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Physical Activity Profile of First-Year Psychology Students at Universitas Negeri Makassar (Cohort 2025)

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ABSTRACT

This study aims to describe the physical activity levels of first-year students in the Faculty of Psychology at Universitas Negeri Makassar (UNM) and examine gender-based differences using the International Physical Activity Questionnaire–Short Form (IPAQ-SF). Employing a quantitative descriptive design, the study involved 102 students who completed an online survey via Google Form. Data processing followed the official IPAQ scoring protocol, including MET-min/week calculations, physical activity categorization, and standardized data-cleaning procedures to ensure accuracy of self-report responses. The results indicate that most students fall into the low activity and "don't know/not sure" categories, suggesting limited physical activity literacy during the early transition to university life. Only a small proportion of students reported moderate or high activity levels. Gender analysis revealed that female students were more likely to exhibit low activity compared to male students. These findings underscore the need for health-promotion policies, gender-sensitive activity programs, and sport psychology–based interventions to support both physical and mental well-being. Future research is encouraged to adopt longitudinal designs and objective measurement tools to enhance validity. This article includes empirical findings, two tables, and one standardized instrument (IPAQ-SF).

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INTRODUCTION

Physical activity constitutes a fundamental component of maintaining physiological health, preventing non-communicable diseases, and promoting overall well-being. A substantial body of global literature consistently shows that physical inactivity significantly contributes to the prevalence of chronic illnesses and premature mortality (Hallal et al., 2012; Lee et al., 2012). Beyond its physiological benefits, physical activity is also closely linked to psychological health and mental well-being. Empirical findings demonstrate that regular physical activity enhances stress regulation, emotional management, and cognitive functioning, and reduces vulnerability to depression and anxiety (Biddle & Asare, 2011). Meta-analytic evidence further affirms that

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sustained participation in physical activity is associated with lower levels of negative psychological symptoms (Rebar et al., 2015). Consequently, physical activity has become central not only in public health discourse but also in psychological science, particularly in relation to university student well-being.

For students entering higher education, the transition from secondary school to university constitutes a complex period of academic, emotional, and social adjustment. This transitional phase often disrupts established daily routines, leading to changes in physical activity behaviors. Prior research reveals a significant decline in physical activity during this period, driven by increased academic load, altered schedules, and limited time (Kwan et al., 2012). Longitudinal evidence shows that sedentary behavior increases rapidly in the first year of university, making first-year students one of the most vulnerable groups to physical inactivity (Deforche et al., 2015). These findings highlight the importance of examining physical activity patterns specifically among first-year students who are entering a developmental phase critical for forming long-term lifestyle habits.

International studies consistently report declines in physical activity among university students. Bray & Born (2004) observed reductions in moderate-to-vigorous physical activity among first-year students due to academic pressure and environmental adaptation. Deforche et al. (2015) found similar patterns in newly enrolled university populations. Meanwhile, contemporary research emphasizes the positive effects of physical activity on academic stress, executive functioning, and self-regulation (Lubans et al., 2016). Additional meta-analytic findings show that regular physical activity improves mood, enhances sleep quality, and reduces psychological fatigue (Zhang et al., 2024). Collectively, these findings illustrate that declining physical activity among first-year students has far-reaching implications for both physical and psychological outcomes, as well as academic performance.

Physical activity among university students is also shaped by environmental conditions, institutional culture, and academic demands. Keating et al. (2005) demonstrated that physical activity decreases when access to sports facilities is limited or when facilities are underutilized. A systematic review by Teixeira et al. (2012) further highlights the critical role of motivation, self-efficacy, and self-regulation in determining physical activity participation. Thus, physical activity among students represents a multidimensional interplay of environmental, psychological, and academic influences.

In the Indonesian context, insufficient physical activity is a significant public health issue among adolescents and young adults. Guthold et al. (2018) identified Indonesia as one of the countries with the highest prevalence of insufficient physical activity. University students in Indonesia increasingly exhibit sedentary patterns, particularly in cognitively demanding programs such as psychology, where extended periods of reading, writing, and digital device use are common Hoare et al., 2016). Furthermore, intermittent implementation of online learning systems has increased screen time and reduced opportunities for movement throughout the day. Collectively, these conditions place psychology students at heightened risk of physical inactivity.

