

Determining factors of flag football sport intention: bibliometric and mixed methods explorations

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Abstract

Research Problems: Existing research on sports participation has predominantly examined general determinants of sports interest or intention to participate. However, interest or intention to participate in flag football, a growing yet less mainstream sport in Indonesia, remains understudied. **Research Objectives:** This study explores the underlying factors influencing individuals' intention to participate in flag football, a rapidly growing sport known for its inclusivity and unique gameplay. **Methods:** The research was performed using combined approaches: the item was formulated through a bibliometric review and structured questionnaires from the results of interviewing 65 participants (qualitative approach), resulting in 26 items. As for the quantitative approach, the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's Test of Sphericity confirmed 20 items suitable for factor analysis. The analysis revealed seven interpretable factors: Accessibility and Environmental Support, Personal Image and External Influence, Prior Sport Experience and Alternatives, Emotional and Novelty Aspects, Social Motivation and Self-Affirmation, Cognitive Stimulation and Excitement, and Competitive and Value-Based Orientation. These factors cumulatively explained 67.58% of the Intention to participate in flag football. **Results:** The findings suggest that both internal drivers (e.g., curiosity, mental stimulation) and external influences (e.g., facilities, media exposure) play significant roles in shaping interest toward sport. Implications of the findings span across different stakeholders, offering strategic insights for sports marketers, policymakers, educators, and community organizers to enhance participation rates and tailor flag football programs to diverse audiences. The study contributes to a more comprehensive understanding of sport engagement psychology and offers recommendations for future research in emerging sports adoption. **Conclusion:** The analysis resulted in the identification of seven distinct factors, each of which represents a unique dimension that shapes how individuals perceive and are motivated toward participating in flag football, reflecting both personal and contextual elements. The findings provide a comprehensive view of how various psychological, social, and environmental components interplay to influence sport adoption.

Keywords: Flag Football; Intention to Play; Factor Analysis; Sport Intention; Motivation.

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INTRODUCTION

The need to do sports and exercise is progressively evolving. While traditional sports are performed as entertainment or a part of a healthy lifestyle, some also aim to partake in relationships by joining a sports community. Being in

a sports community can enrich social interactions. [Yu & Song \(2022\)](#), joining a sports community will help to introduce new people who have different backgrounds and motivations. The Sport Development Index (SDI) in 2022 showed a decline in Indonesian people's participation in sports by 1.87% from the previous year, which was 32.80%. This condition likely occurred because there had been no program interventions that encouraged the development of community participation in sports activities. In addition, research conducted by [Karo Karo et al. \(2024\)](#) showed that 76.3% of respondents had obstacles in exercising. Some gave reasons because of rain, injury, time factors, and laziness, and others.

There are some influencing factors that may support the intention to play sports. [Kinoshita et al. \(2024\)](#) found that among Japanese youths, autonomy supportiveness of coaches and parents was positively related to thriving, intention to continue sport, and subjective well-being. Meanwhile, research from [Pramudya et al. \(2023\)](#) mentioned that people's interest in exercising is influenced by various factors, including comfort, facilities, experience, geographical conditions, and social environment. A systematic review by [Hopkins et al. \(2022\)](#) identified personal, peer, family, socioeconomic, and environmental factors influencing adolescent girls' sport participation, with personal factors, such as self-perceptions and perceived benefits, being the most significant. On the other hand, flag football is categorized as an injury-prone sport, with the overall incidence of injury of 5.1 per 1000 athlete exposures (AEs) ([Foss et al., 2023](#)), compared to basketball at 19.1 per 1000 AEs ([Drakos et al., 2010](#)). This potential accident may also influence the intention to play flag football.

Previous research on sports participation has primarily focused on general determinants like accessibility, infrastructure, and personal enjoyment ([Høyer-Kruse et al., 2024](#); [Kovács & Szakál, 2024](#)). However, these factors may not fully explain the specific influences on interest in flag football, which is an emerging sport in Indonesia. While studies have explored public interest in mainstream sports like jogging, futsal, swimming, and basketball ([Pramudya et al., 2023](#)), research specifically addressing flag football

remains scarce. Additionally, prior studies have overlooked the role of social, cultural, and community dynamics in sports participation, focusing instead on individual interest and talent (Santri et al., 2024). The existing literature also lacks an in-depth exploration of participation determinants such as community engagement and social motivation among flag football players. For instance, a study by Susanto & Jannah (2014) on the self-concept of flag football players was limited to the Surabaya community, neglecting potential variations in other cities.

This study addresses existing research gaps by focusing on the Jakarta Flag Football community that trains at Gelora Bung Karno (GBK), a context that may reflect unique engagement patterns. It aims to explore the determinants of intention to play flag football, a sport that remains rarely discussed in the Indonesian context. The research is guided by two questions: (1) what factors determine individuals' intention to play flag football, and (2) to what extent these factors contribute to interest in the sport. To achieve these objectives, the study employs a three-pronged approach comprising a bibliometric review of relevant literature, qualitative insights obtained through interviews with active players, and a quantitative analysis using exploratory factor analysis (EFA) to identify the key determinants shaping intention to play flag football.

By identifying the key factors that influence individuals' intention to play flag football, this study contributes to the body of research on niche sports. The bibliometric analysis helps to map existing knowledge gaps and research trends, while qualitative player interviews provide a deeper understanding of personal motivations and barriers. The quantitative approach through confirmatory factor analysis provides statistical validation of these determinants. The findings can benefit sports organizations, policymakers, and educators by offering strategic insights for promoting and expanding the sport in Indonesia, with the goal of fostering greater sports participation, inclusivity, and community engagement.

