IMPACT OF PHYSICAL ACTIVITIES IN COGNITIVE DEVELOPMENT OF BASIC LEVEL STUDENTS IN UDAYAPUR DISTRICT

A Thesis

Submitted to the Physical Education Department in Partial

Fulfillment for Requirements of the Master's Degree in Physical Education

Submitted by

Mahesh Giri

Central Department of Education

Faculty of Education

University Campus

Tribhuvan University

Kirtipur, Kathmandu

July 2025

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Kirtipur, Kathmandu

2025

Submitted Date: July 22, 2025 **Viva Date: July 28, 2025**

DECLARATION

I hereby declare that, to the best of my knowledge, this thesis is my original work. This thesis's title and subject matter have not been previously submitted for any degree or qualification at any university, college, or other academic institution. Furthermore, the content and academic writing in this thesis is not copied or derived from any previously submitted research work. The research presented in this thesis is entirely my own and does not contain plagiarized materials from any previous research studies.

……..

Date: July 21, 2025 Mahesh Giri

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TRIBHUVAN UNIVERSITY
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RECOMMENDATION LETTER

This is to certify that Mr. **Mahesh Giri** has completed his thesis entitled **"Impact of physical activities in cognitive development of basic level students in Udayapur district"** under my guidance and supervision. This thesis report reflects his independent, diligent and original work conducted by the candidate himself. Therefore, I hereby recommend this thesis report to the Thesis Evaluation Committee of Physical Education Department for final evaluation and viva-voce.

_____

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CERTIFICATION

This thesis, entitled **"Impact of physical activities in cognitive development of basic level students in Udayapur district"** was prepared and submitted by **Mahesh Giri** for the partial fulfillment of the requirements of the master's degree in physical education and has been approved.

Thesis Evaluation Committee	**Signature**
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Viva Date: July 28, 2025

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I would also like to express my special thanks to the community schools of Udayapur district, especially to the Headmasters, Health and Physical Education teachers, and the students of the selected schools, for their active cooperation during the data collection process. Their willingness to participate and share their experiences made this research meaningful and practical.

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Mahesh Giri

ABSTRACT

This study, entitled "Impact of Physical activities in cognitive development of basic level students in Udayapur district", was conducted in the Udayapur Gadhi rural municipality of Udayapur district, Koshi province, Nepal. The objectives of this study were to find out the impact of physical activities in cognitive development of basic school students in Udayapur district, to evaluate the relationship between physical activities and cognitive development and to analyze the opinion of PE Teachers and Headmasters towards the association of physical activities with knowledge development.

This study was grounded in an explorative qualitative research design, the study utilized in-depth interviews to gather perspectives from twelve respondents, comprising six students (three boys and three girls), three health and physical education (HPE) teachers and three headmasters, selected through purposive sampling from three community schools within Udayapur Gadhi Rural Municipality.

The Findings revealed that physical activities significantly enhanced students' cognitive functions, including attention, memory retention, comprehension, and classroom engagement. Regular involvement in exercises also contributed to students' time management, self-discipline, emotional regulation, and development of positive social behaviors such as teamwork and cooperation. Both teachers and headmasters observed increased academic motivation and improved behavior among physically active students. However, challenges such as lack of facilities, undervaluation of physical education, and unstructured PE sessions hindered its full implementation.

Overall, the research emphasizes that balanced, structured, and well-supported physical education is essential not only for students' physical well-being but also for fostering cognitive and academic growth. It recommends policy support, teacher training, and improved infrastructure to integrate physical activity meaningfully into the school curriculum.

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Chapter 1: Introduction

Background of the Study

(WHO, 2009) defined Physical activity as any voluntary bodily movement formed by skeletal muscles that include energy expenditure. It denotes to all movement including during leisure time, for transport to get to and from places or as part of person's work.

In the early stages of human civilization, physical activities were primarily viewed as means of recreation and a way to sustain livelihood. Over time, however, these activities have evolved to play a vital role in the holistic development of an individual, promoting both physical fitness and mental well-being (Shephard, 1997). Moreover, physical activity has become an important instrument for social civilization, personal reputation, mobility, and quality of life (Kirk, 2010). Consequently, beyond providing recreation and enjoyment, physical activities serve as a powerful tool for achieving socio-economic progress, fostering global unity, and enhancing cognitive development (Hillman, Erickson, & Kramer, 2008).

Physical activities refer to any bodily movement that enhances energy use and improve health. It ranges from organized games and exercise to informal play. Scientific research has shown that physical activity stimulates the brain by increasing blood flow, enhancing oxygen supply, and boosting chemicals such as dopamine and serotonin which play key roles in learning and mood regulation. (Ratey, 2008). Brain-derived neurotrophic factor (BDNF), a protein released during movement, promotes brain plasticity- the brain's ability to adapt and learn (Diamond & Ling, 2016).

In recent years, physical activities and sports have been increasingly recognized as essential means to maintain health and well-being, gaining emphasis in schools, colleges, and universities worldwide. Diamond and Ling (2016) explain that physical activities help students develop a sound mind in a sound body by enhancing both physical and mental capacities. Similarly, Hillman, Erickson, and Kramer (2008) highlight that such activities increase blood flow to the brain and stimulate the production of brain-derived neurotrophins, which support neuronal growth, survival, and synaptic plasticity in the developing brain. These neurotrophins are crucial for maintaining neurons in regions responsible for learning, memory, and higher-order

cognitive functions (Cotman & Berchtold, 2002). As a result, students who regularly engage in physical activities tend to demonstrate improved memory and cognitive performance (Ratey & Loehr, 2011). The term “impact” refers to the strong effect or influence one factor exerts over another. In the context of educational development, this describes how physical movement can positively influence mental processes such as memory, attention, reasoning, and problem-solving (Diamond & Ling, 2016).

The term 'impact' refers to the degree to which one factor brings about noticeable change or influence in another. It highlights a cause and effect relationship where an intervention, condition, or activity leads to observable outcomes. Particularly in the field of education, impact is used to evaluate how different practices such as teaching methods, classroom activities or school programs affect students learning, behavior or development over time. It is not limited to immediate results but also includes long term effects that can be assessed through analysis, observation and comparison (Mertens, 2014)

Cognitive development is a fundamental aspect of childhood education. It includes the growth of abilities related to learning, remembering, analyzing, and making decisions. According to Piaget's theory of development, children develop these abilities progressively through active interaction with their environment. (Piaget, 1952)

Cognitive development involves the advancement of mental skills such as memory, attention, logical reasoning, and language use. These skills develop progressively as children grow and are shaped by various factors including biological processes, educational experiences, and interactions with the surrounding environment (Bjorklund & Causey, 2017). The basic school age typically 6 to 14 years is a key stage during which children develop essential intellectual abilities. Theories of development, such as those proposed by Piaget and Vygotsky, highlight that active engagement in meaningful activities enhances children's mental capacity (Piaget, 1972; Vygotsky, 1972). These theoretical foundations support the idea that physical and interactive experiences are critical for cognitive growth.

Childhood is an important and sensitive period in cognitive development. Many studies have shown the positive impacts of physical activities on the cognitive development of an individual. The cognitive advantages of physical activities can be

seen short term; directly after exercise and long term through improved academic grades and behavior. It also develops the abilities like thinking, building good memory, attention and focus, behaving positively etc.

Nowadays students only focus on their study; they will easily get stress, anxiety and others, which affect their mental and physical health. In which sports are the way that they can release their stress and forget about those things that make them bother of it. If students did not involve in physical activities, their brain can't function well on their performance and it make them feel tired because sport can help to improve their spirit. Many studies conducted in this area have highlighted how sport has an effect on cognitive development.

Modern education increasingly emphasized the need for holistic child development, recognizing that effective learning goes beyond classroom instruction. A growing body of research suggests that physical activity contributes not only to children's physical well-being but also to their cognitive growth. While academic achievement has traditionally been the main priority in schools' physical activities ranging from organized sports to informal play have shown promising results in supporting mental functions and learning abilities (Hilman, Erickson, & Kramer, 2008). This is particularly relevant during the basic education years, when children experience rapid mental development that forms the basis for future learning.

Engaging in physical activities has been found to positively influence children's mental development. As highlighted by Diamond (2015), exercises that involve active participation help enhance brain functions responsible for self-regulations, memory, and decision-making. These movements not only contribute to physical fitness but also neutral circuits link to learning and attention, suggesting that physical activity can effectively support overall cognitive benefits.

In rural regions like Udayapur district of Nepal, Physical activity often not prioritized in school environment due to limited resources infrastructure, or awareness. Nonetheless, incorporating even simple physical exercise or playful activities can positively influence students' brain development and academic performance. Encouraging physical movement in these schools could serve as practical and affordable approach to enhance educational outcomes. Thus, understanding the link between physical activity and cognitive development is

especially important for shaping policies and practices in regions with fewer educational advantages.

Statement of the Problem

There is no doubt that Physical activities and cognitive development are complementary to each other. Physical activities play vital role in the development of all-round aspects of an individual. Frequent participation in sport and physical activity encourages positive cognitive development in students, i.e.; developing and learning to use the core skills of the brain to think, read, learn, remember, reason and problem solve. It encourages the enhancement of brain function and cognition through increasing blood flow to the brain; increasing levels of norepinephrine and endorphins; and increasing growth factors that help create new nerve cells and support synaptic plasticity. (Lindsay & Byington, 2020; Vassilopoulos et al., 2023).

Even though Health & physical Education is contained within the basic education curriculum of Nepal, most public schools do not have a formally established the post for HPE teachers. This gap between curricular design and teacher's deployment has negatively affected the quality and consistency of HPE instructions. As a result, the subject is often taught by general teachers who may lack specific training in physical education or health related topics (Adhikari, 2024).

The absence of trained and specialized HPE teachers means that students are often deprived of essential knowledge and skills related to physical well-being, hygiene environmental care, and healthy lifestyles. Moreover, important components of the subjects, such as regular physical exercise, first aid, nutrition and safety practices are overlooked or superficially covered. This has made it difficult to meet the holistic development goals outlined in Nepal's Education Policy (Education International, 2024).

In addition to structural issues in schools, higher education institutions are also showing signs of declining support for HPE as a major subject due to declining students interests and institutional neglect. This further limits the production of qualified teachers in the subject area. Without a continuous pipeline of professionally trained educators, public schools are unlikely to receive the human resources needed to effectively implement the curriculum (Adhikari, 2023).

