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Research Article

Exploring The Faculty and Students' Readiness Level for The Effective Implementation of Physical Activity Toward Health and Fitness Courses (PATHFIT)

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ABSTRACT

The study aimed to evaluate students' preparation for physical activity in health and fitness courses at Laguna State Polytechnic University (LSPU) campuses. A descriptive correlational methodology was used in the study, which included 920 students and 48 faculty members. The findings demonstrate that PATHFIT courses are generally and substantially prepared at all LSPU campuses. The range of mean scores for each indicator demonstrates a high level of readiness, and given the modest standard deviation, readiness levels across several campuses may be constant. The courses specifically show how to prepare for streamlining curricular materials, objectives, methods, staffing policies, workforce management, alternative programs, physical education curriculum, laboratories, and equipment. These places a strong basis and foundation for the implementation of PATHFIT courses and are much ready.

ANOVA results for the PATHFIT course implementation level throughout LSPU campuses, regarding the availability of facilities and resources, faculty qualification, and support system, revealed PATHFIT course implementation levels varied significantly among LSPU campuses. However, no appreciable differences across LSPU campuses' implementation levels of PATHFIT courses regarding the availability of facilities and resources and evaluation and monitoring attributable to the between-groups variation.

In summary, regression analysis shows there are no appreciable differences between campuses regarding achieving goals and objectives, assessment and monitoring, or overall implementation level, and there are appreciable variations in the availability of facilities and resources, faculty credentials, and support systems. These re-

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sults show how PATHFIT courses must be implemented consistently and successfully throughout LSPU to solve the inequalities in resources and qualifications between campuses.

The study recommends ongoing promotion and improvement of health and fitness programs at LSPU campuses, as well as targeted interventions to enhance preparation levels and foster a culture of physical activity. Future research can explore innovative strategies to support a physically active lifestyle and contribute to overall well-being within the university community.

Keywords: Implementation, PATHFIT Courses, PATHFIT Curriculum, Readiness

Introduction

Philippine Education is part of a national improvement agenda. According to the 1987 Philippine constitution (Const.1987 art 2, sec. 19), Education promotes social growth, patriotism, and community development. Despite a strong commitment to quality education, several indices suggest. Philippine Education is in serious decline. These indicators—student performance on foreign comparison exams and a mismatch between Filipino graduates' abilities and competencies—indicate that Philippine Education is badly endangered by degradation (Tagare and Villaluz 2021).

A study by Sergio (2018) mentioned a qualitative phenomenology study of Generation Z students' challenges in tertiary physical Education at one of the Philippines' top state universities. Physical Education classes play a crucial role in promoting healthy lifestyles and encouraging students to adopt nutritious eating habits and engage in the recommended amount of daily physical activity as advised by the Department of Health (2021). Being physically active can keep down any heart disease and hypertension. Physical Education promotes muscle training and healthy weight management (Gilliam, 2021).

According to Melone et al. (2022), the likelihood of playing a racquet sport at school is four times higher compared to team sports and outdoor activities. At Tagoloan Community College, students are required to complete a minimum of four subjects in the first two years of Physical Education in order to graduate. These subjects include PATH-FIT 1: Movement Com-

petency Training, PATH-FIT 2: Fitness Training, PATH-FIT 3: Dance Sports, Martial Arts, & Group Exercises, and PATH-FIT 4: Dance Sports, Group Exercise and Outdoor and Adventure Activities.

The lack of student interest in engaging with the activities and demonstrations of lousy movements is clearly observable. Presently, almost 30% of students are at risk of failing due to their inability to meet the necessary skills and competencies. The most effective approach to imparting knowledge is closely connected to self-motivation and self-efficacy, coupled with a balanced diet. Students express disinterest, primarily driven by previous research findings that highlight the significant impact of nutritious foods and physical fitness on their daily routines. In response to this alarming outcome, the college offers students the opportunity to seek assistance in recognizing the importance of "wellness and fitness training" throughout their entire lives (CMO No. 40 s, 2021).

