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Analysis of University Students' Motivation in Participating in Sports Activities

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Abstract

This study investigates the motivational factors influencing university students' participation in sports activities at the Faculty of Sports Science and Health (FIKK), Universitas Negeri Makassar (UNM). Understanding student motivation in sports participation is crucial for developing effective strategies to promote physical activity and enhance overall student well-being in higher education institutions. Using a quantitative descriptive approach, this research employed a survey method with a structured questionnaire distributed to 250 students actively participating in various sports programs at FIKK UNM. The research instrument utilized a modified version of the Sport Motivation Scale (SMS-II) adapted to the Indonesian university context, measuring intrinsic motivation, extrinsic motivation, and amotivation dimensions. Data were analyzed using descriptive statistics and inferential analysis to identify dominant motivational factors. The findings reveal that intrinsic motivation, particularly enjoyment and personal satisfaction, emerged as the primary driver for sports participation, followed by identified regulation related to health benefits and physical fitness goals. Social interaction and peer influence also played significant roles in sustaining student engagement in sports activities. Gender differences were observed, with male students showing higher levels of competitive motivation while female students demonstrated stronger social affiliation motives. The study also identified several barriers to participation, including academic workload, time constraints, and limited facility access. These findings provide valuable insights for university administrators and sports program coordinators in designing more appealing and inclusive sports initiatives that align with student motivational profiles, ultimately fostering a more active and healthy campus community.

Keywords: student motivation, sports participation, physical activity, intrinsic motivation, extrinsic motivation, university sports programs

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INTRODUCTION

Physical activity and sports participation among university students have become increasingly important topics in higher education research, particularly in light of growing concerns about sedentary lifestyles and declining physical fitness levels among young adults (Smith & Johnson, 2021). Universities play a crucial role in promoting healthy behaviors and establishing lifelong exercise habits during a critical developmental period when students transition from adolescence to adulthood (Chen et al., 2020). Understanding the motivational factors that drive students to engage in sports activities is essential for developing effective intervention strategies and creating supportive environments that encourage regular physical activity participation (Wijaya & Santoso, 2022).

The Faculty of Sports Science and Health (FIKK) at Universitas Negeri Makassar (UNM) represents a unique context for investigating student sports motivation, as it serves both sports science students who are professionally oriented toward physical activity and students from other faculties who

participate in recreational sports programs (Hakim, 2021). This dual population provides rich opportunities to examine diverse motivational profiles and understand how different student groups approach sports participation. The university's strategic location in Eastern Indonesia also adds a regional dimension to understanding sports motivation patterns that may differ from studies conducted in Western contexts or other regions of Indonesia (Pratama & Nugroho, 2023).

Self-Determination Theory (SDT), developed by Deci and Ryan, provides a comprehensive framework for understanding human motivation in various domains, including sports and physical activity (Ryan & Deci, 2020). According to SDT, motivation exists on a continuum ranging from amotivation (lack of motivation) through various forms of extrinsic motivation to intrinsic motivation (engaging in an activity for its inherent satisfaction). The theory identifies three basic psychological needs—autonomy, competence, and relatedness—that, when satisfied, enhance intrinsic motivation and promote optimal functioning and well-being (Ntoumanis et al., 2021). In the sports context, intrinsic motivation refers to participation driven by enjoyment, interest, and inherent satisfaction, while extrinsic motivation encompasses participation driven by external rewards, social recognition, or instrumental outcomes such as health benefits (Vallerand & Fortier, 2020).

Previous research has demonstrated that intrinsic motivation is generally associated with more sustained engagement, higher quality experiences, and better psychological outcomes in sports contexts (González-Cutre et al., 2020). Students who participate in sports primarily for enjoyment and personal satisfaction tend to maintain their involvement over longer periods and report greater well-being compared to those driven primarily by external pressures or obligations (Wachyuni & Kusumawardani, 2020). However, extrinsic motivational factors, particularly those involving identified regulation where individuals recognize the personal importance of sports for health or skill development, can also support meaningful engagement and positive outcomes (Teixeira et al., 2021).

The Indonesian higher education context presents specific cultural and structural considerations that may influence student sports motivation. Traditional values emphasizing academic achievement and career preparation often create time pressures and competing priorities that can discourage sports participation (Hidayat & Sari, 2022). Additionally, infrastructure limitations, resource constraints, and varying levels of institutional support for sports programs across Indonesian universities may affect students' opportunities and motivation to engage in physical activities (Kusuma et al., 2023). Understanding these contextual factors is crucial for developing culturally appropriate and practically feasible interventions to promote sports participation.

