

ATTITUDES ON THE CORRELATION OF THE ACADEMIC ACHIEVEMENT AND  
PHYSICAL PROFICIENCY: THE CASE OF TOP TEN NATURAL SCIENCE  
PREPARATORY STUDENTS IN EACH SECTION, AT LIDETA SUB-CITY IN ADDIS  
ABABA.

**BY**

KIBRUYISFA BERIHUN BEKELE

“A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES ADDIS  
ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUEREMENTS  
FOR THE DEGREE OF MASTERS OF SCIENCE IN  
TEACHING SPORT SCIENCE”

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**ADDIS ABAB UNIVERSITY**  
**COLLEGE OF NATURAL SCIENCES**  
**SCHOOL OF GRADUATE STUDIES**  
**DEPARTEMENT OF SPORT SCIENCE**

This is to certify that the thesis prepared by Kibruyisfa Berihun Bekele entitled; attitudes on the correlation of academic achievement and physical proficiency, the case of top ten natural science preparatory students, at Lideta sub city in Addis Ababa,. Which is submitted for the partial fulfillment of the requirements for the degree of master of sciences, in teaching sport science complies with the regulations of the University and meets the accepted standards with the respect to originality and quality.

Approved by Examining Committee (Board of examiners):

	Signatures	Date
Advisor: Solomon Teka (Dr.)	_____	_____
_____		
Chair person (Dept. graduate committee)	_____	_____
_____		
Internal Examiner:	_____	_____
_____		

June, 5/2013

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## ACRONYMS

<b>FGD</b>	Focus group discussion
<b>SPSC</b>	Sport science
<b>PE</b>	Physical education
<b>HPE</b>	Health and physical education
<b>HRMO</b>	Human resource management officers
<b>MSC</b>	Master of science
<b>BED</b>	Bachelor degree of education
<b>ASI</b>	American sport institution
<b>SHAPE</b>	School health, academic performance and Exercise
<b>GPA</b>	Average grade point
<b>BMI</b>	Body mass index
<b>CDE</b>	California Department of Education
<b>ACSM</b>	American College of Sport Medicine

## OPERATIONAL DEFINITION OF TERMS

- **Academic achievement:** An achievement that obtained via school educational engagements
- **Top ten students:** Students in a class who stood one up to ten by their, semester academic status
- **Physical proficiency:** Physical (body) efficacy that obtained via physical activities
- **Pseudo perception:** A misleading way, understanding of the community towards physical efficacy
- **Stereotype:** The cumulative assumption of our ancestors' that pivoted beyond the practical reality of the phenomena
- **Indoctrination:** Is the process and procedure of inculcating ones perception about the existing mood to the new generation, subjectively
- **Allegorical expression:** figurative and ironic expression (indirect expression of ideas)

## ABSTRACT

This study is rendered to examine the pseudo perception of top ten, grade twelve preparatory students in each class, in Lideta sub-city, on the correlation of academic and physical proficiencies, the motive of the researcher to undertake the study is on one hand to see the association of the physical development with that of intellectual and determine their correlation on the other hand to assess the perception of those ranked students towards the school physical education engagement and physical activities at large in any case to do so (to make the study practical and viable) the researcher customized descriptive co relational method and the sampling procedure is deliberative(convenient) sampling and the sample size was 100 participants that were engaged by the study, in connection with this the data sources were both the primary and secondary, as the primary data gathering procedure questionnaires , focus group discussion and interviews were prepared and questionnaires were constructed and distributed for both those top ten students and for those PE teachers of those ranked students at the study areas whereas the interview were semi structured type and the items constructed and presented(interviewed) for those aforesaid PE teachers (interviewees) and while the focus group discussion where carried on for those four selected PE teachers, all the activates have been recorded with tape recorder and what have you as the secondary data sources the researcher has been operationalised the literature review which clearly showed the association of academic performance with that of physical efficacy in a positive compartment and as the secondary data sources the researcher has been organized a check list in order to observe the physical features and related phenomena within the study areas ,having said all these things about the nature of the study and data sources the data that was obtained by questionnaires were analyzed and interpreted quantitatively with tabulation in percentage whereas the rest aforesaid data sources have been analyzed and interpreted qualitatively at the end findings, conclusions and recommendations have taken their own places and they approved a positive direction.

**Key terms:** physical proficiency, academic achievement, deliberative sampling, pseudo perception, correlation.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 BACKGROUND OF THE STUDY**

Academic achievement and physical performance are the intertwined phenomenon both are the manifestation of human endeavor, so it is possible a being to have the two variables at the same time due to their intertwined nature. Beyond the interlocking nature of the aforementioned variables, in a logical sense physical proficiency is precondition to have academic achievement. In the earthly life of the being, the aforesaid variables have equal value for the existence of a being to foster its life. The endeavor of a being is to be successful in this material world, to render and to make the intelligibility practical, the two variables should be developed hand in hand; regardless of other constraints, if not the ground is convent to do so physical proficiency should be the prerequisite to the academic achievement. But as of the researcher of this study experience, learners in the school wouldn't be understood the aforementioned argument due to this, their inclination always take a side of one to the other, to underpin the argument, the researcher of this study supposed by the work of certain thinkers, authors and so on in the following manner.

As of many thinkers like Spinoza, Rene Descartes and others it is difficult to alienate the mind from that of the body, for these thinkers these body and the mind is one, as of them to speak the performance of a being, the performance of the body derives from that of the mind, and similarly the performance of the mind supposed by the performance of the body, Spinoza, substantiated the argument of body mind correlation, in terms of their manifestation, which is performance by saying "Teach the body to do many things this will help you to perfect the mind and come to the intellectual level of thought" so as for the Spinoza, the intellectual curiosity and performance of the body is intertwined.

Children must develop basic academic skills to have success in a modern world where technological advances progress at exponential rates. Once students have a social foundation in reading, writing and mathematics they can use skills to acquire advanced knowledge in these any other academics pursuit.

Technology has brought the modern world many advantages, but also many challenges. Where it has allowed a greater degree of independence, it has also resulted somewhat paradoxically in producing almost as much dependence, for example the growth in economic output world-wide is the result in mechanization, but the progress that has increase nearly every one's standard of living has also resulted in an epidemic of sedentariness. Rather than rely on innate motor capabilities with the attendant health producing effect, modern culture dictates that mobile transportation is the first, and often the necessary choice. The result is less caloric expenditure per day than at any other time in history for the majority of people. Coupled with readily available food items, there is little to wonder about the world-wide rise in obesity rates. The outcome is frightening. A sedentary life style leads to obesity which needs to degenerative diseases like type II diabetes cardiovascular disease, stroke and so on, while most of these diseases strike in middle age, the younger age groups are not immune. A theory of some merit is that as children become more sedentary with an attendant loss of physical fitness academic achievement suffers. If this is correct, it stands to reason that when regular physical activity is incorporated in to early child hood education; academic standing improves as Rennie, Johnson and Jabb stated, (2005).

