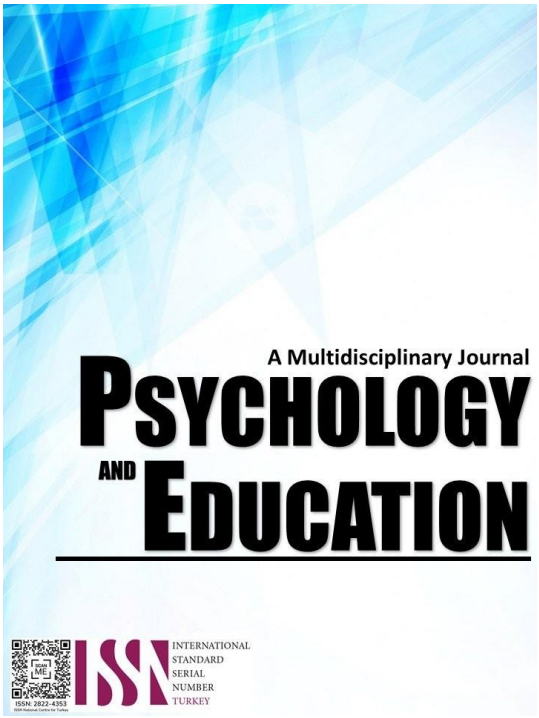
HEALTH-RELATED FITNESS LEVEL OF PATHFIT 1 STUDENTS OF NOTRE DAME OF MARBEL UNIVERSITY: BASIS FOR HEALTH-RELATED EXERCISE PROGRAMS



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 33
Issue 1
Pages: 103-108
Document ID: 2025PEMJ3145
DOI: 10.70838/pemj.330109
Manuscript Accepted: 02-15-2025

Psych Educ, 2025, **33**(1): 103-108, Document ID:2025PEMJ3145, doi:10.70838/pemj.330109, ISSN 2822-4353

Research Article

Health-Related Fitness Level of PATHFIT 1 Students of Notre Dame of Marbel University: Basis for Health-Related Exercise Programs

Eliseo V. Villaganas Jr.,* Christian Dave S. Ignacio, Liezl N. Gandola, Jonathan A. Deocadez, Christian John A. Agustin, Jethro Carl H. Arandallo, Freia Marie L. Gabriel
For affiliations and correspondence, see the last page.

Abstract

This study determined the level of health-related fitness of PATHFIT 1 students of Notre Dame of Marbel University. A descriptive quantitative research design was employed to assess the level of health-related fitness. The respondents were the PATHFIT 1 students. A stratified random sampling was used in this study to determine the respondents, and 500 respondents participated in the survey. The researcher used the physical fitness test tool adopted by the Department of Education (Department of Education) in 2019. Results show that the cardiovascular endurance of PATHFIT 1 students was very weak. On the other hand, the flexibility of the students was good. In addition, the students' muscular strength needs improvement, and muscular endurance was excellent. Moreover, based on the results, the program suggested that physical education should focus on cardiovascular since most of the PATHFIT 1 students were weak. On the other hand, the exercise program for flexibility and muscular endurance must be intensified since the results were excellent. Moreover, the PATHFIT 1 subject must be revisited to determine the effectiveness of the exercise program implemented in the physical education class.

Keywords: *Physical Education, PATHFIT, health-related fitness, descriptive research design, Philippines*

Introduction

Health-related fitness is the physical condition and capabilities that impact the quality of life, such as cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition (De Oliveira et al., 2023). Having an explicit knowledge of health-related fitness components will minimize health problems that arise from misinformation and enhance the quality of life (De Oliveira et al., 2023b). However, declining health-related fitness among college students is attributed to limited physical education courses, heavy academic pressure, insufficient sports facilities, diverse extracurricular activities, and lack of healthy lifestyle awareness ("Research on the Dilemmas in the Development of Physical Fitness Levels of College Students and Sports Policies and Regulations," 2024). Moreover, educational interventions focusing on fitness knowledge have significantly improved long-term physical activity and fitness outcomes (Ferkel et al., 2014).

In China, Chinese college students have a decline in health-related fitness (Yin et al., 2012). In addition, during the lockdown in Puerto Rico, health-related fitness was significantly affected among female college students (Vega et al., 2023). Masanovic et al. (2020) study in European countries reveals that muscular strength, endurance, and flexibility decline among school-age children and adolescents. Moreover, the health-related fitness in adults aged 18 years, with males showing better endurance, strength, and overall wellness; on the other hand, females perform better in coordination and flexibility (Klemm et al., 2021).

