

EXPLORING THE IMPACT OF PHYSICAL ACTIVITIES ON STUDENT'S
ACADEMIC PERFORMANCE: A NARRATIVE INQUIRY

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AN ABSTRACT

of the dissertation of *Binita Sunder Chaudhary*, for the degree of Master of Philosophy in Educational Leadership, presented on November 21, 2023, entitled *Exploring the Impact of Physical Activities on Student's Academic Performance: A Narrative Inquiry*.

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There is a growing body of literature about the relationship between physical activities and academic performance in education. My experience and the review of related literature observed a lack of research on physical activities being the resource for better academic performance in students. To address this gap, I carried out this study. I used the paradigm of interpretivism and conducted a narrative inquiry to explore the students' experiences and their discernments regarding the influence of physical activities on their academic performance. Using the lens of social constructivist theory and self-determination theory, I explored the stories of four participants (students and teacher) from a school in the Lalitpur district, gathering and analyzing the personal narrative of students who actively engaged in physical activities during their academic pursuits. They explained how their participation in physical activities improved their learning abilities and academic performance.

The study found that physical activity is crucial for maintaining a healthy lifestyle and can potentially boost student's cognitive functioning and academic performance. Acknowledging the comprehensive advantages of physical activity becomes increasingly indispensable as our society struggles more with health and academic issues. Several recurring themes were discovered through a careful analysis of the collected narratives. Participants frequently repeated enhanced concentration, improved analytical skills, developed problem-solving skills, and increased overall well-being as outcomes of their participation in physical activities.

The results of this study shed light on the impending benefits of incorporating physical activities into the daily routines of students and putting them into practice.

The improved cognitive and emotional well-being reported by participants serves as a reminder of how important it is for educational institutions to take students' overall development. These findings necessitate reevaluating educational policies to prioritize integrating physical activities within the academic curriculum.

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November 21, 2023

Binita Sunder Chaudhary

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This dissertation entitled *Exploring the Impact of Physical Activities on Student's Academic Performance: A Narrative Inquiry*, presented by Binita Sunder Chaudhary for the degree of Master of Philosophy in Education (Educational Leadership) on November 21, 2023.

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I understand and agree that my dissertation will become part of a permanent collection in the library of Kathmandu University. My signature below authorizes the release of my dissertation to any reader upon request for scholarly purposes.

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DECLARATION

I hereby declare that this dissertation has not been submitted for the candidature of any other research degree at any university.

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DEDICATION

I dedicated this work to my loving parents. Their dream of obtaining a higher degree became an inspiration for my completion of this thesis. Their support, expectation, and trust in me motivate me to achieve academic success.

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LIST OF ABBREVIATIONS

AP	Academic Performance
BMI	Body Mass Index
ECA	Extra-Curricular Activities
HPS	Health Promoting School
KISV	Kanti Ishwari Shisu Vidyalaya
KUSOED	Kathmandu University School of Education
MPhil	Master in Philosophy
NEP	Nepal Education Policy
PE	Physical Education
PA	Physical Activity
SCT	Social Constructivism Theory
SDT	Self -Self-Determination Theory
WHO	World Health Organization
MoE	Ministry of Education
SLC	School Leaving Certificate
ZPD	Zone of Proximal Development

CHAPTER I INTRODUCTION

“In order for man to succeed in life, God provided him with two means: education and physical activity. Not separately, one for the soul and the other for the body, but for the two together. With these means, man can attain perfection.

-Plato

In this chapter, I have explored the importance of physical activities in schools. The chapter begins with a clear enunciation of my research agenda and my excruciating experience as a student and teacher. I have elucidated the study's rationale and the problem statement using references and experiences. After that, I have explained the intent of my research question. At the end of this chapter, I mention the delimitation of my research inquiry.

The Allegory of my School Life

Ganesh International Boarding School (GIBS) was the then-renowned school, as most of the board toppers were from this school. I got admission to this school not because I was a good student but because my father had a good connection with the school's Vice Principal. My very first day at school in grade three was no less than a dream. I had not imagined a school premise as big as Tundikhel (the biggest open space in Kathmandu; 5kms long and 300mts wide undivided). Three five-story buildings and dozens of school buses were parked on the ground. The playground could accommodate thousands of students at a time. A big football ground on the right side of the administration building. Furthermore, there was a separate small football ground for primary students.

In my previous school, there was a small ground mostly used for assembly and gatherings of students in the first hour of school. I was spellbound to see such massive infrastructure. We used to run here and there in the playgrounds during recess time and played hide and seek behind those mammoth trees and school buses. After three years of studying there, I reached Grade 6 and imagined that I would practice Physical Education (PE). The days passed by, weeks, months, and years, but our teachers never took us to the playground for a formal practice of physical education classes. I remember that when I was in grade six, our health book included Physical Education (PE) subject. The total marks of the PE subject were limited to just fifty. Our teachers

focused especially on providing information related to sports such as football ground, volleyball ground, kabaddi area, khokho ground, etc. They never covered a broader spectrum of topics within PE. It was disheartening that our teachers never delved into other pivotal aspects of PE that could enrich our knowledge. They confined us to a limited understanding of the subject.

All the subjects had different books, but no dedicated book for PE existed. The curriculum department integrated PE subjects with health subjects, so they allocated half of the health book for PE. There were plenty of illustrations and pictures of students performing physical exercises. At the bottom of each picture, they provide instructions for these exercises. The book's cover page vastly mentions PE's importance, emphasizing its essential role in promoting a healthy lifestyle and overall well-being. In addition, the curriculum department expects every school to incorporate it into its programs. Regular physical exercise maintains physical fitness and stimulates the brain, enhancing academic performance among individuals who make it a regular routine. The Global Status Report on Physical Activity 2022 states that promoting physical activities can save lives, improve health, and support stronger, more resilient health systems and communities (WHO, 2022). Although this may be true, our school never took us for the practices that could have benefitted our physical health and overall well-being. Afterward, before the final exam, teachers used to tell us to learn the measurements of grounds by heart, which was important only on an exam basis.

Whenever teachers were absent, and we had free time, my friends kept doing their assignments. However, I used to sneak into Manjushree School, which shared the same wall at the edge of our school. I noticed that the students practiced PE under the guidance of the teacher. A teacher wore a blue tracksuit and made students practice scoring goals, passing the ball, drilling, etc. Once a month, they used to have a sports day. Most of the students showed what they had learned in a month, and toward the end of the school year, there was an inter-class football tournament. Later, I became so interested in such sports activities that I requested my friends to sit by the window to look at the physical activities the Manjushree School's students performed. I used to gaze, ignoring the presence of my teacher in my classroom.

The scene was always fascinating; every student practicing was happy and enjoying. I never noticed anyone sitting idle, passive, not talking with others, or

not moving their body. Most of them were very friendly with the teacher and coach. If any of them lack continuity, their peers guide them. The coach would approach and show them how to do it. The happy faces of the students encouraged me to join them. Years of staring at these activities made me think of changing the school. However, my parents denied my request despite my earnest wish to change the school.

I was an average student in my studies and had no complaints from school or my parents. All of them were satisfied with me being an average regular student. However, I was not satisfied with my school's adaptation toward PE. The school had such a huge playground, but they never made us practice there. Even though the PE book clarifies how crucial physical activity is, management opted to ignore how PE is actually applied. I always wished to have PE practicals in my school, but it never happened. My school never organized an annual sports program as other schools do.

Metamorphosis: Spreading Wings

I was in the 9th grade and slightly overweight for my BMI and age. Therefore, my father made me join swimming classes at Dashrath Stadium (Rangashala), a minute walk from my house. I used to swim there on Saturdays only. The 65-meter-long pool was stinking, and the changing room was not less than a skunk cabbage. It was disgusting to go swimming every week, so I requested my parents to let me stay fleshy and chubby rather than go to that musty swimming pool. Finally, I joined martial arts at the Stadium. The hospitality and discipline of the martial arts students fascinated me. Then, practicing martial arts every day after school became my routine.

In 3 months, I shed almost nine kgs, and everyone in my family was happy to see me in good shape. It was hard for me to manage my studies and physical exercise. Nevertheless, with constant practice of both, I could balance my exercise regime and studies in neutral. I used to practice for one and a half hours daily and then complete my schoolwork after having dinner. Surprisingly, I never complained about being lethargic or tired but was much livelier and fuller of enthusiasm. It was the cold weather of February; the temperature had gone dramatically low, keeping every pedestrian shivering while walking. I went to collect my grade 9 report card along with my family. After collecting the report card, I jumped with joy. I scored 85 % in aggregate and stood 8th in the top list of

grades 9. All my family members, filled with happiness, later rewarded me with a beautiful pink school bag as a token of their appreciation for my hard work and achievements. My happiness had no boundaries.

I scored a distinction in the School Leaving Certificate (SLC) board exam. I had never imagined that a regular average student could ever score distinction in the Iron Gate (SLC was the Iron Gate for higher education) of higher secondary education. I had never scored 60% in my examination until grade 8, and in my SLC, I passed it excellently. A review by Howie & Pate (2012) claimed that cognitive function and academic achievement increase as the amount of PA increases in children. I find the idea quite relevant because after I started physical exercise, my better academic performance was noticeable and persistent.

Meanwhile, after the SLC exam, I had vigorous training in martial arts and later could win medals for the country and myself. One day, while traveling alone to my maternal house, Biratnagar, I realized that I had gained confidence in traveling alone, was a quick learner, and was very sharp at calculation. I was no more introverted and shared my food with other unknown passengers at Ramnagar. I had become helpful and much more socialized and felt no hesitation in being in a group.

I learned all these things during my sports journey. At school, teachers taught us how to score good marks in exams. Always seated and listening to teachers, never asking questions. I never acted socially or mingled in a group. However, while in sports, I traveled a lot with my mates. I used to practice with boys and girls. I have shared my Gi (white karate dress) with others and worn theirs. The coach immediately taught me any punches, kicks, or even katas (a choreographed pattern) that I had forgotten I grasped quickly. The coach was always there to scaffold our learning.

A Nightmare is a Prison: Shattered Hopes

In my professional career, when I was teaching at KISV to grades seven and eight, I felt that the school was cheating on students as well as parents. The school had a very large open area. A football ground, a basketball ground, and a large hall as well. The school administration charged some money for extracurricular activities. However, I have never witnessed extracurricular activities practiced by students during my two years of employment. Most importantly, no PE or extracurricular activities teacher assisted the students.

I was astonished to see the same system at KISV as that at GIBS. Although they had enough playgrounds and teachers theoretically taught PE, the school never hired a professional teacher to guide students in performing physical activities. When I talked with the principal about the influence of PE practicals and my transformation, she told me that in the 21st century, students should focus on their studies only, as good marks count last. However, I have never experienced a KISV student scoring even distinctions in the SLC exam. The students were not very active or confident while talking with me. Their socialization skills were not up to the mark. They used to have lunch in their classroom and did not want to go to the playground and play with others. However, KISV organized an annual sports day to gain parents' trust, and the preparation was done a week before only. I experienced that even after a decade, the system of doing practical PE has not been oriented in schools.

Later, I joined Whitehouse School as a primary teacher. The school system made me astound with the daily routine of classes. Each grade had a maximum slot for physical activities. Teachers take students swimming once a week; they have football, martial arts, table tennis, and basketball training according to their age. In the meantime, I observed that the students at this particular school were considerably more self-confident and socialized than the students at the prior school. Their academic performance was also good. The school organizes an annual sports week for parents and teachers, whereas other schools organize an annual sports program for a day only. I could determine that, perhaps, the school leader understood the role of physical activities more clearly and adopted them in their daily routine.

In my first semester of M.Phil, I collected the preliminary data regarding my research paper in a few community schools in Kathmandu. Even though these schools possessed strong infrastructure and included PE in their curricula, most schools lacked practical experience in the subject. Currently, most educational institutions have kept the practice of extracurricular activities and sports as their priority. This could be one of the reasons for institutional schools to perform academically better than community schools.

I used to be highly interested in sports, and while I was in secondary school, my cognitive and social behavior transformed. I could now reflect on how my participation in PE has played a major role. During my early years, if I had

received the appropriate environment for exercise and physical education, my intellectual and physical development would have begun at a much younger age, setting the foundation for a healthier, successful life. When I was a young secondary and a professional teacher, I experienced a lack of understanding of the practical knowledge of PE in students' daily lives. Although there was ample space in the school, the school administration denied students to participate in extracurricular activities such as physical exercises and sports. The issue is prevalent in many schools, particularly community schools, which still lack these valuable benefits. Is it not high time for all school leaders to take the initiative and address this pressing concern?

Statement of Problem

In the 21st century, children spend most of their time sitting on the couch. "Physical inactivity is the greatest public health problem of the 21st century" (Blair, 2009, p.1). The ever-changing world has limited them to staying in one place, learning, and playing static. They hardly exhibit any physical movement. Frost (2010) claims that these days, children are inactive, adopting sedentary habits of staying inside the house, focusing on cyber play, junk food, and abandoned playground intimacy. Human's description as "active organisms" has changed in today's society, leaving humans to stay still and seated for vicarious excitement (Ryan et al., 2009). The objective of this study was to explore the importance of physical activity in schools for better academic performance in students. Keays and Allison (1995) recommend that the benefits of increasing physical activity levels include improvements in overall health, academic performance, attitudes, and classroom behavior. Children given ample time to play in the school playground are more likely to develop physical and cognitive skills and social and behavioral skills.

Globally, 81% of adolescents aged 11 to 17 and 23% of adults do not meet the World Health Organization (WHO) global recommendations for physical activity for health (WHO, 2018). When children and adolescents do not get enough time for physical activities, their brains may not fully activate. As a result, they will not learn better, which will also affect their academic outcomes. Exercise is a miracle-grow for the brain. When we exercise, the body releases a gush of neural chemicals, which enhances brain infrastructure and another growth factor (TED, 2019). Textbooks help deliver theoretical knowledge and share it inside the

classroom, but other cognitive skills students learn outside the classroom, and that is possible in the playground. Children will acquire extra knowledge around the playground that they will never learn in a textbook. Regarding their physical development, if we were to constrain them to the classroom for a prolonged period while we taught, I seriously doubt that they would experience any physical growth. This is because their muscle advancement is highly dependent on muscle building, which directly connects to play, and play is primarily possible in play areas.

As we know, the practice of community school timing is from 10 a.m. to 4 p.m. in Nepal. By calculating the time, we can infer that six hours is a reasonable amount of time for children to spend in school. Supporting this fact, the U.S. Department of Health (2009) claims that children and youth spend a considerable amount of time in school every day (approximately 8.5 hours each), which is the most significant part of their day. Therefore, playtime at school is, for many of them, the most active time of the day. The time students spend in school is comparatively much less than the time given to engage in extracurricular activities (ECA) like exercise, sports, and PE practicals. Suppose we calculate their school time per week, which is 24 hrs a week for studies. In most public schools, students hardly spend one period, i.e., 40 minutes for ECA per week. "Only 15% of the school students aged 13-17 yrs were physically active for at least 60 min/day on all days of the week" (Aryal, 2015, p.3). Children benefit greatly from playing on the school playground in terms of their enjoyment and relaxation and their overall health and welfare. "Child psychologists and educators have considered the school playground an important venue for children's social and cognitive development" (Pellegrini et al., 1995, p.846). When a playground can help foster different aspects of child development, it could be a better prospect for their learning.

The one-fifth of the school day allotted to play has become crucial to the growth and well-being of every child, according to new neuroscience research from the US that shows that play is essential to the healthy development of the neuron pathways in a child's brain that are used for learning. A sedentary lifestyle is a prominent risk factor for non-communicable cardiovascular diseases, cancer, and diabetes. PA improves physical health, stamina, and overall fitness, leading to a healthier, more disease-resistant body. It also reduces stress and anxiety, enhancing emotional well-being. Students engaged in PA testified improved

cognitive abilities, concentration, problem-solving, and analytical skills. Balancing academic commitments with PA improves academic performance. Group sports foster community, social interaction, and self-confidence, thus contributing to a comprehensive connection between PA, disease prevention, and academic performance.

As we have experienced that PA is vital in the development of learning different skills and hence contributes to academic achievement, we find very little research done on the topic. During this critical phase of growth and learning, we need to teach them how physical activity can profoundly enhance their cognitive functions and overall well-being. However, it is worth mentioning that there is limited published research regarding the relationship between sports and cognitive functions in children, requiring further exploration in this area for a better understanding of the potential influence and implications.

PA has tremendous physical benefits, and it enhances academic performance. However, this idea overlaps with completing the syllabus on time; private schools focus more on the student's academic achievement without much regard for physical activities (Thapa et al., 2019). There is less awareness regarding PA's influence on academic performance. The literature on the relationship between physical activities and academic performance has steadily grown. Despite the rapid growth in studies exploring the relationship between physical activity and academic performance, most indications are cross-sectional and only consider single links (Aadland et al., 2017).

Rationale of the Study

As a child and a teacher, I have considered physical activities (PA) in school to have a primary role in the development of the body and mind of students. I noticed from the visit to several schools that they are still reluctant to accept that physical activities play a huge role in students' learning. They have good infrastructure, including big playgrounds; however, they have not realized the benefits it could provide to students' learning.

Schools are not willing to create an environment for physical activities for students, and healthier children are better learners; hence, physical health plays a pivotal role in brain health in school students (Basch, 2011, as cited in Castelli et al., 2014). When students have a better environment for PA in school, they will be good learners in the classroom, too.

I expect this study to bring alertness in the schools regarding the role of physical activities in the body and mind of students, which could help boost their academic performance. The study may contribute to awakening school leaders to amalgam the practical aspects of PE into their routines.

Purpose of the Study

The purpose of this study was to explore how regular physical activity influences students' academic performance by maintaining a healthy body.

Research Questions

- a. How do students and teachers share their experiences on the benefits of physical activities?
- b. How do students narrate their learning experience and academic performance based on participation in physical activities?

Delimitations of the Study

The World Health Organization has recommended that physical activities improve physical fitness (cardiorespiratory & muscle fitness), cardiometabolic health, bone health, cognitive outcomes (academic performance & executive function), mental health, and reduced adiposity in children and adolescents. It was impossible to incorporate all the areas in this small research work. While narrowing down my study, I have certain limitations, and my study is limited to physical activities that promote physical fitness and cognitive outcomes. To make my study more specific, I have concentrated on physical fitness and healthier experiences for academic performance.

In applying theories for my dissertation, I first restricted to using just Vygotsky's social constructivism theory. In addition, while using SCT, I am restricted to using his fundamental concept of ZPD and scaffolding. In Nepal, there are four recommended standards of school: Grade A until Grade D. However, I limited my study to "A" grade school only because "A" grade schools give more opportunities to students for physical activities than other grade schools.

Organization of the Study

I have organized this dissertation into six chapters. Chapter one consists of the study's introduction, including my stimulating journey and personal stories that create the setting for my study connected with physical activities and academic performance since childhood. I have included my experiences as a

student and how I have witnessed the benefits of physical activities and their influence on learning, which enhances my academic performance as a teacher. The concerns regarding the title of my study are understood in the statement of the problem, the rationale of the study, the purpose of the study highlighting two research questions, and the delimitations of the study. Chapter two begins with a conceptual literature review, introducing the benefits of physical activities and their influence on student's learning and academic performance. I have also discussed research theory, empirical studies, research gaps, and theoretical understanding in chapter two. In chapter three, I have presented my research methodology. This includes my philosophical considerations, research paradigm, information gathering, and the process of meaning-making. In addition, I have described the portfolio of my four participants along with the quality standards maintained and ethical considerations followed in chapter three. Chapters four and five portray the narrations of four participants and weave in six different themes. I have linked each theme with theoretical discussion, and my personal reflection is based on the participants' performance and my point of view. Finally, in chapter six, I have placed my insights, three different implications, and the conclusion. I have concluded my dissertation with a display of references that have made a valuable contribution to my study.