METHOD

Bibliometric Analysis

The research is divided into three main sections. The first approach regarding bibliometrics was started by searching for relevant literature on sport intentions. To ensure relevance and rigor, criteria were established for selecting the studies. In March 2025, a search was conducted in the Scopus database using the keywords "intention to play" OR "interest to play" OR "interest to participate" OR "intention to participate" OR "intention to exercise" OR "interest to exercise" OR "sport intention*" OR "sport interest*". Scopus was chosen as the primary database for this bibliometric analysis due to its extensive coverage of peer-reviewed publications across disciplines (Singh et al., 2021). Additionally, Scopus facilitates easy data export, allowing for efficient analysis in VOS viewer, a tool designed for bibliometric visualization. There was no restriction on publication year and document type, ensuring comprehensive trend capture. This search yielded 85 relevant documents, which were then exported from Scopus into VOS viewer for visualization and analysis based on keyword co-occurrences. To ensure academic relevance, a minimum threshold was set: (1) authors with at least one document, and (2) keywords with a minimum occurrence of two. This process allows for identifying clusters of research focused on similar themes and pinpointing gaps in literature where further exploration may be beneficial. Afterward, a literature review was performed on the previously collected articles within the following criteria: (1) article in English; (2) accessible full paper; and (3) fully published in journals or book chapters.

Qualitative Approach: In-Depth Interview

The second part of this study employed a qualitative approach through in-depth interviews with six flag football athletes selected using a purposive sampling method. The number of interviewed athletes was determined based on information saturation, which resulted in 6 athletes, as no new insights emerged after interviewing the fourth, fifth, and sixth athletes. From these interview results, a content analysis was performed, alongside a literature review, resulting in a total of 26 items in the questionnaire. The questionnaire was subsequently distributed to respondents. Participants

were selected through a convenience sampling method based on the following criteria: (1) previous experience in playing flag football; and (2) residency in the Greater Jakarta area (Jabodetabek). A total of 67 respondents participated in the study. However, based on the respondent consistency coefficient, 2 participants were identified as providing inconsistent responses, indicating potential response bias. These 2 respondents were excluded from the dataset, leaving 65 valid respondents for further analysis.

Quantitative Approach: Exploratory Factor Analysis

To address the research questions, EFA was conducted using the principal factor extraction method. The adequacy of the sample was assessed using the Kaiser-Meyer-Olkin (KMO) test, with a significance level set at 0.05 or a value higher than 0.6, along with a statistically significant Bartlett's test of sphericity. The number of factors to retain was identified based on eigenvalues and the rotated factor loadings. Varimax rotation was employed to clarify the factor structure. Only factors with eigenvalues exceeding 1.0 and loadings above 0.50 were considered. The naming of each factor was guided by examining the highest factor loadings associated with it.

RESULTS

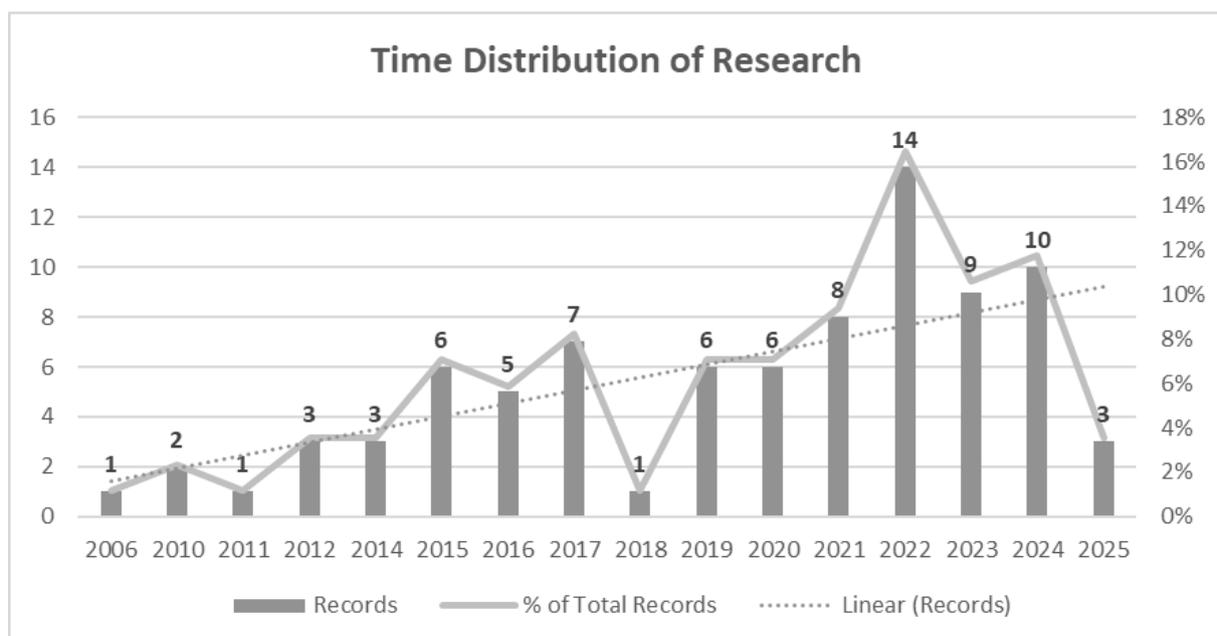


Figure 1. Publications over the years on the topic studied

Figure 1 shows the temporal distribution of research on sport intention from 2006 to 2025, revealing a general upward trend with some fluctuations. From 2012 onward, there is a gradual increase, with notable growth in 2015 and 2016 (six records each year) and a first peak in 2017 (seven records). A sharp decline occurred in 2018, with only one study, but interest recovered from 2019 to 2021. The highest peak is observed in 2022, with 14 records, followed by a slight decrease in 2023 and another rise in 2024.