Furthermore, the broader problem of teacher shortage in Nepal- estimated at over 65,000 vacant teaching positions has forced the government to rely on temporary and underqualified staff. Within such a context, the appointment of subject-specific teachers for HPE remains a low priority (Education International, 2024).

Although, Health and physical Education (HPE) is included in Nepal's national curriculum, it continues to be under evaluated by many stakeholders, including students, teachers, parents and school administrators. A widespread belief exists that HPE is an easy subject, one that does not require much effort to pass. This perception leads many to treat the subject as less important than core academic areas such as Mathematics, Science, or English, which are commonly associated with better career prospects. As a result, student do not engage with HPE seriously, and teachers may not prioritize it during instruction. The problem is further compounded by the belief that HPE lacks strong employment opportunities. Unlike other subjects that lead to clear professional paths, HPE is perceived as offering little in terms of future job prospects (Adhikari, 2023)

This misunderstanding has led to reduce interest in HPE, even in teacher education programs. Several campuses have discontinued HPE as a major subject due to declining enrollment and lack institutional backing. In practice, although HPE is meant to be a practical, skill-based subject, it is mostly taught in a theoretical manner. Physical activities like sports, yoga etc. are neglected, mainly due to lack of trained teachers, inadequate facilities and insufficient time in allocation in school schedules. Consequently, student miss out on the real-life application of the subject which limits their physical, emotional, and social development (Adhikari, 2023)

In today's digital age, where children are often engrossed in screens and sedentary activities, the significance of physical activities for their overall development is not enough study. Regular exercise not only promotes physical health but also contributes to cognitive development of a child. All round development of any nation is possible only when it tries to change the existing concept and move forward. In foreign countries, Physical activities and sports have become a major business and attraction. Billions of dollars are spent on the flourishing professional and scholastic sports industry. Athletes can take a big leap in sports during their students' life. They practice sports in their day-to-day life. However, there could not have become the change in the perspective of Physical activities and sports in our

community. Our society is not liberal towards physical education and sports. While arguing about the impact of Physical activities in cognitive development of students, the outcome is usually against the Physical activities. It is believed that students who are more inclined towards sports and athletics becomes weaker in their academic pursuits because of poor development in cognition. In our society, most of children aren't allowed to involve in physical activities and sports as their choice due to the narrow mindset of their parents that sports create hindrance and obstacles in studies. Whereas some study argued that students should engage in Physical activities in order to become fit, healthy and to cultivate their brain. The diversity of such thoughts found in the community has a great impact on the development of sports.

Regarding this fact, the research would be conducted in the Community school of Udayapur Gadhi rural municipality of Udayapur district. What was the reaction of respondents towards the Impact of physical activities in cognitive development? What kinds of sports and physical activities were practiced there or haven't been practiced yet? Did involving in physical activities create an obstacle in the cognitive development of the students or not? Were there trained and specific teacher to teach physical education in school or not? Did school organize physical and sporting activities or not? Were they (students) getting support from the guardians to involve in physical and sporting activities? What kind of benefits has there seen in the cognition of students after the Physical activities? What improvements have been found in the result? These were the things to make curious the researcher to study about the topic named "Impact of Physical activities in cognitive development of basic school students in Udayapur district ".

Objectives of the Study

The major objective of this study is to analyze and find out the impact of Physical activities in cognitive development of basic school students in Udayapur district. However, the specific objectives of the study are as given below:

- To find out the impact of Physical activities in cognitive development of basic school students in Udayapur district,
- To evaluate the relationship between physical activities and cognitive development.

- To analyze the opinion of PE teachers and Headmasters towards the association of physical activities with knowledge development.

Significance of the Study

In the 21st Century, Physical activities have become fundamental things to everyone as it develops holistic aspects of an individual. Engaging in Physical activities offers plentiful benefits for children's overall development including Physical, social, emotional as well as cognitive. Not only that, it motivates students to achieve harder, raise educational ambition, can keep them attending school, can improve student's academic ranks, develops awareness the benefits of good health, exercise and fitness etc.

In the context of Nepal, no researches are conducted on the title, "Impact of Physical activities in cognitive development". Hence, this study is quite new and challenging one. Thus, the significance of the study will be as follow:

- This study would be helpful to the education planner, administrator to obtain information about the impact of Physical activities in cognitive development.
- The result of the study would be helpful to understand the importance and benefits of physical activities in cognitive development of school level children.
- The findings of the study would be assistive to enhance the existing condition of Physical activities linking with the cognitive aspects of students.
- The study would be assistive to provide basic guideline to the future researchers and scholars to convey and complete their research task.
- The finding of the study would be helpful to curriculum developer to develop HPE curriculum.

Delimitation of the Study

Every study has its own limitation. Therefore, the delimitations of the present research study are as given below:

- This study was conducted in Udayapur Gadhi Rural Municipality of Udayapur district.
- The study was delimited only in grade 7 (Basic level) students of three selected basic schools.

- Students, teachers and head teachers were taken as respondents for this research study.
- The study was conducted in both boys & girls students of grade 7 (Basic level) schools.

Operational Definition of the Key Terms

Civilization: The stage of human social development and organization that is considered most advanced.

Cognitive: The mental action of process of acquiring knowledge and understanding through thought, experience, and the sense.

Complementary: Combining in such a way as to enhance or emphasize the qualities of each other or another.

Dopamine: A type of neurotransmitter and hormone.

Flourishing: Developing rapidly and successfully in a healthy and vigorous way

Fundamental: Forming a necessary base or core; of central importance.

Hindrance: A thing that provides resistance, delay.

Incredible: Impossible to believe or difficult to believe.

Neurotrophins: Growth factors of brain and peripheral tissues.

Physical activity: Any bodily movement produced by skeletal muscles that requires energy expenditure.

Recreation: Any activity done for enjoyment.

Reputation: A widespread belief that someone or something has a particular characteristic.

Serotonin: A substances that is found typically in the digestive tract, central nervous system (brain and spinal cord), and platelets.

Chapter 2: Review of Related Literature

Review of related literature means the study of previously published materials related to the topic to be studied. It is a collection of brief details of the research related to the topic that has already been done by various people. Review of related literature is the most important and fundamental part of dissertation writing. It provides essential ideas, information and knowledge for the study to the researcher.

Theoretical Review

Yerkes and Dodson (1908) in their critical work, introduced the Arousal Theory, proposing that task performance is heavily influenced by physiological arousal levels, with an optimal level leading to the best outcomes. This theory implies that engaging in physical activities can heighten arousal levels, thus improving attention and readiness for learning. In Nepal, where activities like hiking, traditional sports, and cultural dances are prevalent, these pursuits can serve to elevate arousal. For instance, trekking in the Himalayas or playing volleyball can increase heart rate and enhance blood flow to the brain, contributing to heightened arousal. The correlation between optimal arousal levels and cognitive performance, encompassing attention, memory, and information processing, is significant within the Nepalese educational landscape. Moderate arousal levels are linked with better concentration, memory retention, and faster cognitive processing, essential for effective learning. Therefore, integrating physical activity into the Nepalese educational system can create an environment conducive to heightened arousal and enhanced cognitive abilities, ultimately fostering better academic outcomes.

Kohler (1925), in his theory "Theory of insightful learning" had emphasizes the holistic nature of problem-solving, suggesting that learners perceive problems in their entirety and apply their intelligence to find solutions. In the domain of physical activities and sports, athletes frequently experience breakthroughs in skill acquisition and tactical decision-making, aligning with Kohler's concept of restructuring understanding. Coaches play a pivotal role in facilitating environments that encourage creative problem-solving among athletes, thereby enhancing teamwork, decision-making, and mental preparedness. Furthermore, the application of Kohler's theory fosters intrinsic motivation and personal satisfaction among athletes, as they

independently grasp insights and overcome performance plateaus. (Sharma, C. & Sharma, N. 2073)

Piaget (1930), "Theory of cognitive development" presented that how kids experience differences between what they know and what they notice on their own. Children are well adapted at constructing their understanding of the world base on what they experience to develop a mental model of the world. According to Piaget, children actively construct knowledge by interacting with their surroundings. He emphasized that meaningful learning occurs when children engage directly with physical experiences, which help them form internal cognitive frameworks, or schemas. It is based on the idea that the emerging child builds cognitive structures or schemas for understanding and responding to physical experiences within his or her environment. Piaget further attested that a child's cognitive structure increase in sophistication with development, moving from a few innate reflexes such as crying, sucking highly complex mental activities. Since birth, the child has to struggle to survive and adjust in the environment. In concrete operational stage (ages between 7-11) child starts to conceptualize, creating logical structures that explains his or her physical experience. Through this effort, the intellectual capacity of the child is developed. (Sharma, C. & Sharma, N. 2073)

Pavlov (1936), "The classical conditioning theory" was developed by Russian psychologist. This theory associates an unconditioned stimulus that already results in a response with a new, conditioned stimulus. Consequently, the new stimulus brings the similar response. In sports, association between CS and UCS is essential as seen that athletes who have been conditioned well, get back to training fast. Similarly, in sports, in which dealing with emerging athletes, constant reinforcement or training is important as it increase the feeling of competition and learning rate of an athlete. Classical Conditioning can be used as a tool to train young aspiring athletes in learning different skills of games & sports.

Bandura (1962), "Social Learning Theory" provides valuable insights when applied to physical activities and sports. Athletes often acquire skills by observing and emulating others, including teammates, coaches, and professional athletes, honing their techniques through practice and feedback. Reinforcement and correction are integral to this process, with positive feedback fostering skill development and error correction. Additionally, self-efficacy, or belief in one's abilities, influences goal-

setting and perseverance. In team sports, social modeling extends to interactions among teammates, promoting mutual understanding and effective teamwork. Cognitive processes such as attention, retention, and motivation also play vital roles, with coaches fostering learning through engaging training methods and clear instructions. By harnessing Bandura's theory, coaches and athletes can optimize learning, enhance skill development, and ultimately improve performance in sports and physical activities.