A recent study indicated that taking time away from traditional educational pursuits during the school day to spend an hour devoted to physical activity will not adversely influence performance of traditional educational skills as Carlson stated (2008). Other studies showed that the incorporation of physical activity classes actually enhanced academic performance in traditional academic programs, in this regard the health of the body and the training of the mind should be linked to life styles measures such as regular activity. Chomitz,( 2009), Temporo luski, Davis, miller and Naglieri, (2008).

In the school educational engagement it is , expected from the learner to develop the three learning domains such as cognitive, psycho motor , and affective domains as of Bloom's taxonomy of learning domains.

As of bloom's cognitive domains which are highly involved by cultivation of the mind and the psychomotor (body) one, which is skill oriented, so in the school educational engagement, obviously everyone needs to develop the cognitive , as well the psychomotor domains, to gather with the affective one, this is the normal way and the expected attitude, to have with the learner, but most of the time, the participant of this study inclined to one direction which is cognitive one as they perceive the other part contradicts, their inclination, so the researcher driven to design as study in this regard .

## **1.2 STATEMENT OF THE STUDY**

In the school educational engagement the teacher of each subject, the school community, the family of the learners, educational stake holder's educational administrator of the nation (State) aimed the learner in the school to have performance, in all aspects of the educational engagement with no restriction. Not only the aforementioned personnel in the educational arena but also the learners themselves need to have performance in all aspects of their life, at large, to develop performance in any perspective, in any demand the source of performance always derive either the mind which later manifest by the intellectual curiosity or motor development later on manifested by skill oriented performance. Even though the research elucidates the source of performance as dual entities, to develop one part the other one is deliberately desirable otherwise success will fail in any manner so to have the intellectual curiosity the motor development has its own role, and the converse is true but most of the time it is observed that the learner take a side during their educational engagement rather developing both the cognitive and motor developments , as of the research understanding the learners engagement in

the school is to develop both the cognitive and motor development ,and both of them are not contradictory rather supplementary and suppository but by the assumption of the researcher in view of the school learner Specially the identified level , which is preparatory students of top ten, they dichotomized the two essential developments that should be developed through their educational engagement, as of the researcher`s observation, as he observed while he has been teaching physical education for two years in the identified grade level and as he experienced while he was a student of identified level, learners of the top most of the time used up their life time on the cognitive oriented matters, consciously or unconsciously, so in this regard the research would like to know their justification, the reason why they used up their entire educational engagement time only up on the cognitive matters rather than taking both the motor aspects hand in hand with that of their inclination.

### **1.3 HYPOTHESIS OF THE STUDY**

1. The attendant of the study intuitively assumed that the one who participated in physical activities are disadvantaged in the academic arena, due to this perception the top students alienated from having physical proficiency
2. Most physical education teachers in the school highly engaged by the practical activities apart from the theoretical aspect of the lesson this leads the attendant to assume physical education as not one part of natural science subjects rather vocational one. And this leads the attendants to assume physical education subject matter physical activities and physical exercise at large, as they do not have any symmetrical relation with academic achievement.
3. As a stereotype the assumption of the community via physical development of their child that driven through physical exercise either in the organized form as a team or as an individual manner considered as a deterrent to the cognitive development (academic achievement).

4. The researcher thinks that motor development at a young age can affect learning throughout the entire educational engagement of the learner in this regard what are the implications of parental guidance of student's motor development?

## **OBJECTIVE OF THE STUDY**

### **1.4 GENERAL OBJECTIVE**

The general objective of the study is to cross-check the societal outlook towards physical education subject matter from their offspring's and at the same time to see how children are indoctrinated and may be deceived by their predecessors' perception which is pseudo one and critically examine the attitudes, and their justification of the identified participants of the study up on their relationship between motor and academic, proficiencies. While determining, the potential mediating, the role of physical performance, to the academic achievement.

#### **1.4.1 SPECIFIC OBJECTIVE OF THE STUDY**

- To indicate the budgeting of time to those two variables probably may affect the one to the other in a negative or the positive manner.
- To identify the real cause for the perception of the learners and the community at large up on their deception and prevarication, basing the association, or disassociations of the research topic sentence.
- To initiate the participants of the study, as they have to engage in physical exercise via their entire life.
- To indicate the proper budgeting of time to these variables, which are physical efficacy and academic achievement probably may affect the one to the other in a negative or positive manner.

### **1.5 SCOPE OF THE STUDY**

The study is delimited to the top ten preparatory schools grade 12th students. Based on this fact the researcher concentrated the study at Lideta sub city up on the attitude of the appointed attendants of the study, on the correlation of the academic and physical proficiencies.

## **1.6 SIGNIFICANCE OF THE STUDY**

The preliminary concentration of the study is to identify the main factors that lead the attendants of the study, their parents and the school community at large to their pseudo-perception up on physical proficiency that considered as a deterrent to the academic proficiency at the identified area of the study.

The study;

- Helps to challenge the pseudo-perception of the aforementioned subjects, vis-à-vis physical education that considered as a mere academic career.
- Helps to dismantle the perception of the learners, that they think, engaging in regular physical activity in the school or outside the school affects their academic status in a negative manner.
- It helps to build a positive image as academic and physical, proficiencies, as they go hand in hand without any contradiction.
- It helps to give an insight how physical education demands high qualified personnel's in the academic arena as of medical personnel's and the like, then the study initiates its participant to take physical education as a career. Finally it may serve as a bed rock for others to carry and render further study in this arena.

## **1.7 LIMITATION OF THE STUDY**

The stumbling block (obstruction) of the study is too vast and enormous, to mention some of them:

1. The unenthusiastic and reluctant of the primary participants of the inquiry
2. Lack of collaboration by the school community, by facilitating the ground (situation) while the data survey and inspection carried on.
3. The delaines of the allocated money to the research by the university and its insufficiency.
4. Sacristy of sources like researched materials in a local context (perspective).
5. 1/3 of the distributed (dispatched) questionnaires to the teacher are not fully returned this played its own role by deterring the expected out come and still by making the researcher`s psychological position (set or make, up) to be deteriorated.