Chapter Essence

In this chapter, I have presented my concept of the phenomena using my past and present experiences as a student and educator. Subsequently, I expounded on how my personal experiences, particularly my transformation from a butterfly to spreading wings, motivated me to undertake this research. Moving forward, I provided a concise overview of the rationale behind my study, highlighting that physical activity significantly influences students' learning and academic performance, making it a subject worth investigating. Furthermore, I delved into the research problem scenario and endeavored to justify the purpose of my research agenda. Additionally, I have outlined the research questions for my study, along with the thematic delimitations of the research. Finally, I have concluded the chapter by presenting the organization of the study.

CHAPTER II

REVIEW OF LITERATURE

Chapter Overview

In Chapter II, I have introduced my research agenda. The chapter reviews the related literature on the research problem to shape the theoretical framework. I review the existing policies, empirical research findings, and theoretical insights. In this chapter, I have contextualized my study and tried to show a bigger picture, which helps to bring to light the gap identification of the research (Ridley, 2012). Through a literature review, we can understand the space created and the gap in the research. Lastly, I have highlighted theoretical guidelines with the model representation for the study.

Through extensive reading of different literature, I found that a literature review is one of the most important parts of the research. For this review, I have used the terms academic achievement or academic performance interchangeably, including cognition, unless otherwise noted. Physical activity is used interchangeably with exercise and play, wherever needed.

Incorporating Playground in Learning

It is a known fact that these days' children spend most of their time sitting in the house on their comfortable couch, focusing on sugar and other calorie intake, and not spending much of the time in play. Due to homework pressure and a lack of public parks, children do not get much time to perform any physical activities after school. That is why this generation is overweight and unfit. They play less and are not engaged in natural childhood. Many children only have the chance to play and engage in PA during school hours due to the structured nature of their daily routines. This limitation in their opportunities for PA is a substantial concern, particularly considering that WHO (2018, p.5) reported that "the vast majority of children and adolescents spend most of their day at school. It is essential that they need to be given ample opportunity to be physically active within the school environment." Encouragingly, research has shown that school students who participated in 30 minutes of physical activity performed better cognitively than children who spent the same amount of time watching TV (Ellenberg & Desehenes, 2010). Due to this fact, schools must incorporate

different physical activities into their daily routine and promote PA during school hours. Moreover, improving cognitive, motor, and social skills through PA has an advantageous influence on student's academic performance (WHO 2021).

Conceptualization of Physical Activity

WHO (2022) defines PA as any bodily movement produced by skeletal muscles (Slack, 2006) that increases metabolic energy expenditure above the basal level (Butte et al., (2012); Owen et al. (2007). Merrick (2017) elaborates PA as a movement of the body that utilizes energy and can involve many activities, from light and moderate to vigorous, including aerobic, flexibility, and muscle strengthening activities (Kreitzer, 2020). Adamkova et al. (2015) claim PA as a non-pharmacological tool in the prevention of a surfeit of diseases.

In most of the writings, they use the terms 'physical activity,' 'physical fitness,' and 'exercise' interchangeably, in many literature, they use it incorrectly (Sallis & Owen, 1999), which is one of the reasons people have the same prospect on two different topics. Kreitzer (2023) explains that exercise is a sub-category of PA geared toward maintaining physical fitness. Exercise is one of the forms of PA, but PA does not require exercise. On the same line, Thivel et al. (2018) also opine that people confuse the term physical activity with sport; sport is part of the PA spectrum that corresponds to certain institutionalized and organized practices with some specific rules to follow. They explain that individuals and patients may fear the term sports, but what is required is regular PA participation. However, NHLBI (2022) opines that the three main types of physical activity are aerobic, muscle strengthening, and bone strengthening. Balance and flexibility activities are also beneficial for a healthy body.

As claimed by Owen et al. (2007), there is a wide range of physical activity intensities, from moderate-intensity activities like walking to vigorous endurance activities like riding a bicycle fast. People also adopt activities that increase strength and flexibility, such as weight training or calisthenics; it is advisable to adopt any range of intensities to stay healthy. WHO recommends children and adolescents should engage in PA for at least an average of 60 minutes per day of moderate-to-vigorous intensity. At the same time, adults aged 18-64 years should engage at least 150-300 minutes of moderate-intensity aerobic physical activity on a weekly basis.

It is a widely known fact that regularly taking part in PA has many health benefits. CDC (1999) explains that improvement in brain health, management of weight, reduction of the risk of diseases, strengthening of bones and muscles, and

improvement in the ability to do everyday activities are linked with how physically active one is. Saxena et al. (2005) strongly present the idea that PA could be helpful for promoting well-being and as a strategy in psychosocial therapy for people with severe mental disorders. Supporting in the same line, NHLBI (2022) opines that PA can also reduce signs of anxiety in children, teens, and adults in the long term. It also claims that after a single session of PA, children show improvement in cognition, and physically active adults are at lower risk of cognitive function deterioration as they grow older. Not only in the area of communicable disease, PA also has a psychological benefit for human beings. As claimed by Berger (1996), “PA is associated with psychological benefits in four broad areas: enhanced mood, stress reduction, a more positive self-concept, and higher quality of life” (p.330). People who regularly engage in PA tend to experience more positive emotions than ones who are not engaged in PA regularly. PA can help reduce the body’s stress hormones and promote a sense of relaxation. These benefits highlight the importance of integrating regular PA into one’s lifestyle for overall mental well-being, and PA in youth is psychologically beneficial (Calfas & Taylor, 1994). While engaging in PA, they get support from others, create positive interactions, and individuals feel appreciated and valued. This communal aspect of PA can have a positive influence on motivation, fellowship, and emotional well-being, which has the utmost importance in one’s life.

Review of Previous Research Studies

During my literature review, I went through research studies found in the Kathmandu University Library, Tribhuvan University Library, and different internet resources. While reading the study reports, I found only a few researchers have touched on the issue of physical activities and academic performance. Sharif (2014) claims that in modern cities, schools are built in housing apartments with no facility for playgrounds and play scopes, as most people regard school as a place for edification only, for play, as a waste of time. Furthermore, "Most of the parents in Hong Kong regard Academic Achievement as the single most important indicator of success for their children and overlook other aspects of physical and psychological development" (Yu et al., 2006, p. 331). I have experienced many parents believing that physical activity is an energy drainer that distracts concentration on academia. However, Mitchell et al.(2006) believe that urbanization has dwindled the play areas, reducing children's free play and leaving the school playground for only play opportunities. This site is very common in

most of the cities where tall buildings stand up, limiting children inside their houses only. This is why they emphasize the playground as an essential space for learning basic principles of life skills, which is indispensable for a healthy lifestyle. The study's outcomes indicated daily routines should include more physical activity as exercise improves cognitive abilities, intellectual growth, and happiness (Li & Zhang, 2022). It seemed useful to be applicable in most of the learning institutions of Nepal where PA is not given much importance. The study notably emphasized the necessity of PA practice in general.

Approximately 3.2 million deaths each year occur due to insufficient levels of PA (Posadzki et al., 2020). Dishman et al., (2006) strongly claim that active participation in PA helps to reduce the risk of diseases such as diabetes, cardiovascular disease, obesity, and depression. A narrative summary conducted by Hillman et al. (2008) found that there has been very little research done on the impact of PA on academic achievement, and the limited amount of published research is not sufficient to indicate that an increase in curriculum time, PA is associated with a decrease in academic performance. Along the same line, (Bidzan-Bluma & Lipowska, 2018) also support the notion that childhood is an important and sensitive period for cognitive development.

Policy Review

Key issues for education policy and practice have been identified based on the literature review, as there are some clauses regarding physical activities and playgrounds (education regulations, 2059)

- The school must have a playground big enough to hold all the students at once.
- The regulations have emphasized that the playground area has to be equal to that of a volleyball ground and play equipment.

There is no discussion in the Education Act regarding physical activities and playgrounds. "Education policies in Nepal have been considered as a predetermined course of action which is established to provide a guide toward accepted strategies and objectives" (Acharya, 2019, p. 41). I felt that education policies, specifically policies regarding the development of physical activity, had stagnated. NEP (2071) states that for the physical development of students, the practice of different kinds of sports is necessary. In the education policy of Nepal,

there is the mention of very few things regarding physical activity. Still, there is a substantial variation in the definition of PE, how it relates to learning within the curriculum, and, more importantly, focusing on its implementation and how it is assessed in schools (OECD, 2019).

The policies made by the government for education are tempting. It has mentioned the need for physical infrastructure in every school, but it is unclear regarding the playground and how much time students should involve themselves in the playground. WHO (2010) recommends that youth and children must have 60 minutes of moderate to vigorous physical activity daily. However, the CDC (2019) has specified that students are allocated 180 minutes per week to practice the entire health and physical education subject in their school, which is the least preference given to the subject. The policy should focus on contemporary world education to make students healthy people for life. Learning through textbooks is not a complete factor in the development of children, but students can have the opportunity to learn from the playground, too.

Nepal: School Education Sector Plan 2022/23-2031/32 has failed to address any policies regarding physical activities. However, Nepal Education Policy 2076 has mentioned the necessity of playgrounds in schools, but there has been no further discussion. Whereas the amended education policy 2079 also fails to mention PA. These events hinted that the Nepalese school community has a limited idea regarding the influence of PA and its relation to AP.

Recently, there has been an emerging concept of Health Promoting School (HPS), though the concept is not a new one. The World Health Organization's (WHO's) Health Promoting Schools (HPS) framework is a holistic, settings-based approach to promoting health and educational attainment in school (Langford et al., 2014). The health-promoting schools model identifies that healthy students learn better. While health education is imperative, evidence advocates that multifaceted approaches are more effective than classroom-only or particular intervention approaches (Leger et al., 2010). The HPS framework is one that considers the broad health needs of all school community members. These health needs are addressed collaboratively using a combination of strategies linked to the three interrelated components of curriculum, ethos and environment, and partnerships.

Covid-19 has affected young student's physical and mental health as well as social well-being. For better response to health needs and to prevent young students' future

risks, HPS emerged as an important agenda. However, implementing the HPS framework in the schools of South Asia seems to be a dream. There are plenty of challenges, a mismatch between school curricula and the demands of the economies being the major ones (Patel, 2018). In developing countries, the HPS program is more challenging as there is inadequate school health facilities, inadequate health personnel, poor commitments from stakeholder of school health program, and poor implementation of school health education (Mukhtar & Bala, 2017, p. 207). Nonetheless, it is not a difficult task to increase the number of Health Promoting Schools.

Review Related Theory Suitable for My Research

Many philosophers have formulated countless theories regarding education and its aspects. Theories are lenses through which researchers examine existing social issues (Reeves et al., 2008). A single lens applied to social problems is insufficient to understand different life aspects. As my problem of the study demands learning theory, I have used Vygotsky's Social Constructivism Theory. Since "Theory helps us understand how we develop our understanding about the way we work and the way the world works" (Rasmussen, 2017). Applying Vygotsky's Social Constructivism Theory (SCT) in my study, I would like to explore how students construct knowledge through socializing. Vygotsky (1978) views less competent children as thriving with the help of more skillful peers within the Zone of Proximity Development through interactions as an effective strategy. The interaction between peers is more open and pressure less outside the classroom, and the playground is the best place for blossoming their emotions. Moreover, children construct knowledge by being physically active or playing on the ground, forming groups of peers, socializing with others, and interacting with more knowledgeable others. The more knowledgeable other (MKO) refers to someone who has a better understanding or a higher ability level than the learner with respect to a particular task, process, or concept.

Similarly, I have applied the Self-Determination Theory. Through this theory, I connected human's basic psychological needs (i.e., autonomy, competency, and relatedness) along with Vygotsky's SCT to probe the influence of physical activities on students' academic performance.

Social Constructivism Theory (SCT)

Lev Vygotsky, one of the pioneers of constructivism, believed that people learn from social interactions. Vygotsky's (1962; 1978) theory postulates that in learning, the manner in which students solve problems and advance their learning development relies on their social interactions. According to him, people construct their knowledge from the interaction and communication they have with the more knowledgeable and experienced ones. Vygotsky's SCT also focusses on collaborative learning, such as group inquiry and debates, which helps the students to interact with the teachers to increase student learning and academic performance. Accordingly, the learner's construction of knowledge is the production of social interaction, experience, previous knowledge, interpretation, and understanding (Vygotsky, 1962). Following Vygotsky (1978), to build knowledge, there should be an emphasis on the knowledge constructed by the conversation and exchange between two or more individuals. According to this theory, students actively engage in learning if they get the opportunities to ask questions, solve problems, process information, and make decisions. According to Oakley (2004), learning is a social occurrence best facilitated through group work and cooperation with more knowledgeable individuals. This concept should be practiced inside or outside the classroom to make learning effective.

Hirsh-Pasek & Golinkoff (2008 a, p.1) state, "Play is a central ingredient in learning, allowing children to imitate adult behaviors, practice motor skills, process emotional events, and learn much about their world." Children imitate and learn from elders while elders serve as more knowledgeable others.

Based on these facts, Vygotsky developed the concept of Zone of Proximal Development, which indicates that less skilled individuals can learn from more knowledgeable and experienced individuals.

Zone of Proximal Development (ZPD)

It is a concept developed by Lev Vygotsky, which emphasizes the importance of social interactions and scaffolding in cognitive development. The zone of proximal development (ZPD) has been defined as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers." (Vygotsky, 1978, p.86). He believed that when a student is in the ZPD for a particular task, if they get appropriate guidance,

then it would boost the student's capability to achieve the task. ZPD, a fundamental aspect of Vygotsky's theory, is viewed as the range where sensitive guidance is necessary to allow the child to develop skills that they will use for developing higher cognitive functions. He also views social interaction as an important area where children develop their higher mental functions. He suggests that children develop skills and strategies when they interact with peers. Teachers practice cooperative learning exercises where less competent children improve with help from more skillful peers- within the zone of proximal development. From a Vygotskian perspective, the teacher's role is mediating the children's learning activity as they share knowledge through social interaction' (Dixon –Krauss, 1996, p.18).

Scaffolding

Another part of SCT is scaffolding, which is providing the learner with the right amount of assistance at the right time for a particular task. Wood et al. (1976, p.90) state, "those elements of the task that are initially beyond the learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence." If a learner performs a task with assistance, it can be perceived that learners are closer to mastering it. This theory is relevant to improve cognitive development in adolescents because if students get a chance to work in pairs, they interact with people and, therefore, can learn different ideas from one another. This shows that students learn from social interaction and can improve one another and co-construct knowledge.

Self-Determination Theory (SDT)

Deci and Ryan introduced the term self-determination in the book *Self-Determination and Intrinsic Motivation in Human Behavior*, 1985. The Self-Determination Theory (SDT) distinguishes three basic psychological needs that should be satisfied for an individual to feel autonomously motivated (Deci & Ryan, 2004). The first need, autonomy, is the experience that choices and actions are self-endorsed and self-initiated (Deci & Ryan, 2017); the second need, competence, is the ability to accomplish important personal goals and experience task mastery (Deci & Ryan, 2017), the third need, relatedness, is the experience of warmth, support, and caring from and for other people. (Deci & Ryan, 2017).

SDT claims that universal innate psychological needs (i.e., competence, autonomy, and relatedness) influence humans. Eventually, they stand out as the best of humankind when these needs encounter a social environment (Deci &

Ryan, 2002). Similarly, "student's basic psychological needs for autonomy, competence, and relatedness, which when supported are associated with academic engagement and better learning outcomes" (Niemi & Ryan, 2009, p.134). More knowledgeable others, like classmates, peers in groups, coaches, and teachers, must support these universal and psychological needs. If the teacher cannot give such kind of support, they will become frustrated, and there is a danger that such students could show academic disengagement and, hence, poorer learning outcomes.

SDT maintains that a student can accomplish competence in many ways; they can accomplish it through academic learning (like reading and writing). They can also accomplish competence through physical activities and generally accomplish competence within themselves by engaging in social activities with peers. Social competencies in coping with peers shape school readiness and learning academically (Hirsh-Pasek & Golinkoff, 2008). Playing alone in the playground during recess time can be regarded as their achievement of autonomy. Students can attain relatedness through academic and social interactions with classmates and more knowledgeable others like teachers, coaches, and facilitators.

Research Gap

The literature review on my topic has enriched my understanding of the overwhelming advantages of physical activities. I perceived it as the pathway for children to develop physically, socially, and cognitively, and even these factors enhance the AP of students.

Based on literature reviews, I found that healthy learners are better learners. In this urbanization era, with increasing inactivity and sedentary behaviors, the school playground is the only place where children practice their physical activities and broaden their learning skills. Some research I went through did not specifically cover the issues of physical activity and its influence on academic performance. Teachers' approach to play is superficial, and there are practical difficulties due to curriculum inflexibility.

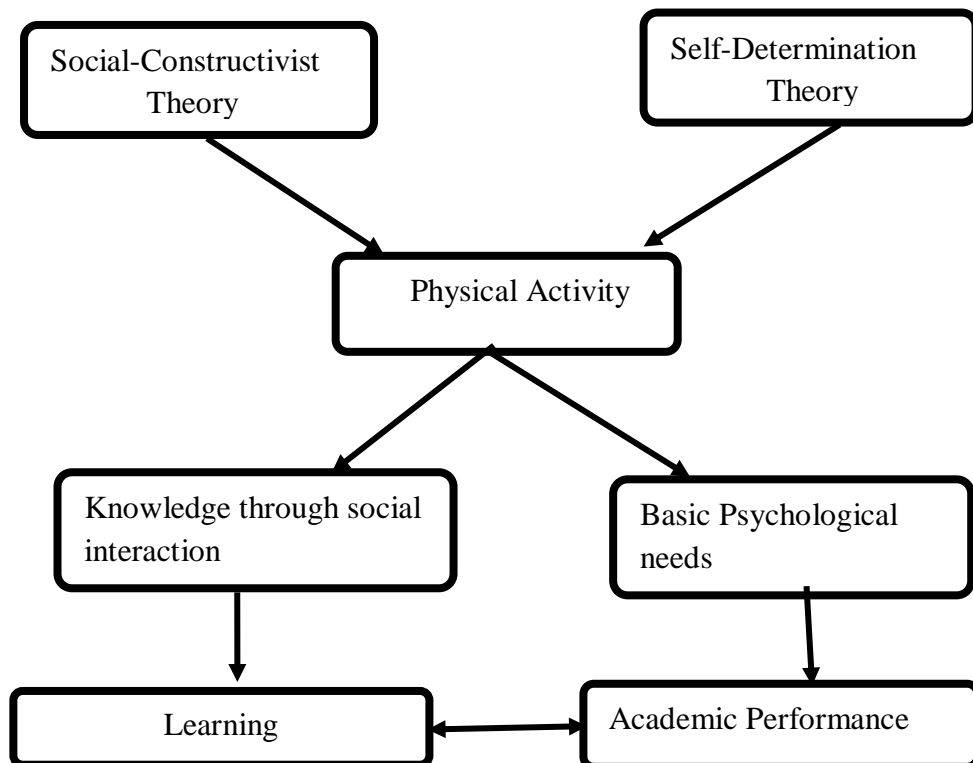
There has not been much research done in Nepal on the relationship between PA and academic success (Basnet & Basnet, 2017). In line with this, Nagata et al. (2016) claim that little empirical research has been conducted on the association between academic achievement and physical exercise in Nepal. Especially in community schools, despite having the facility of playgrounds, the

school leaders seem reluctant and are not aware of the pivotal role playground plays in students learning. This inadequacy inspired me to carry out this research. I suppose this issue is worth carrying out.

