



RESEARCH ARTICLE

PHYSICAL HEALTH PROMOTION EFFORTS FOR COLLEGE STUDENTS AFFECTING THEIR PHYSICAL HEALTH, HABITS AND AWARENESS

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ABSTRACT

As China advances the goals of the *Healthy China 2030* Plan, concerns about the physical health of college students persist, with national reports showing only modest gains despite extensive monitoring efforts. This study quantitatively examined the physical health status and related behavioral factors of 291 students from Weifang Nursing Vocational College, using a structured questionnaire to collect data on lifestyle habits, exercise frequency, attitudes toward physical fitness testing, and awareness of health policies. Statistical analysis of the responses confirmed noticeable gaps in students' fitness levels and highlighted patterns that point to limited engagement with existing health promotion measures. Drawing from these results, the study proposes an integrated physical health promotion model that positions the university, the campus hospital, and the students as interconnected partners in improving wellness. The model emphasizes data-driven strategies in health education, curriculum design, physical activity provision, and exercise-prescription interventions, offering a practical framework for strengthening health outcomes in higher education settings.

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INTRODUCTION

The steady rise of physical inactivity and unhealthy lifestyle habits among college students has become a pressing public health issue. Research over the past decade consistently shows that the transition from adolescence to early adulthood often brings a marked decline in physical activity, poorer dietary routines, and heightened stress and sedentary behavior, all of which affect not only physical health but also cognitive and emotional functioning. National data highlight the urgency: the 2020 Students' Physical Fitness and Health Survey reported that only 0.2% of Chinese college students aged 19,22 met basic fitness standards, an especially troubling figure for institutions expected to nurture health literacy and lifelong wellness habits. The *Healthy China 2030* Plan responds to these trends by promoting stronger links between medical care, physical activity, and education, urging schools to create environments that support prevention, early intervention, and sustained healthy behavior. Despite these national directives, many vocational and tertiary institutions continue to operate without consistent, evidence-based health promotion models. This study, conducted at Weifang Nursing Vocational College in Shandong Province, investigates how institutional support, student behaviors, and health awareness shape overall well-being. The goal is to assess the current state of student health, identify the factors that influence behavior, and offer an integrated framework that strengthens physical and mental wellness across the college environment.

Background of the Study: Research consistently shows a decline in physical fitness among university students, with endurance, strength, and flexibility decreasing compared to adolescent levels (Gao *et al.*, 2024). This pattern is linked to heavier academic demands, increased

screen time, and lifestyle shifts that place less priority on physical activity (State Council Information Office, 2022). Although regular exercise is known to support physical health, cognition, and stress management (Chen & Hu, 2021; Zhang *et al.*, 2022), many school-based initiatives fall short due to uneven implementation and limited medical involvement (Zhou & Li, 2020). International models offer a more holistic approach. The WHO Health Promoting Schools framework highlights the importance of aligned policies, supportive environments, and community participation, with documented improvements in student well-being when these elements are present (WHO, 2021; Seo *et al.*, 2022). In China, growing interest in physical-medical integration—combining exercise science, clinical screening, and preventive care—has shown promise, especially when culturally rooted practices such as Tai Chi and Qigong are included to strengthen adherence (Li *et al.*, 2023; Wu *et al.*, 2023). Despite these advances, many vocational and tertiary institutions still treat health promotion as peripheral, and limited research examines how institutional support, student attitudes, and demographic factors together influence health behavior. This study addresses that gap by examining both institutional conditions and student perceptions to propose a context-specific framework for improving health promotion in higher education. Grounded in the Ecological Model of Health Promotion, the Health Belief Model, and the Theory of Planned Behavior, the study considers how individual beliefs, social influences, and institutional structures interact to shape wellness, guiding the development of an integrated physical-medical model suited to the college setting.

Statement of the Problem: This study investigates how institutional health promotion efforts influence the physical health, habits, and awareness of college students at Weifang Nursing Vocational

College. Specifically, it seeks to determine students' health profiles and evaluate how institutional and personal factors contribute to their overall wellness behavior.