Overall, the linear regression line indicates a growing scholarly interest in sport intention research. The recent increase, particularly between 2021 and 2024, likely reflects heightened awareness of sport participation and motivation, possibly influenced by global health initiatives, policy changes, and emerging trends in sports management and science.

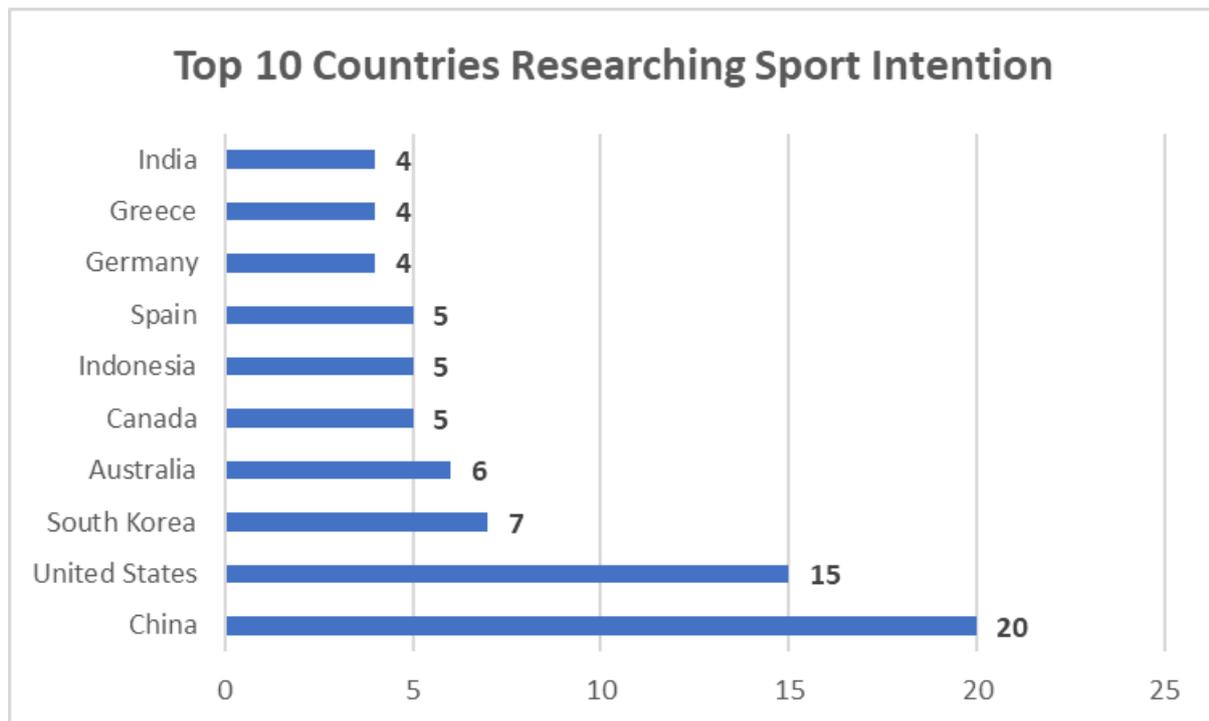


Figure 2. Publications of the topic studied based on the country

Figure 2 illustrates the global distribution of research on sport intentions, showing a concentration of publications in specific countries. China, the United States, and South Korea emerge as the leading research hubs, with moderate contributions from Australia, Canada, Germany, India, Indonesia, Greece, and Spain. In contrast, large regions, particularly in Africa, Central Asia, and parts of South America, show minimal or no activity, indicating gaps in global coverage.

A closer look at the top 10 countries reveals that China leads with 20 publications, followed by the United States (15) and South Korea (7). Australia contributed six studies, while Canada, Indonesia, and Spain each produced five, and Germany, Greece, and India contributed four each. This distribution highlights strong research activity in North America, Asia, and parts of Europe, while underscoring the need for broader international collaboration and examination of sport intention across diverse cultural and socio-economic contexts.