Vygotsky (1978), "The social constructivism theory" offers a comprehensive framework for understanding the intricate interplay between social and cultural factors in the learning and development processes within the realm of physical activities and sports. This perspective emphasizes the significance of social interaction, cultural influences, and collaborative learning, particularly through the concept of the Zone of Proximal Development (ZPD), where individuals engage in tasks slightly beyond their current abilities with guidance from peers or coaches. Furthermore, the theory highlights the importance of scaffolding, teamwork, communication, and the utilization of cultural tools such as equipment and regulations, which shape the learning process within the social context. Additionally, Vygotsky's recognition of play as a facilitator of creativity, experimentation, and social development aligns with the vital role it plays in cognitive and social growth. Applying Vygotsky's theory in sports and physical activities provides educators and coaches with valuable insights to effectively support individuals in realizing their full potential while navigating these domains, promoting holistic development encompassing physical, social, cognitive, and emotional aspects, thereby fostering lifelong engagement and enjoyment in sports and physical activities.

Diamond, A. (2015), "Executive theory" emphasizes the crucial roles of physical activity in enhancing higher-order cognitive processes known as executive functions. These functions include working memory, cognitive flexibility, and inhibitory control, which are essential for goal-directed behavior, problem-solving and academic success. Diamond highlights that not all physical activities yield the same cognitive benefits; rather, activities that require coordination, strategic such as team sports, dance, or marital arts are particularly effective. These types of exercises challenge the brain to simultaneously manage multiple cognitive demands, improving attention control and mental flexibility. Through such complex physical activities, the

brain's neural networks related to executive function are strengthened, which supports children's overall cognitive development and learning capabilities (Diamond, 201

Empirical Literature Review

Thapa, K. K, (2015) had studied about "Parental attitude towards sports in Kirtipur Municipality". His main objective was to find out the attitude of parents of Secondary level students towards sports in Kirtipur municipality and to examine the level of sports attitude of the respondents. In this study, he used descriptive cum analytical research design and population of research were determined through purposive sampling method. Data were collected through Carl-attitude scale in 60 respondents of 10 government schools. He had used altogether 25 attitude statements involving 15 positive and 10 negative statements. As a result 33.33 % respondents strongly agreed, 28.66% respondents agreed 18.66% respondents were undecided, 11.55% respondents disagreed and 7.77% respondents felt strongly disagree towards all positive statements. Similarly, in negative statements, 15.83% respondents strongly agreed, 18% respondents agreed, 12.50% felt undecided and 27.50% disagree and 26.16% strongly disagreed. He concluded that the respondents held average level of positive level of attitude towards sports and physical Education.

Tamang, V. (2016) had conducted a research on "Present status and Prospect of sports in Ilam district". The main objectives of the study were to analyze the development trend of sports in Ilam district, to identify the prospect of sports in Ilam district. Employing a quantitative research design, he had collected data through questionnaires and observational methods. His findings revealed a notable gap: although coaches had received training from the National Sports Council (NSC), the absence of standardized courts and fields for various games hindered progress. Moreover, insufficient infrastructure and a lack of sports equipment underscored the challenges faced due to inadequate financial backing from stakeholders. Despite these limitations, the researcher observed a positive outlook towards games and sports in Ilam District.

Magar, D. B. (2017) had conducted a research on "physical activities and achievement of students in sports and games". The major objectives of this study were to find out the student's achievement in sports and to identify the problem of sports program. The researcher applied quantitative research design and data were collected

through questionnaire, interview and observation in two hundred twelve respondents including HPE students, subject teachers and head teacher of higher secondary school of Pyuthan district. The researcher found that, about 33.33% teachers and 66.67% students were satisfied from the sports program. Hence, the students' achievement in sports was satisfactory. Similarly, the researcher noticed that, the sampled schools had different problem; 66.67% schools had problem of Physical facilities, 83.3% schools had problem of manpower, management and administration, about 50% school didn't organize and participate any students in sports program. The researcher concluded that, the student's achievement in sports was satisfactory though the schools from the research site had no sufficient sports facilities.

Montecalbo-Ignacio R. and Buot M. (2017) conducted research on "Academic Achievement as influenced by Sports Participation in selected Schools in the Philippines" and concluded that there is indeed a strong connection between sports participation and academic achievement among student-athletes. Sports participation develops and enhances academic excellence and class participation of student-athletes. Sports involvement has a positive influence on memory, student concentration, learning efficiency, attainment of higher academic achievement, and obtaining higher school grades.

Bohora, M. B. (2018) had conducted a research on "Effectiveness of teaching physical education in Kathmandu district". The main objective of the study were to find out the effectiveness of teaching physical education in secondary level school in Kathmandu district and to find out the satisfaction of of students towards their subject and subject teacher. The researcher had used quantitative research design and applied purposive cum random sampling method while questionnaire and observation form were used as the data collection tools. It was found that, least number of teachers were from PE background, among them most of were untrained. About 85.33% students told that the teachers used lecture method and they teach without any lesson plan. Similarly, the researcher found that, 82.8% students were satisfied with their subject and subject teacher while 17.2% were unsatisfied. However, when comparing the educational achievement of student, the results were found satisfactory. At the end, the researcher concluded that, although, students' achievement was found satisfactory there was not efficient teaching learning activities due to unqualified teachers and weak result in students.

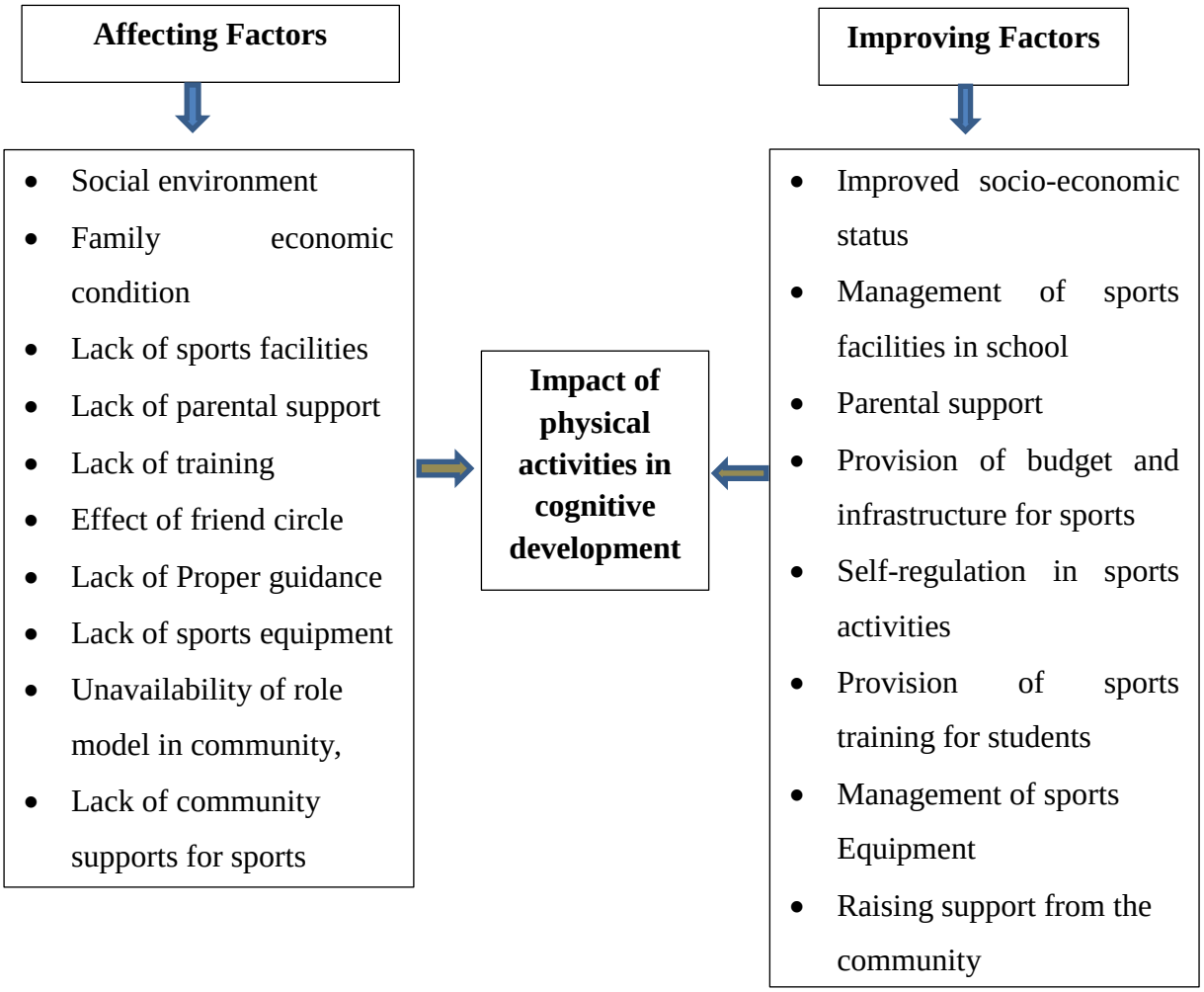
Zhao, G. and colleagues (2019) undertook a study on the "Effect of Physical Activity on Cognitive Development of Adolescents." The main purpose of the study was to examine the relationship between physical activities measured by accelerometers and cognitive development in adolescent boys. They applied a quantitative investigation method among 149 boys. T-tests and ANOVA were utilized to investigate the independent and dependent variables. The findings of the study indicated that physical activities are positively associated with cognitive function and academic performance.

Implication of Review for the Study

Implication of review provides foundation of knowledge on topic in which research is going to be held. The researcher has made strive to study some Theoretical, Empirical as well as related books to review the literature related to the study. The reviews would be very beneficial in selecting methodology, data collection tools and sample and in deciding the number of respondents for the study. Not only that, it would also be helpful to analyze the data, convey findings and various information related to dissertation writing.

After Reviewing of above-mentioned literature, the researcher has selected the title named "Impact of Physical activities in cognitive development of basic school students in Udayapur district", which is less prioritized in the field of dissertation writing.

Conceptual Framework



Chapter 3: Methods and Procedures

Research Design

This study is based on explorative qualitative research design. Data and information are derived through in-depth interview from selected respondents.

The main purpose of this study was to find out the impact of Physical activities in cognitive development of basic school students in Udayapur district. Therefore, this study was based on qualitative research design.

Sources of Data

The main sources of data are students, PE teachers and headmasters of community secondary schools of Udayapur district.