1. What is the profile of the student respondents in terms of:

- Sex
- Age
- Year level
- Physical Activity
- Health Status

What is the assessment of the student-respondents on the effectiveness of existing health promotion efforts in terms of:

- Institutional support and policy quality
- Program design and intervention methods
- Community and environmental support

Are there significant differences in the assessment of the student respondents on the effectiveness of existing health promotion efforts when their profile is taken as test factors?

What is the self-assessment of the student-respondents of their physical health, habits, and awareness based on:

- Physical health status
- Health-related habits (eating, exercise, rest)
- Health cognition and awareness
- Accessibility and utilization of health promotion programs
- Are there significant differences in the self-assessment of student-respondents of their physical health, habits, and awareness when student profiles are considered as test factors?
- Is there a significant relationship between students' demographic profiles and their assessment of physical health and health promotion programs?
- Based on the findings, what strategies and interventions can be proposed to improve the physical health and wellness awareness of college students through integrated health promotion approaches?

Significance of the Study: The study's significance lies in addressing the persistent gap between institutional wellness policies and students' actual health outcomes.

For Students: Raises awareness of the importance of physical health and empowers them to adopt sustainable habits.

For Educators: Provides data-driven insights to enhance the delivery of physical education and health instruction.

For Administrators: Offers evidence to improve health promotion infrastructure and institutional programs.

For the Education Sector: Strengthens the argument for integrating health literacy into the educational system.

For the Medical Sector: Encourages collaboration with educational institutions for preventive and rehabilitative initiatives.

For Policymakers: Informs policy refinement toward youth health and supports implementation of the *Healthy China 2030* framework.

For Future Researchers: Lays groundwork for longitudinal and intervention-based studies on student wellness.

Scope and Delimitations. This study focuses on students from first and second year levels at Weifang Nursing Vocational College, examining their self-reported health practices, awareness, and experiences with campus health initiatives through a structured questionnaire. The scope is limited to self-assessment data and does

not include clinical measurements or laboratory-based evaluations. Findings therefore reflect the specific institutional and cultural environment of Weifang Nursing Vocational College and should be interpreted within that context. The study does not implement health interventions or measure long-term outcomes, nor does it experimentally test integrated physical-medical or Traditional Chinese Medicine approaches, though these concepts inform the discussion. While the results are intended primarily to guide local policy and program development, the theoretical insights and patterns described here may be useful for institutions and researchers exploring similar health promotion concerns in other educational settings.

METHODOLOGY

This study employed a quantitative descriptive-comparative design to assess the physical health status, habits, awareness, and perceptions of health promotion programs among students at Weifang Nursing Vocational College in Shandong Province, China. Participants were selected through purposive sampling from non-physical education programs to capture students not engaged in structured fitness coursework. Eligible respondents were full-time students aged 17–24 who voluntarily provided informed consent. Data were collected using a researcher-developed structured questionnaire comprising four sections: demographic characteristics; physical health and lifestyle habits; health cognition and awareness; and evaluation of institutional health promotion efforts. Items were rated on a four-point Likert scale. Content validation was conducted by experts in public health and research methods, and pilot testing among 50 students ensured clarity. Reliability analysis using SPSS 24 yielded a Cronbach's alpha of 0.98, indicating excellent internal consistency. Institutional approval was secured prior to data collection. The researcher administered questionnaires in classroom settings, provided standardized instructions, and collected completed forms for verification and encoding. Data were gathered over four weeks. Statistical analyses were performed using SPSS 24. Descriptive statistics (frequency, percentage, weighted mean, standard deviation) summarized student characteristics and self-assessments. Independent t-tests and one-way ANOVA examined group differences, while Pearson's correlation coefficient assessed relationships among health behaviors, awareness, and perceptions of institutional support. A significance level of $p < 0.05$ was applied. Ethical protocols were observed through voluntary participation, informed consent, anonymity, and secure data handling. No identifying information or sensitive disclosures were required, and participation involved minimal risk. All procedures adhered to institutional and disciplinary ethical standards.