PATHFIT courses help teachers improve their knowledge, skills, comprehension, and dedication to promoting physical Education. It also encourages effective and efficient program delivery, league competitions, and amateur sports, including training, and collaboration, all of which are necessary for the best development of healthy individuals (Li, 2022). Students benefit from good training and the ability to motivate them. School administrators must acknowledge and support physical education facilities and equipment to discuss and negotiate the needs and provisions. As a result, discovering and acknowledging these needs may

result in positive changes in children's growth and good, if not spectacular, performance on numerous sports fields. As a result, these research findings may interest diverse people, including teachers, coaches, sports coordinators, and school officials. The PATHFIT curriculum is expected to suit the needs of both teachers and students. Thus, the student's well-being is ensured (Chen et al., 2021).

Methods

Research Design

The study used a descriptive correlational research design to assess physical education faculty and students' readiness to implement physical activity toward health and fitness courses (PATHFIT). The factors that predict the practical pedagogical skills of teachers and students were evaluated on the readiness to implement the PATHFIT courses in the university.

Respondents of the Study

Table 1. Distribution of Respondents by Campus

CAMPUS	STUDENTS RESPONDENT	Regular & Part-Time Instructor RESPONDENT	Total
STA. CRUZ	168	1	169
SAN PABLO	590	35	625
SINILOAN	34	9	44
LOSBAÑOS	128	3	131
TOTAL	920	48	968

The respondents of this study were nine hundred 968 tertiary students and PE Instructors in the four LSPU campuses, as seen in Table 1.

Data Gathering Instruments

The main tool employed to collect data in this study was the survey questionnaire. It was a customized questionnaire developed by the researcher, focusing on gathering information about the profiles of the respondents and gathering data relevant to the research. Various statistical methods were employed to present, analyze, and interpret the collected data.

The questionnaire "Exploring the Readiness of Physical Education Faculty and Students to the Implementation of Physical Activity Towards Health and Fitness Courses" was validated by requesting experts in the field. Likewise, the faculty not included in the actual conduct of the study were solicited to validate the questionnaire. For refinement of the primary instrument, it was submitted to the top management and authorities to evaluate the content and organization of the instruments. Finally, through the help of the panel of examiners, the edited and revised statements were completed and included in the final format of the questionnaire.

Statistical Treatment of Data

To provide a comprehensive overview of the respondents' profiles, statistical measures such as frequency distribution, percentage, mean, and standard deviation were utilized. These measures effectively described the general information about the respondents. In order to determine the relationships among the variables, the Pearson-Product-moment-Correlation Coefficient was employed. This statistical tool enabled the exploration of the associations between different variables.

Result and Discussion

The findings executive summary shows that PATHFIT courses at all LSPU sites are generally well-prepared and at a high readiness level. The range of mean scores for each indication shows a good degree of preparation for all course components, from 4.27 to 4.39. Because the standard deviations (SD) are so small, the preparedness levels on several campuses may be consistent.

The courses specifically demonstrate preparation for streamlining courses, staffing policies, workforce management, alternative programs, curriculum material, objectives, methodology, physical education program, and labs/equipment. These places show a good

basis and foundation for the implementation of PATHFIT courses and are well-prepared.

The overall readiness rating for PATHFIT courses at LSPU campuses is 4.32, which denotes high readiness. It implies that LSPU has the tools to properly conduct these courses and carry out the PATHFIT program's goals.

Based on the ANOVA results for the PATH-FIT course implementation level throughout LSPU campuses, the following summary may be drawn:

According to the research, no appreciable differences exist across LSPU campuses' PATH-FIT course implementation levels in Attainment goals and objectives (F(3, 964) = 1.039, p = .374). A tiny part of the total variation was attributable to the between-groups variation.

Regarding the accessibility of facilities and resources, PATHFIT course implementation levels varied significantly among LSPU campuses (F(3, 964) = 4.339, p = .005). The between-groups variation comprised a middle part of the overall variation, demonstrating that resources differed between campuses.

The research shows a significant variation in the faculty qualification implementation level of PATHFIT courses among LSPU campuses (F(3, 964)= 4.625, p=.003). There may be differences in instructor qualifications among campuses, as indicated by the fact that the between-groups variation made up a small percentage of the overall variation.