## **1.8 ORGANIZATION OF THE STUDY**

This research work is prearranged in five broad chapters. Chapter one deals with introduction, statement of the problems, research questions, objectives of the study, significance of the study, delimitation of the study, limitations of the study, definition of terms and organization of the study. Chapter two is about review of related literature. Chapter three deals with research design (method) and methodology. Chapter four deals with analysis and interpretations of data collected. And finally the last chapter involves summary, conclusions and recommendations provided by the researcher.

## CHAPTER TWO

### 2. REVIEWED LITERATURES

Attitudes on the correlation of academic achievement and physical proficiency: the case of top ten preparatory students at Addis Ababa in Lideta sub-city, the motive of the researcher to undertake this study is that,

1. The disinterestedness (unenthusiastic nature) of those top students on the subject matter of physical education.
  2. The perception of the community to the subject matter and its professionals in these and other unmentioned reasons the researcher has been motivated to conduct the study in order to assess, the world wide trends, the association of the two attributes either in appositive or negative manner and what have you, in this regard the reviewed literatures have been organized in a thematic way.
- In a review of the effect of students` participation in sports, Chamber (1991) concluded that “Academic achievement can be fostered through sport.”

Chambers noted that in most cases of his review of empirical research, students who played sports experienced fun, which lessened feeling of stress and anxiety. (Chamber, 1991) He wants on to state that his fulfillment leads to a greater perceived competence and control (P.417), and that this self-esteem and feeling of competence aids student athletes, in academic endeavors as well.

According to Phillips and Schafer coach influence on athletes which results in better academic achievement, and adds to the notion of heightened self- esteem due to sports participation as a positive influence on academic success.

According to the American school curriculum (1990), the mission of the curriculum was, sport as an effort to improve academic achievement. the rationale behind the study was based on the American sports Institution (ASI) position that there are positive aspects of the sports culture which can provide a feeling of meaning and self worth in students, which in turn will provide an environment in which students want to be in school, want to learn, and

ultimately enhance learning promoting achievement in school through sport. This view contradicted the traditional notion of the time that at best sport should take back seat to academics, or at worst that sports may impede academic success if they take priority over academics, American curriculum states that promoting achievement in school through sport, (ASI 1996).

Based on Vansteenkiste (2006), Hierarchical model of motivation of sport in the academic he suggested that “perceived reasons for sports participation enhancing Academic success,” as of him participation in sport may lead to experiences, attitudes, self –perceptions, and treatment that enhance academic role for the following reasons

- 1) if one is participating in sport there may be an increased interest in the school, including activities ,
- 2) to maintain athletic eligibility the athlete is motivated to perform at a higher academic level
- 3) Athletic success may lead to a heightened sense of worth that spills over into academic achievement
- 4) Coaches, teachers, and parents take a personal interest in athletes, including their class room performance
- 5) Athletic participation may lead to membership in the elite peer groups and an orientation toward academic success.
- 6) The athletes may have the hope or expectation of participating in athletics in college.

Fine motor skills are one area of difficulty for children with motor proficiencies challenges according to Snyder (1990) as of him handwriting, children with low motor competence have deficit in timing, duration and sequence of movements. Although not implicitly related to academic performance, this relationship is important to note as children are engaged with fine motor movements (primarily hand writing). A common belief is that the challenges these children face while handwriting may impact their academic performance. (ibid)

Research has shed on the notion that “athletes tend to exceed comparable with none athletes in their achievement of educational goal” (Phillips, 1971).

Due their close relationship (connection) of physical activity, physical fitness and Academic performance several studies suggested a positive relationship between academic performance and physical activity.(kantomaa ,Temmelin ,Demkakos, Ebeling and Taanila,2010).Some studies suggested that females are the sole beneficiaries of elevated physical activity levels for academic performance (Carleson, ulton, Hee , maynerd, Brown,2009).

As some studies suggested that, regarding to the relation of the two variables that is Physical education and Academic performance. “At best, the increased time allocated to physical activity during school hours does not negatively impact a child’s academic performance. (Ahamad, F. (2007)

“Students who met minimum fitness levels in three or more physical fitness areas showed the greatest gains in academic achievement. “ (Culifornia Dept. of Education 2002)

Students who participated in exercise regularly are less depressed, used drug less frequently, had higher attendance levels at school and have higher grade point averages than students who do not have regular physical activity

- “ poor nutrition and lack of physical activity lead to lower academic achievement “ studies show that when children’s basic nutritional needs are met they have the cognitive energy to achieve and learn (ali Kamen, 2006)
- Research indicated that activities that positively enrich both mental and physical process promote the positive development of the whole system (ACSM, 2006). “Students whose time in Physical education or school based physical activity was increases maintained or improved their grades and scores on standardized achievement test , even though they received less , class room instructional time then students in control groups”(Ragesh, S. 2006).
- Adolescents who reported either participating in school activities , such a PE and team sports or playing sports with parents , were 20% more

likely than their sedentary peers to earn an “A” in Mathematics or English” (Linder J.& Kline F. 2006 )

- “ The available evidence shows that children who are physically active and fit tend to perform better in the class room” (Hartmann D. 2008)
  - Children who participated in vigorous physical activity, must as sports, perform better in school.” the most active kids most often have better grades” (ACMS, 2006).
  - Students that a higher level of physical activity maintained higher grades and learned faster than those students who were less physically active “ (Boom K. 2007).
  - Physical activity promotes Academic Achievement and a healthy lifestyle when incorporated in to early child hood education (ibid).
- The detrimental effects of physical inactivity within children have enormous personal health consequences. These health conditions have the potential to impact the economic vitality of society as a whole. Studies have indicated that inactive children are far more likely to suffer from obesity, type 2, diabetes, and hypertension than their physically active peers. Research also indicates that these health problems tend to follow the individual in to adulthood. Seventy percent of obese adolescents will become obese adults (Headley F. D., 2001).
- In addition to the health benefits of physical activity, physical activity has also been positively correlated to academic achievement when integrated into early child hood educational programs (Kocke, D.P. 2002).

#### Influence of physical inactivity on Academic performance

In addition to the adverse physiological effects of obesity which is partly attributed to physical inactivity, research studies have also demonstrated that physical inactivity adversely influences academic performance (Chomitz, 2009, Temporarwsk, Davis, miller and Nuglieri, 2008).