RESULTS

This section presents the study's findings, detailing respondent profiles, their self-assessed health and habits, and their evaluation of campus health promotion efforts, along with group differences and relationships among key variables. Table 1 summarizes the demographic characteristics of the 291 respondents based on sex, age, year level, physical activity, and health status. Of the total participants, 215 (73.88%) are female and 76 (26.12%) are male. In terms of age distribution, 249 respondents (85.57%) are 20 years old and below, while 42 (14.43%) are 21 years old and above. For year level, 259 respondents (89.00%) are in their second year of study, and 32 (11.00%) are in their first year. Physical activity patterns show that 114 students (39.18%) seldom engage in physical activity, 105 (36.08%) often do so, 61 (20.96%) report regular exercise, and 11 (3.78%) do not participate in physical activity at all. With respect to health status, 262 respondents (90.03%) report experiencing occasional health issues, while 29 (9.97%) indicate multiple or frequent conditions. Table 2 presents students' assessments of existing health promotion efforts across institutional, programmatic, and community domains. Among the three, community and environmental support registered the highest mean ($M = 3.31$, $SD = 0.47$), reflecting students' strong perception that their immediate

Table 1. Demographic Profile of the Respondents

Demographic Profile	Categories	Frequency	Percentage
Sex	Male	76	26.12
	Female	215	73.88
	Total	291	100.00
Age	20 years old and below	249	85.57
	21 years old and above	42	14.43
	Total	291	100.00
Year Level	1st year	32	11.00
	2nd year	259	89.00
	Total	291	100.00
Physical Activity	Never	11	3.78
	Seldom (1-2x per week)	114	39.18
	Often (3-4x per week)	105	36.08
	Regular (Daily to 5x per week)	61	20.96
	Total	291	100.00
Health Status	Occasional issues	262.00	90.03
	Multiple and frequent risk conditions	29.00	9.97
	Total	291	100.00

Table 2. Summary of Assessment on the Effectiveness of Existing Health Promotion Efforts

Domains	Mean	SD	Description	Interpretation	Rank
Institutional support and policy quality	3.27	0.50	Agree	Effective	3
Program design and intervention methods	3.30	0.48	Agree	Effective	2
Community and environmental support	3.31	0.47	Agree	Effective	1
Summary of assessment	3.29	0.46	Agree	Effective	

Scale: 1-5.50: Strongly Disagree/ Not Effective; 1.51-2.50: Disagree/Less Effective; 2.51-3.50: Agree/ Effective; 3.51-4.00: Strongly Agree/Highly Effective

Table 3. Differences on the Effectiveness of Existing Health Promotion Efforts Based on Demographic Profile

Profile	Categories	Mean	Stat Value	p-value	Decision (Interpretation)
Sex	Male	3.24	-t= 0.93	0.35	Accept H ₀ (Not Significant)
	Female	3.30			
Age	20 and below	3.30	t= 1.08	0.28	Accept H ₀ (Not Significant)
	21 and above	3.22			
Year Level	1st Year	3.16	-t= 1.84	0.07	Accept H ₀ (Not Significant)
	2nd Year	3.30			
Physical Activity	Never	3.18	f= 6.48	0.00	Reject H ₀ (Significant)
	Seldom (1-2x/week)	3.16			
	Often (3-4x/week)	3.38			
	Regular (Daily-5x/week)	3.41			
Health Status	Occasional issues	3.31	t= 3.02	0.00	Reject H ₀ (Significant)
	Multiple & frequent conditions	3.07			

Table 4. Summary of Self-assessment of Physical Health, Habits and Awareness

Domains	Mean	SD	Verbal Description	Interpretation	Rank
Physical health status	3.12	0.60	Agree	Evident	4
Health-related habits (eating, exercise, rest)	3.13	0.61	Agree	Evident	3
Health cognition and awareness	3.30	0.61	Agree	Evident	1
Accessibility and utilization of health promotion programs	3.21	0.65	Agree	Evident	2
Summary of self-assessment	3.19	0.56	Agree	Evident	

Scale: 1-1.50: Strongly Disagree/Not evident; 1.51-2.50: Disagree/ Less Evident; 2.51-3.50: Agree/Evident; 3.51-4.00: Strongly Agree/Highly Evident