PATHFIT course implementation levels differ significantly across LSPU campuses regarding the support system (F(3, 964) = 3.766, p = .011). The between-groups variation comprised a modest part of the overall variation, demonstrating that support systems differed between campuses.

According to the analysis, there are no appreciable differences across LSPU campuses' implementation levels of PATHFIT courses regarding evaluation and monitoring (F(3, 964) = 1.400, p = .241). A tiny part of the total variation

was attributable to the between-groups variation.

The total level of PATHFIT course implementation varies significantly among LSPU campuses (F(3, 964) = 3.018, p = .029). The moderate share of the total variation from the between-groups variation points to campusspecific heterogeneity at the implementation level.

In summary, while there are no appreciable differences between campuses regarding achieving goals and objectives, assessment and monitoring, or overall implementation level, there are appreciable variations in the availability of facilities and resources, faculty credentials, and support systems. These results show how PATHFIT courses must be implemented consistently and successfully throughout LSPU to solve the inequalities in resources and qualifications between campuses.

Conclusion

The following conclusions are made based on the study's findings.

- 1 The hypothesis that no significant difference exists in the respondents' perceived readiness level for PATHFIT courses is partially sustained. The perceived readiness of laboratories and equipment was found to be significantly different.
- 2 The hypothesis stating that there is no significant difference in the respondents' perceived level of PATHFIT courses implementation is partially sustained. The result revealed that faculty qualification and support system varies across LSPU campuses regarding the availability of facilities and equipment.
- 3 The hypothesis states that the respondents' level of readiness for the PATHFIT courses singly or in combination does not significantly predict the implementation of physical activity in health and fitness courses. (PATHFIT) is partially sustained.

Model:

Predicted Imp = .540 (Readiness) + .123 (¬¬¬¬¬¬¬¬¬¬¬¬¬¬LE) + .103 (AFR) + .107 (FQ) + .104 (SS) + .106

The results of the study showed that the regression model suggests the presence of laboratories and equipment (LE) is necessary for the successful implementation of the PAHTFIT Programs, along with the availability of facilities and resources (AFR), faculty qualification (FQ) will handle, and the support system (SS).

In conclusion, the PATHFIT readiness evaluation reveals a solid foundation and average level of readiness throughout LSPU campuses. It creates a clear picture for the implementation of PATHFIT by guaranteeing that students will gain from well-structured, well-staffed, and well-equipped courses that align with the program's goals.

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References

- Al-Rabia, M., Shawwa, L. A., Gouda, E., Aldarmahi, A., Asfour, H., & Atwa, H. (2021). Validation of a questionnaire evaluating the effect of a preparatory year on qualifying students for studying at health professions education faculties. African Journal of Health Professions Education, 13(1), 72-76.
- Bandura, A. (2016). Guide for constructing self-efficacy scales. Self-efficacy beliefs of adolescents, 5(1), 307-337.
- Bechter, B. E., Dimmock, J. A., & Jackson, B. (2019). A cluster-randomized controlled trial to improve student experiences in physical education: Results of a student-centered learning intervention with high school teachers. Psychology of Sport and Exercise, 45, 101553.
- Behzadnia, B., Adachi, P. J., Deci, E. L., & Mohammadzadeh, H. (2018). Associations between students' perceptions of physical education teachers' interpersonal styles and students' wellness, knowledge, performance, and intentions to persist at physical activity: A self-determination theory approach. Psychology of Sport and Exercise, 39, 10-19.