In the Philippines, a study by Dimarucot et al. (2024) reveals that the PATHFIT course significantly improved the student's cardiovascular endurance and muscular strength, but females showed a lower effect. In addition, first-year college students in the Philippines have 70% physical fitness, 30% not fit, with body composition and strength needing improvement, while flexibility is normal and cardiovascular endurance is excellent (Santiago & Ibarra, 2023). Moreover, Filipino adults exhibit low cardiovascular fitness and high body fat percentages, highlighting a significant health risk within this population (Ring et al., 2022).

Moreover, determining the health-related fitness level in Notre Dame of Marbel University among PATHFIT 1 students remains the gap of the study. To address this gap, the descriptive quantitative research design will be employed to determine the health-related fitness level among PATHFIT 1 students.

Since PATHFIT 1 is a new curriculum in physical education, understanding the current fitness levels among PATHFIT 1, students will help address specific needs to improve health-related fitness levels. Additionally, the findings of this study will be the basis for health-related fitness programs in physical education at Notre Dame of Marbel University.

Research Questions

This study aims to determine the health-related fitness level of PATHFIT 1 students of Notre Dame of Marbel University. Specifically, this study will answer the following questions:

1. What is the level of health-related fitness of PATHFIT 1 students in terms of:
    1.1. cardiovascular endurance;
    1.2. flexibility;
    1.3. muscular strength; and

1.4. muscular endurance?
2. What health-related fitness program can be developed based on the results?

Methodology

Research Design

This study utilized the quantitative research design, specifically the descriptive research design. Descriptive quantitative research design involves collecting numerical data to describe the characteristics of a population or phenomenon. It utilizes surveys, questionnaires, and statistical analysis to provide insights into patterns, trends, and relationships within the data, offering a clear representation of the subject (Deckert & Wilson, 2023). In this study, the descriptive quantitative research design was used to describe and analyze the results of the health-related fitness level as the basis for health-related fitness programs for PATHFIT 1 students at Notre Dame of Marbel University.

Respondents

The study's respondents were PATHFIT 1 students taking Physical Education at Notre Dame of Marbel University. This study used a stratified random sampling. This method divides large groups into smaller subgroups with common characteristics, such as gender, age, race, and educational level (Simkus, 2023). In this survey, the group consists of 1st-year students enrolled in PE 1 subjects at Notre Dame of Marbel University. A total of 500 respondents were selected for this survey.

Instrument

The Physical Fitness Test tool was adopted to revise the Physical Fitness Test (PFT) Manual of the Department of Education (2019). There were five (5) health-related components of physical fitness in the test: Body Mass Index, cardiovascular fitness, flexibility, muscular strength, and muscular endurance. The Body Mass Index was computed using the formula weight in kilograms (kg) divided by height in square meters. Students performed the 3-minute step test for cardiovascular fitness and recorded their heartbeat per minute. For flexibility, students performed the sit and reach; their reach was measured in centimeters (cm). For muscular strength, students performed push-ups, and then the maximum number of repetitions was recorded. For muscular endurance, students performed the planking exercise, where the maximum time they could hold the position was recorded. After recording all the test scores, students encoded their results in Google Forms.

Data Analysis

After conducting physical fitness tests, the students interpreted and encoded the scores in Google Forms. The results were then exported into Microsoft Excel. Then, the data was transferred to JASP software for encoding and processing.

Statistical tools are used in the study to aid the data interpretation and analysis. Descriptive analysis was used for this study. Statistical tools for descriptive data analysis included frequency and percent distribution, particularly the profile of the respondents, such as the sex of the students, body mass index, and physical fitness level in terms of cardiovascular endurance, flexibility, muscular strength, and muscular endurance.

Results and Discussion

Physical Fitness Level of Students

Table 1 shows the cardiovascular fitness test scores of students where 34 of them are good, which covers 6.8% of the population; 37 of them are above average, which covers 7.4% of the population; 49 of them are average, which covers 9.8% of the population, 50 of them is below average which cover 10% of the population, 50 of them is weak which cover 10% of the population, and 246 of them is very weak which cover 49.2% of the population.

