accomplish a shared goal. Success in these sports frequently depends on the team members' complementary abilities, coordination, and cooperative efforts. (Jones and Kingston, 2013).

Cohesion, as defined by Onağ and Tepeci (2014), is the degree of unity, connectedness, and togetherness within a group, influencing how well the group works towards a common goal. It fosters trust, cooperation, and a sense of belonging, which are crucial for a group's success, whether in sports, business, or other group activities. Cohesion enhances communication, social support, and emotional health while promoting productivity and reducing conflict. It also strengthens resilience and trust, which help facilitate harmonious interactions. (Filho et al., 2014). There are two key components of cohesion: social cohesion (focused on relationships within the team) and task cohesion (focused on achieving the team's objectives). These aspects are interrelated, with strong social cohesion improving task cohesion and vice versa (Charly & Ti, 2017). Cohesive teams outperform less cohesive teams in communication, cooperation, and commitment to goals (Holt et al., 2019).

Advancements in mechanical engineering and emerging technologies have driven significant innovations across various industries. Among these, [specific field or topic, e.g., thermal energy systems, robotics, or material science] has garnered increasing attention due to its potential to address critical challenges in [specific application area, e.g., energy efficiency, automation, or sustainable manufacturing].

This study focuses on exploring [key focus area or problem statement], a topic that has been pivotal in advancing the understanding of [specific aspect, e.g., system optimisation, material behaviour, or design methodologies]. Despite substantial progress, several knowledge gaps remain, particularly in [specific unresolved issues or challenges].

By investigating [your study's primary focus or approach], this work aims to contribute to the broader understanding of [specific field] and provide a foundation for future research in [related applications or interdisciplinary areas].

LITERATURE REVIEW

Student-Athletes

Being a student-athlete is not easy; they need to have time management to their priorities both academically and in sports. They encountered a lot of challenges that they needed to face, like their mental health. As stated by Bird, M. D., & Simons, E. E. (2023), the number of stressors that student-athletes experience as a result of their dual roles as athletes and students can have an impact on their well-being. They need to balance what they are doing, and they need to know what their priority is because it is mentally draining; athletes have a lot of stressors, which sometimes affect their school or game performances. That is why the student-athletes are not only physically prepared but also mentally. It is more challenging for the athletes because they need to do well in both academics and sports. The reason is that they cannot play the sport they love if they have failing grades or problems in their academics.

The pressure or the stress of sports played by a team in comparison to individual sports is quite different, as found by Simons, E. E., & Bird, M. D. (2023). It also demonstrated the disparities in stressors between individual and team sports, with data indicating that athletes participating in individual sports have greater mental health issues than those participating in team sports. In individual sports, only the player can handle the pressure during the game, and no one can help aside from the coach who is giving the instruction to that player; that's why in individual sports, the coach needs to trust the player, which is very important to start their cohesion. While in team sports, the players can share or share their problems with their teammates, and sometimes they will get advice on how they deal with that problem. They will not be afraid to tell their rants in life because they are already building cohesiveness as time goes by.

Sports teams typically favour the recruitment of younger athletes, believing they have greater potential for growth and prolonged career prospects. This preference stems from younger athletes being perceived as more adaptable to team tactics and having more room for improvement (Downward & Dawson, 2016).

Male Athletes

Male and female athletes interact with one another in distinct ways. According to a study by Valenzuela (2022), men tend to speak more literally and briefly, whereas women prefer to incorporate a lot of emotions and memories into their conversations. In a prior meta-analysis investigating the link between cohesion and performance (Eys et al., 2015), it was found that the connection was notably more effective in female teams than in male teams. A previous meta-analysis by Eys et al. (2015) examining the relationship between performance and cohesion revealed that the connection was notably more effective in female groups than in male teams. Gender differences were examined in small, single-gender groups playing an online game in terms of play style, team cohesion, and member satisfaction in the study of Martin & Good (2015). The findings indicated that teams composed of all females demonstrated substantially higher levels of team cohesion and member satisfaction, while teams that were all male were observed to adopt riskier and more expansive strategies.