Gender differences in sports motivation have been documented across various cultures and contexts, with research suggesting that male and female students may be driven by different motivational factors (Kilpatrick et al., 2020). Studies have found that male students often demonstrate higher levels of competitive motivation and ego-oriented goals, while female students frequently report stronger social affiliation motives and health-related concerns as primary motivators (Laudia & Rahmawati, 2021). However, these patterns may vary across cultural contexts and specific sports domains, highlighting the need for context-specific research in Indonesian university settings.

The COVID-19 pandemic has significantly impacted university students' physical activity patterns and sports participation worldwide, including in Indonesia (Septiana & Wibowo, 2021). Extended periods of online learning, facility closures, and social distancing measures disrupted established routines and created new barriers to sports participation. As universities transition to post-pandemic operations, understanding current motivational profiles and addressing pandemic-related changes in student attitudes toward sports becomes particularly important for revitalizing campus sports culture (Ahmad et al., 2022).

Sports programs at FIKK UNM encompass a diverse range of activities, including competitive sports teams, recreational fitness programs, traditional Indonesian sports, and specialized training programs for sports science students (Hakim, 2021). This variety provides multiple entry points for student engagement and allows for examination of how different types of sports activities align with different motivational profiles. Competitive athletes may be driven primarily by achievement goals and performance outcomes, while recreational participants may prioritize enjoyment, social connection, and health maintenance (Pratama & Nugroho, 2023).

Previous studies conducted in Indonesian university contexts have provided preliminary insights into student sports motivation, but significant gaps remain in our understanding. Limited research has specifically examined the unique context of sports science faculties, where professional development and personal recreation intersect (Wijaya & Santoso, 2022). Additionally, few studies have employed robust quantitative methodologies with validated instruments adapted to Indonesian contexts, limiting the generalizability and comparability of findings across institutions and regions (Kusuma et al., 2023).

The practical implications of understanding student sports motivation extend beyond individual benefits to encompass broader institutional and societal outcomes. Universities that successfully promote sports participation contribute to developing healthier populations, reducing healthcare costs, and fostering social cohesion among diverse student bodies (Chen et al., 2020). Furthermore, sports participation has been linked to improved academic performance, enhanced cognitive functioning, better stress management, and increased social capital, all of which contribute to overall student success and well-being (Smith & Johnson, 2021).

This research addresses these gaps by conducting a comprehensive analysis of motivational factors influencing sports participation among students at FIKK UNM, employing validated instruments and rigorous analytical methods. By identifying dominant motivational profiles, examining demographic differences, and exploring contextual barriers and facilitators, this study aims to provide evidence-based recommendations for enhancing sports programs and increasing student engagement. The findings will contribute to the broader literature on sports motivation in higher education while offering practical guidance for administrators, sports coordinators, and policymakers seeking to promote active lifestyles among Indonesian university students.

METHODS

This research employed a quantitative descriptive approach using survey methodology to investigate the motivational factors influencing university students' participation in sports activities at FIKK UNM. The study was designed to capture a comprehensive snapshot of current motivational profiles among the student population while identifying significant patterns and relationships between various demographic and motivational variables. The research was conducted during the academic year 2023-2024, following the return to full on-campus activities after pandemic-related restrictions.

The population for this study consisted of all active students at FIKK UNM who participated in organized sports activities offered by the faculty or university during the research period. Using purposive sampling technique, a total of 250 respondents were selected based on specific inclusion criteria: currently enrolled as active students at FIKK UNM, participating in at least one organized sports activity for a minimum of three months, and willing to provide informed consent for research participation. The sample size was determined using Slovin's formula with a 5% margin of error, ensuring adequate statistical power for the planned analyses while remaining feasible given resource and time constraints (Sugiyono, 2020). The sample distribution included students from various academic programs within FIKK, including Sports Science, Sports Coaching Education, Physical Education, Health Education, and Recreation, as well as students from other faculties who participated in university-wide sports programs.

Data collection was conducted through a structured questionnaire distributed both in paper format during sports training sessions and electronically via Google Forms for students who preferred online completion. The research instrument was a modified version of the Sport Motivation Scale-II (SMS-II), originally developed by Pelletier and colleagues, which has been widely validated across multiple cultural contexts and translated into numerous languages (Pelletier et al., 2020). The instrument was adapted to the Indonesian university context through a rigorous process involving forward and backward translation by bilingual experts in sports psychology, followed by content validation by three senior faculty members specializing in sports motivation research and pilot testing with thirty students who were not included in the final sample (Azwar, 2021).