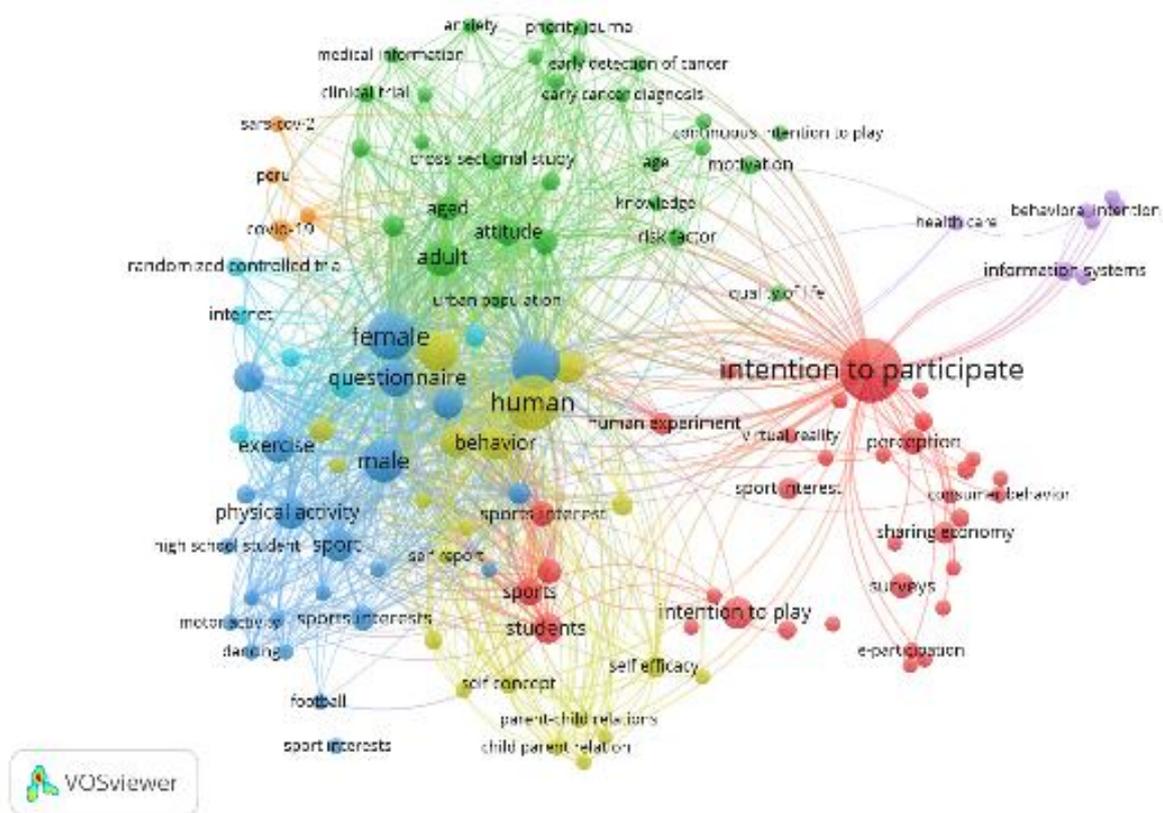


Figure 3. Publications over the years on the topic studied

The co-occurrence analysis of keywords shows several main thematic clusters related to sports participation and behavioral intention. In the Network Map (Figure 3A), “intention to participate” appears as a central concept, closely connected to “sport interest,” “self-efficacy,” “perception,” “attitude,” “students,” and “social influence.” This indicates that research on sports participation largely focuses on psychological and social factors that influence individuals’ willingness to engage in sports. Keywords such as “gender” and “subjective norm” further suggest that demographic

recent studies increasingly connect sports participation with overall health and lifestyle outcomes. In addition, newer terms such as “machine learning” and “big data” highlight the growing use of data-driven approaches to analyze sports behavior, predict participation trends, and improve user experience on digital sports platforms.

At the same time, earlier keywords such as “human behavior,” “exercise,” “habit,” and “sports interests” represent the foundational work in sports psychology and behavioral research. The continued presence of “attitude toward sports,” “perceived enjoyment,” and “social interaction” shows that core psychological and social factors remain central, even as technological and economic aspects gain attention. Overall, the analysis reflects a multidimensional view of sports participation, where psychological, technological, social, and economic factors interact in shaping engagement within an increasingly digital and health-oriented society.

Review of Determinants of Sport Intention

Table 1. Summary of studies regarding determinants of sport intention

Author(s) & Year	Type of Study	Findings
Li (2022)	Cross- Sectional	<ul style="list-style-type: none"> • To promote greater female participation in sports, efforts should focus on establishing more clubs, providing coaching programs, and securing government funding. • The media should portray women's sports in a positive light. • A woman’s decision to participate in sports is often influenced by the nature of the sport and societal perceptions of body image, leading her to carefully assess whether her involvement will have beneficial or negative consequences.
Su & Zhang (2024)	Cross- Sectional	<ul style="list-style-type: none"> • High professional standards among coaches or teachers, coupled with their ability to explain concepts clearly, play a crucial role in engaging students. • The inclusion of novel and engaging content in coaching materials further sustains their enthusiasm. • Positive perception of the coach contributes to a supportive and inspiring learning

Author(s) & Year	Type of Study	Findings
Abdelmegeed (2024)	Cross-Sectional	<p>environment.</p> <ul style="list-style-type: none"> • Self-confidence, enjoyment of exercise, and exercise habits positively influence individuals' intention to exercise. • However, promoting holistic health showed a negative impact on intention to exercise.
Alvarez et al. (2012)	Cross-Sectional	<ul style="list-style-type: none"> • The interest in sports can be increased by fostering a task-involving climate, which positively influences the satisfaction of psychological needs such as autonomy, competence, and relatedness. • Meeting athletes' psychological needs enhances subjective vitality and strengthens their future intention to participate in sports, highlighting the crucial role of coaches in creating a supportive motivational climate that encourages long-term engagement in sports.
Zhu (2025)	Experimental Study	<ul style="list-style-type: none"> • Experiential virtual reality advertising generates higher sport interest than informational video advertising for those with low previous experience. • For those with high previous experience, there was no significant difference between the two advertising forms.
Constantinescu et al. (2022)	Cross-Sectional	<ul style="list-style-type: none"> • Personality traits (extraversion, openness, and conscientiousness) and lifestyle influences across three modes of sports involvement (exercising, watching sports on TV, and attending live events) are predicting factors of sports interest.
Mishra et al. (2022)	Cross-Sectional	<ul style="list-style-type: none"> • Travel exploration, social bonding, and stress relief are the primary motivators for active sport tourism participation. • Factors such as physical strength, self-enhancement, and social recognition do not significantly drive participation.
Song & Park (2015)	Cross-Sectional	<ul style="list-style-type: none"> • Attitude and perceived behavioral control significantly contribute to exercise intentions. • Individuals in group sports rely more on their own positive or negative evaluations, while those in individual sports are more influenced by social expectations.