In this study, the data were collected through primary sources. The researcher visited the selected schools and gathered first-hand data, utilizing in-depth interviews as the main tool of data collection. Additionally, the school's students' results were utilized as secondary information.

Population and Sample

In this study, the researcher selected 3 community secondary schools out of 25 schools running basic level in Udayapur Gadhi Rural Municipality using a purposive sampling technique. These schools were chosen based on accessibility of the researcher and representativeness to ensure smooth data collection and relevant insights. Similarly, out of 67 students from grade 7 students enrolled in the selected schools, 6 students (3 boys and 3 girls) were purposively selected. This ensured gender balance and allowed the researcher to gather detailed qualitative information from a manageable group. Similarly, 3 physical education (PE) teachers and 3 head teachers from each selected school were also purposively chosen. This provided a comprehensive perspective on the research topic by including both educational and administrative viewpoints from the same school environment. Therefore, the total population of the study consisted of twelve (12) individuals. The detail sampling schools and the number of respondents are given below.

Table 1

List of sampled schools

S.N.	Name of School	Boys	Girls	Total
1.	Shree Janata Secondary School Dumre	1	1	2
2.	Shree Secondary school Jalkeni	1	1	2
3.	Shree Panchawati Secondary School Udaypur Gadhi.	1	1	2
Total		**3**	**3**	**6**

Source: Field study, 2082

Table 2

List of sampled teachers

S.N.	Name of Schools	Male	Female	Total
1.	Shree Janata Secondary School Dumre	1		1
2.	Shree Secondary school Jalkeni		1	1
3.	Shree Panchawati Secondary School Udaypur Gadhi.	1		1
Total		**2**	**1**	**3**

Source: Field study, 2082

Table 3

List of sampled Headmaster

S.N.	Name of Schools	Male	Female	Total
1.	Shree Janata Secondary School Dumre		1	1
2.	Shree Secondary school Jalkeni	1		1
3.	Shree Panchawati Secondary School Udaypur Gadhi.	1		1
Total		**2**	**1**	**3**

Source: Field study, 2082

Research Tools

In this study, in-depth interviews were used as the primary data collection tool to gather detailed insights from students, PE teachers, and headteachers. The questions were designed in an open-ended format to encourage thoughtful and elaborate responses. To guide the interview process, clear guidelines were prepared for each group of respondents. This approach helped ensure consistency and depth in the data collection process.

Standardization of the Tools

Primarily, data collection tools were made and reviewed before being finalized and applied as per the objectives of the study. Subsequently, these finalized open-ended questions were pre-tested among basic level students in community schools. Then the tools were finalized by the result of pre-test and following the guidance and recommendation of supervisor.

Data Collection Procedures

Initially, the researcher visited the three sampled schools of Udayapur district; Shree Janata Secondary School Dumre, Shree Secondary School Jalkeni, and Shree Panchawati Secondary School Udayapur Gadhi from 2082/03/12 to 2082/03/14, with a recommendation letter from the Department of Physical Education. Upon arrival, he requested the headmasters to allocate appropriate time and select participants for the data collection process. After receiving permission from the school administration, the researcher worked diligently to build rapport with all respondents. In-depth interviews were then conducted separately with each participant group; students, physical education teachers, and headmasters using open-ended questions following the guidelines for conducting in-depth interview designed for the study. The interviews were guided by ethical and methodological principles outlined by Carolyn Boyce in "Conducting In-depth Interviews". Guidelines of Carolyn Boyce to conduct in-depth interview are as follow:

- Purpose: Gather deep and personal insights into a person's views and experiences.

- Preparation: Select participants carefully and design flexible, open-ended questions.
- Interview Process: Build trust, listen actively, avoid leading questions, and record if permitted.
- After the Interview: Write down key observations, transcribe responses, and identify common themes.
- Ethical Practice: Maintain confidentiality and treat all participants with respect.

With consent, the researcher recorded the interviews using a mobile phone, supported by an assistant teacher from the respective schools. Important points were also noted in a diary for further analysis and interpretation. Each participant group was interviewed using distinct unstructured questions tailored to their role in order to gather rich, relevant, and meaningful insights.

Data Analysis Procedures

The raw data (audio, text, notes) collected from in-depth interviews were carefully transcribed into text format. These transcriptions were then verified for accuracy by cross-checking them with the original recordings and notes. Then, the transcribed data were read thoroughly multiple times to gain familiarity and identify initial impressions. During this stage, open coding was carried out, where significant phrases, statements, and expressions were highlighted and labeled with codes. Then, the generated codes were reviewed and grouped into categories based on their similarities and relevance. These categories helped organize the data into manageable segments. From these categories, broader themes were developed that captured the core ideas emerging from the participants' responses. This process followed an inductive approach, allowing themes to emerge naturally from the data without imposing pre-existing theoretical frameworks initially. Finally**,** the interpreted themes were compared with relevant educational and psychological theories from previous studies to validate the conclusions and establish broader relevance.

Ethical Consideration

In this study, all the respondents were clearly informed about the objectives and process of the research, and their voluntary consent was ensured prior to participation. Respondents were not forced or pressured to provide answers, and they had the freedom to skip any questions. The data were carried out without affecting the academic activities of students. Furthermore, all personal information and identities were kept strictly confidential. The data and information collected were used solely for research purposes, adhering strictly to ethical research standards.

Chapter 4: Results and Discussion

This chapter provides a detailed analysis and interpretation of qualitative data obtained through in-depth interviews with students, Physical Education teachers, and Headmasters from three community secondary schools in Udayapur district. The data were carefully examined and analyzed by generating themes that capture various aspects regarding the impact of physical activities on students' cognitive development and knowledge acquisition. These themes form the foundation for a comprehensive discussion that connects the findings with established educational and psychological theories, as well as relevant empirical research from similar contexts. Furthermore, the chapter explores the practical limitations and challenges identified by participants that affect the effective implementation of physical activities within daily school schedules. By integrating theoretical perspectives with real-world experiences, this chapter offers an in-depth understanding of how physical activity impact on cognitive development of basic school students of Udayapur district.

The themes and their interpretations are presented as follows:

Enhanced Concentration and Mental Alertness

Regular physical activity significantly improves students' ability to focus and maintain mental sharpness. This enhancement stems from better behavioral regulation, increased motivation, and improved cognitive endurance. PE Teacher from School 'A' said,

> *"I have noticed that, physically active students show better classroom behavior, improved decision making and better interest in learning."*

This response indicates that physical activity improves behavioral regulation and motivation, which are critical for sustaining focus in learning environments. According to Diamond's Executive Function Theory (2015), these improvements are linked to enhanced self-control and attention. Similarly, Boy student from School 'C' further added,

> *"When I exercise, I feel stronger, and it feels like my brain gets stronger too. I can focus longer and don't get distracted as easily, especially during long tests."*

His experience highlights increased sustained attention and mental stamina, supporting the theory that physical activity enhances cognitive endurance. This aligns with research on the neurobiological benefits of exercise, such as increased blood flow to the brain and growth of new neurons, which contribute to improved cognitive functions. Similarly, Girl student from School 'A' also said,

> *"I feel walking or doing some yoga really calms me down. When my body is relaxed, my brain feels more organized, and I can think clearer. It's like exercise helps my brain sort everything out, making studying easier."*

This demonstrates the organizing effect of physical activity on mental processes, consistent with Yerkes and Dodson's Arousal Theory (1908), which states moderate arousal improves cognitive performance. The calming effect suggests reduced cognitive load and enhanced executive functions for better information processing.

In summary, regular physical activity profoundly boosts students' concentration and mental alertness. This improvement is rooted in enhanced behavioral regulation, increased motivation, and greater cognitive endurance, as evidenced by improved classroom behavior, better decision-making, and sustained focus during academic tasks. The calming effects of exercise also contribute to clearer thinking and better mental organization, affirming its vital role in optimizing learning environments and academic performance. This theme reflects the objective no. 1 of the study.

Physical Activities Foster Emotional Regulation and Self-Confidence

Participation in physical activities provides a powerful outlet for students to develop emotional intelligence, learn to manage their feelings, and build self-confidence. This leads to improved resilience and a more positive approach to challenges, both in and out of the classroom. Boy student from School 'A' said,

> *"Playing sports has made me healthy both physically and mentally. I've also learned how to deal with my emotions, like fear, joy, or sadness. So, I found strong relationship between Physical activity and cognitive development."*

This reflects Bandura's Social Learning Theory (1962), where physical activity helps students learn emotional regulation through modeled behaviors and reinforcement. The experience of managing diverse emotions within a structured activity contributes to improved emotional intelligence and coping mechanisms. Boy student from School 'B' further added,

> *"Physical activities and sports are my favorite subjects. They help me maintain patience during wins and losses, boost my self-confidence, and focus on achieving my goals."*

His statement highlights the role of sports in building emotional resilience and self-efficacy, which support cognitive development. This aligns with concepts of Diamond's theory, specifically, inhibitory control and goal-oriented behavior. Moreover, Bandura's Social Learning Theory supports this as it suggests behavior is learned through observation and reinforcement, which fits the student's experience of learning from winning and losing. Headmaster from School 'C' also noted,

> *"Physical activity is the backbone of cognitive development. It's clear that students who regularly participate in such activities are patient, disciplined, and persistent in achieving their goals."*

This view ties emotional regulation and persistence developed through physical activity to enhanced cognitive growth. Such traits are integral to executive functions (Diamond, 2015), which involve self-control and goal-directed behavior, crucial for both emotional maturity and academic success.

To conclude, physical activities are instrumental in cultivating students' emotional regulation and self-confidence. Through engagement in sports and exercise, students learn to manage emotions like fear, joy, and sadness, developing crucial emotional resilience and self-efficacy. This ultimately translates into greater patience, discipline, and persistence, which are foundational traits for both personal growth and academic success. It bears the context of objective no. 1 of the study.