Theoretical Guideline

The use of playgrounds in the teaching and learning of students will be very beneficial to their academic performance. My research explored how regular physical activity influences students' academic performance by maintaining a healthy body. To achieve the purpose of the study, I utilized the Self-constructivist theory and self-determination theory as the guide to the research. With the help of these theories, this study has tried to understand the influence of physical activities on learning and academic performance. The study would help us analyze if physical activities can help students improve academically.

Theoretical Framework



Chapter Essence

At the outset, I faced a quandary of delving into concepts and theories. To shape my research agenda, I scanned numerous literature, including books, journals, previous research studies, digital theses, and online articles. The

attachments and interactions defining the benefits of physical activity and its influence on learning and academic performance were crucial in guiding my research under the lens of Vygotsky's social constructivist theory and Deci & Ryan's self-determination theory. Upon reviewing the literature, it became apparent that in Nepal, the knowledge regarding the influence of physical activity on academic performance and learning is scant, and globally, the study on the topic is methodologically lacking. However, my empirical reviews helped me comprehend the vast benefits of physical activity and its influence on physical and cognitive health, ultimately strengthening its influence on academic performance. I have effectively explicated the research gap and finally ended this chapter by outlining the theoretical framework.

CHAPTER III

RESEARCH METHODOLOGY

As the chapter indicates, it includes the methodologies applied to the proposed study. I have used narrative inquiry as my qualitative research (within an interpretive research paradigm) approach to instrument some philosophical considerations of my research inquiry. The methodology employed a naturalist approach to collect participant information through observation, interviews, group discussions, and field notes. This study explores how students and teachers narrate their learning experiences and academic performance through participation in physical activities. Ultimately, I have dealt with research location, quality standards, and ethical considerations for my research.

Interpretivism as a Paradigmatic Stand

I choose interpretivism as my research paradigm based on my relativist ontology and my social constructivist epistemological assumption. Considering the nature of my research problem and purpose (to explore the influence of physical activities on student's academic performance), I reasoned that implementing interpretivism in my study. This allows me to better understand the opinions and viewpoints of my participants through informal discussions and then narrate and interpret them from a variety of socio-cultural and contextual perspectives. The interpretive paradigm is much suited for my research as it consolidates the researcher's local understanding of the life-world experiences of teachers and students and the cultures of classrooms, schools, and the community they serve (Taylor & Medina, 2013).

I believe in subjectivity and relative and contextual knowledge. Since there are multiple realities and perspectives, most people generate multi-layer interpretations of the same object, and knowledge is derived from a variety of content and contexts. To understand the realities, collecting opinions and views of research participants is necessary to enrich the thoughts related to perceptions and practices (Cohen et al., 2017) because knowledge derives from context, which is always

relative (Richards, 2003). In order to understand, I put myself in their shoes and encouraged them to share their experiences openly. I emphasized extended casual and informal conversations. The interpretive paradigm is well suited for exploring the hidden reasons behind interrelated social processes and interpreting reality through a sense-making process. I found the paradigm to be suitable for my research.

Philosophical Considerations

The philosophical approach facilitates researchers in formulating research problems and questions for the study and enlightens them to choose theories that guide research (Creswell, 2013). Researchers base all studies on philosophical and theoretical foundations. The philosophical approach paves the way for the researcher to determine the appropriate approach and reasons behind it. Thus, it is a very important part of any research methodology to choose an appropriate philosophical approach, and it is a specific way of developing knowledge that defines the paradigm. Kivunja and Kuyini (2017) viewed the research paradigm as the abstract beliefs and principles that shape how a researcher sees the world and how he/she interprets and acts within that world. Moreover, a researcher looks at it through the lens of a paradigm.

To maintain all these mentioned facts, I have applied the interpretive paradigm in my study, as it provides me with a rich local understanding of the life-world experiences of students and teachers.

Ontological Assumptions

Interpretive research is ontologically inter-subjectivist or constructivist. The ontology of research design particularly answers the question and refers to the reality status of the study. The reality can differ depending on their social beliefs, understanding, and perception (Coehen et al., 2017).

As an interpretive researcher, I believe that the participants' experiences with learning and academic achievement through their participation in PA helped shape the subject construction. These realities are contextual and subjective. The research participants (e.g., students and teachers) have different stories, experiences, values, and opinions. As the world has multiple realities, I believe there exist multiple realities regarding the use of playgrounds. Thus, my ontology for this research is

relative and subjective. I conducted separate interactions with different individuals to explore the multiple realities.

Epistemological Assumptions

Epistemology deals with theories of knowledge (Ejnavarzala, 2019). Communication through interaction can create knowledge. Thus, epistemology may differ from participant to participant. My epistemological assumptions in this inquiry assume that truth is constructed through interaction and sharing with selected students and teachers. As knowledge is always human and social, I believe in inter-subjective knowledge construction through participants' experiences, stories, opinions, and my subjective views.

Methodological Considerations

I interpret the participants' experiences, stories, values, and opinions. The basic theme of the interpretive paradigm is that there is no single reality and that reality is socially constructed (Bogdan & Biklen, 2003). An understanding (Punch, 2005) that the researcher's real-life experiences within natural settings construct knowledge. The paradigm of interpretivism has helped me as a researcher to understand and construct new knowledge on the learning experience of students and teachers through participation in physical activities. The experiences and narratives of the participants provided the source of this new knowledge.

Narrative Genre

I have used the narrative inquiry method as my study focuses on the experiences and narratives of my participants. Narrative inquiry is a way of understanding human experience that is meaningful, and individual stories project their narrative meanings. Therefore, narrative inquiry helped me collect more details of the experiences shared by each participant. The method of sharing an experience differs from individual to individual, which will provide variation in the study findings. Barkhuizen et al. (2014) state that narrative inquiry interlinks storytelling and research by using narratives or stories as research data. In this connection, I employed narrative inquiry to support me in incorporating different stories of the participants. I have constructed new knowledge through stories, monographs, and experiences. I have familiarized the participants with

the research to set the scene and provide the backdrop for this study. I attempted to present the stories/lived experiences of my participants.

Selection of the Research Site and Participants

For the study, I purposefully chose this school from the Lalitpur district as the research area and children from grades six and seven as the research participants. I selected one boy and a girl from grade six and one girl from grade seven. They participate extensively in physical activities in the school. I have clarified that participants must give enough time for the interview and feel comfortable while being observed to generate data. At the same time, I had a chance to enrich my data about the existing PE practices through head teachers and resource persons of the sample schools.

Research Site (School Profile)

In my study, I chose four participants from an 'A' grade school, where PA is heavily encouraged. The authorities have categorized 'A' grade schools according to anusuchi-21 (Sikshya Niyamawali, 2059). More than 800 students were studying in the school. National athletes and students who performed better in earning higher degrees comprised the majority of graduates. The school includes two large playgrounds, one measuring 90 square meters and the other 50. It is remarkable to see schools in the heart of Lalitpur city with such sizable playgrounds. It has two separate, two-story buildings facing east.

Participants' Profile

Privacy protection for participants is crucial in qualitative research; as a result, it protects the participant and their right to secrecy. I have tagged them with pseudonyms while converting their audio-recorded interviews into transcripts. I have utilized them throughout the study. Additionally, the transcripts were kept using the established pseudonyms even after the study was completed. I obtained the necessary institutional approval before data collection. For this study, I present a brief biographical profile of the participants. Initially, I selected the participants for a purpose, and I enlisted volunteers who were extensively engaged in PA and agreed to interviews. One of the participants took part in almost all physical activities from early grades. The other two participants were average in taking part in PA, as their grades were below average initially. I

interviewed those regarding concerns about their academic performance and learning experience because of their involvement in PA. To illustrate the facts relating to the participants, I have described their profiles in this section. I interpreted the participants based on impressions from my long engagement in their interview sessions.

Providing a thorough description of the research participants sheds light on their personalities, particularly how they develop narratives to share their experiences. The students' experiences were important to this study because they represented a range of educational aspirations, familial circumstances, and personality types. Each of them had a distinctive perspective on their learning activities.

Student Participant (P1)

Student Participant (P1), aged 12, is studying in Grade 6. When the ECA coordinator sent her to meet me in the computer lab, I saw her as outspoken, a bit chubby, and highly confident. She had an angelic face and kept smiling throughout my talk. On the very first day, I had an informal talk with her. The teacher had already briefed her about my visit and meeting her. I asked about her age, section, family background, and her interest in PA. Then, I told her that she needed to fill out the consent letter and get a signature from her parents. After collecting the consent form and an official green signal from the school administration, I started talking. As usual, for a couple of minutes, we talked about other casual things like saying something about your favorite teacher and who is your best friend. To make her feel comfortable, I felt that these casual talks made them more relaxed than asking direct questions. After a while, I briefed them about my research purpose and questions. I obtained permission from her to record the interview in my mobile voice recorder and requested she not be conscious about it. Since my participant was a minor, I ensured she did not get over-excited and nervous simultaneously; otherwise, my data could be tampered with.

It was a very short interview on our second meeting day because I felt that she was unprepared and uncomfortable with her voice recorded. Recognizing the situation, I took notes and told her to share her story as slowly as possible. She narrated her experience of participating in PA more actively. She said:

It was not until Grade 5 I could not recognize the benefits of PA. I was not a regular student participating in PA, especially sports. I feared that I could get hurt if I participated in basketball or karate; therefore, arts and crafts were my favorites. When I upgraded to Grade 5, karate was compulsory in the routine. I was reluctant to be part of the karate class, but my enthusiasm rocketed after the coach's behavior and motivations. (Field note: June.07.2023)

She shared her experience and was excited and happy throughout the conversation. She added that even her parents motivated her to participate in the PA classes where physical movement is higher, and she is proud of it now. She comes to school from Manbhawan on her own every day by walking, which takes her 20 minutes to cover. She had told me initially that she was very excited to be part of my research as no one had ever come to her for an interview with a recording.

Student Participant (P2)

A lean and thin body, a 13-year-old girl with a good height and a bit restless, the student participant (P2) has an energetic yet fidgety personality. She lives in Satdobato with her twin sister and parents. At the first meeting, she was a bit quiet and introverted. We just shared some informal greetings and casual talks on that day. After the conversation with her, I felt that I might need to change my participant because she is a quiet girl and would not be useful enough for my data collection. Nevertheless, she was the most talkative in the second meeting among all my participants. However she was just 13 years old, but her knowledge was that of a young adult. Her answers made me wonder if readers would find that the data interfered as if they had scripted replies. However, I had not shared my questions with her prior. However, I felt that she must have done some part of the research to answer better. From our informal talks, I understood that she is a medium-paced girl in sports and is not very fond of participating in them either. However, she has undertaken it as part of her routine life; she says she knows the benefits of PA for physical fitness. She narrated:

I am not an enthusiastic person in terms of my engagement in PA, especially sports. I know it keeps one physically fit when you participate in it. However, I

consider myself a diligent person. I prefer to focus more on studies rather than sports activities. I often participate in team games, as they foster camaraderie and teamwork spirit in a positive and supportive environment.

(Field note: June.10.2023)

P1 opines that PA is equally important for our well-being, but it is more crucial to improve academics. On my inquiry about her grades, she hesitated to reply that she was average in her studies. She added that her introverted behavior changed after participating in team games, and now she does not feel awkward when dealing with strangers.

Student Participant (P3)

Direct and willing to share, the student participant (P3) has an energetic and confident personality. His curious eyes were revolving behind his spectacles. He was a class topper in Grade 6 last year and lives in Ikhanakhu, Lalitpur district. His passion is to become a renowned basketball player in the future. Therefore, he likes to practice many of his basketball tricks and hooks. I introduced him to my research purpose again and requested thoughtful sharing. He has been an avid talent since his childhood. I observed him inside the classroom; he was a curious boy who was a friendly threat to his friends in sports and studies.

He shared that his engagements in PA have made him a bold and resilient person. His stamina has doubled, and now he can practice for longer hours. He has gained different cognitive skills from his games, such as analytical and problem-solving skills. His story-sharing gave me positive vibes as well. He revealed:

Participating in PA, especially karate, has made me more focused on my games and studies. My concentration level has heightened. I can practice my games for hours and now focus on my studies accordingly. (Field note:

June.10.2023)

Teacher Participant (T)

The school's premises enthralled me on the first day of my visit to my research site. No wonder a couple of hundreds of students study there. The security guard at the school's main gate stopped me and took my brief interview about the reason for visiting the school at an odd time. After taking a visitor pass, I went inside the reception area and

gave another short interview about the reason for my visit. Eventually, I went to the coordinator's room and was told to wait for the ECA coordinator. Because I had already used modern technology and had a detailed conversation on the mobile, it was more convenient to talk at the first meeting. Before she entered the room, I looked around, and my eyes stopped on the writings and pictures, which made the walls enticing. Many positive messages related to discipline and motivated words covered the unpainted walls.

A Mongolian woman with an average height of 5'2" and a healthy woman in her mid-30s approached me. A formal greeting with two closed palms, a million-dollar smile on her face, and a request to take a seat made me feel heartily welcomed. During a long conversation with her, I came to identify that she was a national volleyball player and had been working there as an ECA coordinator for seven consecutive years. She passed her Bachelor's degree in Education at the age of 21, and from that year on, she worked as a teacher and an administrator and presently as an ECA in charge. She was quite a soft-spoken woman until she gave instructions to 90 students in the school playground. She did not need a loudspeaker.

Her journey as a teacher and her role as an ECA coordinator has many difficulties. She feels that her present role at this school is a bit hectic and time-consuming. However, she loves being with young people and adores their innocence. They are easily motivated at times, and in many situations, they get easily distracted; they are just like wet mud, ready to hold any shape given. As I began my formal interview, she readily answered my questions. She revealed:

I am proud that I am the ECA in charge here, and I have been designing the routine in such a way that it integrates PA with academics, with no harm to their academic outcomes. Since I know the ample benefits of PA and its power to influence learners, such as school students, on their cognitive development, I have helped design the school calendar so that students would benefit in both areas. (Field note: June.14.2023)

After listening to her sharing, I was immensely happy that if schools could attract brilliant minds like her, school students would always lead a balanced life. I thank her for all her support, from providing me with my student participants and

their time for the interview to accepting my request to use the school as a research site.

My Field Engagement Strategies

As an observer, I have taken interviews, recorded field notes, and conducted group discussions as my field engagement strategies. I used participant observation as a tool to generate data for my research. Observations have allowed me to gather data (Coehen et al., 2017) from naturally occurring social situations. I observed physical activities and interactions in the school playground and classroom context for approximately 30 minutes each. Through participant observation, I attempted to determine whether the participants learn socially in the playground and what learning capabilities they show in the classroom.

I conducted interviews with the participants. It is considered the fundamental source of data collection because the informants can express their opinions freely and spontaneously. It is a flexible way of obtaining information. I have recorded the conversation on recording devices as well. The interviews took place in three different phases, so I conducted the study over a prolonged period. Initially, I conducted an informal conversation as a warm-up session for the participants. To build a good rapport, I explained the research's main agenda, procedure, and background to the participants. I also discussed open-ended questions and themes to reinforce, scaffold, and facilitate the participants to share their ideas freely. I have recorded all the information as notes, memos, or kept in audio clips for further processing.

Data Generation, Interpretation, and the Meaning-Constructing Process

The processing and meaning-making of the data collected focused on narrative analysis. As Biklen & Bogdan (2007) outline, data analysis in qualitative research encompasses examining and organizing the collected data, using coding and recoding to put them into different themes, and finally symbolizing them through text or narratives. I transcribed the audio and video data collected for further analysis. I have generated memos that portray initial reflections about the data and any emergent interpretations (Lester et al., 2020).

All the collected data in the form of transcripts, memos and notes, and audio & video clips was read and observed properly and was sequentially arranged in order of the events. After that, all of these were organized together to form a story to understand, interpret, and construct meaning out of them. After that, I applied the member-checking method to the authenticity of the constructed meaning and developed narratives. Afterward, I linked the interpreted data with theories to build core themes for better analysis. Lastly, I interpreted and integrated the analyzed data into my research to enlist the research findings.

Quality Standards

The maintenance of quality standards is an integral part of educational research. As a qualitative researcher, adhering to the narrative inquiry, I tried to maintain the quality standards of trustworthiness, authenticity, credibility, transferability, conformability, and peer debriefing as far as possible. Maintaining the quality standard, the ethical issues that could arise when writing a proposal, according to Creswell (2009), should be anticipated by the researchers. Hence, this allows others to criticize the quality of my research study. I tried my best to avoid fabrication and misinterpretation of the experiences and practices shared by the participants.

Applying method triangulation, I used multiple methods such as observation, interview, peer debriefing, reflection, and so forth to collect, analyze, and interpret data that helped me better understand my research topic. I checked the consistency of the collected data thoroughly and used peer debriefing throughout my research process, from the beginning to the end. I discussed the study's main agenda, theme, theoretical framework of the study, and key findings with my colleagues pursuing an MPhil from Kathmandu University.

Using the member-checking method, I shared the data collected, interpretations, and conclusions with my participants so they knew their intentions. In addition, they would provide some additional information or changes if needed. Reflection took its shape daily by pondering on field notes and information from the participants to make clear sense of them. To maintain the authenticity of my study, I was respectful towards my participant's original identity and myself. I have considered the participant's voice as the main tool of my research. I have always

respected participants' rights, opinions, values, and experiences. Haydon & Riet (2016) conclude that a researcher explores experiences through three dimensions in narrative inquiry: temporality, sociality, and place.

Temporality

"Time has no being since the future is not yet, the past is no longer, and the present does not remain"-Ricoeur.

According to Cunliffe et al. (2016), narrative research is a collectively constructed process over time-fluid and dynamic and is open to the interpretations of its many participants. In narrative research, time experienced is subjective. Sharing experiences or narratives emerges in our moment-to-moment, relationally responsive, and talk-entwined activities with participants. Such narratives occur in many discursive times, allowing us time to improvise, draw on past narratives, and construct new ones. In narrative inquiry, it is important to understand people, places, and events as in the process because nothing remains permanent but always in instability. Temporality refers to the events in retrospect, current and next. While generating meaning from narrative events in the form of stories and experiences of my participants, I attempted to find out their synchronized incidents of tribulation and resilience that their past experiences have influenced and how they have been forecasting their future.

Sociality

In narrative inquiries, the inquirer and the study participants are entwined with personal and social interactions, which engulf the feelings, hopes, desires, moral obligations, etc. I valued this and built rapport with the participants to make both of us comfortable sharing feelings and perspectives without creating distance (Clandinin and Connelly, 2004). This connection is integral to the context of the study, fostering a deep association between the researchers and the participants. Sociality refers to focusing on existential conditions like environment and surrounding factors, which help collect narrative texts. It emphasizes the development of good social relations among researchers and participants (Jean & Michael, 2000). I have taken care of my participants' personal and social interactions. While generating meaning in their personal stories, I was careful to consider how their passions, feelings, concerns, and

moral obligations were shaped by each social interaction and surrounding measures to know their perception of the influence of physical activities on academic performance.

Place/Spatiality

Spatiality or place always has a strong bond with one's memory and experiences. Being a narrative inquirer, "Narratives are spontaneous acts of meaning-making that occur and interweave through many moments of discursive time and space" (Cunliffe et al., 2016, p.262). I have valued place, as it may change the narratives and explore temporality. To strengthen the temporality and sociality of the participants' stories and experiences, place work as concrete sites and boundaries in the study (Clandinin & Huber, 2014). For maintaining quality standards in the research, places guide us to events and experiences for meaning-making, so its importance should not be sidelined. Linkage of places with my participants' experiences has provided flow to stories, and the confession of lived experiences becomes more vivid.