Students who are physically active perform, better academically than inactive students, the relationship between physical activity and academic performance

may be explained by both physiological and psychological mechanisms. In this regard, Animal studies have demonstrated that physical activity stimulates neural development and higher capillary volume (Kramer N .20002).

As, Hillman C & Buck S. M.), investigated that the relationship between physical activity and cognitive function by comparing high- and low – fit preadolescent children (9mean age= 9.6 yr) their findings suggest that physical fitness was positively associated with neuro electric indices of attention and working memory (Hillman C & Buck S.M 2007).

As Taras H, also, demonstrated that students, who are physically active demonstrate greater attention during class than sedentary students. From a [psychological perspective , physically active individuals report higher levels of self- esteem and lower levels of anxiety which have both been associated with improved academic achievement (Flook,,Repetti, and Ullman, 2005).

Cross-sectional studies have demonstrated a positive relationship between physical activity and academic performance (Tara, H. 2005).

One study demonstrated that students who pass all components of the fitness gram had higher academic performance measured by the standardized Illinois states achievement test. This relationship was demonstrated in third – and fifth – grade students (Astelli, Hillman, Buck and Erwin, 2007).

A study conducted by the California department of education evaluated the performance of over one million children on standardized tests of physical fitness, including variables such as aerobic fitness, body composition, muscular strength and muscular flexibility to the California standards test which includes indices of language art and mathematics proficiency(CDP, 1999) .

Physical fitness Scores of children in fifth- seventh – and ninth grade were positively correlated with measures of academic achievement. This correlation was stronger in girls and students with higher economic status. However a significant positive relationship was also demonstrated between physical

fitness and academic performance in male students and in students with lower socio-economic status (ibid).

As Meta-analysis conducted on 16 experimental designs reported a positive relationship between physical activity and cognitive function in school aged children This study demonstrated that physical activity was positively related to various components of cognitive function such as perceptual skills, academic achievements verbal skills, mathematical skills, memory and academic readiness (Sibely B.A & Etnier J.L., 2003).

As most studies indicate that physical activity improves general cognitive function which has greater universal application than improvement in one specific skill such as mathematics performance. As research indicates that physical activity improves the decision making process which that may lead to an improved overall quality of life. (Davis et al 2007)

Physical activity improves social and moral development of children as well as academic performance (Jarrett O.S., 1978).

The relation of physical activity and fitness to the academic performance is of special concern because school physical education programs can be questioned regarding their contribution to the primary academic mission of schools (15) although physical education programs can be justified on the basis of their health benefits alone (ibid ).

Physical education (activity) at school could enhance academic performance by increasing cerebral blood flow, enhancing arousal level, changing hormone secretion and improving self-esteem, physical education classes are being replaced with other classes in an effort to increase the students' academic achievement as measured by standardized tests. Despite this trend, numerous evidences that academic achievement will improve physical education classes are cut off. Numerous studies have shown positive relationships between academic and physical activity and sport participation. The mechanisms by

which students may improve academic achievement as a result of increased physical activity through physical education include increased arousal and reduced boredom which may lead to increased attention span and concentration. Increase, activity levels might also be related to increased self-esteem which could be expected to improve class room behavior as well as academic performance (Coe D.P., 2006).

The growing interest in the benefits of physical activity of mental health and a strong evidence base shows that regular activity and improved fitness increases psychological well-being and that is a precondition to achieve in the educational engagement (Coe, D.P., 2002).

Exercise can help people feel better about them and their lives reduce anxiety and improve mood. Evidence is also show that physical activity is associated with substantially reduced risks of mental illnesses and conditions such as depression cognitive impairment and dementia if so all these things are true it is simple and possible to bring cognitive development via exercise (ibid).

Movement is an indispensable part to learning and thinking, as well as an integral part of mental processing (Spinoza 1996, commentary).

The American college of sports medicine revealed that participating in vigorous physical activity is the key to improve academic performance grades couldn't be effected in children who were only moderately active for 30 minutes at least five times a week, enrollment in PE classes alone favorably influenced grades but the highest academic achievers in the study were those who participated in a sport or other vigorous activity at least three times a week (ACSM, 2006).

Researcher suggested that daily physical activity could stimulate student's performance, which could help boost attention and concentration, which leads to better academic performance. When students were enrolled in physical education there was no indication of improved academic performance, however there was also no decrease in academic performance compared to students who had an additional hour of academic instruction each day.

- The finding of many research revealed that spending more time in physical education had no harmful effects on the academic achievement of students. In conclusion researchers. Encouraged school administrators to provide more time for health reined physical education programs because of the physical education programs because of mental health of benefits to students (Sallis Makeenize, 1999).

Movement and motor experiences are crucial for human development in the first two years of life; a child begins the stages of recognition, understanding and thinking. All of these skills will inevitably result I different movement experiences and their consequences children learn from infancy the love to move play and interact with in their environment. “The human body was designed to move and its early experiences lay the foundation of what follows” (Boom K., 2007).

Movement is what stimulates cognitive development, it children lack proper environmental stimuli during infancy sensory path ways in the brain may not develop properly and the ability to utilize motors kills may remain under developed and again, movement is what stimulates the assortment of connection, Which in turn all owns us to think beyond out original focus thinking, outside of the box, Movement when children are planning and thinking enables creativity Children enjoy movement and being active as they develop motor abilities. They use these skills to explore environments and stimuli around them (Boon’s 2007).

Movement stimulates and promotes cognitive development and helps children to express their emotions all while offering opportunities for independence. All of these things contributed to improvised self concepts for children, not to mention it promotes a healthy life style forever(ibid).

According to Linder, as he suggested that when a substantial amount time of school time is dedicated to physical activity academic performance meets and may even exceed that of students not receiving additional physical activity ( Linder K, 2001).

According to Weikarts, Children are having fewer opportunities to be physically active and develop basic motor skills that will enhance children academically. As of him the relationship between them competency and academic performance has been found to be positively correlated (related) to child fens over all school achievement, as well as mathematics and reading achievement ( Weikarts R.H., 1994).

According to Cocke as he suggested that, youth while they received additional physical activity tend to show improved attributes such as increased brain function and nourishment, higher energy / concentration levels changes in body building affecting self esteem, increased self – esteem and better behavior which may all support cognitive development (Cocke D.P., 2002).

Improved brain attributes associated with regular physical activity consists of increased cerebral blood flow, changes in harm one levelly, enhanced nutrient intake and greater arousal, as they suggested that regular exercise can improve cognitive function and increase levels of substances in the brain responsible for maintaining the health of neurons. “Brain function may also indirectly benefit from physical activity due to increased energy generation as well as from time (Shephard R.J., 1997).