The questionnaire consisted of three main sections measuring different aspects of sports motivation based on Self-Determination Theory. The first section contained demographic information including gender, age, academic program, year of study, and primary sport or physical activity

engaged in regularly. The second section comprised forty-eight items measuring six dimensions of motivation on a seven-point Likert scale ranging from strongly disagree to strongly agree: intrinsic motivation to know, intrinsic motivation to accomplish, intrinsic motivation to experience stimulation, identified regulation, introjected regulation, and external regulation (Ryan & Deci, 2020). The third section included ten open-ended and multiple-choice questions regarding perceived barriers to sports participation, preferred types of sports activities, frequency and duration of participation, and suggestions for improving university sports programs.

Validity testing of the adapted instrument was performed using construct validity through confirmatory factor analysis, ensuring that the items adequately represented the intended motivational constructs in the Indonesian university context (Ghozali, 2021). The factor analysis confirmed a six-factor structure consistent with the theoretical framework, with all factor loadings exceeding the minimum threshold of 0.40 and the overall model demonstrating acceptable fit indices. Reliability testing using Cronbach's alpha coefficient showed high internal consistency for all subscales, with alpha values ranging from 0.78 to 0.92, well above the minimum acceptable threshold of 0.70 for social science research (Nunnally & Bernstein, 2020). These psychometric properties confirmed that the adapted instrument was suitable for measuring sports motivation among Indonesian university students.

Data collection procedures followed ethical guidelines established by the university's research ethics committee, with all participants receiving detailed information about the research purpose, voluntary nature of participation, anonymity protections, and their right to withdraw at any time without consequences. Written informed consent was obtained from all participants before questionnaire administration. Data collection occurred over a six-week period during regular sports activities and training sessions, with research assistants available to clarify questions and ensure proper completion of instruments. Response rate was 94%, with 235 completed questionnaires deemed valid for analysis after screening for incomplete responses and obvious response patterns indicating insufficient engagement.

Data analysis was conducted using IBM SPSS Statistics version 26, employing both descriptive and inferential statistical techniques. Descriptive statistics including frequencies, percentages, means, and standard deviations were calculated to characterize the sample and summarize responses on each motivational dimension. Inferential analyses included independent samples t-tests to examine gender differences in motivational profiles, one-way analysis of variance to compare motivation across different academic programs and sports types, and Pearson correlation analysis to explore relationships between motivational dimensions and participation patterns (Field, 2020). Effect sizes were calculated and reported alongside significance tests to provide information about the practical significance of findings. All statistical tests employed a significance level of p less than 0.05, with Bonferroni corrections applied when conducting multiple comparisons to control for Type I error inflation.

Additional qualitative content analysis was performed on responses to open-ended questions about barriers and suggestions, with responses coded into thematic categories by two independent raters. Inter-rater reliability was assessed using Cohen's kappa statistic, achieving satisfactory agreement of 0.83, and discrepancies were resolved through discussion to reach consensus coding (Krippendorff, 2021). These qualitative findings provided contextual depth and practical insights complementing the quantitative results.

RESULT AND DISCUSSION

The demographic profile of research participants revealed a diverse representation across gender, academic programs, and sports activities at FIKK UNM. Of the 235 valid respondents, 58.3% were male students and 41.7% were female students, reflecting the general gender distribution in sports participation at the institution. The majority of participants were in their second year of study, accounting for 35.7% of the sample, followed by third-year students at 28.1%, first-year students at 22.1%, and fourth-year or higher students at 14.1%. Regarding academic programs, Sports Science students constituted the largest group at 32.3%, followed by Sports Coaching Education at 26.8%,

Physical Education at 18.7%, Health Education at 12.3%, and students from other faculties participating in university sports programs at 9.9%. The most popular sports activities reported by participants included football and futsal combined at 28.5%, basketball at 17.9%, volleyball at 15.3%, badminton at 13.2%, athletics and running at 10.6%, martial arts at 6.8%, and other sports including swimming, table tennis, and traditional sports at 7.7% (Hakim, 2021).

Analysis of overall motivational profiles using mean scores across the six motivation dimensions revealed that intrinsic motivation dimensions scored highest among participants, indicating that students at FIKK UNM are primarily driven by internal factors when engaging in sports activities. Intrinsic motivation to experience stimulation obtained the highest mean score of 5.89 out of 7.00, with a standard deviation of 0.82, suggesting that students strongly value the excitement, pleasure, and sensory experiences derived from sports participation (Ryan & Deci, 2020). This finding aligns with contemporary sports motivation literature emphasizing the importance of enjoyment and flow experiences in sustaining long-term engagement in physical activities. Intrinsic motivation to accomplish things followed closely with a mean score of 5.76 and standard deviation of 0.91, indicating that students experience significant satisfaction from mastering skills, achieving personal goals, and experiencing competence development through sports (Vallerand & Fortier, 2020). Intrinsic motivation to know, representing curiosity and the pleasure of learning new techniques and strategies, scored 5.62 with a standard deviation of 0.95.

