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HEALTH AND PHYSICAL EDUCATION (HPE) AS AN EDUCATIONAL DISCIPLINE IN PAKISTAN: CONTEMPORARY ISSUES AND PROSPECTS

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ABSTRACT

Purpose of the study: This article reviews the importance of Health and Physical education (HPE) as an educational discipline in Pakistan: contemporary issues and prospects involved in the negligence of this important sphere of education which range from lack of interest of stakeholders in Pakistan. **Methodology:** Peer-reviewed and scholarly journals were searched for articles related to Health & Physical education program. **Keywords** included curriculum, physical activities, instruction, health and nutrition, carrier opportunities, guidance, teacher training because the review aimed to highlight the importance of HPE as an educational discipline in Pakistan and to address the prevailing issues and prospective improvement. **Findings:** The status of Health and Physical education as an academic discipline was discussed in the article. Among the comparison of the program in Pakistan with that of the others countries, a lack of awareness about the benefits and career opportunities for graduates of HPE is there. **Applications of this study:** Like other programs and projects, the HPE program aimed at the production of skillful youth who have comprehensive knowledge of the subject and also the practice. This study focused on only Health and physical education program but will help to bring positive change in the other discipline too and will facilitate the production of skilled youth in other academic programs. **Novelty/Originality of this study:** This review highlights the importance of the Health and Physical education program both at inter, BS (Bachelor of Studies), MS, & Ph.D. level and practical outcomes in the shape of physically, mentally, and emotionally fit graduates.

Keywords: Curriculum, physical activities, instruction, health and nutrition, carrier opportunities, guidance, teacher training

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INTRODUCTION

Health and physical education (HPE) is an important academic program that aims at promoting self-esteem, fitness, mental health, social development, and overall quality of life of children and adolescents (Laar et al., 2019; Kayani et al. 2020). HPE is given significant consideration in developed countries because academia and researchers in those countries are aware of the positive influence of the program on the wellbeing of students and the general public. In Pakistan, however, this important academic discipline has been ignored for a long time (Sarwar et al. 2010). Although HPE programs are taught at undergraduate and graduate levels in different academic institutions of the country, the perceived outcomes of the program are not satisfactory because of the negligence, and lack of interest from parents, students, and educational stakeholders. At bachelor levels, HEC has introduced a 4 year BS program at higher education institutions which provides a sound background for students to understand the importance of HPE and its role in physical fitness, social development, and carrier outlooks. Four year BS program is currently offered at both college and university levels of the country. In this review, the importance of HPE at BS, MS, and Ph.D. level in Pakistan, prevailing issues, and prospective improvement are discussed.

HEALTH AND PHYSICAL EDUCATION (HPE): GENERAL SIGNIFICANCE

Physical education (PE) is an educational discipline focusing on the physical, mental, behavioral, and social development of students through instructional methods and practical manipulations. Participation of students in physical activities and health-related exercise develop their physical, mental, and emotional health which undoubtedly contribute to their academic progress (Iqbal and Rashid, 2017).

From theoretical and empirical perspectives, the significance of HPE in students' wellbeing is well established. HPE as an instructional discipline is based on a structured curriculum that provides basic knowledge about the human body, its improvement, and requirements. Major emphasis is given to physical activities such as exercise, sport and games, dancing, and several other health-related activities (Fig. 1). Physical education and other activity-intervention programs at schools, communities, and hospitals are regarded as influential factors in controlling obesity by maximum utilization of metabolic fuels of the body (Goran et al., 1999). Biddle et al. (2004) asserted that a healthy lifestyle is related to regular participation of the individual in physical activities for which foundations are provided by HPE. Gil (2020) debated that students in their lifespan are disposed to several types of physical risks and health disorders

like obesity, diabetes, cardiovascular, and blood pressure problems by overlooking the role of physical education and not participating in physical activities. O'Donovan et al. (2020) stressed educating people at earlier life course to prevent them from mental disorders such as dementia and Alzheimer's in their later stages of life.