The determinants of sports intentions are multifaceted, influenced by psychological, social, and environmental factors across different populations. Studies conducted in China provide valuable insights into the role of participation experiences, instructional quality, and advertising in shaping sports interest. [Li \(2022\)](#) surveyed 40 middle-aged and elderly women and found that societal norms and body image perceptions significantly influenced their sports participation, highlighting the need for more inclusive coaching programs, media representation, and government support. Meanwhile, [Su and Zhang \(2024\)](#) examined 486 college students, demonstrating that teacher professionalism, clear instruction, and engaging content are crucial in fostering interest in sports. Their findings suggest that structured coaching can enhance students' motivation and participation. Additionally, [Zhu \(2025\)](#) conducted an experimental study with 216 university students and found that experiential VR advertising significantly increased sports interest among individuals with low prior experience, underscoring the role of immersive technology in shaping engagement. While these studies present strong empirical evidence, the generalizability of their findings remains uncertain due to China's unique cultural aspects, including collectivist values and hierarchical student-teacher dynamics, which may not apply to Western contexts.

Beyond China, studies in Egypt, Spain, Romania, India, and South Korea further emphasize the diversity of factors influencing sports participation. [Abdelwahed \(2024\)](#) analysed survey data from 383 Egyptian entrepreneurs, revealing that self-confidence, exercise habits, and enjoyment positively influenced exercise intentions, whereas excessive promotion of holistic health had a negative effect, possibly due to psychological pressure. In Spain, [Alvarez et al. \(2012\)](#) found that a task-involving climate increased intrinsic motivation among 370 young male soccer players, while an ego-involving climate undermined relatedness satisfaction. Similarly, [Constantinescu et al. \(2022\)](#) identified personality traits such as extraversion, openness, and conscientiousness as key predictors of sports interest in Romania. Meanwhile, [Mishra et al. \(2022\)](#) compared 528 respondents from India and Poland, showing that travel motives like social

bonding and stress relief drive active sports tourism, though their influence varies by country. In South Korea, [Song and Park \(2015\)](#) applied the Theory of Planned Behaviour (TPB) to fitness centre users, highlighting how attitude and perceived behavioural control predict exercise intentions, with group sports participants relying more on personal attitudes and solo exercisers influenced by social norms. Collectively, these studies illustrate the complex interplay of individual psychology, cultural norms, and environmental factors in shaping sports engagement, necessitating tailored interventions rather than a one-size-fits-all approach.

Qualitative Findings

Exposure and Curiosity through Social Media and Peer Influence

A recurring theme across participants (Participants 2, 3, and 5) was the initial exposure to flag football through social media content and peer networks. Informants mentioned being intrigued by stories or posts shared by friends, which sparked curiosity and led them to explore the sport. For instance, one participant described seeing stories from Senayan and becoming “curious” which drove them to ask more and eventually join. Peer invitations also played a central role in the initial decision to try the sport, often framing it as a casual, social activity before deeper involvement.

Appeal of Uniqueness and Equipment

Several participants emphasized their fascination with the distinctive features of flag football (Participants 1 and 5). The oval-shaped ball, the flag-belt concept, and the visual uniqueness of the game made it stand out from more familiar sports like basketball or soccer. The novelty of the game’s equipment and rules served as an aesthetic and experiential draw, which was particularly important for individuals who were already physically active but seeking new, engaging experiences.

Influence of American Football and NFL Culture

The connection to American football and its professional league, the NFL, was mentioned by multiple informants (Participant 1 and 5). For those who followed the NFL, flag football offered a local, accessible variant of a sport they admired from afar. This international linkage enhanced the sport’s

perceived legitimacy and appeal, making it more than just a recreational activity—it became an aspirational platform.

Social Environment and Sense of Belonging

Themes of friendship, team dynamics, and a sense of community (Participants 1, 3, and 6) emerged strongly. Many respondents noted that flag football provided a more familial or close-knit atmosphere compared to other sports they had tried. The regular and intensive nature of training sessions fostered camaraderie, and participants expressed appreciation for being part of a supportive, positive team culture. These aspects were frequently contrasted with more competitive or impersonal experiences in other sports.

Cognitive and Physical Challenge

Several participants highlighted that flag football was both physically demanding and mentally engaging (Participants 1 & 5). Unlike traditional contact sports, flag football requires strategic thinking, quick decision-making, and coordination without relying solely on brute strength. This dual challenge was perceived as intellectually rewarding and further contributed to the sport's unique appeal.

Emotional Satisfaction and Enjoyment

Enjoyment, excitement, and emotional engagement were integral themes. Descriptions such as “fun,” “happy,” and “adrenaline” (Participants 1, 3, and 4) were common. For many, flag football began as a casual hobby but evolved into a passion as they experienced the thrill of competition and personal growth. The shift from “just for fun” to setting competitive goals (e.g., wanting to win or prove oneself) was particularly evident in long-term participants.

Alternative to Other Sports and Transferable Skills

Some respondents mentioned flag football as a replacement for sports they previously engaged in, like basketball (Participant 6). The similar tactical structure and use of teamwork allowed for skill transfer and eased the

transition. This substitution was facilitated by regular schedules and the perceived novelty of the game.