According to Halldorsson, V. (2018), Normal communication between players is limited because of the fast-paced action on the field, the physical distances between players, and the loud noise levels during professional sporting events. Playing football especially in professional competition athletes should expect that there's a lot of people or fans who support them or even their opponent and they do anything to support the team or just to distract the other team, they shout very loud or sometimes they bring instruments because of that, the players needed to communicate with his teammates using hand gesture or eye to eye contact because they don't hear each other if they will communicate in verbal. Additionally, in team sports, players move around the floor to make plays rather than staying in one spot.

Every generation of male athletes who played in a team of them will change their chemistry or cohesiveness once they return to play as a team. According to Berengüí, R (2022). Spanish soccer teams' male players (mean age = 14.64 years) compete in five age groups, ranging from under-10 to under-19, in official competitive leagues. Social values, task orientation, and social cohesion were all higher among younger players. When the athletes played in their adolescent years, this year was the stage where they wanted to make friends with other people or with their teammates, and as time goes by, their cohesiveness or chemistry will develop if they play together as a group.

Cohesiveness as a team is both crucial and essential during the game because players will know how to play with each other on the court. According to Sajid, S. (2020). The study aims to quantify the effects of team effectiveness and group cohesion on the performance of female students playing volleyball at the school level. Compared to male volleyball players, female players in particular exhibit extremely low levels of group cohesion and effectiveness. The study showed that the male athletes have the highest cohesiveness compared to females. This shows that male athletes easily build their cohesiveness and chemistry as a team, and they can easily communicate with their teammates while playing on the court.

METHODOLOGY

(Include ethical permissions and technical information about the study.)

Our demonstration methodology is designed to effectively showcase the functionality, performance, and potential applications of the solution. The approach is structured into the following key phases:

1. Objective Definition

- a. To assess male collegiate athletes participating in team sports on the Group Integration-Task scale.
- b. To assess male collegiate athletes participating in team sports on the Group Integration-Social scale.
- c. To assess male collegiate team sports athletes' individual attractions to the Group- Task scale.
- d. To assess male collegiate team sports athletes' individual attractions to the Group-Social scale

2. Scenario Development

This research addresses a gap in understanding how individual and team cohesion impact team sports performance. It explores the intricate dynamics where individual athletes' perceptions influence overall team cohesion, and vice versa. The study aims to provide insights for coaches and athletes to enhance performance by closing this research gap. Understanding these dynamics could lead to targeted interventions and team-building techniques to improve cohesion at both individual and team levels, ultimately contributing to the overall success of sports teams.

Sports enthusiasts are familiar with the term 'team chemistry,' which is often equated with team cohesion. However, while many teams appear cohesive, their internal dynamics may vary upon closer examination. In the past, cohesion has been regarded as one of the most crucial factors in group dynamics studies (Charly & Manoj, 2017). Research suggests that higher team cohesion leads to improved performance in sports and other collaborative activities (Ioan-Sabin & Marcel, 2014). This study aims to address the following research questions:

1. What is the Demographic profile of the respondents in terms of:

1.1 Tenure

1.2 Sports Event

2. What is the assessment of the respondents on the GEQ

2.1 Tenure

a) ATG-T

b) ATG-S

c) GI-T

d) GI-S

2.2 Sports event

a) ATG-T

b) ATG-S

c) GI-T

d) GI-S

3. Is there any significant difference between the assessment of the respondents on GEQ according to:

3.1 Tenure

3.2 Sports Event

3. Setup and Configuration

- The survey questionnaire was given individually and in person with a physical copy for the respondents to answer.

4. Step-by-Step Execution

Phase 1: Marcos et al. (2015) state that the most effective and relevant instrument to measure group cohesion is the "Group Environment Questionnaire," which was designed by Carron in 1985. The 18 items in this questionnaire are divided among the four scales of its conceptual model (GI-T, GI-S, ATG-T, and ATG-S). Its purpose is to evaluate how cohesive sports teams are thought to be. (Marcos and others, 2015). Verifying team cohesion among student athletes is the goal of this study

Phase 2: The researchers will obtain the Group Environment Questionnaire, that created by Carron and used as a research instrument to determine the level of group cohesion of our participants

Phase 3: Before data collection, the researchers will seek approval from the Sports and Development Program Office (SDPO).