- Biddle, S. J., Ciaccioni, S., Thomas, G., & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. Psychology of Sport and Exercise, 42, 146-155.
- Brothers, A., & Diehl, M. (2017). Feasibility and efficacy of the aging plus program: Changing views on aging to increase physical activity. Journal of Aging and Physical Activity, 25(3), 402-411.
- Calzavara, M., Battini, D., Bogataj, D., Sgarbossa, F., & Zennaro, I. (2020). Ageing workforce management in manufacturing systems: state of the art and future research agenda. International Journal of Production Research, 58(3), 729-747.
- Carson, R., & Webster, C. A. (Eds.). (2019). Comprehensive school physical activity programs: Putting evidence-based research into practice. Human Kinetics Publishers.
- Chang, V. (2016). Review and discussion: Elearning for academia and industry. International Journal of Information Management, 36(3), 476-485.
- Cheung, P. (2020). Teachers as role models for physical activity: Are preschool children more active when their teachers are active. European Physical Education Review, 26(1), 101-110.
- Dasso, N. A. (2019, January). How is exercise different from physical activity? A concept analysis. In nursing forum (Vol. 54, No. 1, pp. 45-52).
- Dowse, R. A., McGuigan, M. R., & Harrison, C. (2020). Effects of a resistance training intervention on strength, power, and performance in adolescent dancers. The Journal of Strength & Conditioning Research, 34(12), 3446-3453.
- Erickson, K. I., Hillman, C., Stillman, C. M., Ballard, R. M., Bloodgood, B., Conroy, D. E., & Powell, K. E. (2019). Physical activity, cognition, and brain outcomes: a review of the 2018 physical activity guidelines. Medicine and science in sports and exercise, 51(6), 1242.
- Fletcher, G. F., Landolfo, C., Niebauer, J., Ozemek, C., Arena, R., & Lavie, C. J. (2018). Promoting physical activity and exercise:

- JACC health promotion series. Journal of the American College of Cardiology, 72(14), 1622-1639.
- Gill, D. L., Williams, L., & Reifsteck, E. J. (2017). Psychological dynamics of sport and exercise. Human Kinetics.
- Hare, J. Towards an Understanding of Holistic Education in the Middle Years of Education. J. Res. Int. Educ. 2016, 5, 301–322. [CrossRef] 2. Patania, V.M.; Padulo, J.; Iuliano, E.; Ardigò,
- Harris, J., Cale, L., Duncombe, R., & Musson, H. (2018). Young people's knowledge and understanding of health, fitness and physical activity: issues, divides and dilemmas. Sport, Education and Society, 23(5), 407-420.
- Hayes, M. (2022). Social media and inspiring physical activity during COVID-19 and beyond. Managing Sport and Leisure, 27(1-2), 14-21
- Hernando-Garijo, A.; Hortigüela-Alcalá, D.; Sánchez-Miguel, P.A.; González-Víllora, S. Fundamental Pedagogical Aspects for the Implementation of Models-Based Practice in Physical Education. Int. J. Environ. Res. Public Health 2021, 18, 7152. [CrossRef] 11. Ministry of Science and Education National Curriculum for Physical Education. Available online: https://mzo.gov.hr/istaknuteteme/odgoj-i-obrazovanje/nacionalni-kuriku-lum/predmetni-kurikulumi/tjelesna-i-
- zdravstvena-kultura/758 (accessed on 20 June 2022).

 Hollis, J. L., Williams, A. J., Sutherland, R., Campbell, E., Nathan, N., Wolfenden, L. ... & Wiggers, J. (2016). A systematic review and meta-analysis of moderate-to-vigorous

physical activity levels in elementary

school physical education lessons. Pre-

ventive medicine, 86, 34-54.

Hollis, J. L., Williams, A. J., Sutherland, R., Campbell, E., Nathan, N., Wolfenden, L. ... & Wiggers, J. (2016). A systematic review and meta-analysis of moderate-to-vigorous physical activity levels in elementary school physical education lessons. Preventive medicine, 86, 34-54.