Table 1. *Cardiovascular Endurance Based on the 3-Minute Step Test Scores of Students*

Variable	*Level*	*Standard for Male in bpm*	*Standard for Female in bpm*	*Frequency*	*Percentage*
Cardiovascular Endurance	Very Weak	>128	>140	246	49.2%
	Weak	117-128	127-140	50	10%
	Below Average	106-116	118-126	50	10%
	Average	100-105	109-117	49	9.8%
	Above Average	90-99	99-108	37	7.4%
	Good	79-89	86-98	34	6.8%
Total				500	100%

Table 2 shows the flexibility of students based on the sit and reach activity where 11 need improvement, which covers 2.2% of the population; 53 are fair, which covers 10.6% of the population; 215 are good. Which covers 43% of the population; 185 are very good,

which covers 10.6% of the population, and 36 are excellent, which covers 2.2 of the population.

Table 2. *Flexibility of Students Based on Sit and Reach Test Scores*

Variable	*Level*	*Score*	*Frequency*	*Percentage*
Flexibility	Needs Improvement	0-15.9cm.	11	2.2%
	Fair	16-30.9cm.	53	10.6%
	Good	31-45.9cm.	215	43%
	Very Good	46-60.9 cm.	185	37%
	Excellent	46-60.9 cm.	36	7.2%
Total			500	100%

Table 3 shows the muscular strength based on push exercises where 3 of them are poor, which covers 0.6% of the population; 198 of them need improvement, which covers 39.6% of the population; 160 of them are fair, which covers 32% of the population, 71 of them is good which cover 14.2% of the population, 43 of them are very good which cover 8.6% of the population, and 25 of them is excellent which cover 5% of the population

Table 3. *Muscular Strength Based on Push-Up Scores*

Variable	*Level*	*Score*	*Frequency*	*Percentage*
Muscular Strength	Poor	Cannot execute	3	0.6%
	Needs Improvement	1-8	198	39.6%
	Fair	9-16	160	32%
	Good	17-24	71	14.2%
	Very Good	25-32	43	8.6%
	Excellent	33 and above	25	5%
Total			500	100%

Table 4 shows the muscular endurance based on planking exercise scores where 12 of them need improvement, which covers 2.4% of the population; 48 of them are fair, which covers 9.6% of the population; 97 of them are good, which covers 19.4% of the population, 34 of them is very good which cover 6.8% of the population, and 309 of them is excellent which cover 61.8% of the population.

Table 4. *Muscular Endurance of Students Based on Planking Duration*

Variable	*Level*	*Score*	*Frequency*	*Percentage*
Muscular Endurance	Needs Improvement	1-15 seconds	12	2.4%
	Fair	16-30 seconds	48	9.6%
	Good	31-45 seconds	97	19.4%
	Very Good	46-50 seconds	34	6.8%
	Excellent	51 seconds and above	309	61.8%
Total			500	100%

Cardiovascular Endurance

The result shows that the cardiovascular of the PATHFIT 1 students is very weak, at 49.2 %, and a good average of 6.8 %. This implies that most of the PATHFIT 1 students have weak cardiovascular endurance. According to Arfanda et al. (2023), low cardiovascular endurance can decrease physical activity due to technology. On the other hand, to improve the cardiovascular endurance of the students, individualized training recommendations should be given for the mode, duration, and intensity of the physical activity (Mayer-Berger, 2018). Moreover, low cardiovascular endurance can be improved through a 12-week functional interval endurance training program (Dogra, 2015).

Flexibility

The result shows that the flexibility of the PATHFIT 1 students is good, with 43% and 2.2 % needing improvement in their flexibility. This implies that college students are expected to have flexibility. It supports the study of Santiago and Ibarra (2023) that the flexibility of college students is normal with adequate flexibility fitness. In addition, 10 weeks of functional training significantly improves the flexibility of college students with deep squats and straight leg raises (Zhao & Guo, 2023). Moreover, flexibility should remain the standard of physical fitness due to its positive effects on muscular strength, power, and potential injury prevention (Bouguezzi et al., 2023).

Muscular Strength

The results show that the muscular strength of the PATHFIT 1 students needs improvement by 39%, and the rest of the results distributed to fair at 32%, good at 14.2 %, very good at 8.6 %, and excellent with 5% of the results of muscular strength. This implies that the students can perform muscular strength exercises, and some need to improve their muscular strength. In a study by Brill et al. (2000), maintaining muscular strength can reduce functional limitations, and higher muscular strength has no limitations in daily

activities. In addition, maintaining good muscular strength leads to productivity and limits medical claims (Gilliam & Terpeluk, 2020). Moreover, maintaining muscular strength plays a vital role in preventing cardiovascular diseases (Artero et al., 2012). A study by Roetert (2000) uses regular strength training exercises, such as bench presses, leg presses, and sit-ups, to maintain muscular strength.