Safety and Non-Contact Nature

A notable motivator mentioned by participants (Participant 2) was the sport's non-contact rule, which offered a safer alternative to more aggressive contact sports. This aspect was particularly appealing for individuals concerned with injury risk but still seeking a competitive and physically engaging outlet.

Structural Challenges and Facilities

While most responses focused on personal and social drivers, infrastructural limitations were frequently raised as a barrier (Participants 3 & 5). Participants noted the scarcity of proper playing fields, the high cost of renting spaces, and the limited availability of flag football-specific infrastructure. These limitations, while not diminishing interest, suggested a need for better support and facilities to sustain and scale the sport's growth in Indonesia.

Based on the interviews and literature review that have been conducted, a total of twenty-two variables were identified from the interviews, while an additional four variables emerged from the literature. One notable finding from the interviews is the perceived similarity between flag football and American Football, which sparked initial curiosity and interest among several respondents. This resemblance served as a gateway for individuals who were already familiar with or intrigued by American Football to explore flag football further. In addition, many participants described flag football as a sport that offers a distinct level of challenge, both physically and strategically. Other areas of interest were the perceived benefits and physical attributes such as equipment, facility, and location. It was also highlighted as a viable alternative to more conventional sports, providing a fresh and engaging option for those seeking new forms of physical activity. These 26 items will then be incorporated into the questionnaire, and the results will be further analysed.

Quantitative Findings

Table 2. Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.647
Bartlett's Test of Sphericity	Approx. Chi-Square	386.503
	df	190
	Sig.	.000

To evaluate the suitability of the data for factor analysis, the KMO measure and Bartlett's Test of Sphericity were examined (Table 2). The KMO value was 0.647, indicating moderate sampling adequacy, which is acceptable for exploratory factor analysis (EFA). Bartlett's Test of Sphericity was statistically significant ($p = 0.000$), confirming that the correlation matrix is not an identity matrix and that the variables share sufficient correlations. These results support the use of EFA to identify the underlying factor structure of flag football participation intention.

However, the Measure of Sampling Adequacy (MSA) showed that six variables—Individualistic, Friend Invitation, Skill in Other Sports, Professional Trainer, Location, and Price—had MSA values below 0.5. As a result, these variables were excluded from further analysis. The remaining 20 variables had MSA values above 0.5 and met the assumptions for factor analysis.

Communalities indicate how much of each variable's variance is explained by the extracted factors. In this study, extracted communalities ranged from 0.487 to 0.801, showing moderate to high shared variance among variables. Sport Alternatives had the highest communality (0.801), meaning it was well explained by the retained factors. Other variables with high communalities (above 0.7), such as Safety, Sportsmanship, Monotonous, Thinking Skill, Diet, Facility, and Interest in Other Sports (0.716), were also strongly represented in the factor structure.

In contrast, Unique Playstyle had the lowest communality (0.487), indicating that less than half of its variance was explained by the factors. However, this value still exceeds the minimum acceptable threshold of 0.4 and was therefore retained. Overall, the communalities suggest that most variables were adequately represented in the factor solution, supporting the reliability

of the extracted factors in explaining participants' intention to engage in flag football.

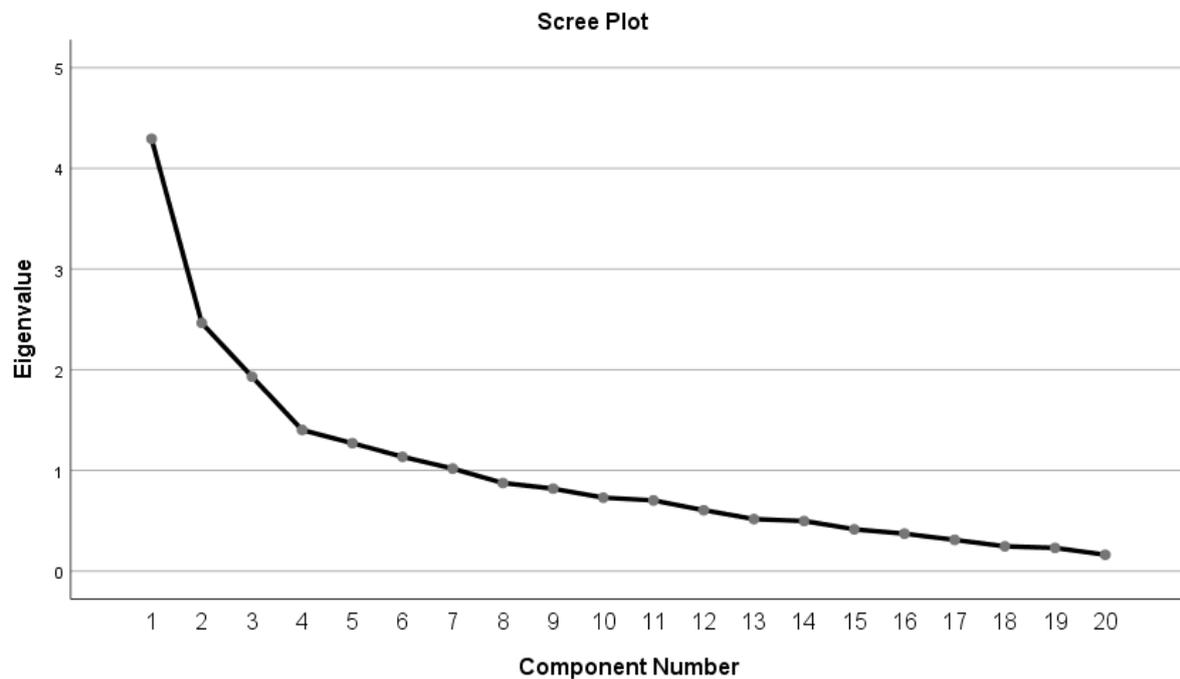


Figure 5. Scree plot highlighting the Eigenvalue of each factor

The scree plot in Figure 5 shows that seven components have eigenvalues greater than 1.0, indicating they explain a meaningful amount of variance and should be retained for analysis. This suggests that the 20 variables in the study can be grouped into seven factors. From the eighth component onward, eigenvalues drop below 1.0, showing that additional factors contribute little to explaining variance. The clear break in the scree plot after the seventh component further supports retaining seven factors as the most concise and interpretable solution for the data.