- Hulteen, R. M., Morgan, P. J., Barnett, L. M., Stodden, D. F., & Lubans, D. R. (2018). Development of foundational movement skills: A conceptual model for physical activity across the lifespan. Sports medicine, 48, 1533-1540.
- Hunzicker, J. (2018). Professional development and job-embedded collaboration: How teachers learn to exercise leadership. Professional development in education, 38(2), 267-289.
- Khazaee-Pool, M., Sadeghi, R., Majlessi, F., & Rahimi Foroushani, A. (2015). Effects of physical exercise programme on happiness among older people. Journal of psychiatric and mental health nursing, 22(1), 47-57.
- Kumar, S., & Bhukar, J. P. (2013). Stress level and coping strategies of college students. Journal of Physical Education and Sports Management, 4(1), 5-11.
- Kwon, E. H., & Block, M. E. (2017). Implementing the adapted physical education Elearning program into physical education teacher education program. Research in developmental disabilities, 69, 18-29.
- Laar, R. A., Ashraf, M. A., Ning, J., Ji, P., Fang, P., Yu, T., & Khan, M. N. (2021, August). Performance, health, and psychological challenges faced by physical education students in online learning during COVID-19 epidemic: A qualitative study in China. In Healthcare (Vol. 9, No. 8, p. 1030). MDPI.
- Lander, N., Eather, N., Morgan, P. J., Salmon, J., & Barnett, L. M. (2017). Characteristics of teacher training in school-based physical education interventions to improve fundamental movement skills and/or physical activity: A systematic review. Sports medicine, 47, 135-161.
- Latimer-Cheung, A. E., Ginis, K. A. M., Hicks, A. L., Motl, R. W., Pilutti, L. A., Duggan, M., ... & Smith, K. M. (2013). Development of evidence-informed physical activity guidelines for adults with multiple sclerosis. Archives of physical medicine and rehabilitation, 94(9), 1829-1836.

- Leo, F. M., Mouratidis, A., Pulido, J. J., López-Gajardo, M. A., & Sánchez-Oliva, D. (2022). Perceived teachers' behavior and students' engagement in physical education: The mediating role of basic psychological needs and self-determined motivation. Physical Education and Sport Pedagogy, 27(1), 59-76.
- Levine, P. A., & Kline, M. (2014). Trauma-proofing your kids: A parents' guide for instilling confidence, joy, and resilience. North Atlantic Books.
- Lund, J. L., & Veal, M. L. (2013). Assessment-driven instruction in physical education: A standards-based approach to promoting and documenting learning. Human Kinetics.
- Mazzoni, A. S., Carlsson, M., Berntsen, S., Nordin, K., & Demmelmaier, I. (2019). "Finding my own motivation"—a mixed methods study of exercise and behaviour change support during oncological treatment. International Journal of Behavioral Medicine, 26, 499-511.
- McClelland, E., Pitt, A., & Stein, J. (2015). Enhanced academic performance using a novel classroom physical activity intervention to increase awareness, attention and self-control: Putting embodied cognition into practice. Improving schools, 18(1), 83-100.
- Mears, R., & Jago, R. (2016). Effectiveness of after-school interventions at increasing moderate-to-vigorous physical activity levels in 5-to 18-year olds: a systematic review and meta-analysis. British Journal of Sports Medicine, 50(21), 1315-1324.
- Moore, S. C., Lee, I. M., Weiderpass, E., Campbell, P. T., Sampson, J. N., Kitahara, C. M. ... & Patel, A. V. (2016). Association of leisure-time physical activity with risk of 26 types of cancer in 1.44 million adults. JAMA internal medicine, 176(6), 816-825.
- Morat, M., Morat, T., Zijlstra, W., & Donath, L. (2021). Effects of multimodal agility-like exercise training compared to inactive controls and alternative training on physical performance in older adults: a systematic review and meta-analysis. European Review of Aging and Physical Activity, 18(1), 1-20.