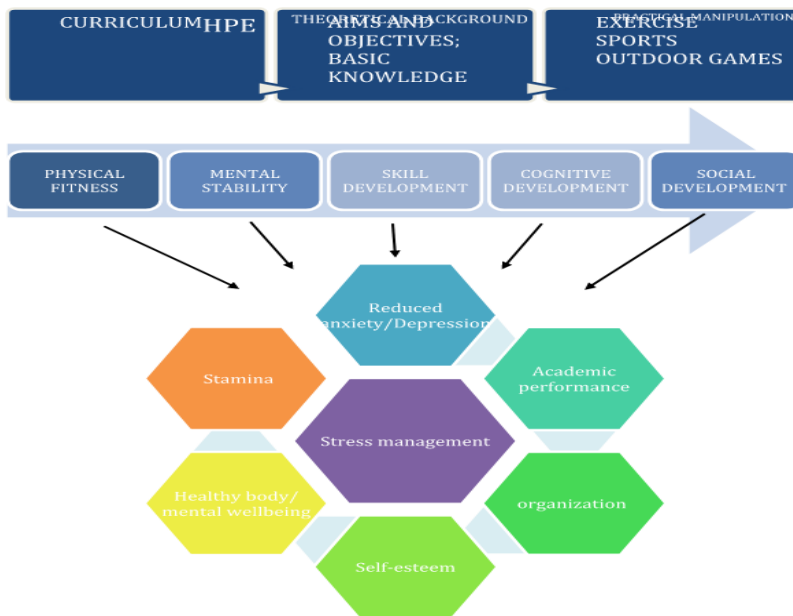


Fig.1. An illustration of Health and Physical Education program on different developmental aspects of students

Empirical studies suggest a multitude of roles of HPE in promoting students' physical and psychological health and reducing their risk of developing serious diseases. Slemenda et al. (1991) associated the role of HPE and participation of students in physical activity accompanied by taking Ca-supplementation for six months to improved skeletal development. Haugland et al. (2003) outlined that HPE and physical activity corresponded to reduced academic stress and health-related complaints in students. Dirajlal-Fargo et al. (2016) pointed towards the efficacy of physical activity on reducing mortality rate and inflammation problems in HIV patients. In a recent study, Maugeri et al. (2020) revealed that regular physical exercises during COVID lockdown in Italy contributed to significantly improve the physical and mental health of subjects.

METHODOLOGY

For structuring and organizing this article, a literature survey was conducted to collect relevant information about the program of Health and Physical education as a discipline. Peer-reviewed and scholarly journals were searched for articles related to HPE and its importance. Major databases such as Google scholar, PubMed, NIH Library, and Elsevier were searched for articles by entering the keywords. A total of 30 journal articles indexed in Scopus and Web of Science (WoS) were selected for this review. Articles on the importance of health and physical education were particularly focused because the review aimed at recognition of Health and physical education as an important educational discipline in Pakistan.

REVIEW DISCUSSION

HPE as an Educational Discipline in Pakistan: Challenges and Prospects

In the US, health and physical education are regarded as influential academic programs that promote physical activities among children and adolescents and have historical perspectives regarding public health and education (Tappe&Burgeson, 2004). In Europe, access to HPE is considered a basic human right, and the program is supported and promoted by the governments and several other agencies to manipulate its influences on public health (Hardman, 2003). In Singapore, the government shows its commitment to provide physical education to every student, and its national curriculum is designed to promote knowledge, skills, games, and a healthy lifestyle among students (McNeill & Fry, 2010).

In Pakistan, HPE (alternatively called physical education) is included in schools and colleges as a curricular subject but mostly optional. In government-run schools below secondary and higher secondary level, HPE is not offered as a subject rather as a co-curricular activity which is mostly monitored by untrained and low-level qualified teachers (Sarwar et al., 2010). At higher secondary schooling and college level, HPE is included as an optional subject. At the university level, only 18 universities in the country offer a master's degree in HPE (Bashir et al., 2017). Recently, many colleges in the country have introduced 4 year BS degree.

In Pakistan, the situation is unsatisfactory regarding the promotion of HPE as an educational subject and is widely neglected. Haider (2008) pointed out the main causes of the negligence of HPE in Pakistan are lack of awareness, expertise in the field, infrastructure, and financial resources. Sarwar et al. (2010) concluded in their study that the non-availability of funds, space, and sports facilities at secondary schools, and lack of interest of teachers hindered the progress of physical education.

In Pakistan, other disciplines such as natural, social, and applied sciences have

been popularly portrait as career-building fields which overshadow the significance of HPE, and hence students preferably choose those disciplines because they see career opportunities in them. In part, educational stakeholders tend to consider HPE less important than other fields of education. The reasons for not giving due weightage to HPE as an educational discipline as compared to other academic disciplines are because educational stakeholders foresee the limited role of HPE in national economic development. Educational policymakers ignore the fact that despite significant contributions of other educational disciplines (medicine, engineering, natural, and other social sciences), the country also needs socially developed, motivated, skilled and healthy individuals who could be produced by HPE. The HPE graduates can play a dynamic role in national economic and social development by utilizing their potentials.