Development of Social Skills through Group Physical Activities

Engaging in group physical activities is a vital avenue for students to cultivate essential social skills, fostering cooperation, communication, and a sense of belonging. Girl student from School 'B' said,

> *"I used to prefer being alone, but after participating in physical activities, I have been motivated to socialize with groups and work cooperatively."*

This aligns with Vygotsky's Social Constructivist Theory (1978), which emphasizes learning through social interaction and cooperation. Group physical activities provide a natural, engaging environment for individuals to practice and develop interpersonal skills and overcome social apprehension. PE Teacher from School 'A' added,

> *"In my understanding, there's a close relationship between physical activity and cognitive development. Students who show interest in such activities become more active. They behave friendly with their peers and pay great attention to time, focusing on their regular work."*

This observation suggests that physical activity fosters social engagement that supports cognitive and behavioral development. The need for teamwork and adherence to rules in games enhances discipline and attention to detail, which are also crucial cognitive attributes. Headmaster from School 'B' further explained,

> *"Physically active students often have quicker mental responses and perform better in group learning."*

This shows that social skills gained through physical activities enhance collaborative learning and cognitive processing. The dynamic nature of group sports demands rapid decision-making and communication, improving response time and collective problem-solving, which are directly applicable to group academic projects.

Ultimately, group physical activities serve as a powerful catalyst for social skills development among students. These collaborative experiences encourage individuals to socialize, work cooperatively, and build stronger peer relationships, which are essential for navigating social interactions effectively. The resulting

improvements in social engagement not only enhance personal development but also contribute significantly to cognitive and behavioral growth in a supportive group setting. The theme is associated with both, objectives no. 1 and 2 of the study.

Physical Activity Boosts Memory and Problem-Solving Skills

Physical activity plays a significant role in enhancing cognitive functions such as memory and problem-solving, equipping students with improved intellectual abilities crucial for academic achievement and critical thinking. PE Teacher from School 'B' said,

> *"Physical activities boost brain functions like focus, memory, and problem solving, self-confidence and teamwork. Thus, these are inseparable to each other in school."*

This corresponds with Kohler's Insightful Learning Theory (1925), which highlights that physical activity promotes cognitive functions essential for learning. The comprehensive benefits described suggest that physical activity acts as a foundation for various interconnected cognitive and non-cognitive skills. Boy student from School 'B' said,

> *"I observed that, my intellectual abilities are enhanced by regular physical activity. Strategic thinking and math problem-solving are significantly aided by playing."*

His response supports Piaget's Cognitive Development Theory (1930), which explains cognitive growth through active engagement and problem-solving. The application of strategic thinking in sports directly translates into improved logical reasoning and analytical skills required for academic challenges. PE Teacher from School 'B' also mentioned,

> *"Team games help develop problem-solving skills."*

This indicates that physical activity, especially in team contexts, sharpens critical thinking and intellectual capabilities. The real-time, dynamic nature of team games requires participants to quickly assess situations, devise strategies, and adapt,

thereby fostering agile problem-solving skills, consistent with Bandura's Social Learning Theory.

In conclusion, physical activity plays a critical role in sharpening students' memory and problem-solving skills. By boosting essential brain functions such as focus and strategic thinking, physical engagement directly enhances intellectual abilities and aids in complex tasks like mathematical problem-solving. This inseparable link between physical activity and cognitive functions underscores its importance in fostering intellectual development and critical thinking capacities. This theme strongly addresses the objective no. 1 of the study.

Physical Fitness Supports Academic Discipline and Persistence

Beyond physical health, engagement in physical activities cultivates crucial traits like discipline and persistence, which are directly transferable to academic endeavors and contribute significantly to students' overall success. Headmaster from School 'A' said,

> *"Actively involved students in physical activities and sports significantly enhance their cognitive development. Specially such students are disciplined, active in their studies and have even achieved excellent results in school performance."*

This supports Diamond's Executive Function Theory (2015) about self-regulation and persistence gained through physical engagement. The structured nature of sports instills discipline and the pursuit of goals, which are vital components of executive functions and lead to academic success. Headmaster from School 'C' added,

> *"Physical activity is the backbone of cognitive development. Students who regularly participate are patient, disciplined, and persistent in achieving their goals*."

His response emphasizes how physical activity cultivates traits important for academic success and perseverance. This aligns with Vygotsky's Social Constructivist Theory (1978), suggesting that the long-term commitment and effort required in

physical activities build a resilient mindset crucial for overcoming academic challenges. Similarly, Boy student from School 'B' further said,

> *"Physical activities and sports help me maintain patience during wins and losses, boost my self-confidence, and focus on achieving my goals."*

This highlights how sports develop persistence and goal-directed behavior linked to cognitive growth. The ability to manage emotional highs and lows in competitive environments directly enhances emotional regulation and self-efficacy, both of which contribute to sustained effort in academic pursuits. It is supported by Bandura's Social Learning Theory as it suggests behavior is learned through observation and reinforcement, which fits the student's experience of learning from winning and losing.

In essence, physical fitness is a cornerstone for fostering academic discipline and persistence. Students who regularly engage in physical activities exhibit greater self-regulation, patience, and goal-oriented behavior, which are vital for sustained academic effort and achieving excellent results. This cultivation of discipline and perseverance through physical activity directly translates into enhanced focus and success in their studies. This theme is strongly associated with the objective no. 1 of the study.

Mind-Body Connection in Cognitive Development

The inseparable link between physical activity and cognitive development underscores a holistic approach to education, recognizing that a healthy body is fundamental to a sharp and capable mind. Boy student from School 'A' said,

> *"Playing sports has made me healthy both physically and mentally. I've also learned how to deal with my emotions, like fear, joy, or sadness."*

This reflects the holistic development of mind and body, consistent with Diamond's Executive Function Theory (2015), linking physical health with cognitive and emotional functioning. The integrated nature of physical and mental well-being is crucial for overall human development, where one informs and supports the other. PE Teacher from School 'B' added,

> *“Physical activities boost brain functions like focus, memory, and problem solving, self-confidence and teamwork."*

This illustrates the inseparable link between physical wellness and cognitive performance. It aligns with the Embodied Cognition theory, which posits that cognitive processes are deeply rooted in our bodies' interactions with the world, making physical experiences fundamental to mental functions. Headmaster from School 'B' further said,

> *“I really believe that being active is key to helping children grow up well all-around. It not only makes their brains sharper but also teaches them how to work with others and understand feelings like empathy.”*

This statement underscores the integral role of physical activity in holistic development, including cognitive, emotional, and social growth. This perspective aligns well with Bandura's Social Learning Theory (1962), which describes how children adopt social behaviors by observing and interacting with others in shared activities.

To summarize, the mind-body connection is undeniably central to cognitive development, highlighting that physical well-being is inseparable from mental acuity. Physical activities not only sharpen cognitive functions like focus, memory, and problem-solving but also foster emotional regulation and social growth. This holistic approach ensures that students develop as well-rounded, resilient individuals, underscoring the integral role of physical health in nurturing a capable and empathetic mind. The findings of the theme resonate with both objectives, objective no. 1 and 2 of the study.

Reduced Stress and Mental Fatigue

Physical activity serves as a powerful antidote to stress and mental fatigue, creating an optimal mental state that enhances students' ability to learn, concentrate, and process information effectively. PE Teacher from School 'C' said,

> *"There is a strong relationship between physical activity and cognitive development as regular exercise reduces students' mental fatigue, brings expected improvements in their memory and concentration abilities."*

This is supported by Yerkes and Dodson's Arousal Theory (1908), explaining how optimal arousal from exercise reduces stress and improves cognition. Physical activity helps regulate physiological responses to stress, preventing mental exhaustion and enhancing neural efficiency for learning. In a same way, Girl student from School 'A' said,

> "*I feel walking or doing some yoga really calms me down. When my body is relaxed, my brain feels more organized, and I can think clearer."*

Her experience highlights the stress-relieving benefits of physical activity leading to better mental clarity. This aligns with mindfulness practices often associated with yoga, which reduce rumination and improve attentional control, thereby freeing up cognitive resources for academic tasks. PE Teacher from School 'A' added, *"Students who regularly take part in physical activities tend to be more attentive, less stressed and able to process information more effectively."* This supports the idea that physical activity reduces cognitive overload and promotes efficient information processing. By regulating stress hormones and improving sleep quality, exercise creates a physiological state conducive to sustained attention and effective cognitive functioning, consistent with theories of cognitive development.

In conclusion, physical activity is a highly effective means of reducing stress and mental fatigue, thereby optimizing cognitive performance. Regular exercise helps students achieve an ideal state of arousal, leading to improved memory, concentration, and clarity of thought. By alleviating cognitive overload and promoting efficient information processing, physical activity creates a more attentive and less stressed learning environment, benefiting overall academic engagement. The evidence of the theme aligns closely with the objective no. 2 of the study.

Enhanced Strategic Thinking and Intellectual Abilities

Sports and physical activities are not just about physical prowess; they are powerful tools for developing strategic thinking, problem-solving skills, and intellectual abilities that extend into academic and real-world contexts. Boy student from School 'B' said,

> *"I observed that, my intellectual abilities are enhanced by regular physical activity. Strategic thinking and math problem-solving are significantly aided by playing."*

This aligns with Piaget's Cognitive Development Theory (1930), emphasizing active problem-solving and intellectual growth. The application of strategic thinking in dynamic play environments directly translates to improved logical reasoning and analytical skills crucial for academic challenges, particularly in subjects like mathematics. PE Teacher from School 'B' added,

> *"Team games help develop problem-solving skills."*

This highlights how strategy-based physical activities cultivate important cognitive skills. The need for quick assessment, decision-making, and adapting to changing game scenarios in team sports fosters flexible thinking and the ability to solve problems collaboratively, consistent with social learning theories in a practical context. Boy student from School 'C' further said,

> *"Playing badminton makes me really concentrate on the game. That strong focus helps me when I'm doing my homework."*

This shows the transfer of focus and concentration skills from physical activity to academic tasks. The intense focus required in sports like badminton trains selective attention, a key executive function (Diamond, 2015), which can then be applied to sustain attention during homework and other learning activities.

Ultimately, sports significantly enhance strategic thinking and intellectual abilities. Engaging in games that require focus and tactical planning, such as badminton, directly improves concentration and problem-solving skills, which are

highly transferable to academic tasks. This demonstrates how physical activities are not just about physical prowess but are powerful tools for developing crucial cognitive and intellectual capabilities. It indicates that, there is a clear link between the theme and objective no. 1 of the study.