Muscular Endurance

The result shows that the muscular endurance of the PATHFIT 1 students is excellent, with 61.8 %, and there were only 2.4 % who needed improvement in muscular endurance. This implies that students with excellent muscular endurance can perform any physical activity. The result supports the study of Carrick-Ranson et al. (2020), which found that endurance training significantly boosts maximal oxygen uptake (VO2max), a key indicator of cardiovascular fitness. In addition, muscular endurance can be maintained for up to 15 weeks with as little as two sessions per week if the intensity is maintained (Spiering et al., 2021).

Based on the study's results, the health-related exercise program should focus on the cardiovascular endurance of the PATHFIT 1 students since most of the students have low cardiovascular endurance. Arfanda et al. (2023) suggest that a program involving low-impact aerobic dance, conducted for 30 minutes three times a week over six weeks, can effectively enhance cardiovascular endurance. In addition, programs for low cardiovascular endurance should start with low intensity and duration, following the "begin low, go slow" principle (Mayer-Berger, 2018). Moreover, data analysis and feedback can also improve cardiovascular endurance (Lee, 2020).

On the other hand, the flexibility of the PATHFIT 1 students is good. The flexibility exercise program should be intensified to maintain the students' flexibility. According to Limanskaya et al. (2022), regular exercise focusing on gradualness, regularity, and complexity can maintain flexibility. In addition, as suggested by Wani (2017), a 12-week resistance training program conducted three times per week is an effective method to maintain and improve flexibility among male college students. Moreover, in Physical Education, a combined strengthening and stretching program can significantly increase the flexibility levels of the students (Zurita, 2020).

The muscular strength of the student needs improvement. To improve, a program should incorporate bilateral, eccentric, and variable resistance training (Suchomel et al., 2018). In addition, the muscular strength program should include exercises focused on training, conducted five days a week for four weeks, incorporating warm-ups, aerobic activities, and stretching (Castro et al., 2015). Since the muscular endurance of the PATHFIT 1 students is excellent, the program should be intensified to maintain the result.

Conclusions

Students' physical fitness test scores can lead to the conclusion that they are not physically fit in terms of cardiovascular fitness. However, their scores also indicate that they have a high level of physical fitness regarding flexibility, muscular strength, and muscular endurance.

The P.E. department may initiate efforts to improve students' cardiovascular fitness, designing and facilitating a dynamic aerobic exercise program for students, for instance.

The P.E. department is recommended to provide training and seminars for the faculty on implementing the subject and facilitating the activities.

On the part of the faculty, it is recommended that the study's results be considered as the basis on which physical fitness components should be given the most intervention.

References

Arey, D. L., Blatt, A., & Gutman, T. (2022). A Self-Determination Theory and Acceptance and Commitment Therapy-based intervention aimed at increasing adherence to physical activity. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.935702

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macro theory of human motivation, development, and health. Canadian Psychology/Psychologie Canadienne, 49(3), 182–185. https://doi.org/10.1037/a0012801

Deckert, J., & Wilson, M. (2023). Descriptive research methods. In University Press of Florida eBooks (pp. 153–165). https://doi.org/10.5744/florida/9780813069548.003.0011

Arfanda, P. E., Aprilo, N. I., Arimbi, A., Mappompo, N. M. A., Nurliani, N., & Wahid, N. W. M. (2023). WORKSHOP ON INCREASING CARDIOVASCULAR ENDURANCE AND CONCENTRATION THROUGH LOW-IMPACT LOW IMPACT AEROBIC DANCE. J-ABDI Jurnal Pengabdian Kepada Masyarakat, 2(9), 6569–6576. https://doi.org/10.53625/jabdi.v2i9.4953

Arfanda, P. E., Aprilo, N. I., Arimbi, A., Mappompo, N. M. A., Nurliani, N., & Wahid, N. W. M. (2023). WORKSHOP ON INCREASING CARDIOVASCULAR ENDURANCE AND CONCENTRATION THROUGH LOW-IMPACT LOW IMPACT AEROBIC DANCE. J-ABDI Jurnal Pengabdian Kepada Masyarakat, 2(9), 6569–6576. https://doi.org/10.53625/jabdi.v2i9.4953

Artero, E. G., Lee, D., Lavie, C. J., España-Romero, V., Sui, X., Church, T. S., & Blair, S. N. (2012). Effects of muscular strength on cardiovascular risk factors and prognosis. Journal of Cardiopulmonary Rehabilitation and Prevention, 32(6), 351–358. https://doi.org/10.1097/hcr.0b013e3182642688

Bouguezzi, R., Sammoud, S., Markov, A., Negra, Y., & Chaabene, H. (2023). Why flexibility deserves to be further considered as a standard component of physical fitness: a narrative review of existing insights from static stretching study interventions. Youth, 3(1), 146-156.