Trustworthiness of the Research

The essential qualities of trustworthiness for a researcher must be demonstrated among the research participants, readers, and the concerned authorities. I valued the participants' thoughts and carefully gathered their information meticulously to retain the genuineness of my research. Ensuring data credibility is paramount in establishing any qualitative study's reliability. To maintain the study's validity, the participant's genuine experiences regarding social occurrences are accurately revealed (Creswell, 2009). During the discussion, I respected the research participants' opinions, values, and perceptions. To avoid showing prejudice toward any participant based on social standing, gender, ethnicity, experience, qualification, or personal connections, I maintained an unbiased approach throughout the engagement. I consistently interacted with participants through phone calls to establish a sense of belongingness and active engagement in this study.

Ethical Consideration

Ethical issues are highly important while conducting qualitative research. Creswell and Creswell (2017) explain ethical consideration in research as a system to

question the fundamental moral assumption of all research agendas, their political and ethical assumption, and the fair treatment of various voices. Valuing the ethical consideration of the participants, their opinions are confidential, and pseudonyms are used to address all participants and their schools to ensure secrecy. Top priority has been given to their confidentiality, dignity, and safety. The participants' approval is required before any use of the data, information, or images of theirs. The participants filled out a consent form and were permitted to use their data. The information received from the participants is not misinterpreted and distorted to affect their lives, and there will be no temptation to compel them to answer the researcher's questions.

Regarding confidentiality, I did not expose or publicize any information that reserves the informants' privacy. I have not violated any rules and regulations, customs, and other typicality of the locality. I have strictly followed the KUSOED ethical guidelines while conducting the research. To achieve all these, any questions related to their ethnicity, culture, gender, etc., and I have avoided things that make them uncomfortable. I have allowed them not to answer any questions they thought could be irrelevant to the study or make them distressed or uncomfortable. Since the participants of my study are minors, I have obtained consent from their parents, too. Their parents have signed the consent form as well.

Informed Consent

Collected narratives hold immense value to the participants, who are the actual owners of them. They may have acquired them through their educational experiences. Consequently, I obtained consent and authorization from the participants to use their narratives as relevant data for my research. I informed my participants about this study and its significance in clarifying the purpose and procedure of the research. I pledged not to exploit collected opinions other than this research endeavor.

Chapter Essence

This chapter elucidates the trajectory and scope of the current research. At the beginning of the chapter, I expounded on the philosophical underpinnings. The philosophical underpinnings established the rationale for the ontological, epistemological, and axiological values that guided the interpretive research. Ontologically, I have applied an interpretive approach that posits that reality is

situated within the life world of individuals. Epistemologically, I have understood that the researcher, through the experiences and narratives of individuals, can construct his/her knowledge in the process of meaning-making. Following a discussion of the philosophical orientation, I drew a connection between my research paradigms, interpretivism, and narrative inquiry.

In doing so, I rationalized my intention of using a narrative inquiry in my study to explore my participants' real-life experiences and stories. Then, I articulated my position as a narrative inquirer. Subsequently, I explicated the role of a narrative inquirer and further clarified the domain of the inquiry of their lived experiences and collected stories. This chapter also incorporated three quality standards, temporality, sociality, and place, to make my study trustworthy. Finally, the chapter sheds light on ethical considerations.

CHAPTER IV
THRIVING BODIES, FLOURISHING MINDS: FROM SWEAT TO ACADEMIC
POTENTIAL

"It is health that is real wealth and not pieces of gold and silver."

-Mahatma Gandhi

This study explores how regular physical activity influences students' academic performance by maintaining a healthy body through participants' stories. In the first phase, I introduce the theme and provide brief biographical profiles of four participants, including their family background, academic qualifications, and schooling. In the second phase, I focus on the thematic journey and present the experiences and stories of the participants. Their narratives are included in their naturally verbal narrations, with narratives framed into three themes. I analyze and interpret these narratives in the third phase, reflecting on my findings and providing a theoretical discussion.

As discussed in Chapter Three, this research explores the influence of a healthy body engaging in PA for learning outcomes. I have collected data through in-depth interviews with four participants from one private school in the Lalitpur district. The participants shared their personal stories of the benefits of physical activities and how getting involved in physical activities has helped them learn. The students' experiences showed that PA has tremendous benefits in life, and they have benefitted remarkably, leading to better academic performance.

There are immense benefits to practicing physical activities in school. It is particularly noticeable in preventing various issues like obesity, hypertension, diabetes, and depression (Onogimesike & Angba, 2022). Students feel that if they participate in different physical activities provided in the school, they will not get diseases easily and live their lives fit and fine. Physically fit people will have less chance of getting diseases in life, too. To this consideration, the chapter explores how PA influences overall development, and it focuses on three sub-themes: I) unshackling wellness: the odyssey to a disease-free existence, II) from shadows to

stars: a journey of self-esteem's rise, and III) the rhythms of intellect: when physicality fuels study.

Unshackling Wellness: The Odyssey to a Disease-Free Existence

The concept of a disease-free life is as simple as knowing ABC. A disease-free life is habitually the effect of many factors, including a healthy lifestyle, regular exercise, balanced nutrition, and other factors.

One of the paramount facets of human welfare is health. From a technical standpoint, being healthy represents being robust and devoid of physical and mental ailments. Health determines an individual's psychological, physical, and emotional well-being. A life free of diseases refers to a state of being in which any significant or chronic medical conditions, illnesses, or diseases do not plague an individual. This manifests that the individual does not endure any physical or mental health concerns that could hinder their normal functioning and quality of life.

While having an informal conversation with the participants, I encountered one common concept among them, i.e., the concept of having a healthy life and living without any diseases. For that kind of disease-free life, they all think that the first thing one should do is do physical activities. PA could be running, jumping, dancing, aerobics, sports, or arts and crafts. I found this concept commendable and could not agree more with Blair et al. (1992) when they said PA reduces the risk of chronic diseases and increases physical fitness.

Afterward, I had an interview with my participants regarding my research questions. How do students benefit from PA, and by what means PA has helped them gain a disease-free life? One of my participants, T, often complained about her stomach pain. She will not join any PA classes and will not participate in any of the activities that happen at school. Nevertheless, in the present day, she says how thankful she is to her karate coach, who motivated her to join the class, and from that day on, she never complained about her stomach pain. She feels Karate class made her physically active, and to a large extent, it made her energetic.

When I was nine years old, I had stomach pain and always felt lazy and unwilling to participate in any of the sports and physical activities classes at school. Incidentally, when I joined the Karate class, the teacher told me that

my footwork was very impressive and that I should continue the class; that motivated me to be regular at karate class. From then on, I forgot to complain about my stomachache to my parents and teachers and started joining almost all the activities classes. The feeling of you can do it, and yes, I can do it, is developed so strongly that you start feeling like a strong person. I give my example to my students and motivate them to take as many PA classes as possible.

Indeed, it is very important to motivate others positively. When you have experienced benefits, you should inspire others, too. The benefits of PA, which my participant T shared, enthralled me. I felt that she used to complain about her stomachache to her parents, as she had never participated in any kind of physical activity, which resulted in her body becoming weak. However, when she participated in activities, her body became strong, and now simple pain does not affect her much. She has become strong. Stomach pain could be symptomatic of an underlying medical condition within her body. However, stomachache itself is not a significant disease. Eventually, the pain got subdued, and I could strongly participate in different PAs. I had never considered PA. Moreover, I could never accept that participating in PA has this many benefits in life until I involved myself in this research. When I had an interview session with my participants, I added that:

I have experienced that no student actively participating in PA has ever complained about anxiety or seen them lethargic on school premises or in class. However, those students who participate very little in PA complain about having mental stress.

Tajik et al. (2017) claim that a lack of PA develops children's mental health problems, anxiety, and stress symptoms. Recently, many children have not engaged much in PA after they reach home from school. We can see that they have adopted sedentary behaviors and focused more on-screen activities, staying in the same position and same place for long hours. Due to this fact, children must practice physical activities at school to be free from stress and have good mental health. Exercise habits protect from the harmful effects of stress and high mental resources (Salmon, 2001). Students' stress levels will always be low, have a balanced mental

health, and are in a good state while they practice many physical activities. Keeping the positive part of PA and its benefits, I talked with another participant P2. She said that;

If one does not participate in PA, especially a fat person, they could get diseases like Diabetes and cholesterol.

It is a fact and not a shocking event that even schoolgoers like my participants know a lot about diseases they would get when they do not participate in PA. Francesconi et al. (2019) state that lifestyle and health-enhancing physical activity are crucial components in the prevention and therapy (Balducci et al., 2014) of diabetes. In this modern era, there is an alarming population who have diabetes. Some have heredity causes, whereas others have it due to their sedentary behaviors. If these people stay physically active from one side, we can at least reduce the number of diabetes-affected people. Perhaps, in many pieces of evidence, we have seen a fat person getting diseases easily. A lot of research has shown that if you do not get physically active, there is a lot of chance that you will be fat and obese; hence, increasing physical activity is a key element in the treatment of individuals who are obese (Wareham, 2007). Most medical practitioners also suggest fat people are physically active, that sedentary activities contribute to obesity risk, and that reducing sedentary time is an important target for obesity prevention (Harvard T.H. Chan, School of Public Health).

Therefore, the bottom line is that “Sit Time needs to be upgraded to “Fit Time” to prevent multiple health hazards.

From Shadows to Stars: A Journey of Self-Esteem's Rise

"I think if you exercise, your state of mind is usually more at ease, ready for more mental challenges. Once I get the physical stuff out of the way, it always seems like I have more calmness and better self-esteem."

-Stone Gossard

The concept of growth in self-esteem related to the disposition individuals uphold about themselves can be a positive or negative inclination toward the self (Rosenberg, 1986). Self-esteem in schoolchildren refers to the personal evaluation and insight of one's worth and value as an individual, predominantly in the context of

their academic abilities, social interactions, and overall self-concept. It plays a central role in shaping a child's resilience, confidence, and inspiration in their educational journey.

From my participants' experiences, I learned that not only the health or disease-free part PA plays. It plays a vital role in growing self-esteem in oneself as well. In their narration, most of my participants shared that if they were physically active in school, they would start grooming themselves in a way that would benefit them personally throughout their lives. Knowing all these benefits of PA, they will certainly practice it a lot. PA increases longevity in participants as it enhances quality of life through better physical and mental functionality (Steakley, 2011). Mental function makes oneself aware of oneself and the surroundings, too. Howells and Bowen (2016) say improving self-esteem through PA interventions is possible.

My first participant (P1) talked about how participating in physical activities groomed her personally and increased her concentration power. The way she used to think has changed. Now, she is not very restless and can focus on only one thing at a time. Moreover, after she completes a single task or until and unless she finishes a single given task, she will not indulge herself in any other task. She credits this developed habit to her participation in activities games as in those games, until and unless you complete one phase, you cannot go to another one. Now, she does not do half the work of English first and half the work of Math. First, she completes the English assignments and then only does the Math assignments. She wraps up her one work first and then moves to another one. She adds,

"Until Grade four, I used to do Nepali assignments first, and after doing a few questions, I shifted to Math assignments and doing a few problems. I used to fidget often and rush to play with my siblings. When teachers collected the assignments the next day, she complained that most of my work was incomplete and that I must develop a habit of completing one work first, wrapping it up, and then moving to another. I remember her saying aloud, "Why don't you focus on one thing at a time? Moreover, she considered me a student with no concentration.

She said how her concentration skill has developed within her. With the time when there was a feeling of grooming oneself, my third Participant, P3, joined a karate class to learn self-defense. He has a feeling that everyone should be careful about himself or herself. When the wrong thing happens, or you have a stroke of ill luck, there is no one around, and one has to do whatever possible he or she can think of. P3 remembers he had never imagined that one bad day in his life, some filthy boys on the street would attack him, and it would change his view of life in an exhilarating way. Before this event, he thought fighting was only part of movie entertainment. He was having a flashback of the event. He said,

“It was 4:30 pm. However, since the month was December, the sky had a dark blanket, too, and I felt it was already a bit darker than previous days. I was coming home with bags full of vegetables in both hands. I entered my alley, and no one was walking at that moment. I saw four boys approaching me. I got nervous and acted not to look so. Nevertheless, when one of the stout boys grabbed my neck and asked me for money, I could not breathe for a while. The time I said I did not have a single penny to give, he thrashed me on the wall, and others hit me with boots. I shouted with all my leftover energy, but no one came for help. I was lying on that cold and wet ground, helpless and in pain. After half an hour, I guess, I tried to shout again, and then I saw a few elderly people running towards me; then they helped me stand and carried my vegetable bags. In a while, I was in bed, my mother applied ointments on my wound, and my big brother was furious that I did nothing to them. After a week, I could go to school. I decided to take a karate class and teach them an unforgettable lesson. I felt they beat me because I was not strong enough, had no skill to fight back, and had no idea how to defend myself. Now, I am taking karate classes regularly to learn self-defense and face anyone with much confidence and strength. These days, I do not feel low while facing strangers, and I roam around alone and come to school alone, too.

While he was sharing his story, I felt that you have to be self-aware in a defensive manner excessively. Because on that very afternoon when bad boys attacked him and had the skill of self-defense learned, he would not have missed so

many classes and could have sent the message to those boys that if someone is walking all alone but knows the technique of defending oneself, they should not dare to rob or harm.

P3 had a lower self-esteem, and due to this reason, he could not fight back earlier against those bad boys. He did not have the courage and confidence to retaliate strongly. However, his confidence and courage increased after he took a karate class. His self-esteem grew so high that now he feels he could strike back at anyone who becomes offended. Nowadays, he is not afraid of any stranger, though he walks in a dark alley; he goes home alone and roams in the streets. His self-esteem has grown tremendously, and he feels safe within himself.

Adding to the experiences the two participants shared, I also felt that it has immense benefits to get involved in PA. Coe et al. (2006) also believed that higher self-esteem could result from increased activity levels, and participating in extra physical activities could positively influence one's self-esteem, potentially enhancing an individual's overall well-being. While I was talking to P3, he confidently and without any hesitation told me that he does other PA after school, too. He has managed time to go to piano classes, and he goes to swimming classes as well. He proudly says he does all these additional physical activities to stay fit and avoid screen time, especially mobile handling. On top of that, he admits that his self-esteem has heightened after he does all these physical activities.

I was impressed by the confidence level of P3; the way he was telling his story made me believe that "You can't change yourself until you want to change yourself." I can witness that P3, who had low self-esteem, wanted to change his attitude toward himself. For that determination, he joined the karate class and became strong enough to fight for himself. Every event he shared has quite an influencing aspect, and he believes it is better to learn something new rather than spend most of your time sitting on the couch and straining your eyes.

Since he has understood PA's benefits and gained the unforgettable experience of learning karate, he now focuses more on engaging himself in PA. This way, he is utilizing his spare time and adding new knowledge to his life from this very young age. I sensed it as a commendable habit he had developed.

Following the idea of P3 and expecting similar growth in self-esteem via engaging oneself in PA, I moved to another participant. My second Participant was overjoyed to share that she feels she is more than happy participating in Physical Activities, especially sports. She says that after participating in sports, she has started socializing a lot and now loves participating in PA even more. She remembers how bored she felt while talking with others and when her school friends approached to talk to her. She said that until grade five, she had never made any new friends or usually did not like talking to new students and new people. She feels so uncomfortable while dealing with new people around. She is comfortable wherever she sits and does not speak a single word with anyone. Nowadays, she feels that the then habit was quite an alienated one. Now, she feels happy to talk to everyone who approaches her and would answer all of them. She also plays with them on the ground during recess time. P2 narrated:

Until grade five, if I am in the classroom, I hardly go out of the classroom, not even in my recess time. I always had my tiffin inside the room and went out of the classroom for toilet use only. Because I do not want to interact with too many people around, it is not that I am an introvert. Nevertheless, whenever the teacher asks questions, I am the one to raise my hand and answer. If I do not understand any topic, I always ask my teacher and request them to explain until I understand completely. The only thing is I feel reluctant to talk to new people. My friends and my parents also said that I do not socialize easily. Nevertheless, in Grade 5, when my coach made me participate in a Basketball game, I had to make a habit of talking with others, especially the teammates whom I had never thought existed in my school. I had to tell them to pass the ball or dribble correctly a year or so after interacting with them while playing. Now, I have developed a habit of interacting with them, and to my parents' surprise and my friend's reaction, I talk with my teammate's parents, too (laughs abruptly). Thanks to my Basketball Coach, I have become more socialized due to his guidance. Blocking the pass, blocking the shot. Even I feel that nowadays, my self-esteem has heightened.

In addition, this change has made her an entirely different person. Now, she is not shy to talk to others and socializes easily. No doubt, as she mentioned, participating in PA has brought this change in her, and she is happy about it. Findlay & Coplan (2008) also reflect on their experiences, saying shy children had decreased anxiety after participating in sports over time. Shyness is evident in social skill deficiencies and internalizing problems. When you have low self-esteem and feel unable to talk with others confidently, you feel like you had better not talk to them. You had better stay behind others so that fewer people would notice you. All these traits suggest that you have not built your self-esteem so high that you could face and deal with the situation.

After listening to the story of P2, I strongly felt that P2 was shy and hardly mingled with friends. As we have already discussed, she had lower self-esteem, and later, when she got involved in her PA sessions, she participated in a basketball game. These days, she does not feel shy to talk to anyone. She easily responds to him or her. Once she started participating in the basketball game, she had to interact with all the participants, and here, she has learned to interact with each other quite often. This learning part of interaction has developed a self-esteem within her.

PA is associated with better levels of self-esteem and reduces shyness substantially by participating in physical activities among schoolchildren (Kjartansdottir, 2018). They can overcome their inhibitions and develop self-confidence when they engage in sports or other forms of activity. Children gain control over their bodies via consistent practice and conquering obstacles, which boosts their confidence and sense of control. Additionally, engaging in physical activities allows for peer social interactions, which promotes social skill development and reduces social anxiety. Shy children can learn to cooperate, communicate clearly, and work toward a common objective by participating in team sports or group activities. This improves their physical health and overall well-being by increasing self-esteem and decreasing feelings of shyness or discomfort in social circumstances. Thus, physical activities are critical in encouraging children to emerge from their shells and build crucial life skills for assured interpersonal connections.

The Rhythms of Intellect: When Physicality Fuels Study

My Participant T strongly feels that PA is crucial in promoting physical fitness and overall health and plays a key role in developing various cognitive skills in children. She expressed her reaction towards the participation of students in PA. Here she goes:

Healthy learners are better learners because integrating playgrounds into curricula is a game-changing skill and lesson. As I have already mentioned, a few students are very good at physical activities and are very good at their studies too. They are mere examples only; somehow, students grow dramatically once they do well in sports. Maybe one of the reasons is that their confidence level is boosting them; they are more attentive and caring, too. These skills are definitely learned in the sports while building the Team. I have noticed that they share their assignments in the classroom and try to cover their friends while teachers ask questions. Like in the games, they know the skill of prioritizing, contributing to necessary skills for success in school and later in life. Since their brain gets active while playing, they tend to understand and grasp their subject quickly. They will develop problem-solving skills as learned in games.