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Although studies on student physical activity exist, most focus on broad or cross-faculty populations, leaving first-year psychology students largely unexplored. Moreover, the Faculty of Psychology at UNM currently lacks baseline internal data to inform the development of health promotion initiatives and well-being interventions tailored to student needs. This gap hinders evidence-based decision-making.

Therefore, the present study seeks to answer the primary research question: "What is the physical activity profile of first-year students in the Faculty of Psychology, Universitas Negeri Makassar, Cohort 2025?" The study aims to describe student physical activity levels, including frequency, duration, and IPAQ-SF–based categories. The novelty of this research lies in its focus on a previously unmapped population, providing baseline data essential for designing targeted interventions. Practically, the findings can inform the development of health-promotion programs, physical activity initiatives, and faculty-wide strategies to enhance student well-being.

METHODS

This study employed a quantitative descriptive design to map the physical activity levels of first-year students in the Faculty of Psychology at Universitas Negeri Makassar (UNM) Cohort 2025. This research design was chosen to portray existing conditions without manipulating variables. The target population consisted of approximately 300 first-year students.

Sampling procedures followed a nonprobability approach, combining purposive and convenience sampling. Respondents met three criteria: (1) active enrollment in the 2025 cohort, (2) official registration in the Faculty of Psychology at UNM, and (3) completion of the questionnaire. The survey was administered online via Google Form distributed through WhatsApp. A total of 102 students completed the questionnaire and were included in the final analysis.

The instrument used in this study was the International Physical Activity Questionnaire–Short Form (IPAQ-SF), which assesses vigorous activity, moderate activity, and walking during the past seven days. IPAQ-SF has demonstrated strong reliability and acceptable validity across 12 countries (Craig et al., 2003), and the scoring procedures followed the Official Guidelines for Data Processing and Analysis (IPAQ Research Committee, 2005), including MET-min/week calculations and categorization into low, moderate, and high activity levels. In accordance with IPAQ standards, item 7 (sitting time) was not included in MET-min/week calculations and was presented only descriptively as an indicator of sedentary behavior, without contributing to the activity category classification. For this study, the questionnaire was administered using the Indonesian-language version of IPAQ-SF, adapted and used in previous Indonesian research (Shadrina, 2017; Soeroso, 2021), both of which reported that the instrument demonstrated stable item–total patterns and consistent scoring distributions, supporting its appropriateness for Indonesian student populations.

Data from Google Forms underwent a rigorous cleaning process, including capping daily activity duration at 180 minutes, coding activities under 10 minutes as zero, and

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removing implausible responses exceeding 960 minutes per day. Descriptive statistical analysis was used to generate frequency distributions, percentages, and categorical classifications of physical activity across students and gender groups.

RESULTS AND DISCUSSION

Result

Overall Physical Activity Levels

Analysis of the physical activity data revealed substantial variation across IPAQ categories. Among the 102 respondents, 7 students (6.3%) were classified as having high physical activity, 17 students (15.3%) as moderate, and 17 students (15.3%) as low. A majority of students, 61 individuals (63.1%), selected the response "don't know/not sure," preventing classification. This large proportion implies low physical activity literacy, reflecting students' limited ability to monitor or evaluate their own activity levels.

Table 1.
Distribution of Physical Activity Categories

Physical Activity Categories	Frequency (n)	Percentage (%)
High	7	6.3%
Moderate	17	15.3%
Low	17	15.3%
Don't Know / Not Sure	61	63.1%
Total	**102**	**100%**

Physical Activity by Gender

The author extends sincere appreciation to the Faculty of Psychology, Universitas Negeri Makassar, for providing administrative support and facilitating data access throughout the research process. Gratitude is also extended to first-year students of the 2025 cohort who generously participated in the study. Their contributions were essential to the completion of this research. The author also acknowledges the support of faculty colleagues and administrative staff who assisted in coordinating the distribution of research instruments. The Faculty of Psychology is predominantly female, a characteristic consistent with psychology programs nationwide. Thus, the gender distribution of respondents mirrors the actual demographic composition. Among female students, 4 were classified in the high category, 13 in moderate, and 14 in low. Among male students, 3 fell into the high category, 4 into moderate, and 3 into low.