## **2.1 ACTIVE BODIES, ACTIVE MINDS**

According to the Active Living Research center, Physical activity and Academic achievement with shrinking budgets and increased pressure to improve academic achievement, school governance leaders are facing challenging decisions on behalf of the students in their district, a number Of Students Show that Students Who Spend Time In physical education or other school-based physical activity increases or maintain their grades and scores on standardized tests even when they receive less class room time for academic subjects schools that offer quality physical activity programs also see increased student concentration and reduced disruptive behavior. Therefore, cost effective strategies to maximize opportunities for physical activity for all

students should be included in decisions aimed to improve student learning and academic achievement (Active Living Research, 1986).

Studies showed a positive correlation between physical activity and academic performance. According to the active living research center in a review of 14 published studies by investigating the link between participation in physical activity and academic performance, 11 studies found that regular participation in physical activity is associated with improved academic performance, Students who are physically active and fit are more likely to perform well in school than their sedentary peer beside this a national study found that adolescents who rep (ibid).

### **2.1.1. PHYSICAL ACTIVITY AND ACADEMIC SUCCESS**

John M., as he discussed that weight is not the only reason to reactivate our bodies Researches found that strong connections between physical activity and brain function a finding that could help solve another national crisis poor student's academic performance, brain rules, which describes the 12 rules of how the brain works rule number one is exercise boosts brain power "Medina supports this with anecdotes real- life scenarios and real science, uncovering many studies that prove, regular exercise even just twice a week, offers significant advantages. Activity boosts memory problem solving, reasoning, and attention, all of which are critical for success in the class room, the effects of physical activity on children. She has found that physically fit children are able to identify visual stimuli faster, concentrated better, pay attention to a task for longer periods of time and when exposed to physical education classes, perform better on core tests than children, who had not been exposed. According to the author physically active children benefitted from being depressed and negatively behaved (John M.W., 2008).

Based on the ACSM realized that students participated in 40 minutes of activity each day, five days a week (as opposed to their usual 40 minutes per

week (as opposed to their usual 40 minutes per week), then number of students who reached proficiency on the year – end state tests went from 55% to 68.5 %. These studies show , we have every reason to be optimistic about the long – term effects of exercise on academic performance, even as an increased focus on test scores causes many schools to cut physical education programs in order to give students more class time(ACSM,2006) .

As Medina and other researchers believed that an integrated program is not only possible but can also be successful. In connection with this the good news is that dormant cognitive abilities can make a comeback. Medina (Researcher) cites a study that measured the brainpower of “couch potatoes “, exercised them for a period of time, and then retested their brain power. These researchers consistently found that when inactive people began an aerobic exercise program, their mental abilities came back to life in as little as four months. A similar Study as it examined the brain power of children as they began an exercise program of jogging for 30 minutes two or three times a week. After 12 weeks, their cognitive performance had improved significantly, but when the exercise program was taken away children’s scores plummeted back to pre- active levels. This rise and fall of achievement in adults and children is the direct result of the brain receiving more or less oxygen, due to lack of experience in exercise (Regularly ) . As the researcher suggested that , when looking at the growing mound of evidence, it becomes obvious that physical education or physical activity is not a waste of students time (especially school engagement time ) so as the researcher suggested that physical activity is critical not only to the physical well –being of children but also their academic success(John Medina W.,2008).

### **2.1.2. EXERCISE AND COGNITION**

The executive function hypothesis posts the benefits of exercise on cognition are specific to or stronger for processes that require cognitive control some experimental evidence supports the idea that exercise might children's cognition. In a study of 9<sup>th</sup> and 10<sup>th</sup> graders, the result found that students randomly assigned to 12 – week aerobic running program for 30 minutes per session, 3 times a week, performed better than student in a regular physical education class on a test of executive function conceptualized as creativity; The same investigator found similar results in 11<sup>th</sup> and 12<sup>th</sup> graders, participants in an aerobic running program performed better on evaluations of creative thinking than did those assigned to regular physical education classes. These results practically support the hypothesis that executive function is sensitive to the effects of aerobic exercise training (Hillman C. & Buck S.M., 2008).

### **2.1.3. EXERCISE AND ACADEMIC ACHIEVEMENT**

As the Field T., explained that the impact of exercise on children's cognition implies a link to academic performance. Population studies provide evidence that inactivity and excess weight are associated with poor academic achievement. Cross – sectional and longitudinal studies performed in the Americas, Europe, and Australia provides clear evidence for the association of inactivity and obesity with poorer academic performance. A recent prospective study showed that girls, but not boys. Who spent 1 to 5 hours per week in physical education had greater achievement in mathematics and reading than those who spent 35 minutes or less per week, achievement has also been related to fitness as the statewide studies stated and have found a positive relationship between fitness gram (a fitness assessment and reporting program for youth) scores and performance on academic achievement tests. Over weight and low fitness levels are markers of a sedentary life style; therefore, physical activity may be the active ingredient behind these associations (Field T. 2001);

For example across – sectional study verified the association between overweight and low scores on academic performance tests, but most of these results were attributable to fitness and socioeconomic status. Until recently, the strong escheatment one could make regarding the effect of physical activity on academic achievement is that at least it does not worsen achievement, even when it takes away from class room time. (Field T. 2001).

Exercise had found improvements on an objective measure of children's academic achievement. Although no difference was detected on an intelligence test, children who trained acerbically for and months had an advantage over children who did not train acerbically on a standardized academic achievement test (Ibid).

Physical activity is a significant, positive predicator of academic achievement body mass index, diet and physical activity explained up to 24 of the variance in academic achievement after contorting for gender, parental education, family structure and absenteeism (Lidner, 2002).

There was a significant positive link between physical activity participation and academic performance, higher physical fitness, physical capacity and physical activity were associated with higher rating of scholastic ability (dwyer T, 1983). Students who reported a great level of exercise spent more time in sport and achieved higher grade point averages (Field, 2001).

For elementary school children speeding more time in physical education did not have harmful effects on academic achievement when measured using standardized test. The two years follow up of the physical education program showed pupils in the experimental group did significantly better in achievement tests when compared to controls (Dwyer, 1983).