Table 3. Total Variance Explained by Principal Component Analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.293	21.467	21.467	4.293	21.467	21.467	2.260	11.299	11.299
2	2.465	12.324	33.791	2.465	12.324	33.791	2.152	10.762	22.061
3	1.931	9.656	43.447	1.931	9.656	43.447	2.099	10.493	32.554
4	1.402	7.010	50.457	1.402	7.010	50.457	2.033	10.167	42.721
5	1.270	6.352	56.809	1.270	6.352	56.809	2.017	10.086	52.806
6	1.136	5.679	62.487	1.136	5.679	62.487	1.640	8.198	61.004
7	1.018	5.092	67.579	1.018	5.092	67.579	1.315	6.575	67.579

The first component explains 11.30% of the total variance, while the second, third, and fourth components account for 10.76%, 10.49%, and 10.17%,

respectively. The fifth, sixth, and seventh components contribute 10.09%, 8.20%, and 6.58% of the variance. As shown in Table 3, the seven components together explain 67.58% of the total variance, meaning they capture about two-thirds of the dataset's variability. This demonstrates that the extracted factors provide a substantial and effective summary of the original variables.

Table 4. Rotated Component Matrix

	Component						
	1	2	3	4	5	6	7
Facility	.794	-.051	-.234	-.021	.025	-.074	.073
Safety	.721	.127	-.320	.333	.087	.125	.147
Similarity	.680	-.199	.148	.142	.063	.226	-.099
Body Shape	-.130	.790	.071	.156	.133	-.199	.042
Promotional Video	.010	.665	.026	.218	-.330	.241	.009
Equipment	.061	.645	.099	.034	.304	.191	-.077
Diet	-.053	.608	-.216	-.113	.440	.122	.243
Skill in Other Sports	-.163	.171	.804	-.138	.111	.040	-.054
Interest in Other Sports	-.076	-.066	.776	.111	-.115	.116	.255
Sport Alternatives	.051	-.046	.604	.351	.539	.038	-.169
Monotonous	.065	.022	.137	-.817	-.164	-.165	-.031
Relieve Stress	.313	.275	.188	.672	-.020	.108	-.055
Unique Playstyle	.182	.086	-.183	.663	.343	.361	-.181
Curiosity	.350	.205	.193	.650	.084	-.098	-.058
Chance to Prove Oneself	-.036	.141	-.023	.221	.767	.017	.088
New Friend	.299	.160	.182	-.045	.626	.297	-.113
Thinking Skill	-.144	.055	.150	.256	.158	.759	.179
Adrenaline	.343	.105	.051	-.046	.041	.689	-.183
Sportsmanship	.260	.133	.245	.133	.201	.129	.741
Challenge	.185	.049	.109	.310	.279	.259	-.663

The Rotated Component Matrix (Table 4) revealed seven key factors underlying participants' intention to play flag football. Component 1 (Accessibility and Environmental Support) reflects the role of facilities, safety, and familiarity in reducing participation barriers. Component 2 (Personal Image and External Influence) highlights the impact of body image, lifestyle, and promotional media. Component 3 (Prior Sport Experience and Alternatives) captures how previous sporting involvement shapes openness to flag football. Component 4 (Emotional and Novelty Aspects) emphasizes stress relief, curiosity, and novelty. Component 5 (Social Motivation and Self-Affirmation) represents social connections and personal achievement. Component 6 (Cognitive Stimulation and Excitement) reflects mental

engagement and thrill, while Component 7 (Competitive and Value-Based Orientation) underscores the importance of sportsmanship, ethics, and challenge. Collectively, these factors illustrate the multidimensional psychological, social, and environmental drivers of participation.