Even I agree with the way T said there is no doubt that healthy learners are better learners, and to have a healthy body, one has to have a better involvement in Physical Activities. Johnson & Jones (2016) claim that incorporating physical activity into the classroom improves student engagement, achievement, and overall wellness. Moreover, the ones who are well physically can think out of the box and handle the situations properly. Just the way T has mentioned, usually, those who are good at studies are good at sports or PA and vice versa. If I talk about myself, I can also claim that I was a good student and athlete. Students who play team games will learn different skills on their own, like cooperation, spontaneous decision-making, responsibility sharing, tolerance, and problem-solving skills. While I was delving into these ideas, I remember participant T highlighted one narration:

During a basketball tournament, I watched children pass the ball to one another in a highly collaborative manner. They cooperate well with one

another. If one cannot score because she is too far away from the basket, she will pass the ball to someone who is close, or she believes she will be able to score if she cannot. Here, instead of keeping the ball to herself and attempting to score, she will find a responsible person who can take the ball and score. Observing this activity, I noticed that they are extremely quick to demonstrate all of the attributes of cooperation, responsibility sharing, and tolerance that improve problem-solving ability in youngsters.

Being an ECA in charge, I was keen to know how thoughtful she is and a good observer of her students. We can see all these attributes shown by students while they play team games or participate in physical activities in a group. All the participants think for the whole team selflessly. That is why we can also see in a football game that there are eleven members of a team, and all of them have different positions and jobs. However, they all put themselves in a do-or-die situation for the team's success. All of them perform selflessly to score a goal. Eventually, they pass the ball to one another and ultimately score. In the process, they know very well that the one who scores the goal is only recognized, but even then, all eleven members work for a single aim. While interpreting the narration of T, I realized how my other participants shared their experiences with problem-solving skills demonstrated by themselves and their friends.

In this study, when I presented the queries to my participant P2 regarding her experiences with problem-solving skills, she narrated that she had strong memories of problem-solving skills with her senior student. She was quite excited to share her story.

When I was in the sixth grade, our basketball team traveled to another school for a tournament. Our team was fully prepared for the upcoming performance, and as our turn approached, I became increasingly excited. The prospect of potentially reaching the semi-finals was incredibly motivating. I informed my friends that I would be taking a brief respite in the restroom and, accompanied by a fellow teammate, proceeded to do so. To my dismay, I suddenly realized that my menstrual cycle had begun, and I was not adequately prepared. In a state of panic, I struggled to contemplate my next

course of action. I confided in my teammate, who regrettably informed me that she had not brought any sanitary products. She encouraged me to remain composed and promised to return shortly. This experience was immensely distressing, particularly as I had to compete in a match while navigating my menstrual cycle. With an uncertain future looming ahead, I realized that none of my companions had brought sanitary napkins. Adding to our dilemma, the commencement of the match was a mere few minutes away, leaving us all in a state of shock. Suddenly, my senior took it upon herself to gather handkerchiefs from us. Though her actions perplexed me, she quickly demonstrated her resourcefulness by transforming the six handkerchiefs into a makeshift cloth napkin pad. With a ready-made solution now at my disposal, her impressive problem-solving skills awed me. Thanks to her intervention, we reached the final without further incident. During our return trip to school, while we were on the bus, I posed a question to my colleague. To my inquiry, she recollected how she played the game of nine stones and how piling the stones inspired her to stack the hankies.

This was an exceptional performance by a teen in a traumatic situation like this. Where even some adults fail to show their intelligence, a teen remembered how she played a 9-stone game, and instead of stones, she thought of using hankies and then piling them up and using them as a napkin cloth pad. Her spontaneity and the presence of mind helped her solve the problem of a junior student. Her problem-solving skill was captivating, and physical activity can positively influence problem-solving skills (Mendes et al., 2021). Exercise increases blood flow to the brain, feeding brain cells and enhancing cognitive functions like processing information, problem-solving, and critical thinking. Participant P2 also shared her problem-solving skill experience; she revealed:

In our first terminal examination, our class teacher obliged us to deliver a presentation within a fortnight. Our group comprised of four individuals. Due to the elongated period of 14 days, we continuously postponed the presentation preparation. With a mere three days remaining before the deadline, we grew anxious that we would not be able to deliver the

presentation on time and consequently receive no recognition for our efforts. Furthermore, one of our companions contracted dengue fever, reducing our team to three members with only three days left. We were at a loss regarding managing the situation and lamented our failure to work on the presentation when we had more time. Subsequently, one of my colleagues proposed dividing the duties among the three of us, each member taking on tasks aligned with their strengths. This approach facilitated a more straightforward and timely completion of the presentation. As per her suggestion, one among us undertook the task of slide preparation, while another individual was responsible for the typing. Subsequently, as a team, we first focused our efforts on the content. This approach facilitated our timely completion of the project. Later, the third team member presented the slides and provided a comprehensive briefing. Because of our collective efforts, the teacher bestowed us with a remarkable grade of A+. We expressed gratitude towards (Supriya) for devising an ingenious solution to our sticky situation and her impromptu problem-solving skills.

Just as Participant T shared her experience that physical activity enhances problem-solving skills, she also mentioned that PA is very helpful in improving grasping skills of different subject matters, especially math problems. She had no experience regarding how PA affects students' skills in grasping subject matter quickly. However, she had a flashback of an event her colleague had shared while having a coffee at the school canteen.

One of my colleagues, a senior math teacher, shared that she had a difficult yet challenging incident while she used to teach in Grade VI (Now she teaches to Grade 9 students only). She shared her experience in such a way that I got spellbound and could not interrupt her in the middle. She added she remembers a boy named Ravi and a few of his close friends had Arithmophobia. The subject has always been a challenge for them. I remember it as a crystal that one day, I had introduced them to a new math concept in the classroom. All of them got frightened and got nervous as well. Then, instead of diving straight into the lesson, I told them we were having a

short break and would engage them in a physical activity during that break.

The whole class was surprised to hear the announcement.

I informed them that before we started any new math concept, we would take a break and participate in any kind of PA. For Today, the PA is dancing. All the students were dancing and laughing with each other. As the dance reaches its climax, something remarkable happens. The brief PA acts as a mental reset, sweeping away distractions and paving the way for deeper focus. Back in the seats, I began to write the concept on the board. Surprisingly, Ravi and his friends found the once-daunting concepts now more approachable and easier to grasp. Toward the end of the second terminal exam, I felt all of them when engaged in various physical activities, whether dancing, stretching or even quick bursts of calisthenics. The positive influence on their learning becomes undeniable. I could see Ravi's understanding of different subjects deepened. I was astonished to experience this remarkable change in them.

After listening to T's unfolding story, my admiration for the teacher heightened. To date, I have not heard of any event like this taking place in the school for the change and betterment of the students. At least in Nepal, most of the schools still follow the same old technique of teaching and are teacher-centered rather than student-focused. This innovative concept helped students like Ravi to be less fearful and more confident in the subjects. Moreover, once students get confident in their subject matter, they will not likely feel it is complicated.

The utilization of PA within the classroom not only serves to enhance focus but also cultivates a growth mindset amongst students. Students achieve by embracing mistakes as opportunities for learning, resulting in perseverance becoming second nature. Additionally, the implementation of PA within the learning environment transforms the students' dynamic from passive learners to active participants in their education. Their eagerness to ask questions, collaborate with peers, and contribute ideas is empowered by the influence of physical activity on their cognitive abilities. As the utilization of PA gains momentum, there is a noticeable improvement in students' test scores, resulting in a more enjoyable and rewarding learning experience for both students and teachers alike. Furthermore, Ravi and his

friend's journey as quick-grasping, confident learners continue, guided by the magic of PA within the classroom.

The effects were remarkable. During the course of his lessons, the individual experienced that his cognitive faculties were more alert and engaged. The haze of perplexity that would often shroud his comprehension gradually lifted with each physical activity. His ability to grasp intricate concepts has enhanced as if the physical movement has unlocked a gateway to newfound cognition. The once-dreaded topics now ignite curiosity and excitement within him. Beyond the academic advantages, Ravi and his peers have discovered something far more valuable- a greater sense of community. The shared moments of movement and mirth cultivate a sense of camaraderie that permeates the learning process. They have transformed into a supportive collective, encouraging one another to excel. At the heart of this transformation lies Ravi, whose journey of discovery has illuminated that the key to acquiring knowledge is not solely through books but also through the rhythm of physical activity.

While I was exploring, Participant T was sharing about her colleague. I was obligated to think and rethink about an experience the third participant (P3) shared. I could not believe what he said at first, and when I connected T and P3's narration, I figured out that PA had some connection in increasing the skill of grasping and understanding the subject matter quickly. He said he used to have a "chemistry phobia." He added it is not about the chemical reactions in the laboratory, but balancing the chemical equations that make him inferior in the classroom. He boasts about his memory skills and is quick at solving math problems. However, when it comes to chemistry, it feels like he is draining. Then P3 shared his experience in a hilariously:

My science teacher knew from grade five that I had a kind of phobia for chemistry, and we both were helpless. One-day, the teacher implemented an innovative approach in the classroom. Instead of immediately diving into the subject matter, she told all of us to raise our right hand and keep our thumb on the right nostril and middle finger on the left. Eventually, breathe in from the right nostril and out from the left. We were doing anulom-bilom in the

class. After ten minutes, I could feel the relaxation of my mind; I was no more restless, and there was no feeling of anxiety about learning and balancing the equations. I could easily comprehend and remember those concepts that I found challenging. Moreover, I am in Grade Seven now, and just like Mathematics, I have a good scale in Chemistry, too. All thanks to my science teacher.

Physical activity, like yoga, significantly influences children's cognitive development and academic achievement. Numerous studies have shown that regular exercise benefits brain function, memory, and attention span with an increase in student's focus (Nayak et al., 2016) for academic success. Exercise encourages the release of endorphins, neurotransmitters that improve mood and reduce stress. These neurotransmitters can improve a child's attention span and memory. Additionally, exercise boosts blood flow to the brain. It encourages the development of new brain cells, which enhances cognitive performance in general, and PA benefits the brain by improving memory, concentration, and reaction (Prostiakov et al., 2020). Regularly exercising children will likely achieve better grades and perform better on standardized examinations. Additionally, physical activity influences children's greater time management and organizational abilities because it helps them cultivate the persistence and self-control necessary for academic achievement.

Regularly exercising children are more likely to connect and work together, developing their communication and cooperation abilities. A supportive social environment can result in better classroom behavior, greater learning motivation, and stronger relationships with teachers and peers. Overall, physical activity influences a student's academic performance, including cognitive, intellectual, and social components, all of which help a child have a successful and well-rounded educational experience.

Theoretical Discussion and My Reflection

In the previous chapter, I presented brief profiles of my participants and shared their stories about their learning experiences. I analyzed these stories to understand how students benefit from PA. I identified three themes that came out of

these narratives and interpreted the meaning of the data based on these themes. This helped me capture the essence of the experiences and provide my understanding of how the involvement of students in PA has influenced their physical health and overall well-being.

Theoretical Discussion

The theoretical discussion of this study legitimized the thematic articulation of my participant's information, linking with the theories to explore the influence of engaging in PA. In this section, I set up a journey to link previous literature that aligns with Vygotsky's social constructivist theory (1962,1978) and self-determination theory (2002,2004,2017) to my understanding of the meaning of the themes of a student learning experience through physical activities. The theoretical discussion herein interplays between multiple themes and self-progression.

The story of my participants about the influence of PA in their learning makes it clear that they were cognitively skilled as they participated in the different activities where they needed to use their physique. In Chapter IV, I presented three themes on how students perceived their learning experience based on their involvement in PA. Eventually, I interpreted and made meaning of the data collected based on the themes assigned.

The theme I derived is that all the participants want to lead a disease-free life and believe PA is one of the driving factors for a healthy life. To understand this experience through a theoretical lens, firstly, I have applied Lev Vygotsky's zone of proximal development. Here, I have linked the importance of social interaction and scaffolding in the learning and development of ZPD, which insists that individuals cannot function independently. Supporting his idea, Chaiklin (2003) proposes that less competent people become independently proficient, supported by more competent people like teachers and adults. Meanwhile, less competent person, like novel students, will accomplish their goals with guidance and support from a more knowledgeable person. The participant's reluctance to engage in any kind of PA due to stomach pain represents her current developmental level. However, the karate coach's continuous positive feedback and encouragement serve as scaffolding, pushing her beyond her comfort zone and elevating her developmental level.

Furthermore, the change from complaining about stomach pain to actively participating signifies the role of social interaction and external guidance in helping individuals realize their potential are central components of ZPD.

The coach's recognition of her as a possessor of untapped potential and that she can excel further with the right guidance and motivation represents the ZPD for the student. As a result, her motivation to continue karate classes subsequently sparked. This aligns with Vygotsky's idea that learning and development occur most effectively when individuals challenge themselves beyond their current capabilities.

Analogous to Deci and Ryan's self-determination theory, their cognitive evaluation theory (CET) also emphasizes the social and environmental factors that facilitate intrinsic motivation and, parallel to it, highlights three significant psychological needs for competence, autonomy, and relatedness to be present in the individual to foster self-motivation (Riley, 2016). My participant's motivation to participate in physical activities, when viewed through the lens of SDT and CET, was clear that the participant lacked autonomy in the beginning due to health constraints. However, the coach's encouragement and positive experience in karate class ignited their sense of autonomy over her choices, which aligns with SDT's emphasis on autonomy as a motivator. Corresponding to it, feeling accepted and related to significant others is related to autonomy (Guay et al., 2008). Additionally, the coach's support and encouragement make a positive teacher-student relationship a powerful motivator. This relationship showed the relatedness of a student with a teacher, another component of SDT.

Applying the same theory of ZPD in theme II, participant P could gain confidence in her studies. Here, she gets the scaffolding of her teacher because she was not able to change her behavior on her own, sustaining the fact by the notion that learning happens when the learner cannot function on their own and support is needed (Vn de pol, Volman & Beishuiaen, 2010, Wood, Bruner & Ross, 1976), more knowledgeable people. I could comprehend that the participant (P) initially had a fragmented approach while doing her assignments. P starts with Nepali assignments, switches to Math, and is easily distracted by a desire to play with her siblings. This behavior reflects her restlessness, a lack of focus, and an inability to uphold attention

on a single task that aligns with Vygotsky's concept of the current developmental level. The teacher's feedback and criticism in the classroom, " Why don't I focus on one thing at a time," hints that P's behavior is short of the expected level of concentration, and the teacher's advice of completing one work at a time serves as a scaffolding to her.

The thrust of guidance encourages her to practice sustained concentration and task completion within ZPD. Moreover, teachers are more knowledgeable individuals, demonstrating much-appreciated behaviors and skills that serve as models for students. Here, this fact aligns with Vygotsky's emphasis on the importance of social interaction and development.

Highlighting the core concept of SDT as it postulates that individuals are more likely to engage in and be determined with tasks when they feel a sense of autonomy, competence, and relatedness. It appeared that the lack of attentiveness in assignments was linked with a lack of autonomy and perhaps a lack of intrinsic motivation for the task. This led to task switching and distraction. Here, at this point, the teacher's feedback and advice positively influence their motivation and concentration to complete one task before moving to another. When students experience support for their autonomy, they behave with more autonomy (Guay & Vallerand, 1996) and thoroughly internalize aspects of the education context likely to focus on their studies. This very act of encouragement of autonomy can foster a sense of connection in turn, enhances participants' motivation to develop concentration skills through relatedness with the teacher, and this need for relatedness also helps students develop their potential (Guay,2022)

Likewise, while looking through the theoretical lens of Lev Vygotsky in theme III, ZPD is a concept that emphasizes the importance of social interaction and collaborative learning in cognitive development. This concept aligns with my participant's (P2) experience sharing. At the outset, P2 was excited about her confidence to show her competence in the upcoming match. The unexpected challenge of coming out of the situation and how her senior solved the problem aligns with the ZPD. As Vygotsky's theory implies, learning and development occur most efficiently when an individual receives support and guidance in a "zone" amid their

current level of competence and what they can achieve with aid. Here, we can experience that P2 was in her ZPD, where she needed external support to navigate the challenge, and her senior acted as a scaffold within the ZPD. The assistance given by her senior, the collaborative problem solving demonstrates Vygotsky's concept that social interaction and support play a critical role in an individual's development and the attainment of new skills, as mentioned (Adesanya, 2009) that people tend to construct new knowledge as they interact with their environment. In contrast to this idea, Bruner's constructivist theory claims that learners construct new ideas or concepts based on their current or past knowledge. Within the same line, he emphasized that all children are active learners capable of solving their problems independently; they do not need scaffolding. However, Kapur (2018) supports the situation by claiming that the social construction of knowledge takes place through teamwork.

SDT, which unfolds the importance of basic human psychological needs, focuses on autonomy, competence, and relatedness in motivation. While looking through the theoretical lens of SDT, the participant's desire to reach the semi-finals played as a catalyst to accomplishment is driven by personal goals and values. Competence leads students to seek challenges that are beyond their current capabilities, and the more they practice, it enhances their aptitudes (Guay, 2022), which aligns with the component of SDT's competence. Now of urgency, her senior's support highlights intrinsic motivation's role in problem-solving and creativity, drawing experiences and interests. The participant feels the relatedness with her senior meeting the basic psychological needs of SDT.

My Reflection

After analyzing the stories under the theme of *unshackling wellness, the odyssey to a disease-free existence*, it was evident that all of my participants want to lead a healthy life, a life without the pressure that now or in a while we have to take a medicine for a certain disease. Before the meal or after the meal, gulping proper medicine with water is compulsory. We always have to track what we can eat and what we cannot, followed by a bag full of medicine. My participants T, P2, P1, and P3 had the same voice: to lead such a life, we must be active in PA. Convinced by the

voices of my participants and the appealing notion of (Blair et al., 1992), it is now clear that regular physical activity reduces the risk of morbidity and mortality from several chronic diseases and increases physical fitness, which leads to improved function. Hence, we need to be involved in different PA to lead a healthy life.

From all the experiences shared by the participants, I have considered that to influence your mind to be healthy, you have to engage in any kind of physical activity. After listening to the story of P2, I felt stimulated when she said how engaging in PA improved her health; how she used to complain about stomachaches has now vanished. In the progressive mode of interviewing my participants, I learned that, for better health and well-being, PA is a determinant for reducing chronic diseases (Myers, 2005; Kruk, 2007; Uher et al., 2016).

In my quest for this study on the theme of *From Shadows to Stars: A Journey of Self-esteem's Rise*, student's learning experience reflects their participation in the PA. It is also evident that the participants influence their learning and mount their self-esteem via their engagement in the PA. The participant's (P) and (P3) experiences with the escalation of self-esteem are commendable, and anyone who looks into their transmogrification will be amused. I felt disheartened to know the unfortunate incident happened in (P3)'s life. However, the transformation was commendable and inspirational for all of us. In a case study by Howells & Bowen (2016), PA interventions have shown a dramatic change in a low self-esteem student to a higher one.

I learned that PA is not only helpful for maintaining physical, but it also instigates to maintain self-image and consciousness. The experience highlights that the one who does not participate actively remains low self-esteemed. Agreeing in the same line, Russo (2019) opines that those who perform better in PA have higher self-esteem compared to less physically active students, concluding the point that PA boosts self-esteem. After listening to the stories of the participants, I am very interested in developing a habit of engaging in any sort of PA, as engaging in PA has been strongly associated with self-image and social and family relationships, contributing to higher self-esteem (Kumar, 2014) to identify additional opportunity to be receptive to boost self-esteem.

In my quest for this study on the theme of *The Rhythms of Intellect: When Physicality Fuels study*, I generated the meaning of my participants' self-motivation or intrinsic motivation. In my research, when I took the narrations of the students based on the topics, they shared that they learned problem-solving skills from their involvement in various physical activities, which they apply in their academics and later in their lives where needed. In the team game, they create problem-solving skills, and they have to decide promptly because, as we can see in the games, in a flick of a second, your chances of scoring would shift to opponents if they do not make the decision spontaneously. The influence of the seven stone games applied at the urgency by making cloth napkin pads highlights students' spontaneity at times of urgency.