Physical Activity as a Stimulator for Academic Engagement

Beyond direct cognitive benefits, physical activity acts as a catalyst for academic engagement by improving students' behavior, decision-making, and overall enthusiasm for learning, creating a more conducive environment for educational success. PE Teacher from School 'B' said,

> *"Physically active students show better classroom behavior, improved decision making and better interest in learning."*

This supports Diamond's Executive Function Theory (2015), showing how physical activity enhances behavioral control and motivation. Improved self-regulation allows students to manage impulses and direct their attention more effectively in a classroom setting, leading to greater engagement. Headmaster from School 'A' added,

> *"Actively involved students in physical activities and sports significantly enhance their cognitive development. They are more disciplined active in their studies."*

This reflects the link between physical activity and increased academic responsibility. The discipline and commitment learned in sports are transferable skills that encourage students to take ownership of their studies, aligning with principles of self-determination theory in motivation. PE Teacher from School 'C' further noted,

> *"Physically active students maintain better focus and reduce classroom fatigue."*

This indicates that physical activity contributes directly to students' engagement in learning environments. By improving overall physical and mental well-being, exercise helps regulate energy levels and alertness, making students more

receptive and capable of sustained attention in class, thereby reducing disengagement caused by fatigue.

To sum up, physical activity serves as a powerful catalyst for academic engagement, driving improved classroom behavior, decision-making, and overall interest in learning. Physically active students tend to be more attentive, less fatigued, and more disciplined in their studies, translating directly into better academic performance. This highlights how physical activity creates a more focused and proactive learning environment, fostering greater student participation and success. This insight strongly aligns with the objectives no. 2 of the study.

Balancing Physical Activity and Academic Responsibilities

While beneficial, the integration of physical activity into students' lives requires careful consideration of balance to ensure it complements, rather than detracts from, academic focus and prevents mental and physical fatigue. Girl student from School 'A' said,

> *"I really like yoga because it helps me concentrate on my studies. However, when I engage in outdoor physical activities, I feel tired and cannot focus on studying."*

This shows the need for balanced physical exertion to avoid cognitive fatigue, supported by Yerkes and Dodson's Arousal Theory (1908). While moderate arousal is beneficial, excessive physical strain can lead to over-arousal and exhaustion, impairing cognitive functions and focus on academic tasks. PE Teacher from School 'A' added,

> *"I've also seen cases where too much focus on sports can distract some students from their studies, especially if they lack balance and time management."*

This highlights that over-involvement without regulation may reduce academic focus. This issue can be understood through resource allocation theories of attention, where limited cognitive resources are pulled away from academic tasks

when time and energy are disproportionately dedicated to sports, without proper planning. Girl student from School 'C' further said,

> *"My body gets tired and I feel fatigued, so no matter how much I try to focus, I can't concentrate on my studies."*

Her response underscores the importance of managing physical activity intensity to maintain cognitive readiness. This physiological response demonstrates that physical fatigue directly impacts mental stamina and attention, reinforcing the need for individualized approaches to physical activity to ensure it supports rather than hinders academic performance.

In conclusion, achieving a proper balance between physical activity and academic responsibilities is crucial for optimal student performance. While exercise can boost concentration, excessive or poorly managed physical activity can lead to fatigue, hindering academic focus. It's essential for students to find the right intensity and duration to ensure that physical well-being supports, rather than detracts from, their cognitive readiness for studies. This theme is closely associated with the objective no 2 of the study.

Challenges in Integrating Physical Activity into School Curricula

Despite the widely recognized benefits of physical activity for cognitive development, schools often face significant obstacles in fully integrating it into their curricula, including limited resources, time constraints, and a lack of proper infrastructure. PE Teacher from School 'C' said,

> "*Although our school lacks sufficient outdoor facilities, we make efforts to keep students physically active through routine activities. One challenge is minimal time set aside for physical education."*

This statement points to resource constraints and curricular prioritization issues within the educational system. Despite recognizing the benefits, schools struggle with practical limitations that prevent adequate provision for physical activity, creating a gap between pedagogical ideals and implementation realities. Headmaster from School 'C' added,

"Insufficient government funding and lack of proper infrastructure hold us back from offering a strong physical education program."

These highlight systemic challenges related to educational policy and resource allocation. The absence of sufficient investment in physical education infrastructure underscores a broader societal undervaluing of physical activity's role in comprehensive student development, impacting overall program quality. PE Teacher from School 'B' further explained,

"Not every activity is academically aligned and the time allocated for PE is limited."

This reveals a prevailing perception that often separations physical education from academic learning, leading to its marginalization. This view contradicts modern understanding of integrated learning and holistic development, where physical activity is seen as foundational to cognitive and social-emotional growth, not merely a recreational break.

Ultimately, the integration of physical activity into school curricula faces significant challenges, despite its recognized benefits. Insufficient funding, limited facilities, and minimal time allocation for physical education are major barriers. These constraints often prevent schools from fully leveraging physical activity as a strategic tool for holistic development, highlighting the need for greater support and recognition of its importance. The theme directly resonates with the objective no. 3 of the study.

Enhanced Social-Emotional Learning

Physical activity is a powerful tool for developing critical social-emotional skills, fostering empathy, teamwork, and improved interpersonal relationships, which are essential for students' overall well-being and success in life. Headmaster from School 'B' said,

"I really believe that being active is key to helping children grow up well all-around teaches them how to work with others and understand feelings like empathy."

This highlights the role of physical activity in fostering social-emotional learning, specifically empathy and collaborative skills. This aligns with Social Learning Theory (Bandura, 1962), where interaction in group activities provides opportunities for observational learning and practicing prosocial behaviors. PE Teacher from School 'B' added,

"Physical activities boost self-confidence and teamwork."

This reinforces the impact of physical activity on self-efficacy and group cohesion. Achieving personal milestones and contributing to a team's success in sports directly builds a sense of competence and belonging, supporting healthy social development. Headmaster from School 'C' also said,

"Physical activity helps develop social-emotional skills such as teamwork and empathy, preparing students for life challenges."

These responses highlight the vital role of physical activities in fostering social and emotional competencies. The experiential nature of physical activity provides a practical arena for developing these life skills, reinforcing theories of experiential learning (Kolb, 1984), where concrete experiences drive development.

In conclusion, physical activity is a vital component in enhancing social-emotional learning among students. Through collaborative play and team sports, children develop essential skills such as teamwork, empathy, and self-confidence. These experiences foster positive social interactions and emotional regulation, equipping students with crucial competencies that prepare them not only for academic challenges but also for life beyond the classroom. The conclusion of the theme is associated with objective no. 2 of the study.

Physical Activity as a Tool for Holistic Development

`Physical activity is not merely about physical fitness; it is an indispensable tool for fostering holistic development, encompassing intellectual, social, and emotional growth, and cultivating well-rounded and resilient individuals. Headmaster from School 'C' said,

"Physical activity is essential for cultivating well-rounded, resilient individuals helps students succeed intellectually, socially and emotionally."

This statement encapsulates the core tenet of holistic development, where physical activity is seen as fundamental to success across all developmental domains. It underscores the interconnectedness of mind, body, and spirit in nurturing a fully capable individual. PE Teacher from School 'A' added,

"Students appear more enthusiastic and happier after participating in physical activities, which enhances memory and concentration."

This highlights the positive emotional impact of physical activity, which in turn benefits cognitive functions. The release of endorphins and reduction of stress through exercise contribute to improved mood, attention, and memory, supporting arousal theories and the benefits of a positive emotional state for learning. Headmaster from School 'B' also noted,

"Physical activity and cognitive development can't be separated."

This assertion emphasizes the integral and inseparable link between physical engagement and cognitive growth. This perspective aligns with contemporary neuroscience, which increasingly demonstrates how movement and physical health directly influence brain structure and function, reinforcing the mind-body connection.

In sum, physical activity is an indispensable tool for holistic development, nurturing well-rounded and resilient individuals. It extends far beyond mere physical fitness, significantly enhancing intellectual, social, and emotional growth. By boosting cognitive functions, improving mood, and fostering interpersonal skills, physical activity is foundational to cultivating enthusiastic, well-adjusted students who are prepared to succeed in all aspects of life. The findings of the theme resonate with objective no. 2 of the study.

Underestimation of Physical Education's Role in Academic Success

Despite substantial evidence supporting the benefits of physical activity for cognitive development, physical education is often undervalued or sidelined in schools, leading to misconceptions among parents and educators regarding its crucial role in academic success. Headmaster from School 'A' said,

> *"Some parents even discourage it, thinking it's a waste of study time."*

This reveals a common misconception among some parents regarding the value of physical education, viewing it as detracting from academic time rather than enhancing it. This perspective often stems from a narrow focus on rote learning and test scores, neglecting the broader cognitive and emotional benefits that physical activity provides. Headmaster from School 'B' added,

> *"Not all teachers use physical education as a learning opportunity; it's often treated as relaxation time rather than a strategic learning tool."*

This points to a lack of pedagogical integration and understanding among some educators. Treating PE solely as "relaxation" undervalues its potential as a strategic learning tool that fosters discipline, problem-solving, and social-emotional skills, which are crucial for overall academic performance. PE Teacher from School 'A' further said,

> *"Physical education is often undervalued or sidelined due to academic pressures."*

This highlights the systemic pressure on schools to prioritize core academic subjects, leading to the marginalization of physical education. This approach often overlooks the evidence-based link between physical activity and improved cognitive function, which could, in fact, improve some academic pressures by enhancing learning capacity.

Ultimately, the underestimation of physical education's role in academic success is a significant barrier to holistic student development. Misconceptions among parents and educators often lead to physical education being viewed as a secondary

subject or a distraction from academics, rather than a strategic learning tool. Overcoming this undervaluation is crucial to fully integrate and leverage physical activity for its profound positive impact on cognitive abilities and overall student achievement. The focus of this theme is directly linking with objective no. 3 of the study.