According to Ahamed`s study finding revealed that total of 519, 18 year old south Australian school children took part in the school health academic performance and exercise (SHAPE) study which involved 45-60 minutes of additional physical education each day. The findings from the study indicated health benefits from daily physical activity. There was no evidence of any loss

of academic achievement measured by arithmetic and reading tests despite less time dedicated to class room teaching (Ahamed, 2007).

As the Active Living Research center narrated that Physical Education (Activity) can have an impact on cognitive skills and attitudes and academic behavior, all of which are important components of improved academic performance. These include enhanced concentration and attention as well as improved class room behavior. In some cases, more time in physical education leads to, improved grades and standardized test scores. The research centre stated that unfortunately, many schools cut physical education and PE funding with the belief that more rigid class room time would somehow stimulate d students to learn more. It's an incorrect belief, and there is scientific evidence to prove it, Exercise directly impacts the behavior and development of the brain. “ It is likely that the effects of physical activity on cognition would be particularly important in the highly plastic developing brain of youth ,” according to developing brain of youth,” according to a 2010 essay penned by Charles Barles Bscha,of Columbia university ; He summarized how exercise may affect executive functioning (Active living Research , 1986);

- Increased oxygen flow to the brain,
- (Increased) brain neurotransmitters
- Increased brain – derived neurotrophins that support neuronal differentiation and survival in the developing brain “Neurotrophins assure the survival of neurons in areas responsible for learning, memory ad higher thinking. So physical activity has benefits beyond improved grades, too Bausch extra palates current research and connects physical activity to absenteeism, social connectedness, and dropout rates. Drop-out rates where lower for youth who consistently participated in interscholastic sports “ According to Bach as he writes, though cautions that forcing children to join sports won't solve the drop out problem that plagues many inner city schools , it simply may foster an environment of connectedness that could keep at – risk students attending school(ibid) .

## **2.1.4. THE RELATIONSHIPS OF PHYSICAL ACTIVITY, AND ACADEMIC PERFORMANCE**

A positive relationship of physical activity and academic performance has been explored through several studies conducted in the USA by the California department of Education; Linder (1999), Dwyer et al. (1983), Tremblay, (2000), Sallis, Blizzared, Lazarus , and Dean (2001) as they researched , their finding support one another in suggesting that when a substantial amount of school time is dedicated to physical activity academic performance meets and may even exceed that of students not receiving additional physical activity (Shephared, 1997) . As Debby Mitchell consolidated that relation of physical activity with academic achievement he said that children are having fewer opportunities to physically active and develop basic motor skills that will chance children academically (aforementioned authors by CDE 1990).

As Mitcheel performed a study on the relationships between rhythmic competency and academic performance, in first grade children (1994),the findings supported a link between academic achievement and the motor skills of maintaining a study beat, also motivated by other researchers like phillis, J.C. (1971), weikart, kuhlmean (1999) who reported in their discussions that children's timing has been found to be positively related to children's over all school achievement as well as mathematics and reading achievements (Mithcheel J 1994).

As of Tremblay as he discussed that Youth receiving additional physical activity tend to show improved attributes such as increased brain function and nourishment higher energy / concentration levels changes increased self-esteem and better behavior which may all support cognitive learning (Tremblay M., 2000).

As Shephard stated that improved brain attributes associated with regular physical activity consist of increased cerebral blood flow; changes in hormone levels enhance enduring intake, and greater arousal (Shephard, 1997).

Studies presented at the 2002 society for neuroscience by Linder suggest that regular exercise can improve cognitive function and increase levels of substance in brain responsible for maintaining the health of neurons

“ Brain function any also indirectly benefit from physical activity due to increased energy generation as well as form time out side of the classroom may give relief from boredom resulting in higher attention levels during class room instruction (Linder 2002).

In order to cross check the correlation of physical fitness and academic performance CDE (California Department of Education has been conducted a research on the six fitness standards included in the fitness gram are cardio vascular endurance, body composition , abdominal strength , endurance, trunk strength , flexibility, upper body strength , endurance and overall flexibility (CDE 2002) .

Results of the CDE (2002) study included “ Statistical analysis indicating a distinct and linear correlation between students academic achievement and fitness scores” in all three grades 9<sup>th</sup> 10<sup>th</sup> and 11<sup>th</sup> higher academic performance was positively related to higher levels of fitness with the greatest academic gains in students who met there or more physical fitness standards . This association was greater in mathematics than in reading additionally females demonstrated higher academic achievement at higher fitness levels than the males (Dwyer et al 201)

## **2.1.5. SPORTS AND ACADEMIC ACHIEVEMENT**

As Rajesh S., stated that the link between athleticism and academic performance has always been an area where educators are keen to investigate knowing whether students benefit from the impact of sports involvement is a

huge advantage in engaging learners from a variety of back grounds. In doing a recent literature review as he has found that students who are involved in sports benefit in a variety of ways, not only academically through increased grade point averages; (GPA) but through greater school involvement better self – esteem and social skills (Rajesh Singh, 2006).

As the Mitchell suggested that, Sport involvement has positive effects in relation to academic achievement. For example as recently as 2008, an extra hour of involvement in physical activity does not affect performance and may have small gains in GPA. Taking time away from physical activity and adding it to academic subject learning does not help the GPA (Melinic, Sabo and Varntossen F.1992)

Similarly,as Mitcheel L.S defended in support of the academic and sport involvement association, a study at the university of central Florida including a million students in grade 7, 8 and 9 found a distinct linear correlation between students ‘ academic achievement and standardized fitness measurement in these grades (Mitcheel L.Schever 1994).

A higher level of fitness was positively related to better grades these findings are also corroborated by Headley as he suggested that youth who found that high levels of exercise were associated with better relationships with parents less depression more involvement in sport, less frequent drug use, and higher grade point averages better relationships with parents have been noted as important for adolescent’s happiness Headly F.D (2001).

On the another cornerstone study done by J.s. Coleman the famous sociologist who wrote a famous report on equality of education, found that boys were too preoccupied with star athletes and this makes the boys to be active and high achiever in their academic engagements J.s. Coleman (1961).

Hauser and Lueptow (1978) replicated and extended the Coleman’s study later show that athletes have higher GPAS by the end of their higher school career Hauser W. and Lueptow L., (1978).

As Hartmann suggested that the pro-social benefits of sports involvement that encourages young people need to maintain good grades to study eligible , and

coaches , membership and interaction with educationally oriented peers, college aspirations for sports participation, Hartmann D.,( 2008).