Table 5. Differences on the Physical Health, Habits and Awareness based on Demographic Profile

Profile	Categories	Mean	Stat Value	p-value	Decision (Interpretation)
Sex	Male	3.09	t= -1.65	0.09	Accept H ₀
	Female	3.22			
Age	20 and below	3.19	t= 0.32	0.74	Accept H ₀
	21 and above	3.17			
Year Level	1st Year	3.10	t= -1.06	0.29	Accept H ₀
	2nd Year	3.20			
Physical Activity	Never	2.85	f= 14.25	0.00	Reject H ₀
	Seldom (1-2x/week)	2.97			
	Often (3-4x/week)	3.34			
	Regular (Daily-5x/week)	3.40			
Health Status	Occasional issues	3.22	t= 3.84	0.00	Reject H ₀

Table 6. Relationship between Assessment of Physical Health and Health Promotion Programs

		Institutional support and policy quality	Program design and intervention methods	Community and environmental support	Overall	Interpretation	Decision
Physical health status	Pearson <i>r</i>	0.59	0.63	0.63	0.64		
	Sig.	0.00	0.00	0.00	0.00	Significant	Reject H ₀
Health-related habits	Pearson <i>r</i>	0.53	0.61	0.62	0.61		
	Sig.	0.00	0.00	0.00	0.00	Significant	Reject H ₀
Health cognition and awareness	Pearson <i>r</i>	0.48	0.55	0.56	0.55		
	Sig.	0.00	0.00	0.00	0.00	Significant	Reject H ₀
Accessibility and utilization of health promotion programs	Pearson <i>r</i>	0.58	0.66	0.64	0.65		
	Sig.	0.00	0.00	0.00	0.00	Significant	Reject H ₀
Overall	Pearson <i>r</i>	0.60	0.68	0.68	0.68		
	Sig.		0.00	0.00	0.00	Significant	Reject H ₀

surroundings—peer networks, accessible facilities, and safe spaces—encourage health-supportive behaviors. This aligns with the Ecological Model of Health Promotion and national directives that emphasize community participation and built-environment design in sustaining active lifestyles (WHO, 2021; State Council of China, 2019; Li *et al.*, 2023). Program design and intervention methods followed closely ($M = 3.30$, $SD = 0.48$). Respondents rated existing programs as structured and inclusive, suggesting the presence of coordinated initiatives that integrate physical, cognitive, and emotional dimensions of student wellness—an approach consistent with evidence-based models of comprehensive health promotion (Gao *et al.*, 2024; Chen & Wang, 2023; Yin *et al.*, 2023). Institutional support and policy quality yielded the lowest, though still positive, mean score ($M = 3.27$, $SD = 0.50$). This indicates that while policies and administrative directives exist, gaps remain in terms of policy clarity, communication, and implementation. Previous studies note similar patterns, where institutional intentions do not always translate into student-level engagement due to limited visibility or inconsistent execution (Liu & Chen, 2021; Zhou & Li, 2020). Generally, the composite mean ($M = 3.29$, $SD = 0.46$) suggests that students view the institution's health promotion efforts as generally effective. The results depict a relatively balanced system in which environmental conditions, structured programs, and policy frameworks operate together to support wellness, aligning with integrated physical-medical promotion models seen in both national and international frameworks (Qian, 2018; WHO, 2021). Hence, strengthening administrative involvement and refining policy communication may further reinforce a more coherent and student-centered health promotion culture. The results of Table 3 indicate that demographic characteristics exert varying degrees of influence on students' perceptions of institutional health promotion efforts. Across sex and age groups, no statistically significant differences emerged in the evaluation of institutional support, program design, or community and environmental support, suggesting that existing initiatives are implemented in a generally equitable manner. These findings align with national and international frameworks emphasizing inclusive, population-wide access to school-based health promotion (WHO, 2021; State Council of China, 2019). Year level similarly showed limited effect, with first- and second-year students demonstrating comparable assessments across most domains. A marginal but significant difference was observed only in program design and intervention methods, where second-year students reported higher ratings. This pattern is consistent with research indicating that sustained exposure to institutional systems enhances program familiarity and perceived responsiveness (Seo *et al.*, 2022; Chen & Wang, 2023). In contrast, physical activity level was a significant determinant across all domains. Students who reported regular or frequent physical activity consistently evaluated institutional support, program design, and environmental factors more positively than those who seldom or never exercised. These differences reflect the reciprocal relationship between behavioral engagement and perceived institutional efficacy described in ecological and behavioral health models (Chen & Hu, 2021; WHO, 2021). Active students are more likely to utilize and recognize available resources, leading to more favorable evaluations of institutional efforts (Gao *et al.*, 2024).