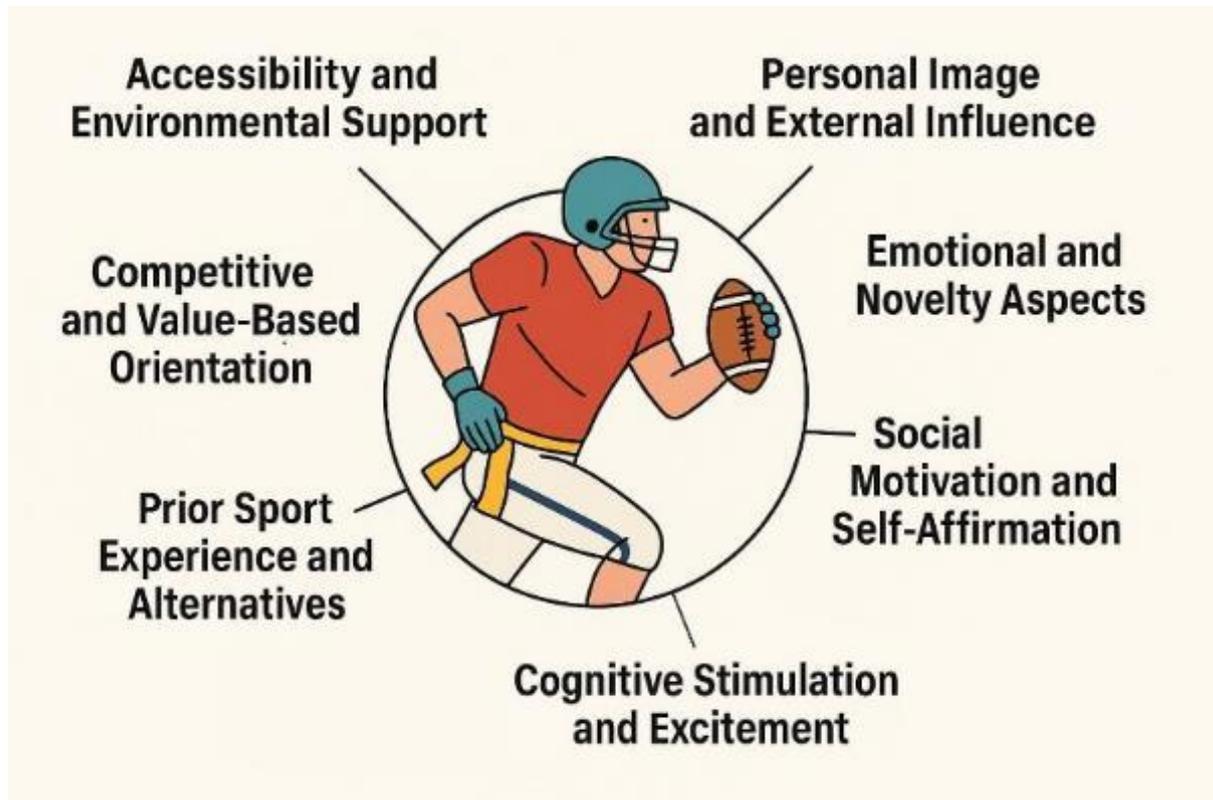


Figure 6. Summary of determining factors of flag football sport intention

DISCUSSION

The results of this study highlight seven key factors shaping individuals' intention to participate in flag football, each reflecting a distinct aspect of motivation and perception. The first factor, "Accessibility and Environmental Support," emphasizes the importance of facilities, safety, and familiarity in encouraging participation. This suggests that accessible and comfortable environments increase engagement, consistent with previous research highlighting environmental cues and infrastructure as enablers of sports participation (O'Reilly et al., 2015; Sharifi et al., 2024). Institutions and communities should therefore invest in safe and inclusive sporting spaces to reduce barriers to entry.

“Personal Image and External Influence,” the second factor, highlights how body image, promotional media, and equipment shape perceptions of the sport. Individuals are influenced not only by internal interest but also by how they see themselves and how others perceive them ([Adam et al., 2021](#); [Dixon, 2018](#)). This positions flag football as a lifestyle-oriented sport, appealing to image-conscious participants, though reliance on superficial motivators may limit long-term engagement without deeper involvement.

The third factor, “Prior Sport Experience and Alternatives,” underscores the role of experience in other sports in facilitating participation. Familiarity with other sports can reduce intimidation and support skill transfer, making flag football more approachable ([Jacobs & Wright, 2018](#)). However, individuals without prior experience may feel less confident, highlighting the need for beginner-friendly programs to promote inclusivity.

“Emotional and Novelty Aspects,” the fourth factor, captures the psychological appeal of flag football. The sport provides stress relief, curiosity stimulation, and a dynamic experience, aligning with literature on emotional benefits of leisure sports ([Li et al., 2021](#); [Rodríguez-Bravo et al., 2020](#)). Sustaining this novelty effect over time requires offering evolving and engaging experiences.

The fifth factor, “Social Motivation and Self-Affirmation,” reflects the importance of friendships, social recognition, and personal achievement. This highlights flag football’s potential for youth and community development ([Anderson-Butcher, 2019](#); [Evans et al., 2017](#)), though lasting participation depends on consistent team dynamics and an inclusive culture.

“Cognitive Stimulation and Excitement,” the sixth factor, emphasizes strategic thinking and thrill-seeking aspects of gameplay, which appeal to participants valuing both mental and physical engagement ([Gültekin & Akcan, 2024](#)). Overemphasis on intensity or competitiveness, however, may deter those preferring fewer demanding experiences, suggesting a need for varied gameplay formats.

Finally, “Competitive and Value-Based Orientation” reflects participants’ appreciation for fairness, sportsmanship, and ethical competition (Agnew et al., 2017; Zakhem & Mascio, 2019). This indicates that flag football can serve as a character-building sport, but maintaining these values requires structured coaching and consistent enforcement of fair play rules.

CONCLUSION

This study identified seven key factors influencing individuals’ intention to participate in flag football, reflecting personal, social, and environmental motivations. Findings highlight how accessibility, prior sport experience, social connections, personal image, cognitive stimulation, emotional appeal, and competitive values shape engagement. These insights can inform athletes, the public, and policymakers in promoting participation, designing inclusive programs, and supporting complementary sport choices. Future research should validate these factors across diverse populations and examine their long-term impact on sustained involvement and athletic development.

AUTHOR'S CONTRIBUTION

William Ben Gunawan: Writing – Review & Editing, Methodology, Software and Writing – Original Draft, Validating. **Angelica Herdyandra Setyani:** Writing – Review & Editing. **Narendra Diwangkara Diptawibowo:** Writing – Review & Editing. **Ghazlina Putri Perwitasari:** Writing – Review & Editing.

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