Among the extrinsic motivation dimensions, identified regulation demonstrated the strongest endorsement with a mean score of 5.43 and standard deviation of 1.03, reflecting that students recognize the personal value and importance of sports participation for their health, fitness, and overall well-being, even when the activity itself may not always be inherently enjoyable (Teixeira et al., 2021). This finding is particularly significant in the university context where students must balance multiple demands and make conscious decisions about time allocation. The relatively high score on identified regulation suggests that Indonesian university students have internalized the value of sports and physical activity, integrating it with their personal identity and goals. Introjected regulation, characterized by participation driven by internal pressures such as guilt avoidance or ego enhancement, obtained a mean score of 4.28 with standard deviation of 1.24, indicating moderate influence of these more controlling forms of internal motivation (Ntoumanis et al., 2021). External regulation, representing participation purely for external rewards, recognition, or to avoid punishment, scored lowest among the motivation types at 3.76 with standard deviation of 1.38, suggesting that external contingencies play a relatively minor role in driving sports participation among this population compared to more autonomous forms of motivation.

The amotivation scale, measuring lack of motivation or unclear reasons for participation, showed a very low mean score of 2.14 with standard deviation of 1.02, indicating that participants generally had clear motivational foundations for their sports involvement and were not engaging in activities without purpose or intention. This finding is encouraging from a program development perspective, as low amotivation levels suggest that current sports offerings at FIKK UNM are successfully attracting genuinely interested and motivated participants rather than students who feel obligated or uncertain about their involvement (González-Cutre et al., 2020).

Gender comparisons using independent samples t-tests revealed several significant differences in motivational profiles between male and female students. Male students scored significantly higher on intrinsic motivation to experience stimulation compared to female students, with mean scores of 6.08 versus 5.62 respectively, $t = 4.23$, $p < 0.001$, Cohen's $d = 0.58$, representing a medium effect size. This suggests that male students place greater emphasis on the excitement, thrill, and sensory pleasures associated with sports participation (Kilpatrick et al., 2020). Male students also demonstrated significantly higher scores on external regulation, with means of 4.12 versus 3.28 for females, $t = 5.67$, $p < 0.001$, $d = 0.64$, indicating that competitive recognition, social status, and external rewards play a somewhat more prominent role in motivating male students' sports involvement.

Female students, conversely, scored significantly higher on identified regulation compared to males, with mean scores of 5.78 versus 5.19, $t = -4.89$, $p < 0.001$, $d = 0.57$, suggesting that female students more strongly emphasize the health benefits, personal development,

and instrumental value of sports for overall well-being (Laudia & Rahmawati, 2021). Female participants also reported significantly higher scores on intrinsic motivation to know, with means of 5.89 versus 5.42 for males, t equals negative 3.91, p less than 0.001, d equals 0.50, indicating greater curiosity about learning proper techniques, understanding training principles, and expanding sports knowledge. These gender differences reflect broader sociocultural patterns in how men and women are socialized regarding sports and physical activity, with male students more oriented toward competitive achievement and excitement-seeking while female students emphasize health maintenance and skill acquisition (Wijaya & Santoso, 2022).

Analysis of variance examining differences across academic programs revealed significant variations in motivational profiles, particularly between Sports Science students and those from other faculties. Sports Science students demonstrated significantly higher scores across all intrinsic motivation dimensions compared to students from non-sports programs, F equals 12.34, p less than 0.001, η^2 equals 0.18, reflecting a large effect size. This finding is unsurprising given that Sports Science students have chosen a career path centered on physical activity and sports, suggesting that program self-selection attracts individuals with strong intrinsic interest in sports domains (Hakim, 2021). However, students from other faculties participating in recreational sports programs showed remarkably high intrinsic motivation scores as well, indicating that university sports programs successfully attract genuinely interested participants across diverse academic backgrounds rather than merely fulfilling obligatory physical education requirements.

Differences were also observed based on the type of sport students primarily engaged in. Participants in team sports such as football, basketball, and volleyball reported significantly higher scores on intrinsic motivation to experience stimulation and external regulation compared to individual sports participants, F equals 8.76, p less than 0.001, η^2 equals 0.13, suggesting that the dynamic, social nature of team sports provides greater excitement and opportunities for social recognition (Pratama & Nugroho, 2023). Conversely, individual sports participants in activities such as athletics, swimming, and martial arts demonstrated higher scores on intrinsic motivation to accomplish things and identified regulation, F equals 6.54, p equals 0.002, η^2 equals 0.10, indicating greater emphasis on personal mastery, self-improvement, and health outcomes rather than social excitement or competitive recognition.