Table 2.
Physical Activity Categories by Gender

Gender	Physical Activity Categories		
	High	Moderate	Low
Female	4	13	14
Male	3	4	3

Discussion

The findings indicate that first-year psychology students predominantly fall into the low activity and "don't know/not sure" categories. This reflects low physical activity literacy, defined as students' ability to recognize, track, and assess their physical

activity. This result aligns with Keating et al. (2005), who noted that university students often fail to notice their physical activity patterns due to academically driven sedentary routines. The small proportion of students with moderate or high activity aligns with Kwan et al. (2012) and Deforche et al. (2015), who found that the transition into higher education is associated with reductions in daily physical activity due to environmental changes, increased academic demands, and social adaptation processes.

Institutional factors, both at the university and faculty levels, also contribute to this pattern. The periodic implementation of online or hybrid learning increases screen time and prolongs sitting during digital classes (Aritonang et al., 2022), thereby intensifying sedentary behavior, particularly among first-year students who are still adapting to academic routines. At the faculty level, initiatives related to sport psychology are supported through BKM PSYSPORT UNM, which facilitates activities such as mental skills workshops, self-regulation practices, and the promotion of active habits among students. However, the exposure of first-year psychology students to these initiatives remains limited. As a result, many new students do not receive early guidance on managing physical activity or balancing academic demands with movement routines, which further contributes to low activity levels during the transition into higher education.

From a health psychology perspective, low physical activity is associated with reduced emotional regulation and more limited stress-coping abilities. Physical activity has been shown to decrease symptoms of stress, anxiety, and depression through psychological and neurobiological pathways (Biddle & Asare, 2011; Rebar et al., 2015). Thus, first-year students with low physical activity may experience heightened psychological strain as academic pressures increase. This vulnerability is consistent with research showing that first-year students face substantial adjustment demands during the transition to university, including academic, social, and environmental changes that often disrupt self-regulation and stress-coping abilities (Arum & Khoirunnisa, 2021). Such challenges may further reduce their capacity to maintain consistent physical activity.

From a sports science perspective, ages 18–21 constitute a critical period for establishing long-term fitness. The American College of Sports Medicine recommends at least 150 minutes of moderate-intensity or 75 minutes of vigorous activity weekly. Failure to meet these standards may reduce cardiovascular fitness and increase metabolic risks. The tracking phenomenon suggests that physical activity habits developed during early adulthood tend to persist over time (Telama et al., 2014), making early intervention particularly important.

From a sport psychology lens, low physical activity may stem from weak self-regulation, low self-efficacy, and the intention–behaviour gap. Teixeira et al. (2012) highlight that consistent physical activity requires goal setting, behavioral monitoring, and overcoming internal barriers. For first-year students, academic and social adjustment demands may deplete psychological resources needed to maintain physical activity routines. Lower perceived physical competence, common in young adults, may further inhibit participation (Bélanger et al., 2015).

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Gender differences observed in this study mirror global trends. Female students were more frequently classified as low activity, consistent with the worldwide finding that women engage less in physical activity (Guthold et al., 2018). Psychosocial barriers—such as low confidence, safety concerns, and lower perceived physical competence—may limit female students' engagement in physical activity (Bauman et al., 2012). Conversely, male students were more evenly distributed across moderate and high activity categories, consistent with tendencies toward vigorous or competitive physical activities (Bélanger et al., 2015; Kwan et al., 2012). Lower self-monitoring among female students (Zhang et al., 2024) may also explain the higher frequency of uncertain and low activity responses.

Overall, these findings underscore that first-year students represent a vulnerable group prone to low physical activity due to intertwined academic, psychosocial, environmental, and gender-based factors. Faculty-level interventions—including physical activity literacy programs, sport psychology–based training to enhance self-regulation, and inclusive recreational opportunities—are needed to promote physical, psychological, and academic resilience.

CONCLUSION

This study provides a comprehensive profile of physical activity levels among first-year students in the Faculty of Psychology at Universitas Negeri Makassar. The majority of students were categorized as having low or uncertain physical activity levels, suggesting low physical activity literacy during the transition into higher education. These findings align with existing evidence that the first-year transition is characterized by increased sedentary behavior, academic pressures, and digital learning environments.

Gender analysis shows that female students disproportionately fall into the low activity category, consistent with global gender disparities in physical activity. The study contributes preliminary insights for physical activity research and health psychology in Indonesian university settings.

Practically, the findings provide essential baseline data for developing faculty-led health promotion programs, sport psychology–based interventions, and academic systems that support active lifestyles. Limitations include the high proportion of uncertain responses, reliance on self-report measures, and the descriptive design, which does not permit causal inference.