Innovative Practices Linking Physical Activity with Learning

Forward-thinking schools are exploring and implementing innovative strategies to integrate physical activity directly with academic learning, demonstrating promising results in enhancing student engagement, focus, and overall cognitive development. Headmaster from School 'C' said,

> *"We have practiced book-free Friday in school to strengthen such abilities which helps students succeed intellectually, socially and emotionally."*

This illustrates an innovative curricular approach that prioritizes physical and experiential learning. "Book-free Fridays" represent a strategic effort to foster intellectual, social, and emotional development through alternative pedagogical methods, acknowledging the value of embodied learning experiences. PE Teacher from School 'B' added,

> *"Initiatives that combine physical activity and learning promote better engagement and cognitive development."*

This emphasizes the effectiveness of integrated learning strategies. By merging physical movement with academic content, schools can tap into different learning modalities, which can lead to increased student motivation, deeper understanding, and enhanced cognitive processing, consistent with constructivist learning theory of Bandura. Headmaster from School 'B' also noted,

> *"Using creative approaches to link movement with learning improves students' focus and enthusiasm."*

This highlights the pedagogical benefits of creative, movement-based learning. Such approaches recognize that physical activity can serve as a powerful medium for

enhancing attention, motivation, and overall engagement in academic subjects, making learning more dynamic and effective.

In conclusion, innovative practices linking physical activity with learning offer promising avenues for enhancing student engagement and cognitive development. Strategies like "book-free Fridays" and creative approaches that combine movement with academic content demonstrate how schools can effectively integrate physical and mental growth. These initiatives prove that when physical activity is thoughtfully incorporated, it significantly improves students' focus, enthusiasm, and overall intellectual and social-emotional capabilities. This theme relates to the objective no. 3 of the study.

Major Findings

Based on the analysis and interpretation of the study, the following key findings have been identified:

- Regular physical activity significantly enhances students' cognitive abilities, including improved attention, memory retention, and comprehension. These improvements enable students to grasp academic concepts more effectively and perform better in their studies.
- Physical activities play a crucial role in supporting emotional regulation by helping students manage stress and anxiety. Through consistent engagement in exercise, students develop greater self-confidence and a calmer mindset, which contribute to improved mental readiness for learning tasks.
- Participation in group physical activities fosters essential social skills such as teamwork, cooperation, and empathy. These experiences enhance peer relationships and positively influence classroom behavior by encouraging students to work collaboratively and respect others.
- Engagement in physical exercise encourages discipline and effective time management. Students who regularly participate in sports demonstrate improved adherence to academic routines, exhibit greater responsibility, and maintain focus on their schoolwork.
- Teachers observed that students became more alert, motivated, and actively engaged in classroom discussions after participating in physical activities. This

heightened level of engagement supports a more dynamic and productive learning environment.

- Practices such as yoga and traditional games contribute to increased mindfulness, concentration, and self-control. These activities not only calm students but also improve their ability to regulate emotions, fostering both cognitive and emotional development.
- Strategic sports and team games enhance students' problem-solving, critical thinking, and decision-making skills. These cognitive abilities developed on the playing field translate effectively into improved academic performance, particularly in subjects requiring logical reasoning.
- The lack of adequate physical education infrastructure, equipment, and scheduled time within many schools presents a significant barrier to effective implementation. These limitations restrict students' opportunities to benefit fully from physical activities.
- Physical education is frequently undervalued by some parents and educators who prioritize traditional academic subjects. This attitude leads to marginalization of physical activity within school curricula, reducing its potential impact on holistic student development.
- Excessive involvement in physical activities without proper balance and guidance can result in physical fatigue and decreased academic focus. It is essential to manage the intensity and duration of exercise to ensure it complements rather than detracts from students' studies.
- Innovative approaches that integrate physical movement with academic content have shown promising outcomes. Schools implementing such strategies report increased student motivation, better engagement, and improved retention of knowledge.
- The study's findings are consistent with well-established cognitive and behavioral theories, including those by Bandura, Piaget, Vygotsky, and Diamond. These theoretical frameworks underscore the vital role of physical activity in fostering holistic cognitive, emotional, and social development.

Chapter 5: Conclusion and Recommendation

Conclusion

Physical activity, broadly defined as any movement that spends energy through muscle work, plays a critical role not only in physical well-being but also in enhancing mental and cognitive functions. This study, titled "Impact of Physical Activities in Cognitive Development of Basic School Students in Udayapur District," aimed to explore how such activities support students' cognitive functions including attention, memory, and comprehension. The research addressed three main objectives: to find out the impact of physical activities in cognitive development of basic school students in Udayapur district, to evaluate the relationship between physical activities and cognitive development and to analyze the opinion of PE teachers and Headmasters towards the association of physical activities with knowledge development.

A qualitative research design was employed, targeting Grade 7 students, PE teachers, and Headmasters from selected schools in Udayapur Gadhi Rural Municipality. Data were collected through in-depth interviews, then analyzed using thematically on the basis of objectives of the study grounded in established learning theories such as those of Bandura, Piaget, Vygotsky, Diamond, etc. and so on.

The study found that regular physical activity positively influenced students' cognitive performance, classroom behavior, and emotional balance. Activities like yoga and group-based games were particularly effective in developing self-regulation, cooperative behavior, and decision-making skills. Both, teachers and Headmasters reported that physically active students tended to be more attentive, disciplined, and engaged in learning. These insights strongly supported the theoretical frameworks applied.

However, the study also exposed several limitations. Many schools lacked essential infrastructure like playgrounds and equipment. Additionally, physical education was sometimes undervalued by both teachers and parents, and PE periods were often underutilized. In a few cases, excessive focus on physical activities

without structured academic connection was observed to distract students from their studies.

Based on the study, it was concluded that, physical education must be recognized as a core element of school curricula. It should not be treated merely as recreational time but as a strategic tool to enhance students' cognitive, emotional, and social growth. For meaningful outcomes, schools need proper planning, skilled educators, sufficient resources, and supportive policies. When thoughtfully implemented, physical activities can significantly enrich students' overall learning experiences and contribute to a well-rounded education system in Nepal.

Recommendation

The recommendations provided in this study are derived from the key findings and overall analysis of the research. They are intended to address the issues and gaps identified during the study and to offer constructive guidance for enhancing future work in this area. These recommendations may serve as a useful reference for researchers who are interested in exploring the topic further, helping them to build upon the existing knowledge and approach the subject with greater clarity and focus.

Recommendation for Practice

To improve the integration and impact of physical activities on students' cognitive development at the school level, the following practical suggestions are proposed:

a. Schools should include regular physical activities like exercises, light sports, and movement breaks to boost students' attention, memory, and classroom participation. These routines help refresh the mind and reduce stress.
b. Physical education classes should be well-structured with clear goals and led by trained instructors. All students, regardless of gender or ability, should be encouraged to participate actively.
c. Collaboration between PE and academic teachers should be promoted to make learning more interactive. Integrating physical activities into lessons supports engagement and diverse learning styles.

d. Adequate space, time, and resources should be provided for physical activities. In the absence of formal facilities, schools can use nearby open areas or community grounds.
e. School leaders should receive training on the cognitive and emotional benefits of physical activity. A balanced schedule between academics and physical engagement must be maintained.
f. Regular reviews of PE practices should be conducted to guide improvements. Schools should also involve parents and communities through events and awareness programs for shared support.

Recommendation for National Policy

To enhance the role of physical activities in students' cognitive development, the following national-level policy recommendations are proposed:

a. The Government of Nepal should develop an inclusive national policy that formally recognizes physical education as a core element of holistic student development. This policy should emphasize its role in enhancing cognitive and academic outcomes across all basic education levels.
b. Physical education must be made compulsory with well-defined learning objectives, age-appropriate curricula, and scheduled instructional time. Adequate national standards should also guide the recruitment and training of PE teachers, ensuring they can link physical activity with cognitive learning.
c. To support effective implementation, the government should allocate sufficient budget for school infrastructure like playgrounds, equipment, and safe spaces especially in rural areas. Regular supervision and evaluation mechanisms should monitor how well schools are incorporating physical activities.
d. Nationwide awareness campaigns should promote the value of physical education among parents, teachers, and communities. Inter-ministerial coordination and reward systems for best practices can further strengthen the national commitment to integrating physical activity in education.

Recommendation for further study

a. A Comparative Study on the Role of Physical Activities in Cognitive Development among Urban and Rural Basic School Students in Eastern Nepal
b. The Influence of Structured Physical Education Programs on Academic Performance and Executive Functioning of Middle School Students
c. Parental and Teacher Perceptions Towards Physical Education and Its Contribution to Holistic Development of Children in Community Schools
d. Study on the relationship between the Physical and Sports Activities and Socio-cognitive learning.
e. Action research on Regular Sports Activities and Improvements of Academic Performance of Basic School Students.

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APPENDIX-A

Guidelines for conducting in-depth interview with students

Dear Students,

Thank you for meeting with me today. My name is Mahesh Giri, and I'd like to talk with you about the **impact of physical activities on the cognitive development of basic school students**. This interview is part of our program evaluation to assess its effectiveness and gather insights for future improvements. The interview will take less than an hour. I'll be recording the session to ensure I capture everything accurately, though I'll also take a few notes. Please speak clearly for the recording. Your responses will be kept strictly confidential and only used by the researcher. You're free to skip any question or stop the interview at any time.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

_____ _____ _____

Interviewee Witness Date

_____

Legal guardian (if interviewee is under 18)

Name of Student: …… **Age:** ……... **Date:** ……..……...

Sex: ……... **Class:** …… **Address**: ……

Name of School: …….

The in-depth interviews with students were conducted based on the following thematic contents:

- **Frequency and type of physical activities at school**
  (e.g., how often students participate in games, exercises, yoga, or sports and what types they prefer).
- **Perceived feelings after engaging in physical activities**
  (e.g., feeling refreshed, happy, energetic, focused, relaxed, etc., after physical exertion).

- **Changes in study habits and learning ability**
  (e.g., improved concentration, memory, and study habits noticed after regular physical activity).
- **Enjoyment and mental impact of specific games or activities**
  (e.g., which physical activities students enjoy most and how these contribute to attention, thinking, or problem-solving).
- **Comparison of learning with and without physical activity**
  (e.g., experiences of focusing only on academics versus engaging in both physical and academic activities, and how they differ).
- **Beliefs about physical activities and brain sharpness**
  (e.g., students' opinions on how exercise and sports might help improve brain function and cognitive skills).
- **Mood, energy, and cognitive clarity post-exercise**
  (e.g., changes in alertness, emotional state, and mental clarity after physical activities and how that affects learning).
- **Creativity and idea generation after physical activity**
  (e.g., whether students experience more creativity or new thoughts following sports or exercise).
- **Link between physical activity and academic performance**
  (e.g., students' perception of how physical health supports classroom learning and intellectual performance).
- **Parental and teacher encouragement**
  (e.g., how family or school staff promote physical activities and connect them to learning success).