Health status also produced significant variation. Students with occasional health concerns rated all domains more positively than those experiencing multiple or frequent risk conditions. This finding corresponds with studies demonstrating that individuals in better health encounter fewer participation barriers and tend to perceive wellness initiatives as more accessible and effective (Li & Wang, 2021; Zhou & Li, 2020). Conversely, those with recurring health issues may experience environmental or structural constraints that diminish perceived program utility (Yin *et al.*, 2023). The results suggest that while institutional wellness efforts are broadly inclusive across sex, age, and year level, students' physical activity levels and health status substantially shape perceptions of effectiveness. These findings underscore the need to reinforce support for less active students and those with persistent health concerns to ensure that institutional health promotion initiatives reach all segments of the student population, consistent with the integrated and equity-oriented objectives of Healthy China 2030 (State Council of China, 2019; Qian, 2018). Table 4 summarizes students' self-assessment across four domains of physical health, habits, and awareness. The overall mean score of 3.19 ($SD = 0.56$) reflects generally satisfactory wellness behaviors and perceptions among respondents. Health cognition and awareness obtained the highest rating ($M = 3.30$, $SD = 0.61$), indicating that students possess a solid understanding of health concepts and the value of informed decision-making. This pattern aligns with recent studies showing that contemporary college students demonstrate relatively strong health literacy, even as many continue to struggle with translating knowledge into sustained behavioral change (Chen & Hu, 2021; Gao *et al.*, 2024). Accessibility and utilization of health promotion programs followed ($M = 3.21$, $SD = 0.65$), suggesting moderate institutional support for student wellness. Prior literature notes that program effectiveness is often contingent upon clear communication, visibility, and active engagement strategies, which may influence students' ability to fully utilize available services (Wang *et al.*, 2022; Li & Wang, 2021). Health-related habits ($M = 3.13$, $SD = 0.61$) ranked third, reflecting students' attempts to maintain balanced routines in exercise, rest, and lifestyle management, albeit with varying consistency. Similar findings have been documented in studies linking academic workload, irregular schedules, and digital sedentary behaviors to uneven adherence to healthy practices (Dong *et al.*, 2023; WHO, 2021). Physical health status received the lowest mean ($M = 3.12$, $SD = 0.60$), indicating that while students view themselves as generally healthy, they also report experiencing intermittent fatigue, reduced stamina, or occasional symptoms. This observation is consistent with national reports highlighting declining physical fitness across Chinese college populations despite growing awareness of health benefits (Ministry of Education PRC, 2020; Yin *et al.*, 2023). In general, the results suggest a student population with commendable awareness but uneven habits and variable physical health. Strengthening structured wellness programs, reinforcing preventive care, and expanding opportunities for regular physical activity align with the Healthy China 2030 agenda and the Health Promoting Schools framework, both of which call for integrated institutional strategies to cultivate long-term student well-being (State Council of China, 2019; WHO, 2021). Based on Table 5, students tended to view their physical health,

habits, and awareness in broadly similar terms across demographic groups, suggesting that the shared academic setting, institutional culture, and campus routines exert a stronger influence on their wellness perceptions than individual characteristics. Sex-related comparisons show that males and females assess their physical condition and daily habits almost alike, yet females consistently reported higher health awareness and greater engagement with wellness programs. This pattern echoes earlier findings that women are generally more attentive to preventive information and more responsive to health education efforts (Chen & Hu, 2021; WHO, 2021), indicating the need for strategies that encourage stronger participation among male students. Age comparisons revealed the same uniformity. Students aged 20 and below assessed their health and habits much like their older peers, suggesting that exposure to the same schedules, digital behaviors, and campus pressures tends to neutralize age differences in self-perceived wellness (Wang *et al.*, 2022; Yin *et al.*, 2023). Year level produced a similar outcome: first- and second-year students reported nearly identical evaluations across all domains, pointing to the stability of wellness perceptions across academic progression and reflecting the consistent delivery of institutional health programs throughout year levels. Physical activity level showed clearer trends—students who exercised often or regularly consistently rated themselves higher in all domains than those who exercised rarely—but these differences did not reach statistical significance.