## **2.1.6. PHYSICAL FITNESS AND ACADEMIC ACHIEVEMENT**

As the CDE announced that the relationship between physical education (fitness or activity) and academic achievement received much attention owing to the increase prevalence of children who are overweight and unfit as well the in escapable pressure on schools to produce students who meet academic standards ( CDE 1990).

A study examined by 259 public school students in 7<sup>th</sup> and 8<sup>th</sup> grades found that field tests of physical fitness were positively related to academic achievement specifically aerobic capacity was positively associated with academic achievement, whereas BMI was inversely related, associations were demonstrated in total academic achievement like mathematics and reading, thus suggesting that aspects of physical fitness may be globally related to academic performance in pre adolescents Darla M.Castelli Chares H,(2000).

As the CDE, broadcasted that Educational and Health professionals have intuitively believed that individuals who are physically active and fit perform better in school, So in relation the two variables several studies have documented a positive relationship between physical fitness and academic achievement or other cognitive performance measures. (California Department of Education,1990).

As studies showed that exercise can increase standardized test scores, like Mathematics, language and physics, as Sigfusdottir, stated that body mass index and physical activity were responsible for as much as 24% of all differences in academic achievement Sigfusdottir I.D., (2007).

According to ASC, as it stated that evaluation of nearly one million students in grades 5 through 12 found that those adapted with higher levels of physical fitness (particularly aerobic capacity ) achieved higher scores on standardize tests, this effect was strongest for mathematics tests (ASC or American School of Curriculum 1996).

Sheperd (1997), found that reducing academic class time by 240 minutes per week and replacing it with physical activity increased scores on standardized math tests. As different authors suggested that physical education should be reformed to produce academic benefits. As studies Measuring physical fitness or time spent exercising constantly find that exercise improves academic performance. However increasing time spent traditionally physical education classes will not necessarily produce academic benefits for the following reasons.

- Traditional physical education, with its team sports orientation, often has students standing around or sitting and waiting for much of the time.
- A study conducted by Coe D.P., found that on average, among a number of physical, education classes studied, students participated in just 19 minutes of vigorous physical activity per class, and many students dislike team sports or find exercising with others stressful, those who are not natural athletes are often marginalized by traditional physical education approaches and being forced to participate can cause some students to develop a lifelong aversion to all physical activity (Coe D.P., 2006).

### **2.1.7. HIGH SCHOOL SPORTS AND THE DIRECT IMPACT ON ACADEMIC ACHIEVEMENT**

As Aries E.& McCarthy D suggested a number of studies over the years have gone beyond finding only non-cognitive advantages of participation in sports, and argued that there is a direct correlation between participation in high school sports and student's academic success, (While in the context of the, "Us-versus - them" character of the current climate of athletics versus academics such a finding would appear to be counterintuitive, a strong literature has developed in support of the claim (Aries E. and McCarthy D.2004).

In a study at Hardiness Research in 2006, it was made by ACSM, found that by a 2-to-1 ratio boys who participate in sports do better in school, do not drop

out and have a better chance to get through college”, for girls, the ratio is three to one. A study by the women’s sport foundation in 1989 also found that; “High school athletic participation has a positive educational and social impact on many minority and female student” (ACSM 2006).

The ACSM also issued a report indicating that the “dumb jock” stereotype is actually a myth and that student- athlete boy’s drop out less than non-athletic boys, a study of high schools in ACSM, it was found that those which had success on the playing field also experienced success in standardized tests, and again a study in school counselor magazine ACSM on 123 soccer students found that “active participation ... may enhance academic performance “ , and this is also supported by another study called extracurricular participation and student Engagement”, which revealed that during the first semester of their senior year, participants reported better attendance than their non-participating classmates “. Moreover, “ Students who participated were three times as likely to perform in the top quartile on a composite Mathematics and reading again assessment compared with non- participants is in a better position” , and a study in North Carolina found “a strong correlation between participation in athletes and positives such as improved grades and increased attendance rates “ (ibid).

According to Comeaux E. a number of empirical studies exist that attempt to predicate whether or not student athletes will be successful in school, Some studies look at, Demographic, factors, and others environmental factors influencing success, most of the Studies are done on the collegiate level as Comeaux, found that when student athletes receive a lot of input from advisers and when they study in a supportive environment, their academic achievement will be high. Here recommends “a wide range of forms of faculty communication and mentoring that are responsive to the needs of male student- athletes of different abilities”. Mentoring of student – athletes by faculty has also been found to be helpful. One approach to solidifying the link between athletics and academic achievement involves looking at both as part of the development of the talent of a student (Comeaux E. 2002).

According to Oliszewski K. as he explained, what it takes to assist in the development of a student- athlete is to make sure that the class is immediately; enjoyable to him or her, and develop in the long-term goals, the basis of this approach to the student – athlete is the study of eminent individuals that finds outside –of-school or extracurricular activities “plays a more pivotal role in talent development than school- based programs” ,and Participation in extracurricular activities is also said to increase the parent’s social capital and therefore their ability in “obtaining appropriate educational resources and addition opportunities for their children” (Oliszewsk K. 2004).

Most importantly, however, research shows that children participate in extracurricular activities because these activities present them with a level of challenge not found in classrooms. They often make friends and become more connected at school too, as a result of participation, and Others report that during extracurricular activities, including sports, they also learn time management and other skills Which enhance their abilities with regard to academics, Overall, then, the conclusion of this literature is that students gain much from participation in sports, which cumulatively and positively Impacts academics however , in the study of gifted students, while it was found that their giftedness apparently buoyed by participation in extracurricular activities, as they were more likely to be involved in a variety of high school extracurricular activities compared to students with lower test scores ,however, this did not include athletics, cheerleading and vocational activity that gifted children appear to participate in are related to their hobbies, and most often involving writing, drawing and mathematics, other qualifications of these findings with regarded to gifted students is that all adolescent participation in sports declines in high school with girls in particular moving in academic clubs and activities, these changes in participation levels are also true for gifted students. One twist however relates to the motivation of gifted students to be noticed for their work and receive awards for academic accomplishment and it is conjectured that gifted students may seek out recognition because they are vulnerable to peer pressure due to their superior abilities this motivation may

be even more pronounced in schools where an anti- intellectual atmosphere is prevalent (OliSZewski K. 2004).

This latter finding provides the rationale for an additional argument in how sports lead to stronger academic, but in a negative way (ibid).