Bouguezzi, R., Sammoud, S., Markov, A., Negra, Y., & Chaabene, H. (2023). Why flexibility deserves to be further considered as a standard component of physical fitness: A narrative review of existing insights from static stretching study interventions. Youth, 3(1), 146–156. https://doi.org/10.3390/youth3010010

Brill, P. A., Macera, C. A., Davis, D. R., Blair, S. N., & Gordon, N. (2000). Muscular strength and physical function. Medicine & Science in Sports & Exercise, 32(2), 412. https://doi.org/10.1097/00005768-200002000-00023

Carrick-Ranson, G., Sloane, N. M., Howden, E. J., Bhella, P. S., Sarma, S., Shibata, S., Fujimoto, N., Hastings, J. L., & Levine, B. D. (2020). The effect of lifelong endurance exercise on cardiovascular structure and exercise function in women. The Journal of Physiology, 598(13), 2589–2605. https://doi.org/10.1113/jp278503

Castro, L. E. J., Salazar, L. T. S., & Perea, K. G. V. (2015). Programa de ejercicio físico para mejorar fuerza muscular en personas sedentarias. Cuerpo Cultura Y Movimiento, 3(6), 13. https://doi.org/10.15332/s2248-4418.2013.0006.01

De Oliveira, N. R. R., Santos, N. M. G. D., Da Silva, N. C. L., & Domingues, N. S. C. (2023a). Components of health-related physical fitness and physical-sport content of leisure. World Journal of Biology Pharmacy and Health Sciences, 15(1), 131–137. https://doi.org/10.30574/wjbphs.2023.15.1.0305

De Oliveira, N. R. R., Santos, N. M. G. D., Da Silva, N. C. L., & Domingues, N. S. C. (2023b). Components of health-related physical fitness and physical-sport content of leisure. World Journal of Biology Pharmacy and Health Sciences, 15(1), 131–137. https://doi.org/10.30574/wjbphs.2023.15.1.0305

Dimarucot, H. C., Aguinaldo, J. C., Minas, G. C., & Cobar, A. G. C. (2024). Physical Fitness Status of Tertiary Students under the New Physical Activity towards Health and Fitness (PATHFit) Course: A Quasi-Experimental Study. Sport Mont, 22(1), 63–69. https://doi.org/10.26773/smj.240209

Dogra, D. K. (2015). Effect of functional interval endurance training program on cardio-respiratory endurance and muscular endurance of Tripura cricketers.

Ferkel, R. C., Judge, L. W., Stodden, D. F., & Griffin, K. (2014). Importance of health-related fitness knowledge to increasing physical activity and physical fitness. Physical Educator, 71(2), 218.

Gilliam, T., & Terpeluk, P. (2020). Muscle Health: the gateway to population health management. In IntechOpen eBooks. https://doi.org/10.5772/intechopen.94058

Klemm, K., Krell-Roesch, J., De Clerck, I. L., Brehm, W., & Boes, K. (2021). Health-Related Fitness in Adults from Eight European Countries—An analysis based on data from the European Fitness Badge. Frontiers in Physiology, 11. https://doi.org/10.3389/fphys.2020.615237

Lee, S. R. (2020). Cardiovascular endurance training management apparatus using training mask for cardiovascular endurance.

Limanskaya, O., Kriventsova, I., Altukhov, V., Yermakova, T., Jagiello, W., Iermakov, S., Vypasniak, I., & Lisovskyi, B. (2022). The development of female students' flexibility engaged in choreography. Physical Education of Students, 26(2), 54–63. https://doi.org/10.15561/20755279.2022.0202

Masanovic, B., Gardasevic, J., Marques, A., Peralta, M., Demetriou, Y., Sturm, D. J., & Popovic, S. (2020). Trends in Physical Fitness Among School-Aged Children and Adolescents: A Systematic Review. Frontiers in Pediatrics, 8. https://doi.org/10.3389/fped.2020.627529

Mayer-Berger, W. (2018). Endurance training in cardiovascular patients – practical aspects. German Journal of Sports Medicine, 2018(04), 87–92. https://doi.org/10.5960/dzsm.2018.319