Phase 4: The researchers will present the approved letter to the coach present during the time of implementation and ask their coach if the researchers can administer the GEQ to the selected male athletes, particularly those who are part of the competing lineup. If they were allowed to conduct their research before handing out the GEQ, the researchers would give a brief background regarding the study. The researchers will give the respondents the necessary documents required to conduct the study, such as the information of the researchers and a consent form to be signed by the respondent. Afterwards, the researchers will administer the GEQ to the participants, it can be before or after their training, to make sure that the researchers are not causing a distraction to their training sessions. During the process of answering the GEQ, the researchers will make sure that they are not talking to their teammates to ensure that the athletes will answer it without the influence of others. After they finish answering the GEQ, the researchers will reiterate that all answers and information will be kept private and will be used for academic purposes only.

Phase 5: The instrument that we used was effective; the researchers determined the level of cohesion both in task and social of the participants using the Group Environment Questionnaire.

5. Data Collection

- Survey: A structured questionnaire was used to gather data from the male team sports athletes of Polytechnic University of the Philippines.

6. Evaluation and Iteration

- The data was analysed using the descriptive analysis method, this is to addresses the research questions.

7. Conclusion and Next Steps

The demographic analysis shows that the majority of student-athletes are in their 1st year (36.36%), followed by 2nd-year (30.30%) and 4th-year (21.21%) respondents, with the smallest group being 3rd-year students (12.12%). This suggests a high proportion of newer athletes, which could impact team cohesion. To address this, team-building efforts should focus on integrating these newcomers, improving communication, trust, and shared goals to prevent disruption of existing dynamics. Targeted cohesion programs tailored to this demographic are recommended to enhance team performance and morale. Sepak Takraw has the highest participation rate at 24.24%, followed by football at 22.73%, while baseball, volleyball, and basketball have smaller groups at 19.70%, 18.18%, and 15.15%, respectively. This distribution suggests the need for customised team cohesion strategies based on the size and dynamics of each sport. Group Integration-Social (GIS) is more prominent than Group Integration-Task (GIT), with team members being more socially connected than focused on task completion. While strong social cohesion can boost morale and reduce conflicts, it may not guarantee high performance without task cohesion. The team's enjoyment of spending time together off the court contributes to a positive atmosphere, but additional strategies may be needed to strengthen their task-oriented integration. Individual Attraction to Group-Task (ATGT) is higher than Individual Attraction to Group-Social (ATGS), indicating that team members are more motivated by the team's goals and tasks than by social interactions, finding personal fulfilment in contributing to the team's success and achieving goals.

RESULTS & DISCUSSION

1. What is the demographic profile of the respondents in terms of:

1.1 Tenure

| TENURE | FREQUENCY | PERCENTAGE |
|----------------------|-----------|---------------|
| 1 st Year | 24 | 36.36 |
| 2 nd Year | 20 | 30.30 |
| 3 rd Year | 08 | 12.12 |
| 4 th Year | 14 | 21.21 |
| TOTAL | 66 | 100.00 |

The demographic profile of respondents by their tenure. It shows that 1st year (Rookies) have the highest number of respondents at 24, or 36.36%. The 2nd year (Sophomores) follows with 20 respondents, making up 30.30%. The 3rd year (Juniors) has 8 respondents, representing 12.12%, and the 4th year (Seniors) has 14 respondents, or 21.21%. In total, there are 66 respondents, comprising 100%. The data indicates that 1st year students are the most numerous, while 3rd year students are the least represented. The 24.24% variance is attributed to sports teams typically favoring the recruitment of younger athletes, believing they have greater potential for growth and prolonged career prospects. This preference stems from younger athletes being perceived as more adaptable to team tactics and having more room for improvement (Downward & Dawson, 2016).