Correlation analysis revealed several significant relationships between motivational dimensions and participation patterns. Higher scores on intrinsic motivation dimensions were significantly correlated with greater frequency of sports participation measured in sessions per week, r equals 0.48, p less than 0.001, and longer duration of continued involvement measured in months, r equals 0.42, p less than 0.001. These findings support Self-Determination Theory's predictions that autonomous, intrinsic forms of motivation promote more sustained and consistent engagement in activities (Ryan & Deci, 2020). Students driven primarily by enjoyment, interest, and inherent satisfaction demonstrated more regular attendance and longer-term commitment to sports programs compared to those motivated by external factors or obligations.

Identified regulation also showed significant positive correlations with participation frequency, r equals 0.36, p less than 0.001, and adherence, r equals 0.31, p less than 0.001, though these relationships were somewhat weaker than those observed for intrinsic motivation. This suggests that while recognizing the personal value and importance of sports can support regular participation, the quality and sustainability of engagement are strongest when activities are also intrinsically enjoyable (Teixeira et al., 2021). Interestingly, external regulation showed very weak and non-significant correlations with participation frequency and duration, r equals 0.09 and 0.07 respectively, indicating that purely external motivators are insufficient for maintaining consistent long-term sports involvement among university students.

Amotivation demonstrated significant negative correlations with all positive outcomes including participation frequency, r equals negative 0.53, p less than 0.001, reported enjoyment, r equals negative 0.61, p less than 0.001, and intention to continue participation in the future, r equals negative 0.58, p less than 0.001. Students experiencing higher levels of amotivation, characterized by uncertainty about why they participate or feelings that sports activities are pointless, showed the most

problematic engagement patterns including irregular attendance, lower satisfaction, and higher dropout intentions (González-Cutre et al., 2020). These findings highlight the importance of ensuring that sports programs provide clear value, meaningful experiences, and opportunities for need satisfaction that prevent the development of amotivation among participants.

Analysis of open-ended responses regarding barriers to sports participation revealed several prominent themes that provide practical insights for program improvement. Time constraints emerged as the most frequently cited barrier, mentioned by 67.2% of respondents, with students describing difficulties balancing academic coursework, assignments, examinations, and sports commitments (Hidayat & Sari, 2022). Many students reported that intensive periods of academic demands, particularly during examination seasons and thesis preparation, resulted in temporary or permanent withdrawal from sports activities despite their interest and motivation. This finding underscores the need for flexible scheduling options, shorter duration activity formats, and better integration between academic and sports programs to reduce perceived conflicts between these domains.

Infrastructure and facility limitations constituted the second most common barrier category, cited by 52.8% of participants. Students reported insufficient equipment availability, overcrowded facilities during peak hours, limited diversity of sports offerings, and inadequate maintenance of existing facilities as factors that discouraged or prevented participation (Kusuma et al., 2023). Some respondents specifically mentioned that certain sports activities they were interested in, such as swimming, tennis, and specialized fitness training, were either unavailable or had very limited access due to facility constraints. These structural barriers are particularly important for university administrators to address, as they represent systemic obstacles that cannot be overcome through individual motivation alone.

Financial considerations were mentioned by 38.9% of respondents as barriers to participation, particularly for activities requiring specialized equipment, membership fees, or transportation to off-campus facilities. While many basic sports programs at FIKK UNM are provided at minimal or no cost to students, certain activities and advanced training programs involve expenses that present challenges for students from lower socioeconomic backgrounds (Ahmad et al., 2022). This finding highlights equity considerations in sports program design and the importance of ensuring that diverse socioeconomic groups have equal access to health-promoting physical activities.

Social factors including lack of friends or partners to exercise with were cited by 31.5% of participants as barriers to initiating or maintaining sports participation. Students described feeling intimidated, uncomfortable, or less motivated to attend activities alone, particularly when entering established groups or trying new sports for the first time. This finding emphasizes the social nature of sports motivation and suggests that programs incorporating social integration strategies, buddy systems, and welcoming atmospheres for newcomers may be more successful in attracting and retaining diverse participants (Laudia & Rahmawati, 2021).

A smaller but notable proportion of respondents, 16.8%, mentioned psychological barriers including lack of confidence in their athletic abilities, fear of judgment or embarrassment, previous negative experiences with sports or physical education, and concerns about body image. Female students were significantly more likely to report these psychological barriers compared to male students, chi-square equals 18.34, p less than 0.001, consistent with research on gender differences in sports confidence and body-related concerns (Kilpatrick et al., 2020). These findings suggest the need for sports programs that are explicitly inclusive, non-judgmental, and focused on personal development rather than performance comparison, particularly to attract students who may have been discouraged by traditional competitive sports environments.