Mayer-Berger, W. (2018). Endurance training in cardiovascular patients – practical aspects. German Journal of Sports Medicine, 2018(04), 87–92. https://doi.org/10.5960/dzsm.2018.319

Research on the dilemmas in the development of physical fitness levels of college students and sports policies and regulations. (2024). Journal of Human Movement Science, 5(2). https://doi.org/10.23977/jhms.2024.050203

Ring, S., Truppa, D., Schubert, M., & Astorino, T. A. (2022). Assessment of cardiometabolic health and fitness related indices in Filipino adults. Medicine & Science in Sports & Exercise, 54(9S), 218. https://doi.org/10.1249/01.mss.0000877736.99218.51

Roetert, E. P. (2000). Maintain Strength---Reduce limitations. Strength and Conditioning Journal, 22(4), 48. https://doi.org/10.1519/00126548-200008000-00014

Santiago, R. G., & Ibarra, V. C. (2023). HEALTH, PHYSICAL FITNESS, AND SKILLS OF FIRST YEAR COLLEGE STUDENTS: EVIDENCE FROM a PHILIPPINE COLLEGE. Malaysian Mental Health Journal, 2(1), 07–12. https://doi.org/10.26480/mmhj.01.2023.07.12

Santiago, R. G., & Ibarra, V. C. (2023). Health, physical fitness, and skills of first year college students: evidence from a philippine college. https://doi.org/10.26480/mmhj.01.2023.07.12

Santiago, R. G., & Ibarra, V. C. (2023). HEALTH, PHYSICAL FITNESS, AND SKILLS OF FIRST YEAR COLLEGE STUDENTS: EVIDENCE FROM a PHILIPPINE COLLEGE. Malaysian Mental Health Journal, 2(1), 07–12. https://doi.org/10.26480/mmhj.01.2023.07.12

Spiering, B. A., Mujika, I., Sharp, M. A., & Foulis, S. A. (2021). Maintaining physical performance: the minimal dose of exercise needed to preserve endurance and strength over time. The Journal of Strength and Conditioning Research, 35(5), 1449–1458. https://doi.org/10.1519/jsc.0000000000003964

Suchomel, T. J., Nimphius, S., Bellon, C. R., & Stone, M. H. (2018). The importance of muscular strength: training considerations. Sports Medicine, 48(4), 765–785. https://doi.org/10.1007/s40279-018-0862-z

Vega, A., Segarra-Vázquez, M., & Martínez-Colón, L. del R. (2023). Comparing Health-related Physical Fitness In College Students Pre And Post Covid-19 Pandemic Lockdown. Medicine and Science in Sports and Exercise, 55(9S), 180–181. https://doi.org/10.1249/01.mss.0000981408.37759.6d

Wani, M. A. (2017). Impact of resistance training on flexibility of male college hostel students. Forensic Science & Addiction Research, 1(2). https://doi.org/10.31031/fsar.2017.01.000509

Yin, X. J., Du, J. Q., Ji, L., Xiong, J., & Ji, C. (2012). Research on the trend in physical health of the Chinese college students. Journal of Beijing Sport University, 35(9), 79-84.

Zhao, G., & Guo, Q. (2023, March). Correlation analysis between functional training and flexibility of college students based on functional movement screen test. In Second International Conference on Statistics, Applied Mathematics, and Computing Science (CSAMCS 2022) (Vol. 12597, pp. 500-506). SPIE.

Zurita, M. a. P. (2020). Effect of a strength and stretching program, combined or isolated, on active flexibility in a physical education setting. A pilot study. Journal of Physical Education and Human Movement, 2(2), 6–13. https://doi.org/10.24310/jpehmjpehmjpehm.v2i29847

Affiliations and Corresponding Information

Eliseo V. Villaganas Jr., LPT, PhD
Notre Dame of Marbel University – Philippines

Christian Dave S. Ignacio, LPT
Notre Dame of Marbel University – Philippines

Liezl N. Gandola, LPT, MAEd
Notre Dame of Marbel University – Philippines

Jonathan A. Deocadez, MAPE
Notre Dame of Marbel University – Philippines

Christian John A. Agustin, LPT
Notre Dame of Marbel University – Philippines

Jethro Carl H. Arandallo, LPT, MAEd
Notre Dame of Marbel University – Philippines

Freia Marie L. Gabriel, LPT, MAEd
Notre Dame of Marbel University – Philippines