Besides these barriers, if properly addressed the pertinent issues, HPE as an educational discipline has a bright future for both graduates and national economic and capital development. There is a dire need to readdress the issues and barriers pertinent to HPE on a priority basis. The educational stakeholders and policymakers should streamline the following recommendations:

1. Recognition of HPE as an important educational discipline.

In Pakistan, several educational programs are taught at schools, colleges, and universities. Higher education is generally confined to postgraduate colleges and universities although, in recent years, degree colleges have also introduced bachelor of studies (BS) programs in some disciplines. Considerable importance is given to some educational disciplines such as medicine, engineering, law, business studies, etc. These disciplines are considered by policymakers as the leading drivers in national economic and manpower development. Being considered important contributors, proper funding and infrastructure are provided at institutes for the effective running of these disciplines.

Monitoring, Revision, and Rationalization of the Curriculum

Monitoring, revision, and up-gradation of any educational discipline according to society's needs are inevitable processes because an obsolete curriculum could lead to many developmental drawbacks in the prospective graduates. Rossi et al. (2009) stated that the curriculum of HPE in most of the developed countries and Australia is regularly guided, monitored, and revised according to the needs of their societies. In an article entitled "Physical Education: What Future(s)?" Penney & Chandler (2000) described in detail about future prospective of physical education. They argued that societies and their needs are changing

with time and therefore suggested that the curriculum of health-related physical education must be transformed, updated, and restructured according to the needs of the 21st century. In Pakistan, HEC has taken a positive initiative to revise curricula of major educational subjects including HPE; however, focus on only revising the curriculum will not bring the required outputs. To raise the standard of the program, its contents must be compared to international curricula and domestic needs must be taken into consideration. Besides regular revision and up-gradation of the curriculum, proper implementation in its actual form is also necessary which of course require substantial financial, infrastructural, and human resource input.

2. Collaboration Among Educational Institutes and Sport Organizations

The provision of practical opportunities to any field of study is a prerequisite for bringing excellence in the specified field. Medical institutes are affiliated with hospitals and health organizations where medical graduates get exposure to practical manipulation of what they study in their designed curriculum. Similarly, law schools have collaboration with judicial complexes, business graduates have opportunities to strengthen their practical knowledge through entrepreneurship in corporate industries. Likewise, the establishment of linkages among educational institutions which offer HPE with sports organizations is crucially necessary for sharing theoretical and practical knowledge.

3. Promotion of Research Culture in HPE Programs

Research is vital to bringing innovation and new ideas. Educational disciplines flourish and attain the high status of recognition through creativity and research activities. The dearth of research in any discipline will stagnate the existing status of an educational program and will slab ways for the introduction of prospective innovation and excellence. HPE as a discipline is the combination of medical, physical, and social sciences. Improvement and excellence in HPE are strongly linked with the identification of strengths and weaknesses of the discipline which depends on elaborative research in the field. Bashir et al. (2016) revealed a discouraging situation of educational institutes stating that throughout the country only one university offered the Ph.D. program in HPE. At BS level, HPE is concluded in eight semesters covering the theoretical and practical framework of the subject. In the seventh semester, research is optional, and mostly optional papers are taught. This indicates the lack of interest in research in that important field of education. There arises a great need for introducing research as a mandatory component of the HPE

curriculum. Moreover, universities and higher education institutes should offer a maximum number of research degree programs (M.Phil. and Ph.D.) in HPE.

4. Introducing Innovative Technologies

In HPE the use of computers and nontraditional technology has been advocated in several studies. Papastergiou (2009) concluded in a comprehensive review that the use of computers and electronically interacted games had a positive impact on knowledge, skills, motivation, and behavioral improvements in students of HPE. Devecioglu et al. (2012) pointed out that specially designed sport wears reduces the risk of injury during exercise, the use of computers, multimedia, and sound technology improve class efficiency and discipline and bring positive outcomes in HPE related activities. In many other studies and commentaries, experts in the field of health-related physical education have emphasized the use of computers, digital technology, information, and communication technology in HPE and they attributed the manipulation of such technology to advanced learning potentials of students and overall efficiency of HPE outcomes (Clarke, 2008; Dureja and Bal, 2012; Jennifer and Krause, 2019; Su and Zhou, 2020). In Pakistan, financial problems and lack of attention of the stakeholders have overlooked the importance of innovative technologies as an integrated part of the HPE curriculum and there is a very limited application of such technologies in the subject. Keeping in view the important contributions of modern technologies, policymakers should give attention to the integration of computers, information and communication technology, digital sport and physical fitness techniques, and digitally monitored assessment in the HPE curriculum. The integration of innovative technologies will optimize the subject status and outcomes of the HPE program.