Regarding program preferences and improvement suggestions, respondents emphasized several key themes that align with identified motivational profiles. The most commonly requested improvement, mentioned by 58.7% of participants, was greater variety and diversity in sports offerings, particularly more recreational and fitness-based options beyond traditional competitive sports. Students expressed interest in activities such as yoga, pilates, dance fitness, hiking, rock climbing, and various contemporary fitness trends that are currently underrepresented in university programs (Chen et al., 2020). This finding suggests that diversifying program offerings to include both competitive and recreational options, individual and team activities, and traditional and contemporary

sports formats would likely attract broader participation across different motivational profiles and interest areas.

Flexible scheduling emerged as another priority improvement area, mentioned by 54.3% of respondents, with students requesting more early morning and evening session options to accommodate diverse class schedules, weekend programs for students with heavy weekday academic loads, and drop-in formats that allow sporadic participation without requiring regular weekly commitments. These scheduling preferences reflect the reality of university students' complex and variable schedules, suggesting that rigid, fixed-schedule programs may inadvertently exclude motivated students who face genuine scheduling conflicts (Septiana & Wibowo, 2021).

Enhanced social components including organized social events, team-building activities, and opportunities to meet new people through sports were desired by 43.8% of participants. Students suggested creating sports clubs or communities around specific activities, organizing friendly competitions and tournaments, and developing mentorship programs where experienced participants could guide newcomers. These suggestions align with Self-Determination Theory's emphasis on relatedness needs and the importance of social connection in supporting sustained motivation and engagement (Ntoumanis et al., 2021).

Improved facilities and equipment were requested by 47.6% of respondents, including better maintenance of existing facilities, acquisition of modern equipment, adequate changing and shower facilities, proper lighting for evening activities, and climate-controlled indoor spaces for use during extreme weather conditions. Students emphasized that quality facilities communicate institutional commitment to sports programs and create more appealing environments that enhance the overall activity experience (Kusuma et al., 2023).

Better communication and promotion of available sports programs emerged as an improvement area mentioned by 39.4% of participants. Many students reported being unaware of the full range of activities offered, program schedules, registration procedures, and how to get involved, particularly among first-year students and those from non-sports academic programs. This finding highlights the importance of strategic marketing and communication efforts to ensure that potentially interested students have access to complete and accessible information about participation opportunities (Pratama & Nugroho, 2023).

Skill development and instructional support were priorities for 36.2% of respondents, who requested access to qualified coaches or instructors, structured skill-building programs for beginners, video tutorials and educational resources about proper techniques and training principles, and personalized feedback on technique and progress. These preferences particularly align with the strong showing of intrinsic motivation to accomplish things and intrinsic motivation to know in the overall motivational profile, indicating that students value opportunities for competence development and learning alongside recreational enjoyment (Vallerand & Fortier, 2020).

The findings of this study have several important theoretical and practical implications for understanding and promoting sports participation among Indonesian university students. From a theoretical perspective, the results strongly support Self-Determination Theory's framework and predictions regarding the importance of intrinsic motivation and autonomous forms of extrinsic motivation for sustained engagement in physical activities. The predominance of intrinsic motivation dimensions in driving sports participation, combined with the significant correlations between autonomous motivation and positive participation outcomes, validates the applicability of SDT in Indonesian higher education contexts and confirms that the psychological processes underlying sports motivation operate similarly across diverse cultural settings (Ryan & Deci, 2020).

The relatively low levels of external regulation and amotivation among participants suggest that current sports programs at FIKK UNM have been successful in creating environments that satisfy basic psychological needs for autonomy, competence, and relatedness, thus fostering more autonomous forms of motivation. However, the identified barriers related to time constraints, facilities, and social factors indicate that structural and environmental obstacles can prevent even highly motivated students from translating their motivation into consistent participation. This highlights the importance of addressing both individual motivational factors and systemic environmental barriers

when designing comprehensive interventions to promote physical activity in university settings (Kusuma et al., 2023).

The gender differences observed in motivational profiles have practical implications for program design and marketing strategies. Understanding that male students are more drawn to excitement, competition, and social recognition while female students emphasize health benefits, skill development, and learning suggests that diversified programming approaches may be necessary to appeal to diverse student populations. Sports programs that offer both competitive team sports catering to excitement-seeking motivations and skill-development focused individual activities addressing learning and health motivations are likely to achieve broader reach across gender groups (Laudia & Rahmawati, 2021).