APPENDIX-B

Guidelines for conducting in-depth interview with PE Teachers

Respected Teachers,

Thank you for meeting with me today. My name is Mahesh Giri, and I'd like to talk with you about the **impact of physical activities on the cognitive development of basic school students**. This interview is part of our program evaluation to assess its effectiveness and gather insights for future improvements. The interview will take less than an hour. I'll be recording the session to ensure I capture everything accurately, though I'll also take a few notes. Please speak clearly for the recording. Your responses will be kept strictly confidential and only used by the researcher. You're free to skip any question or stop the interview at any time.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

_____ _____ _____

Interviewee Witness Date

Name of Teacher: ……. **Sex**: ……

Age: ……. **Address:** …….

Academic Qualification: ……...

Teaching Subject: …… **Teaching Level**: ……

Name of school: …… **Teaching experience**…….

Training (If any): ……

The in-depth interviews with PE teachers were conducted based on the following thematic contents:

- **Types and frequency of physical activities organized at school** (e.g., sports, games, yoga, drills, etc.) and the level of student participation.
- **Observed cognitive improvements among active students** (e.g., changes in memory, creativity, concentration, and problem-solving skills after regular physical activity).

- **Behavioral and psychological outcomes of physical activity**
  (e.g., increased attention span, emotional control, decision-making, confidence, and stress management).
- **Link between physical activity and academic performance**
  (e.g., improvement in classroom focus, retention, test performance, and general learning ability).
- **Influence of physical activities on critical thinking and cognitive processes**
  (e.g., students' ability to think clearly, reflect, analyze situations, and generate ideas during or after participation in games or exercises).
- **Perceptions on the ideal balance between academics and physical activities**
  (e.g., recommended duration, scheduling, and integration for optimum cognitive support).
- **Specific physical activities contributing to cognitive development**
  (e.g., which types of activities enhance particular skills such as memory, strategic thinking, and creativity).
- **Role of school environment and resources**
  (e.g., effect of sports infrastructure, equipment availability, and administrative support on promoting cognitive development through physical activity).
- **Challenges faced by PE teachers**
  (e.g., limited time, lack of support, or difficulty integrating cognitive learning goals within the physical education curriculum).

APPENDIX-C

Guidelines for conducting in-depth interview with Headmasters

Respected Headmasters,

Thank you for meeting with me today. My name is Mahesh Giri, and I'd like to talk with you about the **impact of physical activities on the cognitive development of basic school students**. This interview is part of our program evaluation to assess its effectiveness and gather insights for future improvements. The interview will take less than an hour. I'll be recording the session to ensure I capture everything accurately, though I'll also take a few notes. Please speak clearly for the recording. Your responses will be kept strictly confidential and only used by the researcher. You're free to skip any question or stop the interview at any time.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

_____ _____ _____

Interviewee Witness Date

Name of Headmaster: ……. **Sex:** ……

Age: ……. **Address**: …… **Academic Qualification**: ……

Teaching Subject: …… **Teaching Level:** ……

Name of school: …… **Teaching experience**…….

Training (If any): ……

The in-depth interviews with headmasters were conducted based on the following thematic contents:

- **Perceptions on the role of physical activities in student development** (e.g., importance of sports, games, yoga, and other physical programs in the holistic development of students).
- **Observed relationship between physical activity and academic/cognitive outcomes**

(e.g., improvements in learning, memory, discipline, problem-solving, and school performance due to regular physical activity).

- **Feedback from teachers and parents**
  (e.g., perceptions shared by stakeholders regarding changes in academic or behavioral performance due to physical involvement).
- **School-level support and initiatives**
  (e.g., policies, administrative encouragement, infrastructure, or curricular space given to physical activities to support learning).
- **Impact of physical activity on school environment and student behavior**
  (e.g., changes in discipline, classroom engagement, punctuality, cooperation, or emotional regulation due to physical activity programs).
- **Institutional trends and scheduling practices**
  (e.g., how the school's timetable and curriculum structure reflect the integration of physical activity and its cognitive benefits).
- **Policies and programs that support cognitive development through physical education**
  (e.g., implementation of school-led projects, training, or special focus to merge physical and academic growth).
- **Perceived cognitive benefits from physical engagement**
  (e.g., students' improvements in attention, creativity, decision-making, or conceptual understanding linked to regular physical activity).
- **Challenges in balancing academics and physical education**
  (e.g., barriers such as lack of time, resources, awareness, or teacher motivation when promoting physical activity for learning).
- **Resource and collaboration needs**
  (e.g., support needed from education offices, community, or inter-teacher collaboration to enhance physical activity's impact on learning).

Email: janatamavidumre2012@gmail.com

श्री जनता माध्यमिक विद्यालय डुम्रे

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स्थापना–२०१२
Estd.: 2012
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प.सं. : २०८२/०८३
च.नं. : ०१

मितिः २०८२/०४/०१

श्री त्रिभुवन विश्वविद्यालय
शारीरिक शिक्षा विभाग
कीर्तिपुर, काठमाण्डौ ।

विषय : जानकारी सम्बन्धमा ।

प्रस्तुत विषयमा त्रिभुवन विश्वविद्यालय, शिक्षाशास्त्र सङ्काय, शारीरिक शिक्षा विभाग अन्तर्गत एम.एड. चौथो सेमेष्टरका विद्यार्थी श्री महेश गिरीले उहाँको शोधकार्य (Thesis) को प्रयोजनार्थ यस विद्यालयमा प्रत्यक्ष सहभागी भई कक्षा ७ र ८ मा अध्ययनरत २ जना (१ छात्र, १ छात्रा) विद्यार्थी, स्वास्थ्य तथा शारीरिक शिक्षा विषयका शिक्षक र प्रधानाध्यापकसँग गहन अन्तरवार्ता गरी आवश्यक तथ्याङ्क सङ्कलन गर्नु भएको व्यहोरा अनुरोध छ ।

दुर्गादेवी खतिवडा
(प्रधानाध्यापक)

दुर्गादेवी खतिवडा
प्रधानाध्यापक
श्री जनता माध्यमिक विद्यालय

श्री माध्यमिक विद्यालय जल्केनी (ECD-१०)

उदयपुरगढी गा.पा.-४, उदयपुर

स्थाः २०३५

प.सं: ०८२/०८३ **विद्यालय कोड**: १४०१००००४

च.नं.: ०१ **मिति**: २०८२/०४/०१

बिषय: जानकारी सम्वन्धमा ।

श्री त्रिभुवन विश्वविद्यालय
शारीरिक शिक्षा विभाग
केन्द्रीय कार्यालय
कीर्तिपुर, काठमाण्डौ ।

प्रस्तुत विषयमा त्रिभुवन विश्वविद्यालय, शिक्षा शाखा सङ्काय, शारीरिक शिक्षा विभाग अन्तर्गत एम.एड.चौथो सेमेस्टरका विद्यार्थी श्री महेश गिरीले तहाँको शोधकार्य (Thesis) को प्रयोजनार्थ यस विद्यालयमा प्रत्यक्ष सहभागी भइ कक्षा ७ र ८ मा अध्ययनरत २ जना (छात्र-१,छात्रा-१) विद्यार्थी, स्वास्थ्य तथा शारीरिक शिक्षा विषयका शिक्षक र प्रधानाध्यापकसंग गहन अन्तवार्ता गरी आवश्यक तथ्याङ्क सङ्कलन गर्नुभएको व्यहोरा अनुरोध छ ।

सन्तमान राई
प्रधानाध्यापक

श्रीपञ्चावती माध्यमिक विद्यालय (१-१२)उदयपुरगढी

उदयपुरगढी -५, उदयपुर

NEB code : 1410

स्थापना : २००९

SEE code : 14002

IEMIS code : 140270009

पत्र सं. :२०८१/०८१

च. नं : १

मितिः २०८२/०४/०१

श्री त्रिभुवन विश्वविद्यालय
शारिरीक शिक्षा विभाग
किर्तिपुर, काठमाण्डौ।

विषयः जानकारी सम्वन्धमा।

प्रस्तुत विषयमा त्रिभुवन विश्वविद्यालय ,शिक्षा शास्त्र सङ्काय शारिरीक शिक्षा विभाग अन्तर्गत एम.एड. चौथो सेमेष्टरका विद्यार्थी श्री महेश गिरीले त्यहाँको शोधकार्य (Thesis) को प्रयोजनार्थ यस विद्यालयमा प्रत्यक्ष सहभागी भई कक्षा ७ र ८ मा अध्ययनरत २ जना (१छात्र,१छात्रा) विद्यार्थी,स्वास्थ्य तथा शारिरीक शिक्षा विषयका शिक्षक र प्रधानाध्यापकसंग गहन अन्तरवार्ता गरी आवश्यक तथ्याङ्क सङ्कलन गर्नु भएको व्यहोरा अनुरोध छ।

भक्त बहादुर राई

प्रधानाध्यापक

त्रिभुवन विश्वविद्यालय
शिक्षाशास्त्र संकाय
शारीरिक शिक्षा विभाग

TRIBHUVAN UNIVERSITY
FACULTY OF EDUCATION
Physical Education Department

विश्वविद्यालय क्याम्पस
कीर्तिपुर, काठमाडौं, नेपाल
फोन नं. ४३३१३३७
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विश्वविद्यालय क्याम्पस
कीर्तिपुर

पत्र संख्या/Ref.

मिति/Date: २०८०/०४/०८

श्रीमान .....
.....

विषय: *जो जस संग सम्बन्ध छ ।*

महोदय,

यस विभाग अन्तर्गत एम.एड प्रथम वर्ष / दोस्रो वर्ष / थेसिस वर्ष र सेमेस्टरका विद्यार्थी समूह तपाईंको कार्यालय / समुदाय / विद्यालय क्षेत्रमा आउदा उनीहरुलाई आवश्यक सहयोग गरिदिनु हुनको लागी हार्दिक अनुरोध गर्दछु ।

सहयोगको लागि धन्यवाद ।

उप.प्रा.शैलेन्द्र चिलुवाल
प्रमुख
शारीरिक शिक्षा विभाग
त्रि.वि. कीर्तिपुर

विभागीय प्रमुख