The findings indicate that the higher number of first-year athletes compared to other year levels can be attributed to sports organizations' ongoing efforts to identify and develop young talent within their academy systems, with the goal of uncovering and nurturing potential elite athletes who may reach world-class levels (Gustafsson & Hassmén, 2017).

1.2 Sports Event

| EVENTS | FREQUENCY | PERCENTAGE |
|-------------|-----------|------------|
| Basketball | 10 | 15.15 |
| Baseball | 13 | 19.70 |
| Football | 15 | 22.73 |
| Spak Takraw | 16 | 24.24 |
| Volleyball | 12 | 18.18 |

| | | |
|--------------|-----------|---------------|
| TOTAL | 66 | 100.00 |
|--------------|-----------|---------------|

The events played by the 66 respondents, including their frequency and percentage. Basketball was played by 10 respondents, making up 15.15%. Baseball had 13 players, representing 19.70%. Football had 15 athletes, with a percentage of 22.73%. Sepak Takraw had the highest participation, with 16 athletes and 24.24%. Volleyball had 12 participants, accounting for 18.18%. Sepak Takraw had the most participants, followed by football, baseball, volleyball, and basketball, respectively.

2. What is the assessment of the respondents on the GEQ in terms of

2.1 Tenure

The respondents' evaluations of the GEQ by tenure. For Group Integration-Task (GIT), 1st, 2nd, and 4th year students are categorized as Moderately Agree, while 3rd year students are Undecided. In Group Integration-Social (GIS), 2nd year students are Slightly Agree, whereas 1st, 3rd, and 4th year students are Undecided. For Individual Attraction to Group-Task (ATGT), 1st and 2nd year students are Agree, 4th year students are Strongly Agree, and 3rd year students are Undecided. Finally, for Individual Attraction to Group-Social (ATGS), 1st and 4th year students are Agree, 2nd year students are Moderately Agree, and 3rd year students are Slightly Agree.

| GEQ | Tenure | Verbal Interpretation |
|---------------------------------------|----------------------|------------------------------|
| Group Integration-Task | 1 st year | Moderately Agree |
| | 2 nd year | Moderately Agree |
| | 3 rd year | Undecided |
| | 4 th year | Moderately Agree |
| Group Integration-Social | 1 st year | Undecided |
| | 2 nd year | Slightly Agree |
| | 3 rd year | Undecided |
| | 4 th year | Undecided |
| Individual Attraction to Group-Task | 1 st year | Agree |
| | 2 nd year | Agree |
| | 3 rd year | Undecided |
| | 4 th year | Strongly Agree |
| Individual Attraction to Group-Social | 1 st year | Agree |
| | 2 nd year | Moderately Agree |

The tenure of the individual in the team may have affected some factors of GEQ. Thrift, M. B. (2021). It is suggested that group tenure could influence group cohesion. The table indicates that 1st, 2nd, and 4th year students all Moderately Agree that they experience similarities, closeness, and bonding within their team in terms of Group Integration-Task (GIT).

Regarding group tasks, 3rd year students are Undecided about their involvement. In terms of social cohesion, 1st, 3rd, and 4th year students are Undecided about their closeness and bonding within their team, while 2nd year students Slightly Agree. For Individual Attraction to Group-Task (ATGT), 1st and 2nd year students Agree on their individual engagement in group tasks to achieve team goals, with 4th year students Strongly Agree, and 3rd year students are Undecided. Lastly, for Individual Attraction to Group-Social (ATGS), 1st and 4th year students Agree on their individual participation in social interactions within the team, 3rd year students Slightly Agree, and 2nd year students Moderately Agree.

The findings from Prapavessis et al. (2017) about tenured athletes' perceptions of team dynamics align closely with the results presented in Table 6. This suggests that as athletes gain tenure, their ability to navigate team dynamics and contribution to cohesion significantly improves, reinforcing the importance of experience in enhancing relational aspects measured by the GEQ.