The recommendations for this study are as follows:

1. Develop faculty-wide physical activity promotion programs, including orientation sessions on physical activity literacy and integration of active-lifestyle messages into course modules and student activities.
2. Provide safe, inclusive, and gender-sensitive recreational options, such as group exercise, yoga, or light-to-moderate activity programs, to increase participation, especially among female students.
3. Incorporate active breaks within online or hybrid learning formats, reducing prolonged sitting and promoting movement during long digital learning sessions.

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4. Implement sport psychology–based interventions, such as self-regulation training, self-efficacy strengthening, and strategies to reduce the intention–behaviour gap, to foster consistent physical activity behaviours.
5. Conduct future studies using longitudinal designs and objective tools such as accelerometers, and include variables such as motivation, self-regulation, social support, and academic workload to develop a more comprehensive understanding of student physical activity dynamics.

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The author extends sincere appreciation to the Faculty of Psychology, Universitas Negeri Makassar, for providing administrative support and facilitating data access throughout the research process. Gratitude is also extended to first-year students of the 2025 cohort who generously participated in the study. Their contributions were essential to the completion of this research. The author also acknowledges the support of faculty colleagues who assisted in coordinating the distribution of research instruments.

REFERENCES

Aritonang, J. P., Widiastuti, I. A. E., & Harahap, I. L. (2022). Gambaran Tingkat Aktivitas Fisik Mahasiswa Pendidikan Dokter Fakultas Kedokteran Universitas Mataram di Masa Pandemi COVID-19 Description of Physical Activity Level of Medical Students Faculty of Medicine, University Of Mataram In Covid-19 Pandemic. 10(1). https://doi.org/10.23886/ejki.10.129.58

Arum, A. R., & Khoirunnisa, R. N. (2021). Hubungan antara regulasi diri dengan penyesuaian diri mahasiswa baru psikologi. Character: Jurnal Penelitian Psikologi, 8(8), 187–196. https://doi.org/10.26740/cjpp.v8i8.41717

Bauman, A. E., Reis, R. S., Sallis, J. F., Wells, J. C., Loos, R. J. F., Martin, B. W., Alkandari, J. R., Andersen, L. B., Blair, S. N., Brownson, R. C., Bull, F. C., Craig, C. L., Ekelund, U., Goenka, S., Guthold, R., Hallal, P. C., Haskell, W. L., Heath, G. W., Inoue, S., … Sarmiento, O. L. (2012). Correlates of physical activity: Why are some people physically active and others not? In The Lancet (Vol. 380, Issue 9838, pp. 258–271). Elsevier B.V. https://doi.org/10.1016/S0140-6736(12)60735-1

Bélanger, M., Sabiston, C. M., Barnett, T. A., O'Loughlin, E., Ward, S., Contreras, G., & O'Loughlin, J. (2015). Number of years of participation in some, but not all, types of physical activity during adolescence predicts level of physical activity in adulthood: Results from a 13-year study. International Journal of Behavioral Nutrition and Physical Activity, 12(1). https://doi.org/10.1186/s12966-015-0237-x

Biddle, S. J. H., & Asare, M. (2011). Physical activity and mental health in children and adolescents: A review of reviews. In British Journal of Sports Medicine (Vol. 45, Issue 11, pp. 886–895). https://doi.org/10.1136/bjsports-2011-090185

Bray, S. R., & Born, H. A. (2004). Transition to University and Vigorous Physical Activity: Implications for Health and Psychological Well-Being. Journal of American College Health, 52(4), 181–188. https://doi.org/10.3200/JACH.52.4.181-188

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Craig, C. L., Marshall, A. L., Sjöström, M., Bauman, A. E., Booth, M. L., Ainsworth, B. E., Pratt, M., Ekelund, U., Yngve, A., Sallis, J. F., & Oja, P. (2003). International Physical Activity Questionnaire: 12-Country reliability and validity. Medicine and Science in Sports and Exercise, 35(8), 1381–1395. https://doi.org/10.1249/01.MSS.0000078924.61453.FB

Deforche, B., Van Dyck, D., Deliens, T., & De Bourdeaudhuij, I. (2015). Weight changes, physical activity, sedentary behaviour and dietary intake during the transition to higher education: A prospective study. International Journal of Behavioral Nutrition and Physical Activity, 12(1). https://doi.org/10.1186/s12966-015-0173-9