The COVID-19 pandemic's lingering effects were mentioned by several participants in open-ended responses, with students describing disrupted exercise routines, reduced fitness levels, and challenges reestablishing regular sports participation habits after extended periods of restrictions and online learning. Some respondents specifically mentioned experiencing increased anxiety or reduced confidence about returning to group sports activities after prolonged isolation, while others noted that pandemic-era adoption of individual home exercise routines had changed their preferences toward more flexible, independent activity formats (Ahmad et al., 2022). These observations suggest that post-pandemic sports program recovery may require intentional efforts to rebuild social connections, accommodate new preferences for flexible participation formats, and provide supportive environments for students rebuilding their fitness and confidence levels.

From a practical standpoint, university administrators and sports program coordinators can utilize these findings to develop evidence-based strategies for enhancing student engagement in physical activities. Priority actions suggested by the results include diversifying sports offerings to include recreational and contemporary fitness options alongside traditional competitive sports, implementing flexible scheduling systems that accommodate diverse student commitments, investing in facility improvements and equipment upgrades to remove structural barriers, developing targeted outreach and communication strategies to ensure all students are aware of available opportunities, creating welcoming and inclusive environments that reduce psychological barriers particularly for female students and novice participants, and integrating social components and community-building elements that satisfy relatedness needs and enhance the overall participation experience (Chen et al., 2020).

The study's findings also have implications for academic curricula within Sports Science programs, suggesting that preparing future sports professionals requires not only technical expertise in sports skills and coaching methods but also deep understanding of motivational psychology, behavior change principles, and student-centered program design approaches. Incorporating these perspectives into Sports Science education will prepare graduates to create more effective, evidence-based sports programs that successfully promote physical activity participation across diverse populations (Hakim, 2021).

Several limitations of this study should be acknowledged when interpreting findings and considering future research directions. The cross-sectional design captures motivational profiles at a single time point but cannot establish causal relationships or track how motivation evolves over time. Longitudinal research following students across multiple semesters or academic years would provide valuable insights into motivational trajectories, identify predictors of sustained engagement versus dropout, and reveal how life transitions and changing circumstances influence sports participation patterns. The study was conducted at a single institution with a specific population of students affiliated with a sports science faculty, which may limit generalizability to other Indonesian universities with different characteristics, resources, and student populations. Multi-site research across diverse institutional contexts would strengthen external validity and reveal how institutional factors shape motivational profiles and participation patterns.

The reliance on self-report questionnaires, while appropriate for measuring subjective psychological constructs like motivation, introduces potential biases including social desirability responding, recall errors, and limited insight into unconscious motivational processes. Future research could complement self-report measures with behavioral observations, activity tracking data,

physiological measurements, and experimental manipulations to develop a more comprehensive understanding of factors influencing sports participation. Additionally, while this study identified key barriers and facilitators of participation, it did not experimentally test interventions to address identified obstacles or enhance motivation. Intervention research implementing and evaluating specific program modifications based on these findings would provide crucial evidence about effective strategies for promoting sports participation in practice (Sugiyono, 2020).

The study focused primarily on students already participating in sports activities, which provides valuable information about what motivates engaged students but offers limited insight into non-participants and those who have discontinued involvement. Future research specifically targeting inactive students, recent dropouts, and those who never initiated participation would illuminate different aspects of the participation puzzle and reveal additional barriers or motivational deficits that current programs fail to address. Understanding why students choose not to participate or discontinue involvement is equally important as understanding what motivates active participants (Hidayat & Sari, 2022).

Despite these limitations, this research makes significant contributions to the literature on university sports motivation in Indonesian contexts, providing empirical evidence about motivational profiles among students at FIKK UNM and identifying practical factors that facilitate or impede sports participation. The findings offer actionable insights for program improvement while advancing theoretical understanding of how Self-Determination Theory operates in this particular cultural and institutional context.

CONCLUSION

This study investigating motivational factors influencing university students' participation in sports activities at FIKK UNM has revealed several important findings with theoretical and practical implications. Intrinsic motivation dimensions, particularly intrinsic motivation to experience stimulation and intrinsic motivation to accomplish things, emerged as the primary drivers of sports participation among students, indicating that enjoyment, personal satisfaction, and competence development are central to sustained engagement in physical activities. Identified regulation, representing recognition of the personal importance and value of sports for health and well-being, also demonstrated strong influence on participation patterns. These findings support Self-Determination Theory's framework and confirm the importance of creating sports programs that satisfy basic psychological needs for autonomy, competence, and relatedness to foster autonomous motivation and sustained engagement.

Gender differences in motivational profiles were observed, with male students showing significantly higher levels of excitement-seeking motivation and competitive orientation while female students demonstrated stronger emphasis on health benefits, skill learning, and personal development. These differences suggest that diversified programming approaches addressing varied motivational profiles may be necessary to achieve broad participation across student populations. Significant barriers to participation were identified including time constraints related to academic demands, infrastructure and facility limitations, financial considerations, social factors, and psychological barriers particularly affecting female students and novice participants.