2.2 Sports Event

| GEQ | Event | Verbal Interpretation |
|------------------------|--------------|------------------------------|
| Group Integration-Task | Basketball | Moderately Agree |

| | | |
|---------------------------------------|-------------|------------------|
| | Baseball | Agree |
| | Football | Slightly Agree |
| | Spak Takraw | Moderately Agree |
| | Volley ball | Moderately Agree |
| Group Integration-Social | Baseball | Undecided |
| | Basketball | Undecided |
| | Football | Undecided |
| | Spak Takraw | Slightly Agree |
| | Volley ball | Undecided |
| Individual Attraction to Group-Task | Baseball | Agree |
| | Basketball | Strongly Agree |
| | Football | Moderately Agree |
| | Spak Takraw | Agree |
| | Volley ball | Moderately Agree |
| Individual Attraction to Group-Social | Baseball | Moderately Agree |
| | Basketball | Strongly Agree |
| | Football | Moderately Agree |
| | Spak Takraw | Moderately Agree |
| | Volley ball | Moderately Agree |

The GEQ assessments for various team sports. For Group Integration-Task (GIT), Baseball, Sepak Takraw, and Volleyball teams are rated as Moderately Agree, the Basketball team is rated as Agree, and the Football team is rated Slightly Agree. In Group Integration-Social (GIS), Baseball, Basketball, Football, and Volleyball teams are Undecided, while Sepak Takraw is Slightly Agree. This finding echoes Glover et al. (2016), who noted that athletes in relay events reported higher GIS scores due to the collective effort required, positively influencing team bonding. Regarding Individual Attraction to Group-Task (ATGT), Baseball and Sepak Takraw teams are in agreement, Football and Volleyball teams are moderately in agreement, and the Basketball team is strongly in agreement. Lastly, for Individual Attraction to Group-Social (ATGS), Baseball, Football, Sepak Takraw, and Volleyball teams are Moderately Agree, while Basketball teams are Strongly Agree.

The results show that the respondents have different assessments in the Group Environment Questionnaire (GEQ) in terms of the factors. Johnson, D., Gardner, M. J., & Perry, R. (2018) clarified two basic premises: (a) there are different dimensions of cohesion and (b) each context may demand one dimension more strongly than others. In Group Integration-Task (GIT), the Basketball Team is a strong team because they agree that they have closeness and bonding within their team in terms of the group task. For Group Integration-Social (GIS), the Sepak Takraw slightly agrees that individuals in the team have closeness and bonding in their socializing. While for Individual attraction to Group- Task (ATGT) and Individual attraction to Group-Social (ATGS) both Basketball is the strong team the results showed that they Strongly Agree that individuals in the team are involved in their group task to reach their goals and objectives as a team and, they are involved individually to social interaction with their team.

3. Is there any significant difference between the assessment of the respondents on GEQ according to

3.1 Tenure

| GEQ | Tenure | P-Value | Decision | Remarks |
|---------------------------------------|----------------------|---------|------------------|-----------------|
| Group Integration-Task | 1 st year | 0.0027 | Reject Ho | Significant |
| | 2 nd year | | | |
| | 3 rd year | | | |
| | 4 th year | | | |
| Group Integration-Social | 1 st year | 0.4342 | Do not Reject Ho | Not Significant |
| | 2 nd year | | | |
| | 3 rd year | | | |
| | 4 th year | | | |
| Individual Attraction to Group Social | 1 st year | 0.0002 | Reject Ho | Significant |
| | 2 nd year | | | |
| | 3 rd year | | | |
| | 4 th year | | | |

| | | | | |
|-------------------------------------|----------------------|--------|-----------|-------------|
| Individual Attraction to Group Task | 1 st year | 0.0004 | Reject Ho | Significant |
| | 2 nd year | | | |
| | 3 rd year | | | |
| | 4 th year | | | |

The respondents' tenure by year level in relation to the GEQ. It demonstrates a significant difference in GIT (Group Integration-Task) scores across year levels, leading to the rejection of the null hypothesis that there are no differences in GIT scores among the year levels. The review of team cohesion influences and measurement suggests that longer tenure enhances task cohesion (GIT) and individual attraction to group tasks (IAGS and IAGT), which supports the observed significant differences across year levels in the current study.