It is evident from the experiences and stories shared by the participants it can be well formulated that most of the students who participate in physical activities are likely to be good at sports or academics and vice versa. In many narrations, I have found that when they participate in PA, their brain gets active, and the students grasp the subject matters taught by teachers quickly. Physically active students have built confidence, and any topic they do not understand, they do not hesitate to ask.

I felt stimulated to discover that students apply the skills learned in their PA in their academics, too. Physical movement helps in learning (Mendes et al., 2021), and we must be able to integrate the activities in our lives that keep us physically fit. It helps us stay fit physically and keeps our cognitive health at bay. I had a feeling that it is very likely to have a higher chance of becoming more receptive in the classroom once you have a responsive behavior in the playground, too. From my participants' experiences and sharing, we need to think of different ways to keep our young generations physically active. We need to consider the influence of bodily movements in learning different cognitive skills for life.

Chapter Essence

In this chapter, I have theoretically discussed the study's findings about how student narrate their learning experiences based on the benefits of physical activities. I extracted themes from student's stories and presented them in response to the research questions. Additionally, I highlighted the key points of the study, along with

the underlying theoretical foundations of social constructivist theory and self-determination theory. Afterward, I used these theories to develop an understanding of learning experiences based on the benefits of physical activities. The participant's stories were analyzed, organized, and used to construct meaning, which is the knowledge contributed to the study.

CHAPTER V
EXCELLENCE ADORNED IN ACADEMIC CREST

"Physical fitness is not only one of the most important keys to a healthy body, but it is also the basis of dynamic and creative intellectual activity"

- John. F. Kennedy.

The title Excellence Adorned in Academic Crest” symbolizes a beacon of human achievement, a testament to the indomitable spirit of individuals who aspire to elevate themselves through the relentless pursuit of knowledge. In this chapter, I have delved into the multifaceted facets of academic excellence under the influence of students’ engagement in PA. To achieve academic excellence lies a dedication to continuous learning and self-improvement and a commitment to tireless efforts to grasp complex concepts, solve intricate problems, and expand the horizons of their understanding. The influence of the pursuit of academic excellence is beyond the individual, radiating into the broader society. Once students achieve excellence, their self-esteem and self-confidence boost, which catalyzes positive change, contributing their knowledge, skills, and talents to various facets of society. However, there are many setbacks and emotional strain. Students often grapple with stress, anxiety, and self-doubt as they strive for academic success. The chapter focuses on the participants’ narrations to explore the influence of a healthy body on students’ academic performance. To meet the purpose of the study, four participants shared their experiences, and their words were included in the verbal language with italicized text. The three themes discussed here give meaning to my understanding. I have divided the narrations into three themes, and at the end, I have included my reflection and theoretical discussion.

Harmonizing Analytical Artistry: Unveiling Proficiency through Embodied Engagement

Analyzing skills in students involves the capacity to evaluate information (Ennis, 1985) critically, dissect it into its parts, recognize patterns and relationships,

and develop insightful conclusions, facilitating effective problem-solving (Doyle,2020) and decision-making (Phuseengoen & Singhchainara, 2022).

Much evidence shows that analytical skills can also be developed and sharpened through active participation in physical activities. When children are engaged in PA, they must assess situations and make decisions accordingly. They must adapt their actions based on real-time feedback and changing circumstances. While participating actively in PA, children observe their environment, observe their movements, and monitor the movements of others and opponents. While performing PA, children must make split-second decisions based on the information they gather. If they delay in making decisions, they could lose the game. We have seen and experienced that people from infants to youth find playing with blocks challenging. While playing rubrics, they must have the idea of creative problem-solving.

Through active participation in physical activities, children develop analytical skills in a practical and experiential style. I talked with my second participant regarding the analyzing skills she has acquired. Moreover, it has helped her in a way to hone her analyzing skills and use them in academics. I was surprised to hear about her experience. From the beginning of our meeting, she has shown quite impressive behavior; the most influential was her smile. She is very active, and her body movement is quick. However, when you ask her a question, she takes slightly more time to reply. She was at ease when answering.

She said that she remembered the last winter vacation, a game-changing moment for her. The camp revealed a different dimension of her life, which she was unaware of to date. P2 joined a winter camp and met many students from different schools there. While the coach explained the different camp programs, she thought her involvement in PA would help her become a good analyzer in life. To her comfort, she thoroughly enjoyed the camp. Not only has she made new friends and worked with them, she has learned to think outside of the box. She added:

On the first day of the camp, I saw a diverse group of students from different schools gathered, each with their own interests and challenges. There was a tall and heavy-built person who briefed me about the program. The mentor, Coach Satish, explained that the program would use various physical

activities to help students sharpen their analytical skills. I was both eager and skeptical – how could running around or playing games help me become a better thinker? The first activity was a treasure hunt that required teams to crack clues and solve riddles to find hidden objects. As my teammates and I worked together, I realized my ability to think critically and connect clues improved. Running around and using my body to search for clues activated the mind in new ways.

The skepticism and disbelief in herself and the coach have faded away slowly. She could find herself in a situation where she had to use her mind and body, which had changed her thinking. Now, she finds solving the puzzles and connecting the clues easy. She has a change in her attitude as well, and now she does not think physical engagement is not going to help her cognitively. A research review (Dyrla-Mularczyk & Giemza-Urbancowicz, 2019) clearly stated that physical activity improves cognitive functioning and influences memory and attention. It was only a few days before she had a good experience learning analytical skills in the camp.

Within the same line, P1 felt overjoyed and narrated:

Over the next few days, the program blended physical activities with mental challenges. We played outdoor word games that required quick thinking and engaged in team-building activities that demanded effective communication and problem-solving. Each activity provided a unique perspective on how physical movements could enhance analytical thinking. As the program progressed, I noticed remarkable changes within. At the end of the winter camp, the coach gathered the students for a final challenge – a puzzle-solving relay race. The race combined physical agility with quick thinking, requiring teams to solve riddles and puzzles at various stations. My team was neck-and-neck with another team, and as we approached the final station, I realized that my analytical skills had blossomed. After coming from the camp, I could feel that I had changed a lot in my attitude, and the change was for good, of course. I became more attentive in class and could focus for longer; I was a restless girl earlier. I found myself approaching homework with newfound

curiosity and dissecting problems and solutions with a fresh outlook. My grades improved, and I participated more actively in class discussions.

Concerning the exploration of learning analytical skills in the camp, she has emerged as a new being. The experience of staying for several days in the camp and following what the coach told me to do had an encouraging influence on P2. Indeed, she developed a focus on her studies as well and realized that all the physical activities she was involved in at the camp had a long-lasting impact on her behavior and her studies. How she handled the puzzle-solving relay race has influenced her to do her home assignments with a new approach. Now, she is happy that she can analyze the situations with new dimensions. Hence, her grades are better than they used to be.

P2 appears to be highly analytical for her age, saying, *in studies, I analyze just as I analyze the game. I look at those with higher grades than me and try to study accordingly. If someone has a 3.4 in English, I attempt to get a good result above 3.6 on the final test, which is difficult.*

On that very day, while returning from school and gathering my data. I was wondering about how the seventh-grade student thinks in that way. P2 handles the situation tactfully. Nowadays, she tactfully analyzes who has a better score in the subjects she could not attain. She first gathers the information and then plans to overcome the situation. Her active participation in PA classes has undoubtedly achieved this analytical skill. She is even thankful for the winter camp, where she learned analytical skills involving different physical activities. Her studies reflect the skills she learned in the winter camp. Now, she could always be the topper in academics, too, and she is a better learner now with her grades improved dramatically. The benefits of exercise are physical and integrated connections within the brain to stimulate new pathways, which inevitably speed up the learning process (Spark, as cited in Nayak et al., 2016, p.3).

Another participant's experience in honing analytical skills is influential. My participant P3 said he has no good story to share about how he developed the analytical skill within him. Still, he shared about a very interesting event in his life, where he was also part of the story. He mentioned his friend "Arnav," an inquisitive

boy in the classroom. P3 remembers his friend Arnav. I have a recollection just like a movie. He begins:

As far as I know, he had endless energy and insatiable curiosity. He was always eager to try new things, and even teachers were surprised by his unquenchable inquisitiveness, but when it came to analyzing things in school, he often felt stuck. One sunny morning, as we were heading toward school, we saw a few young children playing in the park, a group of young children engaged in a unique activity. They built a towering structure using sticks, stones, and ropes. The challenge attracted us, and we eagerly joined in without hesitation.

In a few moments, I dropped the idea of getting involved and started watching them carefully. As Arnav picked up sticks and carefully balanced stones, he felt that this activity required more than physical effort. He had to think about how to place each item to create a stable structure. It was like solving a puzzle; he was determined to crack the code. With each attempt, Arnav's analytical skills grew. He started to notice patterns – which sticks were sturdier, which stones were smoother – and used this knowledge to his advantage. He began to think strategically, planning his moves ahead of time and adjusting his approach based on the outcome. Weeks passed, and Arnav sought more challenges that combined physical activity with thinking. One day, our science teacher announced a science fair competition. The teacher asked students to construct a creative experiment or project. Our group decided to put our newfound skills to the test. Arnav developed a new idea of tower-building activity, and with determination in his heart, he gathered sticks, stones, and other materials from his adventures. He set up a controlled experiment and carefully documented his observations. The process felt like another puzzle, and he engaged completely. When the science fair arrived, we proudly presented our project. Arnav explained his hypothesis, methods, and findings to curious onlookers. Judges and fellow students were impressed by the tower experiment and his confident and analytical presentation.

From the lived experience of P3, I could figure out that one who felt stuck when analyzing things has now gathered admiration and status at school. The experience of playing with the young children in the park and trying to make a tower using sticks, ropes, and stones made him use the creative and analytical skills he had. Though the activity seemed simple, it was challenging to perform initially, affecting his achievement.

At first, when making the tower for small children, he felt easy, but as soon as he started to make a tower by himself, he felt the difficulties and figured out that it is not only with physical force that you can complete the task. You need to crack the code and analyze how to fix the corners. Which corners fit in the right place, and which sticks are sturdier to use along with the smooth stones? After many trials, he could think strategically, plan every move, and adjust his approach. Here, he figured out the pattern and realized he had already developed analytical skills.

It wasn't surprising for P3 and his friend that the knowledge he gained while participating in the PA in the park got a good reflection in his presentation, and the outcome was undeniable because exercise might not only help to improve their physical health but also improve their AP (Hillman et al., 2008, p.58). The lived experience story shared by P3 made me realize that PA can effectively develop students' analytical skills.

Resolution as Unbreakable as the Strings of a Racket

My first participant (P1) never considered winning or losing in games. It was for fun only. Back then, the thrill of the game was all that mattered, and victory or defeat were mere whispers. Nevertheless, I soon realized that many of my friends were out to bring me down. Moreover, one day, I decided that this would not happen to me from that day on. I became serious about whatever my teacher/coach taught me and practiced that with my heart and brain. It has been two years since I was the champion of the girls' badminton title; likewise, my grades have improved exceptionally. I have figured out that once you are good at scoring and better at academics, everyone in the school and community will love and respect you. Then she started to open up about her story:

There was a gang of girls named the "Super Duper Gang." One of the gang members was a top student in our school. She excelled not only in academics but also in athletics. She has numerous medals on her name. As a result, all the students and the teachers liked her. They continually ridicule me, stating that because I am weak and cannot play properly, I am not up to their standards and, hence, cannot be their friend. They never included me in their group. They believed that I was constantly last in sports and academics. I do not want to remember when the whole gang came in and locked me in the toilet from outside. I called for help for a long time. To my dismay, no one assisted me. I stayed inside the toilet for 40 minutes, helpless and vulnerable. After a while, the toilet cleaner didi rescued me. I was grateful to her, and I resolved not to allow anyone to oppress me. Coming out of the toilet and resting for a few hours at the infirmary. I had gone through this situation because I could not improve in sports and academics. If I had been better and up to the mark, they would have included me in their group and treated me better. I realized my weakness, and from that day on, I have started studying so hard that now, I am the leader of my school and bagged two consecutive gold medals in inter-school badminton tournaments. The competitive spirit to make myself outstanding in the crowd brought me to this level.

Her story does not end here. She added that their school is also participating in the inter-school tournament this year, and she is ready enough for a hat trick to bag the title. I could see her making a fist and raising her hand, saying, "This year, the title is mine." Witnessing her spirit, I saw her transformation from a loser to a gainer.

She remembered the carefree days when the court was her playground, and the shuttlecock was her companion. Back then, the thrill of the game was all that mattered, and victory or defeat were mere whispers. Those carefree days had given way to harsh realities. The "Super Duper Gang" and their mockery cast shadows on her spirit. Their leader, the top student at the school, held sway over hearts and medals alike. P1's heart tightened as she recalled their taunts, a constant reminder of her shortcomings.

P1 declared with a newfound determination. Like a phoenix rising from the ashes, she embraced change. She listened earnestly to her coach's guidance and practiced with an unwavering heart. Her passion ignited a fire within her that refused to extinguish. Therefore, P1's journey began. With every swing of the racket, she honed her skills. With every leap, she shattered the limitations imposed on her. They unfurled their wings two years later, and P1 stood tall as the Girl's Badminton Champion. Her victories on the court mirrored the victories she achieved within herself.

Nevertheless, P1's growth has not been confined yet and is limited to the court alone. Her grades, once distant stars, now adorned her academic sky. She had grasped a truth hidden beneath the layers of doubt – that analyzing skills are also achievable beyond the textbooks. They flowed through every facet of life, from sports strategies to tackling algebraic puzzles. P1's tale, however, was not without its trials. The memory of the locked toilet door still sent shivers down her spine. The cruel act of isolation, the suffocating 40 minutes spent trapped within, had etched scars on her heart.

From that day forth, P1 carried with her a resolve as unbreakable as the strings of her racket. She would not allow anyone to suppress her spirit or define her worth. Through every hurdle and hardship, P1 learned that analyzing skills transcended the boundaries of subjects and situations. They were the threads that weaved the tapestry of her growth.

The event had that competition vibe now. Earlier, she thought it did not matter whether to win or lose, but now she wants to win; she wants to be on the top, either in badminton or in academics. Most of the time, having a spirit of competition is fruitful and hence works in every situation of life. However, having said that, we should not always have the passion to win and stand first; it will be turned into ego rather than pride. Making yourself proud and feeling proud of your achievement is a human need for growth, but we should have a balance.

Precision in Every Kick: Crafting Focus through Karate's Punchy Lessons

"To keep the body in good health is a duty... otherwise we shall not be able to keep our mind strong and clear." -Buddha.

In the journey of exploring the experiences and stories of the students on their learning experience and academic performance based on participation in PA, I wanted to weave the experience of my second participant.

P2 says her habit of focusing has a drastic growth after she became a strong member of the basketball team. She is a lean and a thinned body girl of 5'7". A bit tall for an average girl's height. Her face glows, and she repeatedly nods her head. When I inquired about this nodding head, she said it is my habit these days to do so, and it unknowingly happens. She pulled the chair by herself while my other participants stood in front of me, and until and unless I told them to sit, they stood like statues. She sat opposite to me, legs apart, and hand resting on her thighs, and looked directly at my face. Her faint smile was sending a message to me that we needed to finish this conversation at the earliest.

From her appearance to the way she was looking at me, I felt uncomfortable to begin the interview. Somewhere, she was not feeling quite comfortable either to have an interview. I asked her if she was feeling unpleasant because I would be recording her voice. She nodded her head and said not at all. It was comprehensible for both of us. However, this meeting was not for the first time. We had met twice before in a group, though. We had a "samosa chat" at the school canteen too. I cannot assure them that she is as comfortable as I am with her now. To break the ice, I shared a joke with her, and then she added another one. Both of us laughed and had a light and fun conversation for a couple of minutes. With her consent, I started the interview. In response to my second research question, she shared her experience in this way:

I was a fidgety child. My grandmother used to say, Baakhra ko puchar khaayera janmeko ki kya ho? This means you must have eaten a goat's tail in your mother's womb. I could never stay in the same place for a long time and could not focus on a single thing. It is either watching cartoons, playing toys, or playing block games. Even at school, my teachers always used to complain about my restlessness during parent-teacher meetings. My grades were not up to the mark, and I could never make my parents' faces happy when they held the report card. I joined karate classes when I reached grade 4. In the starting

phase, whenever I participated in “kumite,” my opponents always hit my body and had scars on my face. This happened because I could not focus on my practice. I could not figure out where and when the punch or kick came. I was not attentive. However, toward the end of grade four, I became a different person from fidgeting to a quite focused one. I hold a brown belt now, and this gradation was possible after I became a focused karateka. Now, I can easily reflect on the punches and kicks.

While P2 had not practiced karate, her academic performance had declined, and her parents were always disappointed with her report card. Her inability to stay still or focus on a single task in her early years was a matter of concern for both teachers and her parents. Nevertheless, the turning point in P2’s life came when she decided to join karate classes in the fourth grade. Initially, the struggle in Kumite, frequently struck by opponents, was due to a lack of focus and attention. This resulted in some physical consequences, making it difficult to anticipate punches and kicks throughout practice in the playground. P2’s commitment and dedication deepened as time passed. Now, she can defend herself against punches and kicks and has achieved a significant milestone: a brown belt in karate. The fidgety child has now evolved into a composed and more focused individual. This shows her transformational journey from a restless, fidgety girl to a disciplined, focused student. This very event illustrates the deep influence of karate within her. Within the same line, P2 feels more contented that her decision to take karate classes was hitting like a hot iron with a hammer; it was just at the right moment. She continued:

In a very similar manner, this also helped me extensively in my studies. I know that I should take my textbooks and focus on my studies. Stay in the same place until I finish my home assignments. Just the way kicks and punches come, I have realized that the question could come from any chapter in the exam, and I have to stay for 3 hours in the same place and write the answers correctly. I started focusing on both games and studies. Focusing and attentiveness in karate has also influenced my studies. I apply the same in my learning.

Listening to the experience shared by P2, I was overwhelmed to accept that a result-oriented attitude is slowly developing within her. Now, the girl's learning experience from karate was commendable. The learning experience from PA, the principle of staying disciplined and focused, which she applied to her studies, and her performance in academics have grown.

Regarding my second research question, I went into another frame of this study, in the voyage of exploring the learning experiences and stories of the students on academic performance based on their participation in PA. I went to my participant, who shared her ex-students story that she could not focus on her studies because of surplus participation in PA.

When we are talking about the positive side of PA, it helps in boosting analytical skills in young students. I consider what Participant T has emphasized. Though her student was truly a god-gifted personality in sports, her parents were not satisfied with the grades she received in academics. Most of my participants were thankful for the decision to participate in different physical activities at school. However, "Yuk" has not had a satisfactory performance in her studies. Because of this fact, her parents always had grumpy faces after collecting the mark sheet. T narrated:

She remembers a girl named "Yuk," a tall, stout, and perfect athlete body figure. She was excellent at basketball games, and she helped the school win two different titles in the school championships. She scored 25 points, which is one of the best scores ever scored in inter-school basketball tournaments. She had a swift movement and a hunger for scoring. Not only in basketball was she also excellent at running 100 meters. Some students used to call her "Usain Bolti, female Usain Bolt." No doubt, she was the pride of our school (She is an ex-student now). However, she was not the best at her academics, unlike the few present students I mentioned earlier. Her mother was a nurse, and her father was a renowned lawyer at the Supreme Court. Both parents were studious, but their daughter was not good at studies. She was a below-average student. In the parent-teacher meeting, she came with her parents to collect the report card. At that time, we experienced that her parents were not

happy about the achievements Yuk had in sports. They were scolding her. "Nepal ma Khelera maatrai Khaana Pugdaina, Padhnu dherai jaroori cha" which means that playing is not enough to earn you bread; you need to study as well.