This reinforces the view that while activity contributes to better self-assessed health, it is only one component in a broader mix of factors that include sleep quality, stress, diet, and academic workload (Li & Wang, 2021; Dong *et al.*, 2023). Health status was the only variable that consistently and significantly differentiated student responses. Those experiencing only occasional health issues assessed themselves as healthier, more consistent in their habits, more aware of health information, and more engaged in institutional programs than peers with multiple or frequent conditions. These findings align with evidence showing that persistent health problems can constrain participation and shape perceptions of well-being in meaningful ways (Gao *et al.*, 2024). Students managing recurring conditions may face barriers—physical, psychological, or logistical—that limit their ability to benefit from standard wellness initiatives. Generally, results suggest that while demographic distinctions such as sex, age, and year level produce only minor variations in self-assessed wellness, health status significantly shapes how students perceive their physical well-being and engagement with health behaviors.

These insights affirm the value of broad, campus-wide wellness strategies while underscoring the need for tailored support systems that address the specific challenges faced by students with ongoing health concerns, which also aligns with the ecological understanding of health behavior and supports the call for inclusive, equitable health promotion within educational institutions. Table 6 reveals that all computed Pearson *r* values, ranging from 0.48 to 0.68, indicate a moderate to strong positive correlation between the respondents' assessment of physical health and the effectiveness of health promotion programs. Since all *p*-values (0.00) are lower than the 0.05 significance level, the relationships are statistically significant, leading to the rejection of the null hypothesis (H_0) in all domains. The results above implies that as institutional support, program design and community and environmental initiatives improve, respondents also report higher levels of physical health, better habits, and greater awareness. The strongest correlation is found under Program Design and Intervention Methods ($r = 0.68$), which, in turn, suggests that well-structured and engaging health initiatives have the greatest impact on students' overall wellness. Wang *et al.* (2022) and Gao, *et al.* (2024), who both emphasized that comprehensive and inclusive health programs significantly enhance student participation, physical well-being, and preventive behavior. In implication, the findings show the importance of continuously strengthening institutional and community-based health promotion efforts. Schools should invest in clear policies, innovative and inclusive program designs, and supportive environments that reinforce healthy routines and awareness among students. Such integrated strategies reflect the

Health Promoting Schools framework (WHO, 2021; State Council of China, 2019), which advocates a holistic approach where education, environment, and engagement collectively contribute to sustained student wellness.

DISCUSSION

The results of the study reveal a student population that is generally aware of health principles yet continues to struggle with the consistency required to sustain healthy routines. Awareness, while present, has not fully translated into practice. This gap between knowing and doing surfaced repeatedly across domains, whether in exercise, sleep, diet, or participation in wellness programs. The finding is not surprising; college students often juggle academic demands, shifting schedules, and psychosocial pressures that complicate the adoption of stable lifestyle habits. What emerges clearly, however, is that the institution plays a decisive role in whether students can move from intention to action. Students viewed existing health promotion efforts positively, but the relatively modest scores on institutional support show that policy clarity and administrative visibility remain areas for improvement. Programs are functioning and appreciated, yet without stronger leadership direction, their long-term sustainability is at risk. Existing patterns across demographic groups reinforce this point. Differences by sex, age, and year level were minimal, suggesting that the broader campus environment, including its rhythms, constraints, and opportunities, shapes wellness more powerfully than individual characteristics. What mattered more were students' own activity levels and health status. Those who were physically active or generally healthier evaluated institutional programs more favorably, indicating a reciprocal relationship: participation enhances perception, and positive perception encourages continued engagement. The contrast is sharp for students with frequent or recurring health concerns as they consistently reported lower ratings across all domains, underscoring the barriers that chronic conditions create in accessing and sustaining wellness behaviors. While the institution's programs appear inclusive in design, the results suggest that equal access does not always translate to equal benefit. These students, hence, require more adaptive, flexible, and supportive mechanisms within health promotion systems. Taken together, these findings also highlight an overarching principle: effective health promotion in higher education cannot rely solely on information dissemination. It must create structures that make healthy behaviors easier, more accessible, and more integrated into daily academic life. Students already have the foundational awareness; what they need is an environment that helps convert that awareness into lived practice. In addition, strengthening institutional policy is a critical starting point. Clear frameworks, defined responsibilities, and consistent administrative backing ensure that health initiatives do not depend on individual champions but are embedded within the institution's operational culture. Complementing policy, wellness programs must focus intentionally on behavioral change, namely goal setting, progress tracking, and personalized feedback, to help students build habits that persist beyond momentary motivation. Year-level-specific programming can further ensure developmental relevance, from foundational health literacy for new students to stress management and resilience-building for upper years.