- Morrow Jr, J. R., Tucker, J. S., Jackson, A. W., Martin, S. B., Greenleaf, C. A., & Petrie, T. A. (2013). Meeting physical activity guidelines and health-related fitness in youth. American journal of preventive medicine, 44(5), 439-444.
- Olander, E. K., Fletcher, H., Williams, S., Atkinson, L., Turner, A., & French, D. P. (2013). What are the most effective techniques in changing obese individuals' physical activity self-efficacy and behaviour: a systematic review and meta-analysis? International Journal of Behavioral Nutrition and Physical Activity, 10(1), 1-15.
- Pangrazi, R. P., & Beighle, A. (2019). Dynamic physical education for elementary school children. Human Kinetics Publishers.
- Piotrowski, D., & Piotrowska, A. I. (2021). Operation of gyms and fitness clubs during the COVID-19 pandemic-financial, legal, and organizational conditions. Journal of Physical Education and Sport, 21, 1021-1028.
- Reigal, R. E., Moral-Campillo, L., Morillo-Baro, J. P., Juarez-Ruiz de Mier, R., Hernández-Mendo, A., & Morales-Sánchez, V. (2020). Physical exercise, fitness, cognitive functioning, and psychosocial variables in an adolescent sample. International journal of environmental research and public health, 17(3), 1100.
- Sallis, J. F., Floyd, M. F., Rodríguez, D. A., & Saelens, B. E. (2012). Role of built environments in physical activity, obesity, and cardiovascular disease. Circulation, 125(5), 729-737.
- Sallis, J., Bauman, A., & Pratt, M. (2018). Environmental and policy interventions to promote physical activity. American journal of preventive medicine, 15(4), 379-397.
- Sato, T., & Haegele, J. A. (2017). Professional development in adapted physical education with graduate web-based professional learning. Physical Education and Sport Pedagogy, 22(6), 618-631.
- Saw, A. E., Main, L. C., & Gastin, P. B. (2016). Monitoring the athlete training response: subjective self-reported measures trump commonly used objective measures: a systematic review. British journal of

- sports medicine, 50(5), 281-291.
- Shogren, K. A., Burke, K. M., Antosh, A., Wehmeyer, M. L., LaPlante, T., Shaw, L. A., & Raley, S. (2019). Impact of the Self-Determined Learning Model of Instruction on Self-determination and goal attainment in Adolescents with intellectual disability. Journal of Disability Policy Studies, 30(1), 22-34.
- Siedentop, D., Hastie, P., & Van der Mars, H. (2019). Complete guide to sport education. Human Kinetics.
- Tripp, A., Rizzo, T. L., & Webbert, L. (2017). Inclusion in physical education: Changing the culture. Journal of Physical Education, Recreation & Dance, 78(2), 32-48.
- Verschueren, K.; Van Minderhout, M.B.W.M.; Koomen, H.M.Y. Practitioner Review: Dyadic Teacher-Child Relationships: Comparing Theories, Empirical Evidence and Implications for Practice. J. Child Psychol. Psychiatry. 2022, 63, 724–733. [CrossRef] [PubMed] 5. Richardson, V. The role of attitudes and beliefs in learning to teach. In Handbook of Research on Teacher Education; Sikula, J., Ed.; Simon & Schuster: New York, NY, USA, 1996; pp. 102–119. 6. dela-Peña, C.; Fernádez-Cézar, R.; Solano-Pinto, N. Attitude Toward Mathematics of Future Teachers: How Important Are Creativity and Cognitive Flexibility? Front.

- Psychol. 2021, 12, 713941. [CrossRef] [PubMed]
- Wang H, Yang F, Xing X. Evaluation Method of Physical Education Teaching and Training Quality Based on Deep Learning. Compute Intell Neurosci. 2022 Jun 23; 2022:1680888. DOI: 10.1155/2022/1680888. PMID: 35785060; PMCID: PMC9246637
- Williams, A. M., & Jackson, R. C. (2019). Anticipation in sport: Fifty years on, what have we learned, and what research still needs to be undertaken? Psychology of Sport and Exercise, 42, 16-24.
- Wright, J.; Burrows, L. Re-Conceiving Ability in Physical Education: A Social Analysis. Sport. Educ. Soc. 2006, 11, 275-291. [CrossRef] 8. Sallis, J.F.; McKenzie, T.L.; Alcaraz, J.E.; Kolody, B.; Faucette, N.; Hovell, M.F. The Effects of a 2-Year Physical Education Program (SPARK) on Physical Activity and Fitness in Elementary School Students. Sports, Play, and Active Recreation for Kids. Am. J. Public Health 1997, 87, 1328–1334. [CrossRef] 9. UNESCO Quality Physical Education: Guideline for Policy Makers. Available online: https://en.unesco.org/inclusivepolicylab/sites/default/files/learning/document/2017/1/231101E.pdf (accessed on 20 June 2022).