Later, when I asked her what the reason behind her lower marks was, she said that because she loves physical activities so much, she feels tired and cannot concentrate on her studies. She cannot focus on mathematics and science. She could play and practice basketball for several hours; however, sitting in a place and studying is not her forte. She becomes restless whenever she sits down and tries to focus on her studies.

If it had been 2023, she would have been able to earn her bread by playing games; the world and even Nepal have significant developments in sports. Nowadays, due to professionalism in sports, sports personnel and players are earning their livelihoods by being involved in sports. Nevertheless, she was born some five years ago when there was not much appreciation for sports in Nepal. Yuk could not have good marks in her studies because of her lack of focus on her studies. She was more interested in sports rather than books because reading books requires focus and relaxation. Good grades are possible by focusing and staying in a fixed place, not by moving here and there and being restless.

As per the story shared by Participant T, Yuk could not achieve good marks in her studies because she could not balance her PA and academics. Joseph et al. (2023) credibly stated that PA within schools is vital and enhances academic performance rather than detracts. Joseph et al. also reported that PA does not have a deleterious effect on academic performance even though the allocated time is increased. From the literature I read, Yuk's study-related weakness is not the reason because of her overindulgent in PA, not a convincing affirmation at all.

Theoretical Discussion and My Reflection

Theoretical Discussion

The theoretical discussion of this study legitimized the thematic articulation of my participant's information linking with the theories by exploring the benefits of involvement in PA. In this section, I set up a journey to link previous literature that

aligns with Vygotsky's social constructivist theory (1962, 1978) and self-determination theory (2002,2004,2017) to my understanding of the meaning of the themes of a student learning experience and academic performance based on participation in PA. I have woven three different themes to articulate the meaning of my understanding.

The story of my participants about the influence of PA in their learning makes it clear that they were cognitively skilled as they participated in the different activities where they needed to use their physique. In Chapter V, I presented three themes on how students perceived their learning experience based on their involvement in PA. Eventually, I interpreted and made meaning of the data collected based on the themes assigned.

The notion that can be experienced from theme I of chapter V is that analyzing or analytical skills, which play a pivotal role in human beings in every step of life, can change the point of view as it is perceived. In this theme of harmonizing analytical artistry and unveiling proficiency through embodied engagement, participants gathered a good experience through their active participation in different physical activities. From their narrations, I concluded that when your brain is active through physical activities, numerous cognitive skills are developed. Instructional design theory supports the concept of ZPD. It mentions that to make learning more effective, the dependent factors are the learner and the learning environment. That is how the learner applies prior knowledge and how the learner performs in a group or independently (Reigeluth, 2013). Similarly, ZPD states that learning is more effective when individuals engage in tasks that lie just beyond their current competence level, facilitated by appropriate support (Vygotsky, 1978). The participant's enthusiasm to explore a new sphere is characteristic of his higher potential; however, his current developmental boundaries made him unable to think analytically. Nevertheless, the unique tower-building activity was instigated as a scaffold challenge that aligned with his ZPD. The tower-building activity illustrates the integration of physical and cognitive challenges. This event witnessed the analytical skills honed by the participant through repetitive attempts, his cognitive processes intertwined with physical actions.

While delving through the lens of STD, It shows that the participant's unquenchable curiosity is autonomously motivated, while his struggle with analytical tasks speaks of the need for competence realization. His leadership capability represents his autonomy in science presentations. He autonomously chose to use his newfound skills and knowledge in the playground at the science fair. His accomplishment of the presentation shows that his competence aligns with the key concept of STD. Corresponding to STD, Bandura (1997), through his self-efficacy theory, posits that individuals with higher self-efficacy are more likely to set challenging goals, persevere despite obstacles, and view effort as a path to mastery. The participant's choice to participate with the young children can be taken as autonomy, mastering the tower building task can be taken as competence, and collaborating with others as relatedness, all of which posit the concept of SDT's basic psychological needs.

In theme II, we observe that the participant was in her zone where she was careless, vulnerable, and inadequate both physically and academically. The distressing experience and her realization of her potential were perceived as a transformational movement toward her ZPD, which bridged the gap between her current competence and her intact potential. The learning and support the participant received from her senior and friends in the group mentions learning through scaffolding. The incident also discusses the idea of peer learning or tutoring. The peer tutoring method of learning maximizes student responsibility for learning and enhances cooperative and social skills (Falchikov, 2003), where peers substitute teachers and students often take a turn in the role of teacher. It is not always the teacher whose guidance students take. They also take the support of their peers and have cognitive development, and Learning also occurs in collaboration between students who have similar levels of conceptual understanding (Littleton & Light, 1999; Cowie & Vander Aalsvort, 2000, as cited in Fernandez et al., 2001). Whether the learning happens via the teacher or peers, it happens in a social environment with social interaction among all.

Understanding through the lens of SDT as the participant realizes the need for self-improvement, it gives a sense of autonomy, and the experience focuses on the

autonomously motivated shift. In addition to this, the determination to study hard and stand out in academics and sports reveals a newfound sense of autonomy and competence, which is a driving factor for academic achievement. To support this fact, Guay et al. (2004) claim that students who perceive themselves as competent at school are more likely to attain higher degrees. As satisfaction is directly related to performance (Marsh et al., 2003), the need for competence is thus an essential prerequisite for full functioning at school.

Theme III also discusses the theoretical frameworks of Lev Vygotsky's zone of proximal development (ZPD) and self-determination theory (SDT) as propounded by Deci & Ryan (1987). The participant's inability to focus and achieve academic success aligns with the concept of the ZPD. He was not able to do his task independently. i.e., he could not remain focused and was not able to do it on his own, which led to the fact that he was not able to sustain attention, which resembled a gap created inside the zone of proximity. The structured environment of karate classes, persuasion from the coach, focus on discipline, and continuous practice as the scaffolding for his achievement filled the gap. This reflects the social interaction and scaffolding facilitating cognitive progress and skill acquisition, aligning with ZPD.

On the same line of discussion along with the SDT theory, the participant's restlessness and helplessness in focusing seems to have a lack of self-motivation. Their progress in karate and noticeable achievement worked as a bridge for the enforcement of his intrinsic motivation and competence. This feeling of competence persisted in activities they felt competent in, which aligns with the key concept of SDT. Reeve (2002) supports the idea and hence posits that students perform well when they feel competent, and students always benefit by articulating their effects on perceptions of intrinsic motivation and competence.

Examining all the themes and theoretical discussion, it reflects that individuals who are not capable enough for self-motivation are likely to get motivated when they are involved in activities they feel competent. The external support that they get in their learning phase has a noticeable shift from inability to autonomy and competence.

My Reflection

After analyzing the stories under the theme of *harmonizing analytical artistry, unveiling proficiency embodied engagement*. Through the narrations of all my participants on theme-I, it was evident that they had a positive influence on practicing different physical activities in the school and outside the school as well. Their learning experience through involvement in PA has a magnificent influence on their academic achievement. The theme deals with the development of analyzing or analytical skills in the participants after they engaged themselves in the PA. Eventually, the skills learned in PA and its positive influence on their application will lead them to better performance in academics.

With a dilemma in mind, the participant who joined the winter camp was skeptical about sharpening analytical skills through physical activities. With time, she realized her potential in analytical skills and its growth that enhanced her attributes in academics. Using her body to search for clues seemed to activate the mind in new ways. As I see it, when the participant got involved in the PA in camp, there was a change in her perception, and that newfound perspective has helped her to be more attentive in class. Now, she can focus for longer durations, as stated by Vassilopoulos et al. (2023). A PA session can increase adrenalin and dopamine levels in the body, which immediately improves attention. As her attention improved in PA, Hence, her grades improved. To enhance my skills in the analytical aspect, I need to practice PA more often than earlier. When we give more time to PA, it is likely to develop our analytical skills, which improves our cognitive and our academic skills will improve accordingly. In a similar vein, perhaps schools must adopt PA, for it positively influences cognition and academic outcomes (Vassilopoulos et al., 2023).

In my quest for this study on the theme of *resolution as unbreakable as the strings of racket*, the learning experience and academic performance of students based on their participation in the PA. It can be clearly understood that if we follow the guidance of our senior or more knowledgeable person like a teacher or coach, there is no looking back ever; as claimed by Vygotsky (1978), learning thrives when individuals engage in tasks that surpass their current capabilities, guided by more knowledgeable others. Just the way Participant P has experienced and learned how to

be competitive. The transformation in attitude from a loser to a gainer after taking PA classes and motivating oneself seems to be a real story of someone's life. Once she took the resolution of becoming a better person in sports as well as academics, her declaration was as strong as the strings of the badminton racket. Listening to the story of P taught me to be more competitive in life. I am eager to see myself as a changed person, a person who always keeps the work for tomorrow; from now on, I need to finish my college assignments first and then only do other work. I am committed to myself that until and unless I complete my dissertation and do the defense, I will not take any new project in hand. This story already taught me to maintain the discipline to achieve better academically.

After reading the stories narrated by the participants in the theme titled *Precision in Every Kick Crafting Focus through Karate's Punchy Lessons*, I came to accept that one who tries hard has a chance of achieving success. The participant P2, who could never focus on a particular task, has started focusing on her studies well and started achieving the desired goal. The way she had to face the hardships in practicing karate, kicks, and punches on her body made her realize the importance of being attentive. After she became a lot more focused and attentive in her karate class, she acquired the same skill to apply to her studies, and the skill of focusing reflects her improved academic performance. She developed a coped attitude to get better in academic performance compared to her performance before she joined karate class.

It has become evident to me that without giving proper attention and focus to any kind of task, it is very difficult to achieve the desired target. The experience of P has taught me to integrate PA into my daily activities as I am also a bit restless girl, and even I cannot focus well on my studies. Due to this reason, I have faced many penalties while doing my M.Phil course. Now, I am very interested in developing my nature of focusing and attention on my studies so that I will be achieving my target sooner.

Chapter Essence

In this chapter, the study's findings theoretically discuss student's narration of their learning experiences and their academic performance based on their participation in physical activities. I have reflected on my understanding of their

stories and my own experiences relating to their experiences. Moreover, the extracted themes from student's narrations reflected the response to the research questions. The key points of the study highlighted the underlying theoretical foundations of social constructivist theory and self-determination theory. Afterward, I applied these theories to develop an understanding of learning experience and academic performance based on participation in physical activities. The participant's stories were analyzed, organized, and used to construct meaning, which is the knowledge contributed to the study.

CHAPTER VI

INSIGHTS, CONCLUSIONS, IMPLICATIONS, AND REFLECTION

This chapter deals with my insights on how regular physical activity influences students' academic performance by maintaining a healthy body. I have highlighted the implications and some recommendations per my understanding of the study. As I approached the end of my research, I realized that the research never ends once you start. The particular topic of research within a particular timeframe is completed. Eventually, a new topic evolved. Some researchers turn their findings into black and white, whereas others continue with exploration. In this last chapter of my research paper, "Exploring the Impact of Physical Activities on Student's Academic Performance," I share my experiences, emotions, reflections, and understanding gained during my research journey. The journey had many difficulties. I will explain the importance of this topic and the reason for carrying it for a couple of years. In conclusion, I summarize the essence of this chapter. The dissertation concludes with a list of references used in the study.

Insights

In this study, data analysis revealed several key findings through in-depth interviews and participants' narrations. My research has established a strong connection between regular physical activity and the prevention of chronic diseases. Participants consistently highlight conditions where those actively participating in PA are not at risk of diseases such as diabetes, cardiovascular disease, and obesity. Participants often cited the importance of integrating PA into their daily routines, as they have experienced improvements in physical health, stamina, and overall fitness, contributing to their awareness of a healthier and more disease-resistant body. The study also uncovered the significant role of PA physically and mentally. Not only does PA help in staying physically fit, but it also helps in reducing stress and anxiety, leading to enhanced emotional well-being. One participant noted, "Those who participate in PA perform better physically and academically." This finding aligns with previous research emphasizing the role of engagement in PA; Mavilidi et al.

(2019) demonstrated the benefits of PA on children's cognition, meta-cognition, student engagement, and academic performance.

Moreover, interviews with students reported a drastic improvement in cognitive abilities such as better concentration, problem-solving and analytical skills, quick grasping skills, spontaneous decision-making, responsibility sharing, and tolerance, which they attributed to their physical activities in school. As the students became more skilled at balancing their academic commitments with PA, their stand for academic performance improved. Additionally, I found that the student's engagement in-group sports foster their sense of community and support. They become socially interactive, overcome their inhibitions, and develop self-confidence. This study's insights contribute to comprehensive connections between PA, disease prevention, and academic performance.

Conclusions

In conclusion, this qualitative study explores the relationship between engagement in PA, its effect on health, and academic performance among students. The research objective is to explore the influence of a healthy body on student's academic performance. Several key findings emerged through in-depth interviews and thematic analysis based on their shared experiences.

I believe that a more systematic and detailed approach to analyzing the literature is necessary to provide a comprehensive and objective overview of the state of knowledge on this crucial topic because we have seen the potential for PA in its various forms to increase cognitive and academic performance. The conclusions of the existing reviews are now ambiguous, and it is difficult to tell if this is due to population or study section, the combination of studies with different designs or that focus on distinct research issues, or the interpretation of data. Distinguishing between physical activity versus fitness impacts, extracurricular versus curriculum activity, cognitive function versus academic accomplishment, and short-term or acute versus long-term effects are only a few of the study criteria that need deeper segmentation.

In conclusion, this research emphasizes the importance of PA for disease-free living and their potential to improve student's cognitive abilities and academic performance. As our society increasingly faces health and academic

challenges, recognizing the holistic benefits of physical activities has become dominant. Parents, educators, and communities need to promote children's physical activities. They should strive to foster and endorse safe and enjoyable physical activities that cater to individual needs and interests. By encouraging and supporting physical activity, we can help children cultivate the essential physical, cognitive, and emotional skills they need to lead healthy, happy, and successful lives.

Reflections on the Research Journey

My engagement in this research journey has profoundly transformed me on multiple levels. Through the countless hours invested in delving into data and analyzing complex concepts, I have emerged as a more critical thinker than I was previously. My initial drive had an unwavering zeal to bring about an enormous shift in society, driven by what I now recognize as a rather immature and extremely ambitious dream. As a novice researcher, I have realized that meaningful change often demands a more refined and patient approach rooted in a deep understanding of the issues. This realization has reshaped my viewpoint, encouraging me to embrace the learning process and strive for gradual progress rather than pursuing subtle, overnight transformations.

Furthermore, this engagement assisted me to outline the purpose, research questions, and rationale of my study. However, setting these views into a formal research format was puzzling. I lacked confidence at the time because I was inexperienced, but I was determined to conduct this research. I changed my mind about my choice after receiving an encouraging response from the class when I presented my study idea. However, I was quite committed to this issue and could not let it go. I was intrigued to investigate the relationship between physical activity and its influence on academic achievement as a student of educational leadership. I have always felt that my ability to concentrate has significantly increased since I started practicing karate. I must admit that since I won the gold medal, my confidence level has skyrocketed. After winning a gold medal, I started to crave more, and the same attitude developed in my studies.

I had difficulty deciding on the study paradigm and approach when conducting my research. At the beginning of the semester, I chose a mixed methodology and worked on it. Later, I chose a quantitative study design and completed my initial proposal. After learning more about the design, I realized that I was not yet skilled enough to manage the

complexity of the techniques. My supervisor suggested that I take qualitative research design and apply narrative inquiry. Now, I am more comfortable with the primary concept of this design. Nonetheless, I initially hesitated because of my inclination toward data and calculations rather than experiences and narratives. However, after conducting my literature survey, I identified a methodological void in my research topic that eventually captivated me. I am mindful that this is merely the tip of the iceberg.

Implications

The objective was to understand student's experiences on the influence of a healthy body to promote student's academic performance and its influence on their learning experiences. The focus was on how students learn and have better academic performance based on participation in PA. The study findings emphasized the significance of PA within the physical sphere and academic spheres, promising a holistic and enriched life. The contemporary scenario with today's human race is that they are glued to their computers, captivated by screens, and caught in the web of modern life's rapid pace in the zeitgeist. The negative repercussions of this sedentary lifestyle have been well documented, including increased health problems such as obesity, diabetes, and cardiovascular disease.

This research validates these claims by illuminating how PA can be a potent remedy. The narrations derived from the in-depth interviews of participants reveal compelling ideas of how regular physical activities have transformed their lives, enhancing strength, flexibility, and endurance. However, the implications of this research are not limited to the territory of physical well-being; it expands outward as well, infiltrating cognitive infinitude. The most striking revelations are the prominent enhancements imputable to physical activities. This is a philosophical departure from conventional narratives that PA deviates from a student's time and energy. This study delves into the nuanced interactions between these apparently distinct areas and uncovers a symbiotic relationship between PA and academics.

Students passionately spoke about their improved cognitive functions and enhancement in their ability to focus, concentrate, and retain information after their engagement in PA, which is significant for their pursuits. They even noticed an alertness that prepared them to tackle academic challenges with renewed vitality.

One of the participants said, "My perception toward physical activities has changed from a waste of time and energy to a mental reset button. I no longer think that more study equals better grades. But breaks with PA make study hours more productive". Supporting the narration of the participant, Mullender-Wijnsma et al. (2015) opine that PA does not diminish academic performance in schoolchildren but potentially enhances it. Therefore, there are many opportunities for its implications in academic institutions. As I delve deeper into the search for my findings, it becomes increasingly apparent that PA's benefits are undeniable and multilayered. The findings draw attention to the dynamic function of PA as an integrated facet of life, obscurely woven with academic pursuits.

The practical implications of this research are applicable in various sectors. Based on my understanding of the findings, I present some possible implications of this research in educational settings where there is a compelling need to recognize the role of PA in enhancing cognitive development. I am sure this recognition will be able to drive a shift in pedagogical paradigms, promoting a culture of physical well-being alongside academic firmness.

Implications for Students

This study focuses on the importance of physical activities for students. PA helps to make students physically fit and enhances their cognitive abilities, fostering their academic performance. In school life, students think of getting better grades, and they spend most of their hours studying hard, which is generally required. Having said that, students should not skip PA classes for academic achievement. Findings from this study have led to a deeper understanding that students who engage actively in PA are better in their grades. PA interventions are good for bringing a better mood for concentration and focus, linked to academic enhancement. This study highlights PA's crucial role in student's holistic development than previously thought.

Implications for Teachers

This study also revealed the importance of teachers in arousing motivation in students. They are the pillars on which students can lean in times of difficulty when they feel drained out when they do not know what to do next and step back due to low esteem. Teachers act as a scaffold to the students, which raises self-motivation in

students to achieve success academically and stay positive and fit. The findings show that teachers should persuade students to participate in PA as much as possible because of the multifaceted benefits. Teachers are a reliable source for students to believe blindly. However, they should analyze their student's potential and limitations while practicing PA. Excessive PA will make them feel exhausted all the time and unable to focus on their studies. This could affect them adversely.