Campus life itself must model and reinforce healthy routines through integrating balanced meal schedules, sleep education, movement breaks, and campus-wide fitness opportunities into academic structures to help narrow the gap between what students know and what they are able to practice. Equally important is the creation of flexible, stigma-free support for students with recurring health conditions, as well as accessible counseling, adaptive fitness programs, and confidential support systems to ensure they are not left behind. Institutional research also plays an essential role. Regular monitoring and evaluation allow programs to evolve, to remain grounded in evidence, and to respond to the changing needs of the student population. When paired with collaborative leadership such as administrators, faculty, student affairs, health services, guidance offices, and student leaders working together, an institution can build

a coherent ecosystem of wellness rather than a collection of isolated initiatives. These insights shape the proposed Comprehensive Campus Health and Wellness Enhancement Program, which seeks to unite policy, practice, and community engagement into a single, student-centered framework. The program's objectives reflect the needs illuminated by the study: an integrated institutional foundation; evidence-based and behavior-focused interventions; inclusive wellness pathways for all students; strengthened habits in physical activity, nutrition, rest, and stress management; and a culture where students, faculty, and administrators share responsibility for promoting well-being. The specific objectives of this program are as follows:

- To establish a comprehensive, student-centered institutional framework that integrates policy, leadership, and collaboration for sustained health and wellness promotion.
- To design and implement evidence-based initiatives that move beyond awareness and effectively promote consistent, positive health behaviors among students.
- To provide inclusive and responsive wellness programs that address diverse student needs across year levels, health conditions, and personal circumstances.
- To strengthen students' lifestyle habits in physical activity, nutrition, rest, and stress management through structured, campus-integrated interventions.
- To foster a culture of shared responsibility and participation by empowering student leaders and building partnerships with faculty, staff, and community stakeholders.

Acknowledging the aforementioned points, as well as the proposed program, the discussion points toward a simple but demanding truth saying that student wellness flourishes in environments where healthy choices are supported and where institutional systems work in concert to transform knowledge into everyday habit. Grounding health promotion in policy, community, and lived student experience, universities can build a campus culture that sustains well-being far beyond the classroom and into later life.