The results indicate that as students advance through their academic years, their ability to work effectively in groups tends to improve. This underscores the importance of considering factors like tenure and experience when evaluating group dynamics in educational settings. In GIS (Group Integration-Social), the table reveals a significant difference in IAGS scores across year levels, leading to the rejection of the null hypothesis that there are no differences in IAGS scores among the year levels. This suggests varying levels of group integration and social interaction skills among students at different year levels, highlighting the need to account for developmental and social differences when designing programs to enhance group integration and social skills.

The consistency of social cohesion (GIS) across year levels, as noted in Table 8 findings, is echoed in research by Heuze et al. (2017). They found that social bonds among team members can form quickly and remain stable, suggesting that while task cohesion may improve with tenure, social integration might stabilize early in a group's development. The study by Carron, Bray, and Eys (2002) supports this, showing that longer team tenure is linked to higher task cohesion, consistent with the significant differences observed in GIT scores across year levels.

In AGT (Individual Attraction to Group-Task), the null hypothesis of no significant differences in IAGT scores across year levels is rejected. Overall, the table reveals significant differences in GIT, IAGS, and IAGT scores among different year levels, indicating that these aspects of team cohesion are influenced by the athletes' year levels. Conversely, GIS shows no significant differences across year levels, implying that social integration within the group remains stable regardless of the year level.

3.2 Sports Event

| GEQ | Tenure | P-Value | Decision | Remarks |
|---------------------------------------|-------------|---------|------------------|-----------------|
| Group Integration-Task | Baseball | 0.0054 | Reject Ho | Significant |
| | Basketball | | | |
| | Football | | | |
| | Spak Takraw | | | |
| | Volley ball | | | |
| Group Integration-Social | Baseball | 0.9248 | Do not Reject Ho | Not Significant |
| | Basketball | | | |
| | Football | | | |
| | Spak Takraw | | | |
| | Volley ball | | | |
| Individual Attraction to Group Social | Baseball | 0.4083 | Do not Reject Ho | Not Significant |
| | Basketball | | | |
| | Football | | | |
| | Spak Takraw | | | |
| | Volley ball | | | |
| Individual Attraction to Group Task | Baseball | 0.0158 | Reject Ho | Significant |
| | Basketball | | | |
| | Football | | | |
| | Spak Takraw | | | |
| | Volley ball | | | |

The sports events of male athletes in relation to the GEQ. The Group Integration-Task (GIT) row reveals significant differences among various sports. The p-value of 0.0054 is below the significance level of 0.05, indicating that the null hypothesis of no differences in GIT scores across sports is rejected. This finding aligns with the study "Cohesion and Performance in Sport: A Meta Analysis," which found that higher task cohesion levels are strongly linked to better team performance, thus supporting the observed significant differences in GIT scores across different sports in the current study.

In Group Integration-Social (GIS), there is no significant difference across different sports. The p-value of 0.928 exceeds the significance level of 0.05, meaning the null hypothesis of no difference across sports is not rejected. This finding relates to the study by Filho, Dobersek, Gershgoren, and Tenenbaum (2014), which indicates that task cohesion has a stronger connection to performance than social cohesion. This supports the current study's results, which show significant differences in GIT and IAGS scores across year levels but not in GIS scores. This emphasizes the greater impact of task cohesion on performance outcomes.

In IAGT, there is a significant difference in scores among different sports. The p-value of 0.0158 is below the significance level of 0.05, indicating that the null hypothesis of no differences in IAGT scores across sports is rejected.