Guthold, R., Stevens, G. A., Riley, L. M., & Bull, F. C. (2018). Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1·9 million participants. The Lancet Global Health, 6(10), e1077–e1086. https://doi.org/10.1016/S2214-109X(18)30357-7

Hallal, P. C., Andersen, L. B., Bull, F. C., Guthold, R., Haskell, W., Ekelund, U., Alkandari, J. R., Bauman, A. E., Blair, S. N., Brownson, R. C., Craig, C. L., Goenka, S., Heath, G. W., Inoue, S., Kahlmeier, S., Katzmarzyk, P. T., Kohl, H. W., Lambert, E. V., Lee, I. M., … Wells, J. C. (2012). Global physical activity levels: Surveillance progress, pitfalls, and prospects. In The Lancet (Vol. 380, Issue 9838, pp. 247–257). Elsevier B.V. https://doi.org/10.1016/S0140-6736(12)60646-1

Hoare, E., Milton, K., Foster, C., & Allender, S. (2016). The associations between sedentary behaviour and mental health among adolescents: A systematic review. In the International Journal of Behavioral Nutrition and Physical Activity (Vol. 13, Issue 1). BioMed Central Ltd. https://doi.org/10.1186/s12966-016-0432-4

Keating, X. D., Guan, J., Piñero, J. C., & Bridges, D. M. (2005). A meta-analysis of college students' physical activity behaviors. In Journal of American College Health (Vol. 54, Issue 2, pp. 116–126). Heldref Publications. https://doi.org/10.3200/jach.54.2.116-126

Kwan, M. Y., Cairney, J., Faulkner, G. E., & Pullenayegum, E. E. (2012). Physical activity and other health-risk behaviors during the transition into early adulthood: A longitudinal cohort study. American Journal of Preventive Medicine, 42(1), 14–20. https://doi.org/10.1016/j.amepre.2011.08.026

Lee, I. M., Shiroma, E. J., Lobelo, F., Puska, P., Blair, S. N., Katzmarzyk, P. T., Alkandari, J. R., Andersen, L. B., Bauman, A. E., Brownson, R. C., Bull, F. C., Craig, C. L., Ekelund, U., Goenka, S., Guthold, R., Hallal, P. C., Haskell, W. L., Heath, G. W., Inoue, S., … Wells, J. C. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: An analysis of burden of disease and life expectancy. The Lancet, 380(9838), 219–229. https://doi.org/10.1016/S0140-6736(12)61031-9

Lubans, D., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M., Nilsson, M., Kelly, P., Smith, J., Raine, L., & Biddle, S. (2016). Physical activity for cognitive and mental health in youth: A systematic review of mechanisms. In Paediatrics (Vol. 138, Issue 3). American Academy of Paediatrics. https://doi.org/10.1542/peds.2016-1642

Rebar, A. L., Stanton, R., Geard, D., Short, C., Duncan, M. J., & Vandelanotte, C. (2015). A meta-meta-analysis of the effect of physical activity on depression and anxiety in non-clinical adult populations. Health Psychology Review, 9(3), 366–378. https://doi.org/10.1080/17437199.2015.1022901

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Soeroso, D. A. (2021). Hubungan antara tingkat aktivitas fisik dengan tingkat stres dan kualitas hidup mahasiswa Pendidikan Dokter Universitas Brawijaya.

Shadrina, S. N. (2017). Hubungan aktivitas fisik dengan prestasi akademik santri Pondok Pesantren X di Kabupaten Bogor.

Teixeira, P. J., Carraça, E. V, Markland, D., Silva, M. N., & Ryan, R. M. (2012). Exercise, physical activity, and self-determination theory: A systematic review. http://www.ijbnpa.org/content/9/1/78

Telama, R., Yang, X., Leskinen, E., Kankaanpää, A., Hirvensalo, M., Tammelin, T., Viikari, J. S. A., & Raitakari, O. T. (2014). Tracking of physical activity from early childhood through youth into adulthood. Medicine and Science in Sports and Exercise, 46(5), 955–962. https://doi.org/10.1249/MSS.0000000000000181

Zhang, H., Hashim, S. Bin, Huang, D., & Zhang, B. (2024). The effect of physical exercise on depression among college students: a systematic review and meta-analysis. PeerJ, 12(9). https://doi.org/10.7717/peerj.18111