REFERENCES

- Bull, F. C., Al-Ansari, S. S., Biddle, S., *et al.* (2020). World Health Organization 2020 guidelines on physical activity and sedentary behaviour. *British Journal of Sports Medicine*, 54(24), 1451–1462.
- Chaput, J. P., Willumsen, J., Bull, F., *et al.* (2020). 2020 WHO guidelines on physical activity and sedentary behaviour for children and adolescents aged 5–17 years: Summary of the evidence. *International Journal of Behavioral Nutrition and Physical Activity*, 17, 141.
- Chen, Y., & Wang, H. (2023). Health promotion models for college students: Integrating physical and medical care. *Journal of Public Health Policy*, 44(1), 12–25.
- Dong, X., Huang, F., Starratt, G., & Yang, Z. (2023). Trend in health-related physical fitness for Chinese male first-year college students: 2013–2019. *Frontiers in Public Health*, 11, 984511. <https://doi.org/10.3389/fpubh.2023.984511>
- Gao, D., Ma, Y., & Zhen, C. (2024). Development process of school health education since China's reform and opening up. *Chinese Journal of School Health*, 45(8), 1070–1074.
- Han, L. L., Wang, Y. Y., He, L. E., *et al.* (2020). The development experience of sports referral program in Britain and its implications for the integration of sports and medicine in China. *Journal of Xi'an Physical Education University*, 37(2), 137–144.
- Jiao, W., Li, X., & Zhang, L. (2021). Closed loop model of physical-medical integration health promotion in colleges. *International Journal of Sports Science & Coaching*, 16(2), 210–220.
- Jiao, W., Zhao, B., & Zhang, D. (2022). Research on new health promotion model of physical medicine integration in colleges and universities. In *Proceedings of the 12th National Sports Science Conference* (Rizhao, Shandong, China).
- Le, S., Lu, D., Xia, P., *et al.* (2015). Exploration of four-in-one sports health promotion model of “family, community, hospital and university.” *Journal of Beijing Sport University*, 38(11), 23–29.
- Liu, Y., & Chen, S. (2021). Challenges in applying physical health test results to promote student fitness. *Chinese Education & Health*, 29(3), 276–284.
- Ma, G., Liu, Y., Gao, B., *et al.* (2023). Physical medicine integration: Concept, integration path and guarantee mechanism. *Journal of Chengdu University of Physical Education*, 49(1), 97–103.
- Ministry of Education. (2014). Notice of the Ministry of Education on printing and issuing national physical and health standards for students (Revised in 2014). Government Portal Website of the Ministry of Education of the People's Republic of China. http://www.moe.gov.cn/s78/A17/twysleft/moe_938/moe_792/s3273/201407/t20140708_171692.html
- Ni, G., Deng, X., Xu, Y., *et al.* (2020). Research on the historical advancement and development path of physical medicine integration. *Journal of Beijing Sport University*, 43(12), 22–34.
- Pan, M., Ying, B., Lai, Y., *et al.* (2022). Status and influencing factors of physical exercise among college students in China: A systematic review. *International Journal of Environmental Research and Public Health*, 19(20).
- Peng, Y., Yang, J., & Yan, J. (2020). Research status of lifestyle and physical health of college students at home and abroad. *Chinese Journal of School Health*, 41(10), 1583–1587.
- Qian, L. (2018). The development and prospects of physical-medical integration in China. *Sports Science*, 38(3), 5–14.
- State Council of China / Xinhua News Agency. (2016, October 25). The outline of Healthy China 2030 plan issued by the CPC Central Committee and the State Council. China Government Net. http://www.gov.cn/zhengce/2016-10/25/content_5124174.htm
- Wang, T., Li, H., & Zhao, Y. (2022). Physical health trends in adolescents: A global perspective. *Journal of Adolescent Health*, 70(2), 185–192.
- Yin, J., Kong, L., & Cui, Y. (2023). Association analyses of physical fitness parameters and anxiety symptoms in Chinese college students. *International Journal of Environmental Research and Public Health*, 20(1), 623. <https://doi.org/10.3390/ijerph20010623>
- Zhang, Y., Hasibagen, & Zhang, C. (2022). The influence of social support on the physical exercise behavior of college students: The mediating role of self-efficacy. *Frontiers in Psychology*, 13, 1037518.
- Zhang, Y., Liu, X., Wang, Z., & Li, H. (2023). Effects of health education during public health emergencies on the health literacy, emotion, and coping style of Chinese junior middle school students: A randomized controlled trial. *BMC Public Health*, 23, 2187.
- Zhang, Y., & Wu, Y. (2022). Practice effect, dilemma and promotion strategy of body-medicine integration under Healthy China strategy. *China Sports Science and Technology*, 58(1), 109–113.
- Zhou, C., Xun, S., & Sun, J. (2019). Review on research status of physical and medical integration under the background of Healthy China construction. *Journal of Anhui Normal University (Natural Science Edition)*, 42(4), 395–399.