5. Influential Role of HPE Teachers in Reforming The Discipline

The role of HPE teachers in delivering effective messages regarding physical activities and scholastic aspects of the subject matter is immensely important because they can enhance students' perceptions about their health and the subject (Tilga et al., 2019). Ha, et al. (2004) identified the professional development of HPE teachers as a core component in reforming and improving the subject curriculum. They presented the example of the HPE curriculum in Hong Kong where teachers and administrators sought different developmental opportunities through in-service training programs. Armour and Yelling (2007) proposed that continuous development in the professionalism of HPE teachers was necessary for improving the quality and standards of students, and also had a positive impact on the subject. They further argued that the government took

the strong initiative to change the HPE curriculum from a skill-oriented domain to a broader health-oriented one through teacher development programs. To improve the quality and standard of HPE in Pakistan as compared to developed countries, professional training and systematic development of teachers are profoundly needed. Regular training programs and refresher courses with the collaboration of expert agencies should be offered to HPE teachers providing the opportunities to enhance their intellectual skills. It is also recommended that skilled and professional subject experts who have availed professional development opportunities should be included in designing the curriculum. From highly skilled and intellectual professionals a standard and reformed HPE curriculum is expected.

CONCLUSION

Physical education, health, and physical education, and sport sciences are almost similar terms widely used to describe educational discipline concerned with health improvement, physical fitness, psychological wellbeing, and acquisition of motor skills, cognitive and social development of students. The importance of HPE in producing skilled manpower, intellectuals, and athletes is recognized throughout the world besides its significant role in reducing the prevalence of some health disorders like obesity, diabetes, high blood pressure, and cardiovascular problems. In Pakistan, HPE is offered at school, college, and university levels; however, the subject has been poorly acknowledged as an academic discipline. Several factors are responsible for the negligence of HPE as a discipline at educational institutes. Lack of interest of educational stakeholders, budgetary issues, limited availability of infrastructure and human resources, drawbacks in curriculum, and lack of awareness among youth about the significance of HPE are important barriers in the progressive development of HPE as an educational discipline. To promote HPE as an educational discipline and give it a status equivalent to other educational disciplines, drastic measures are to be taken by policymakers. Educational institutions should be facilitated to promote HPE by providing financial, infrastructural, and human resources. To improve the standard and quality of the discipline, the curriculum needs comprehensive revision and regular monitoring by integration of modern technologies and research components into HPE. Focus is needed on the professional development of teachers and the establishment of collaboration of educational institutes and sports/health organizations. Improvement and standardization of the HPE curriculum will yield competent graduates who will play their active role in the economic and social development of the country.

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AUTHORS CONTRIBUTION

This manuscript is a part of the Ph.D. thesis of Mr. Zafar Iqbal. Mr. Zafar Iqbal designed and executed the study. Mr. Rahim Khan supervised and organized this research. Mr. Abdul Wadood reviewed the literature. Mr Javeed khan surveyed the literature sources.

REFERENCES

- Armour, K. M., & Yelling, M. (2007). Effective professional development for physical education teachers: The role of informal, collaborative learning. *Journal of teaching in physical education*, 26(2), 177-200.
- Bashir, A., Abro, A. A., Anwar, S., & Ali, M. (2017). A State Of Physical Education And Sports In Pakistan: A Critical Analysis On Lack Of Infrastructure And Framework In Pakistani Institutions. *The Shield-Research Journal of Physical Education & Sports Science.*, 11.
- Biddle, S.J.H., Gorely, T., & Stensel, D. (2004). Health-enhancing physical activity and sedentary behavior in children and adolescents. *Journal of Sports Sciences*, 22, 679–701.
- Clarke, N. (2008). Information and communications technology in physical education: innovative teaching and learning approach. In *Creative Approaches to Physical Education* (pp. 108-123). Routledge.
- Devecioglu, S., Sahan, H., Tekin, M., & Yildiz, M. (2012). Development of innovative strategies for sports education. *Procedia-Social and Behavioral Sciences*, 46, 445-449.
- Dirajlal-Fargo, S., Webel, A. R., Longenecker, C. T., Kinley, B., Labbato, D., Sattar, A., & McComsey, G. A. (2016). The effect of physical activity on cardiometabolic health and inflammation in treated HIV infection. *Antiviral therapy*, 21(3), 237.
- Dureja, G. & Bal, B. (2012). Hawkeye: logical innovative technology use in sports for effective decision making. *Sport Science Review*, 21(1-2), 107-119.
- Gil, P, "The Importance of Physical Education to Students Health and Academics" (2020). *Capstone Projects and Master's Theses*. 758.
- Goran, M. I., Reynolds, K. D., & Lindquist, C. H. (1999). Role of physical activity in the prevention of obesity in children. *International journal of obesity*, 23(3), S18-S33.