Based on these findings, several recommendations are proposed for university administrators, sports program coordinators, and policymakers seeking to enhance sports participation at FIKK UNM and similar institutions. First, diversify sports program offerings to include a broader range of activities beyond traditional competitive sports, incorporating recreational fitness options, contemporary exercise trends, individual skill-development programs, and activities explicitly designed to be welcoming to beginners and students with varying fitness levels. This diversification should address the varied motivational profiles identified in this research, providing options that satisfy excitement-seeking motivations, health and learning goals, social connection needs, and personal accomplishment desires (Chen et al., 2020).

Second, implement flexible scheduling systems that reduce conflicts between academic demands and sports participation, including varied session times accommodating different class

schedules, drop-in formats allowing sporadic participation without fixed commitments, intensive short-term programs during academic breaks, and online or hybrid options combining in-person and remote participation elements. These flexible approaches can help address the most commonly cited barrier of time constraints while recognizing the reality of students' complex and variable schedules (Septiana & Wibowo, 2021).

Third, invest in infrastructure improvements and facility enhancements that remove structural barriers to participation, including upgrading and maintaining existing equipment and facilities, expanding capacity in popular activities facing overcrowding issues, developing adequate changing facilities and amenities, ensuring proper lighting and climate control for year-round comfortable participation, and creating appealing physical environments that communicate institutional commitment to student health and well-being (Kusuma et al., 2023).

Fourth, develop comprehensive communication and outreach strategies ensuring all students are aware of available sports opportunities, particularly targeting first-year students during orientation periods, students from non-sports academic programs who may be less aware of offerings, and underrepresented groups facing access barriers. Communication should emphasize the intrinsic benefits of participation including enjoyment, stress relief, and social connection alongside health outcomes, use diverse channels including social media, campus events, peer ambassadors, and partnerships with student organizations, and provide clear, accessible information about how to get involved, program requirements, and what to expect (Pratama & Nugroho, 2023).

Fifth, intentionally design social integration elements into sports programs that address relatedness needs and reduce social barriers to participation, including buddy systems pairing newcomers with experienced participants, organized social events and team-building activities, sports clubs or communities built around specific activities providing ongoing social connection, and mentorship programs facilitating skill transfer and social inclusion. These social components should be particularly emphasized given the significant role of relatedness in supporting autonomous motivation according to Self-Determination Theory (Ntoumanis et al., 2021).

Sixth, provide instructional support and skill development opportunities that satisfy intrinsic motivation to learn and accomplish, including access to qualified coaches or instructors particularly for skill-intensive activities, structured beginner programs explicitly designed for students with limited previous experience, educational resources about proper techniques, training principles, and injury prevention, and personalized feedback systems helping students track progress and experience competence development. These elements address the strong showing of intrinsic motivation to know and intrinsic motivation to accomplish things identified in this research (Vallerand & Fortier, 2020).

Seventh, address equity considerations ensuring that students from diverse socioeconomic backgrounds have equal access to sports participation opportunities, including minimizing costs associated with basic sports program participation, providing equipment loan programs for activities requiring specialized gear, and offering scholarship or subsidy programs for students facing financial barriers to participation. Economic accessibility is essential for ensuring that health-promoting physical activities are available to all students regardless of financial circumstances (Ahmad et al., 2022).

Future research should extend this investigation through longitudinal studies tracking motivational changes over time and identifying predictors of sustained engagement versus dropout, multi-site comparative research across diverse Indonesian universities revealing how institutional contexts shape motivation and participation, intervention studies testing specific program modifications based on identified recommendations, research specifically targeting non-participants and dropouts to understand barriers among inactive students, qualitative investigations providing deeper insights into subjective experiences and meanings students associate with sports participation, and studies examining the relationship between sports participation, academic performance, mental health outcomes, and overall student well-being to strengthen the evidence base for university investment in sports programs (Wijaya & Santoso, 2022).

The findings of this research demonstrate that Indonesian university students participating in sports at FIKK UNM are primarily driven by intrinsic motivation and autonomous forms of extrinsic motivation, suggesting that programs emphasizing enjoyment, personal growth, and meaningful

benefits are most likely to attract and retain participants. However, even highly motivated students face structural, social, and psychological barriers that can prevent consistent participation. Addressing these obstacles while building on identified motivational strengths through evidence-based program design will be essential for creating university sports cultures that successfully promote physical activity, enhance student well-being, and establish lifelong healthy behaviors among Indonesian youth.

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