Overall, the table reveals significant differences in GIT and IAGT scores across different sports, suggesting that these aspects are notably influenced by the sport. According to the study by Aoyagi, Cox, and McGuire (2016), leadership positively impacts both task and social cohesion, and longer team tenure enhances these effects. This supports the observed differences in GIT, IAGS, and IAGT scores across year levels, highlighting the importance of team dynamics and cohesion in athletic performance. Future research could investigate how different leadership styles affect team cohesion and performance in various sports. In contrast, GIS and IAGS show no significant differences across sports, indicating that these factors remain consistent regardless of the sport. These findings provide a theoretical and empirical basis for understanding the role of team cohesion in sports performance, aligning with the significant differences observed in GIT and IAGT scores across different sports.

CONCLUSION

In conclusion, this demo has highlighted the key features and benefits of our solution, demonstrating its ability to address [specific challenges or needs] effectively. By showcasing [specific functionality or outcomes], we have illustrated how it delivers value, enhances efficiency, and aligns with [specific goals or objectives]. We are confident that this solution can drive meaningful results and look forward to exploring how it can be tailored to meet your unique requirements. Thank you for your time and attention.

1. The demographic analysis indicates that a majority (36.36%) of student-athletes are in their first year, highlighting the need for targeted strategies to foster cohesion among new team members. This is followed by 2nd-year respondents at 30.30%, and 4th-year respondents at 21.21%. The 3rd-year respondents represent the smallest group, with 12.12%. These data points to newer student-athletes in the sample, which could have major implications for team cohesion. The high proportion of first- and second-year student-athletes suggests that team-building efforts should center on integrating these newcomers to develop a sense of unity and camaraderie. Strategies for improving communication, trust, and shared goals among team members will be critical to ensuring that the influx of newer athletes does not disturb existing team dynamics. As a result, targeted team cohesion programs that address the specific problems and opportunities given by this demographic distribution are recommended for maintaining and improving overall team performance and morale.
2. The demographic breakdown of sports event participation shows that Sepak Takraw has the highest number of participants, comprising 24.24% of the total, followed by football at 22.73%. In contrast, baseball, volleyball, and basketball have smaller groups, with 19.70%, 18.18%, and 15.15%, respectively. This distribution highlights the need for tailored team cohesion strategies that align with the size and dynamics of each sport.
3. Group Integration-Social outweighs Group Integration-Task. Even though the team members share a common aim of achieving performance goals, they are more socially connected than truly unified. A strong collective focus on task completion doesn't necessarily result from their enjoyment of spending time together and their positive interpersonal relationships. Although strong social cohesion (GIS) can improve team morale and lessen conflicts among team members, it might not be adequate to ensure high performance if task cohesion is lacking. Strong social cohesiveness is indicated by the fact that most of each year's level involves hanging around off the court.

This can create a fun and encouraging team atmosphere, but the team may require other techniques to improve their task-oriented integration.

RECOMMENDATIONS

We highly recommend exploring our interactive demo, designed to provide a hands-on experience of our solution's features and benefits. This demo offers a comprehensive walkthrough, showcasing real-world applications, user-friendly interfaces, and the seamless integration of advanced functionalities. By engaging with the demo, you'll gain valuable insights into how our product can address your specific needs, streamline operations, and deliver measurable results. Whether you're looking to enhance efficiency, reduce costs, or improve outcomes, this demo will illustrate why our solution is the right choice for you.

The following recommendations are made for future studies evaluating team sports athletes' group cohesion:

1. Future researchers should also consider evaluating the group cohesion among female team sports athletes. The results may differ as sex is related to different factors regarding the character of a person. As per mentioned in chapter 1, men tend to keep their thoughts and feelings to themselves, whereas women talk it out.
2. It is better if they can compare the results of the cohesion between men and women team sports athletes, to expound and extract further data regarding the topic.
3. By understanding the level of cohesion from the teams that they will include in their study, future researchers can also create an intervention, such as team building, to either make the team more cohesive or maintain the cohesion that the team already has.
4. Coaches whose team's cohesion level is low can conduct necessary actions or interventions needed to improve their team's cohesion.
5. According to the result of this research, the number of rookies or first-year student-athletes is greater than the third- and fourth-year athletes, the Sports and Development Office can investigate as to why the number of seniors decreases, affecting the cohesion of the team.

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