- Haugland, S., Wold, B., &Torsheim, T. (2003). Relieving the pressure? The role of physical activity in the relationship between school-related stress and adolescent health complaints. *Research quarterly for exercise and sport*, 74(2), 127-135.
- Ha, A., Lee, J., Chan, D., & Sum, R. (2004). Teachers' perceptions of in-service teacher training to support curriculum change in physical education: The Hong Kong experience. *Sport, Education, and Society*, 9(3), 421-438.
- Haider, S. Z. (2008). Challenges in higher education: Special reference to Pakistan and South Asian developing countries. *Nonpartisan education review*, 4(2).
- Hardman, K. (2003). School physical education and sport in Europe-rhetoric and reality: current and future perspectives. *Kinesiology: International Journal of fundamental and applied kinesiology*, 35(1.), 97-107.
- Iqbal, Z., & Rashid, A. (2018). ASSESSMENT OF THE PREVAILING BARRIERS IN PROMOTING PHYSICAL ACTIVITIES AMONG THE INTER-LEVEL COLLEGE STUDENTS OF DISTRICT PESHAWAR. *THE SPARK A HEC Recognized Journal*, 2(1), 82-89.
- Kayani, S., Wang, J., Biasutti, M., Zagalaz Sánchez, M. L., Kiyani, T., & Kayani, S. (2020). Mechanism Between Physical Activity and Academic Anxiety: Evidence from Pakistan. *Sustainability*, 12(9), 3595.
- Laar, R. A., Shi, S., & Ashraf, M. A. (2019). Participation of Pakistani Female Students in Physical Activities: Religious, Cultural, and Socioeconomic Factors. *Religions*, 10(11), 617.
- Maugeri, G., Castrogiovanni, P., Battaglia, G., Pippi, R., D'Agata, V., Palma, A., ...&Musumeci, G. (2020). The impact of physical activity on psychological health during the Covid-19 pandemic in Italy. *Heliyon*, 6(6), e04315.
- McNeill, M. C., & Fry, J. M. (2010). Physical education and health in Singapore schools. *Asia-Pacific Journal of Health, Sport and Physical Education*, 1(1), 13-18.
- O'Donovan, G., Hamer, M., Sarmiento, O. L., &Hessel, P. (2020). Education in early life markedly reduces the probability of cognitive impairment in later life in Colombia. *Scientific Reports*, 10(1), 1-8.
- O'Neil, K., & Krause, J. M. (2019). Physical Education Teacher Education Faculty Self-Efficacy toward Educational Technology. *Physical Educator*, 76(5), 1287-1305.

- Papastergiou, M. (2009). Exploring the potential of computer and video games for health and physical education: A literature review. *Computers & Education*, 53(3), 603-622.
- Penney, D., & Chandler, T. (2000). Physical education: what future (s)?: *Sport, Education, and Society*, 5(1), 71-87.
- Rossi, T., Tinning, R., McCuaig, L., Sirna, K., & Hunter, L. (2009). With the best of intentions: A critical discourse analysis of physical education curriculum materials. *Journal of teaching in physical education*, 28(1), 75-89.
- Sarwar, M., Hussain, S., & Mehmood, T. (2010). Physical education at secondary school level in Gujranwala, Pakistan. *Asian Social Science*, 6(11), 120.
- Slemenda, C. W., Miller, J. Z., Hui, S. L., Reister, T. K., & Johnston Jr, C. C. (1991). Role of physical activity in the development of skeletal mass in children. *Journal of bone and mineral research*, 6(11), 1227-1233.
- Tappe, M. K., & Burgeson, C. R. (2004). Physical Education: A Cornerstone for Physically Active Lifestyles. *Journal of Teaching in Physical Education*, 23(4), 281-299.
- Tilga, H., Hein, V., Koka, A., Hamilton, K., & Hagger, M. S. (2019). The role of teachers' controlling behavior in physical education on adolescents' health-related quality of life: Test of a conditional process model. *Educational Psychology*, 39(7), 862-880.