Implications for Further Study

In conclusion, this study underscores the significance of engagement in PA not only in physical spheres but also in academic terrain. However, there are irrefutable limitations in this study. The relatively small sample size and the reliance on self-reporting bias need careful inspection for generalization. Future research endeavors should incorporate larger and more diverse populations and integrate quantitative and qualitative methods to validate, authenticate, and expand upon these findings. This study invites us to reconsider our understanding of health and education, noticing PA as essential to intellectual pursuits rather than something apart from them. By doing this, we will be more vibrant tomorrow and open doors to a future where the search for knowledge and the pursuit of health walk hand in hand toward a brighter future. Since many educational institutions have omitted PA from the curriculum to focus completely on better grades in Nepal, the situation demands extensive exploration for further study.

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APPENDICES

APPENDIX A: INTERVIEW GUIDELINES

Interview Guidelines for Narrative Inquiry on the following topics:

Exploring the Impact of Physical Activities on Student's Academic Performance

Plan for the interview

- i. The time for generating data from the field was from May 28 to June 8, 2023.
- ii. The number of participants is four: three students and one extra-curricular coordinator (teacher)
- iii. The geographical location is in Lalitpur district.
- iv. The questions for interviews were the same for all three students and slightly different for the teacher.
- v. The questions were open-ended (semi-structured) in nature.
- vi. The main questions were the same as those mentioned in the proposal.
- vii. The interviews were initiated with informal conversation for rapport building until the participants felt comfortable talking.
- viii. The time for the interview was previously scheduled, first before the PA class and second, after the PA class.
- ix. The interview continued until the period of saturation.
- x. The interview continued with the participants having a comfortable time.
- xi. I strictly followed the guidelines of Kathmandu University as an ethical consideration. The participants and their parents filled and signed the written consent form because three of the participants were minors.
- xii. Demographic information will be collected from the school administration.
- xiii. The medium of the interview will be Nepali and English.
- xiv. The interview will be recorded by mobile.
- xv. The research diary and reflective notes will be maintained daily.
- xvi. The interview will be conducted by focusing on the research questions.

Questions for the interviews

Purpose of the research proposal: The study explored the influence of a healthy body to promote the academic performance of students.

For rapport building:

Some of the possible (not limited to) questions are:

- i. Good Morning. How are you?
- ii. Do you like to play on the school playground?
- iii. How much time do you spend practicing PA?
- iv. How many physical activities have you engaged in?
- v. Which PA is your favorite?

The research questions (Questions for generating data for the research): (Questions related to the benefits of physical activities and their influence on learning and academic performance. Some of the possible (but not limited to) questions are:

1. How important is PA in the school life?
2. What is your favorite PA?
3. What do you think happens to us if we participate in PA and if we do not play any of them?
4. Does participating in several physical activities hamper your study?
5. Have you experienced any changes in academic performance before you joined physical fitness programs in school?
6. Whenever we are learning, how much do you think the guidance of seniors or adults is important?
7. I noticed that you have included many physical activities in your routine; why is that?
8. According to WHO, 60 minutes of physical activities the children need to get involved in per day basis. How do you meet it?
9. How important is it to have physical activities in school?
10. With PA in your daily routine, do you think this hampers their studies?
11. Has any student complained about tiredness just after the PA classes?
12. What affects PA in your life?

13. Have you experienced any changes in students if they participate in PA? In addition, those who do not participate in PA?
14. How have you experienced students' preferences toward peers or adults while learning?

APPENDIX B. SAMPLE TRANSCRIBE

I used the framework of inductive reasoning. Firstly, I transcribed the audio-recorded interviews and then read the transcripts without judging the content to gain a holistic sense of data. Then, examine the data for information related to research questions. After then, I did the coding with different colors. After that, the data for patterns is called thematization. Then, similar themes and combined related themes were used to capture the meaning of the data. These are the primary findings, and giving them titles that capture their meaning. Later, I interpret the emergent themes as they relate to the study's research question and statement of the problem. I have presented a sample of the framework.

Teacher (T)

R- Have you ever experienced PA has a noticeable impact on Cognitive development and academic performance?

T- Yes, I have because I have noticed that Healthy learners are better learners due to the fact that the integration of playground into curricular is a game changing skill and lesson. As I have already mentioned about students like Aakriti, Aarek they are very good at physical activities and in their studies too. They are mere examples only but most of the students grow dramatically once they are doing well in sports. Because the confident level is boosting in them, they are more attentive and are more caring too. These skills definitely, they learnt in the sports while building the Team. They share their assignments and try to cover their friends while teachers asks questions to their friends. Just like in the games, they know the skill of prioritizing which contribute to necessary skills for success in school and life. Since their brain gets active, they tend to understand and grasp their subject teachers quickly. They will develop problem-solving skills as learnt in games. I have seen them to be more competitive in nature. They want to win at games and at studies as well. For that, they put their heart and brain for securing and achieving extra grades as well. Therefore, I think if we can promote participation of students in Physical activities, we will see the change in their Academic Performances as well.

R- How do you think PA will help students not only physically?

T- Take my own example-I used to be very shy girl, I have become extrovert. Now I do not feel shy to speak in front of anyone. Now I give speech and talk with so many students and parents as well. I have gained a confident in a social manner as well. When there was a time, I could hardly speak with strangers and make any new friends. Now, I talk with numbers of new people every day. This skill or change in my behavior is due to my participation in sports in my school days. I used to play in Team games, which lead me to deal with others and develop a unity and friendship with them for the success of the team. Having a good coordination with them and developing the sense of “WE” has made me win many medals in my school days. I have experienced the same kind of behaviors especially of girls that how reluctant they feel whenever they have to talk with or coordinate with someone new to them. The bond gets deeper and strong among oneself. Which indeed a life skill learnt that in future no one knows how your situation let you act.

(P3)

R-so what do u think how much important is physical activities in our life

P3- in our life it is very very important if we dont do physical we get clumsy and when we get clumsy and like we lose and after we lose, we lose confident thats why after losing once we shouldn't lose confidence and we should try again and keep on trying .like physical fitness make us mentally strong and mentally strong as well as makes us comfortable with others . I share my story here “It was 4:30 pm of December. You know how dark it is early. the sky had a dark blanket too and I felt it was already a bit dark than previous days. I was coming home, I had two bags full of vegetables in hands, I entered my galli, and no one walking at that time. I saw four bad boys approaching me. I got nervous and acted ignore... One of the stout boys grabbed my neck and asked me for money. It was hard to breathe for a while. The time I said, I have no money, he thrashed me on the wall and others hit me with boots. I was shouting with all my leftover energy, but no one came for help. I was lying on that cold and wet ground helpless and in a lot of pain. After half an hour, I guess, I tried to shout again and then I saw few elderly people running towards me, then they helped me stand and carried my vegetable bags. In a while I was in my bed, my mother was applying ointments on my wound and my big brother was furious that

I did not do anything to them. After a week, when I was able to go to school I decided to take a karate class and teach them an unforgettable lesson. I felt they beat me because I was not strong enough and I had no skill to fight back, no idea to defend myself. Otherwise, I would not have to stay home and suffer. Now, I am very confident and taking karate classes regularly so that I can learn self-defense and face anyone with much confidence and strength. These days, I do not feel low while facing strangers and I roam around alone and come to school all alone too. I gained lot of confidence now.

(P2)

R- How important it is to be physically active?

P2- It is very important to be physically active because, when I was in grade 2 in my lower grade, I used to be very ill. In alternate weeks I used to have fever and very unwell and due to the reason I never used to participate in games. When I reached Grade 4 then I started participating in sports, we were given freedom to choose the games and then I got interested a lot. Moreover, participated, as I wanted to win medals for myself too. After this I started to participate in sports, I joined dance and started becoming more active physically. A habit of mine drastically helped me in improving my health. I started becoming healthy and started eating foods as well. I believe I was not that good at studies till grade 3 but my studies got better after I became physically active.

R- Do you remember any event in your life, because of which you have loved PA?

P2- Until grade five, if I am in the classroom I hardly go out of the classroom, not even in my recess time. I always had my tiffin inside the room and only went out of the classroom for toilet use. Besides this time, I am inside the classroom only.

Because I do not want to interact with too many people around, it is not that I am an introvert, whenever the teacher asks questions I am the one to raise my hand and answer. If I do not understand any topic, I always ask my teacher and request them to explain until I understand completely. The only thing is I feel reluctant to talk to new people. My friends and my parents also used to say that I do not socialize easily.

Nevertheless, in Grade 5 when my coach made me participate in a Basketball game, I had to make a habit of talking to others; especially the teammates whom I had never

thought existed in my school. I had to tell them to pass the ball correctly or do the dribbling in the right way. In a year or so after interacting with them while playing. Now, I have developed a habit of interacting with them, and to my parents' surprise and my friend's reaction I do talk with my teammate's parents too (laughs abruptly). Thanks to my Basketball Coach, due to his guidance now I have become a more socialized person. Blocking the pass, blocking the shot. Even, I feel that nowadays my self-esteem has heightened.

(PI)

R- How much do you participate in PA?

P-I try my level best to participate in the entire PA at school. I have been participating so far.

R-Your favourite PA at school

P- I am very competitive and especially in sports. We have biscuit eating competition as well, I have won in this game as well. and I participated in orange peel and eat game as well. we had to peel the orange eat it completely and come back to our place again. I have participated in relay games as well and I have won them mostly.

R-What benefits do you get after you get involved in PA?

P- It has increased my concentration power and I have become more attentive than earlier. In class four, I used to do first Nepali homework, and after doing a few questions I do to Math homework and doing a few problems I used to fidget a lot and then go to play with my brothers and sisters. Tomorrow, when teachers collected the homeworks, she complains that most of my work was incomplete and that I must develop a habit of completing one work first, wrapping it up, and then moving to another one. I remember her shouting.

“Why don't you focus on one thing at a time? Moreover, she considered me as a student with no concentration.

APPENDIX C. CODING

P	1st Participant (P)
I	students benefit from physical activities
a.	for me its PA has helped me a lot. personally It has helped me to pay attention.
b.	If we do PA, there are lots of benefits, like we will be fit and there will be less risk in getting diseases
	PA is interesting and exciting for all
	It has increased my concentration power and I have become more attentive than earlier
	- I find it enough but if you could include more physical activities it's better.
	2nd Participant (P2)
	PA impacts in our studies, physical behaviours, life skills
	obviously and directly impacts in our health
	if not participate in PA then they might get diseases like Diabetes, cholestrol
	sports teach us to be in discipline.
	Sports also impacts in socialization manner of ours. While playing we make friends and then we become socialize with them.
	joined dance and started becoming more active physically. This habit of mine drastically helped me in improving my health.
	3rd Participant (P3)
	karate, because it helps me to improve my self defense,
	after learning karate i am more mentally confident and i become stronger and feel comfortable staying around strangers it becomes comfortable
	I do it everyday and stamina has increased little and strength has also increased little more confidence has increased. I just like to stay away from mobile phones
	- in our life it is very very important if we dont do physical we get clumsy and when we get clumsy and like we lose and after we lose, we lose confident thats wif
	If you do physical activities you gain some confidence and when you feel confident it helps us to improve our studies.
	4th Participant (T)
	Physical activities for the overall development of the students
	get in the particular field though its not academic
	Bones will be strong, muscle tightness is necessary, muscle build up, balancing oneself mentally can be done via Physical activities.
	Depression, Anxiety, Mental stress is getting higher because these days children are like couch potatoes.
	muscle tightness, stress relief and maintain the stress level
	Exercise actually changes the brain's anatomy, physiology and the way it functions.
	discipline they have learnt in sports applies in their studies and later in their life too
	developing the sense of "WE"
	feeling of you can do it and yes, I can do it is developed so strong that you start feeling yourself a strong person
	Students seemed to be very lethargic, inattentive in classes, passive in few activities. and even not good at grades.
	are very confident to say things and speak in front of teachers without any fear. I found the students to be more socialized with peers and supportive as well
	Healthy learners are better learners due to this fact integration of playground in curricular is a game changing skill and lesson
	most of the students grow dramatically once they are doing well in sports.
	confident level is boosting in them, they are more attentive and are more caring
	their brain gets active they tend to understand and grasp their subject teachers quickly
	will develop problem-solving skills as learnt in games
	more competitive in nature

S.N		1st Participant (P)		2nd Participant (P2)		3rd Participant (P3)		4th Participant (P)
	Students narrate their learning experience and academic performance based on participation in Physical activities	become more competitive in Sports and in academic also		I think it will be better because the concentration power we use in the games are quite focussed		after doing physical activities i also dont get tired and thats why my studies also has become nicer		Students have never complained about it that they are tired ever
Q.2		being competitive I have been studying good and standing out in the class		we keep on playing at that time we had to focus more on the particular thing and that will become our habit.		when participating in sports it develops the mentality of competition in studies also		I have found that most of the students are in better mood, better energy, better attention to the teacher and better memory as soon as they take subject classes just after their PA classes.
		I always analyze my friends how good they are at studies and then I perform accordingly.		consciously or unconsciously we start using our focussing habit in our studies too		like this year I will top my friend thats our goal our all confidence to top her to top our friend you get motivation		Why this happens I think is students gives more attention to their coaches whenever they are trying to teach new steps and new rules and they catch it very quick
		used to be a lazy girl		we become competitive and try for better development and improvement.		yes, improved in my studies too.		I feel somewhere the same attentive nature they adapt in studies as well.
		I was a very shy person				I understand but not that much and like we feel tired and we can't rest so our brain doesn't work properly that's why we are tired that's why we understand half and don't understand the rest.		we all know our moods get happier if we are refreshed and no doubt students feels refreshed after any sort of PA.
		In this new session, there are few students from new school, I have made them friends and make conversations with them too						Yes I have because I have noticed that Healthy learners are better learners due to this fact integration of playground in curricular is a game changing skill and lesson.
		For that I have made a schedule. I do according to the routine						they are very good at physical activities and in their studies too
		I do my exercise first and then study ad do the assignments given by teachers. Since we have tests in between I remember to study as well.						most of the students grow dramatically once they are doing well in sports.
								Because the confident level is boosting in them, they are more attentive and are more caring too.
								Since their brain gets active they tend to understand and grasp their subject teachers quickly.
								They will develop problem-solving skills as learnt in games
								be more competitive in nature.
								They want to win at games and at studies as well. For that they put their heart and brain for securing and achieving extra grades as well
								I think If we can promote participation of students in Physical activities we will see the change in their Academic Performance s as well.

APPENDIX D. THEMATIZATION

students benefit from physical activities

Self-Awareness	Physically Fit	Diseases	Interesting & Exciting	Impacts studies
Concentration-P power Attentive(P)		No Diseases-P No diabetes-P2 No cholesterol-P2	Interesting and Exciting for all-P	
Physical behaviours-P2 Life skills-P2	Direct impact-P2 Joined dance-P2 More active physically-P2			
Discipline-P2 Socialization Manner-P2 Make friends Socialize while playing-P2	Improve health-P2		Become stronger-P3 Feel comfortable with strangers too-P3	
Improve self defense-P3 Mentally confident-P3 More confidence-P3	Increased Stamina-P3 More strength-P3	Get clumsy-P3 Lose confident-P3		Improve studies -P3
Overall Development	Strong Bones Tight Muscle Muscle Build Up	No Depression, Anxiety No Mental Stress	Balancing mentally	
Socialized Supportive				
Self Motivation Developing the sense of WE I can do it Speak without		Stress Relief Lethargic In attentive Passive		Understand quickly Grasp promptly Problem

fear Problem solving skill More competitive				solving skill
Students narrate their learning experience and academic performance based on participation in Physical activities				
Competitive	Enhancement	Revitalizing	Evolution	Standing Out/ Exceptional
Become more competitive in sports and academic-P			Used to be a shy girl-P Lazy Girl-P No awkardness-P Work according to routine-P	Studying good and stand out-P
Analyze-P				
	Concentration-P			
	Quite focussed- P2 Score a goal in basket...how focussed we need to be		Focussing habit-P2	Become more competitive and try Better development and improvement- P2
Mentality of competition in studies also-P3				Studies have become nicer
			Motivation to top the topper- P3	Improved in studies too-P3

		Don't understand the rest as tired-P3		
Grasp teacher quickly	Same attentive way- Alert from where the kick and punch comes so need to be very attentive	Better Mood, Better Energy, Better attention Better Memory- Remember the rules, so memory power is boosted	Healthy Learners are better learners	
		Feel Refreshed after PA class	Very good at Physical and Studies too	
	Grow dramatically if they are doing well in sports	Develop problem solving skill as learnt in games		
	Confidence level is boost- Once won....they will win again Same at studies as well			
	Put their heart and brain for securing and achieving extra grades.			

APPENDIX E. PARENTAL CONSENT

Parental Consent to Participate in a Research Study**Kathmandu University • Hattiban, Master of Philosophy****TITLE of Dissertation: Exploring the Impact of Physical Activities on Student's Academic Performance****Name of Participant: -----T****Introduction**

- Your child is being asked to be in a research study of Master of Philosophy.
- S/he was selected as a possible participant because he/she has the potential to think promptly and reply actively.
- We ask that you read this form and ask any questions that you may have before allowing your child to participate in this study.

Purpose of Study

- The purpose of the study is to explore how healthy body influences academic performances.
- Ultimately, this research may be presented as a paper.

Description of the Study Procedures

- If you decide to allow your child to participate in this study, s/he will be asked to do the following things: Answer questions related to research
will allow to record his/her voice

Confidentiality

- This study is anonymous. We will not be collecting or retaining any information about your child's identity.
- The records of this study will be kept strictly confidential. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. We will not include any information in any report we may publish that would make it possible to identify your child.
- Information about your child's identity will never be published. However, you will be given the opportunity to review and approve any material that is published about her/him.

Consent

- Your signature below indicates that you have decided to allow your child participate as a research subject for this study, and that you have read and understood the information provided above. You will be given a signed and dated copy of this form to keep, along with any other printed materials deemed necessary by the study investigators.

Parent/Guardian Name: _____

Parent/Guardian

Signature: _____

Date: _____

Investigator's Signature: _____

Date: _____

APPENDIX F. FIELD NOTES

Field visit → June 7, Wednesday

went at 10:50 am for interview.
 Since one of my participant was absent since Sunday, I requested the incharge for the substitute and today she had managed and. Today, I met my new participant and briefed him about everything.

They had Karate classes today from 11:00 - 11:50 am.

I observed them for 20 mins.

(G1) very active, practicing according to the coach. She was following whatever the coach was doing.

Swift in learning Karate moves. Very energetic. # went to class, there was 5 minutes rest time. attentive to what teacher was teaching. raised hand in yet^{er} to ask question. not tired at all.

(G2) → very active in the beginning. ~~but~~ started feeling tired. was moving slowly comparing to other students. drank water once. again started practicing. 5 m after the class walking like a turtle to go to her class.

Mathematics class going on. She reached late. said "taking rest and drinking water". sat on 1st bench. was reluctant to take out books & copies. In 17 minutes, teacher asked 1st question - formula - she could not answer.

Field Visit

May 28, 2023, 11am, I went to Omega International school @ Kumbipati. The school was quite a big one with 650 students from pre-primary to Grade 10. They have 2 different premises. pre primary to 4 in one block - 5-10 in another.

1 basketball court, 1 small playground, outdoor, 1 small playground indoor for pre-primary studs.

near the basketball court two big trees and sitting area.

One big basketball court @ 72 Block and a futsal

I met 8 students altogether from Grade 6-8. 5 Boys and 3 girls for my Research.

We met at 11:30 and had a general informal meet. The ECA teacher had already explained ~~to~~ ^{to them} about me, a brief introduction was given. After that I had a very brief and informal chat with all of them.

I told my purpose and my Research title, how and we going to work together. I came to know about their Name, age, Section, Grade and address. The physical activities they get engaged. Their fav. PA. How many times a day they practice PA, what kind of PA they get involved in? what is their favourite PA?

After that I told them about the ethical guidelines and the Consent form their parents have to sign as they are all minors.