A more positive, but equally circuitous route to provide that sports improves academics is provided by those researchers who note that sports serves as a marketing tools to attract better students to a school, including students with higher test scores, in this stream of research, athletics is linked to graduation rates, and found to be beneficial to the overall graduation rate of the school. But this is because a strong sports program creates a high level of prestige which in turn attracts a higher caliber of student, academically speaking, to the institution. Moreover, higher levels of academic success create a larger disparity between student- athlete and under graduate graduation rates” at the college level, how sports contributes to this is relative however, as “although athletes have higher graduate rates than all other undergraduates for the entire sample, pressures to succeed athletically compromise, their relative academic standing compared to other students, this kind of indirect argument suggests a linkage between sports and academics, but acknowledges that the level of achievement, measured by graduation rate alone, is relative to the level of academic achievement of the non- athletic student body (ibid).

According to Aries E. & McCarthy D as they argued that, most studies seeking to find a direct connection between participation in sports and academics are faced with the problem of time and demand, in this regard studies have shown that the time demands of athletic programs force student-athletes to sacrifice attention to academics, making it difficult for them to devote time to study or earn good grades but this doesn` t mean there is no any connection between the academic circle and physical efficacy, this problem is exacerbated if the student was granted some form of scholarship that overlooked his or her “less impressive academic records” or if they play in one of the high- profile money sports like basketball or football (Aries E.& McCarthy D.,2004).

Studies on the college level have also shown that as student- athlete's move through college, the gap between their level of academic achievement and that of the non-athletic student increases, still other studies have found that student- athletes also underachieve outside the classroom, with indexes showing slower rates of personal growth, and that student athletes remains less open to diversity and have low levels of self –understanding, along this line of research, the fact that athletes often “form a separate subculture” has been found to contribute to the downward spiral of achievement in many life skill areas among student- athletes (ibid).

According to Aries E. and McCarthy D., not only does this subculture isolate student-athletes from non athletic peers, but it encourages negative, insulated behavior such as binge drinking ,in a study of high – commitment athletes in a division III college level ,found that these student-athletes , as a result of their lifestyle on campus , “ had lower verbal SAT scores, to a lesser degree lower math SAT scores ,and lower self- assessments of their academic skills” these athletes also reported that their isolation contributed to poor academic performance, as they experienced problems such as Being taken seriously by professors, while these result would seem to negate the argument that participation in athletics helps improve academics do point out that this deficit vanishes when student- athlete academic performance is compared , not to the whole non athletic student body, but to students with comparable demographic profiles and SAT (Aries E. and McCarthy D., 2004).

According to Ferris E. and Finster M., explained that scores, upon entering college, when such pre-college difference were taken into consideration, researchers found “No differences between the academic achievement of intercollegiate athletes and non-athletes”, other studies find that high commitment student athletes also spend enough time in other extracurricular

activities to counteract the purported isolation of the sports subculture. Along the same lines of research, based on the study of overall school graduation rate statistic mandated by the federal government with regard to division I athletes does not take in to; account the demographics or the pre-existing academic standards of the particular schools. Nor had there been a careful consideration of the various ways in which student – athlete credentials are “ compressed “ to fit the needs of a school and how schools are willing to trade – off the athletic and academic dimensions of an admitted athlete in order to give him or her a well- rounded education. Moreover, variations in academic qualifications among some schools means that many student- athletes are denied entrance into schools where they would have been admitted had they applied only as a student (Ferris E. & Finster M., 2004).

## **2.2. ATHLETICS AND ACADEMICS IN HIGH SCHOOLS**

As the problem of relating athletics and academics at the college level becomes more serious , this concern has trickled down to the high school level as well as number of studies have been conducted “to determine whether participating in support activities had any impact on students’ academic achievement at the high school level, study acknowledges that a present the literature reveals mixed results on this question and that the issue of the benefits of sports on academics remains “ a topic of controversy”, much of the problem can be explained by the fact that literature is of an “ uneven quality that provides no evidence to afford a clear understanding of the nature of the issue”, in the research , one study looked at whether or not girls’ participation in sports leads to higher test scores (Din F.S.,2005).

As the Din`s study discussed that only girls with “higher levels and higher levels of involvement were predicate vie of higher scores “, Another study looked at the effect of sports participation on the “Educational expectations” of high school girls, and found “a positive relationship between extracurricular participation and educational expectations” , as motioned previously, much of

the literature that seeks to find a link between sports and academics does so by building indirect bridges built up of non cognitive strengths such as motivation, Still other studies find a strong link between sports and academics, but of a circumstantial kind that is, one study found that high school body's did better in schools, but only because participating in sports made them want, to go to college, and they therefore became more predisposed to meet certain academic requirements for doing This so- called positive effect of sports on a academics appears to be especially beneficial for African – American student-athletes who might otherwise have dropped out of high school (Din F.E.,2005).

In a comparative study of Din F., on eight grade African- American boys it was found that Sport participation for these students was positively related to their aspirations to enroll in college preparatory programs in high schools, to have definite plans to complete high school and enter college on other, study of Hispanic girls found that those who participated in sports were found to be more likely to score well on achievement test, to stay in high schools and continue their education than their non- athletic peers, however, in general, and perhaps because there are less collegiate opportunities for high school female athletes, this kind of positive impact of sports on academics is less documented among females at present, appears to split hairs by calling the above positive effect a psycho- educational aspect of influence, that is, part non- cognitive and part cognitive( *ibid*).

However, the aforesaid dialogue stated as it was, one study in did find that in the case of a specific high school course program which used sports to enhance academic achievement the data did reveal that the program students out performed those in the control group on all of the applicable measures, including GPA and academic eligibility of for extracurricular activities, this finding suggests that when sports are used as parts of a targeted imitative to improve academics, they do improve academic standing, pursues that issue of the influence of sports on academics in a slightly more subtle manner, So it is concerned with the hypothesized relationships between

adolescents sports involvement and how they think and act within the scholastic setting how they think and act, appears to consist of the constructs of educational aspirations, academic self-esteem, and school related achievement. Educational aspirations, academic self esteem, and school, related achievement all constructs that can perhaps be classified as; physical educational as they exist half way between non cognitive and cognitive constructs (Din F.S 2004).

As Ryska exploring the relationship between how the athletes are involved in sports and how this translates in to and how they participate in academics, as He describes “the multivariate relationship between relevant sport involvement variables and scholastic competence perceptions among a sample of high school student-athletes, in order to dig down into the proposed constructs, Ryska makes use of the construct regarding task- oriented versus ego- oriented students. These two types of students approach their work in different ways, While the task- oriented student defines success in terms of self reference, criteria including task mastery, fulfillment of one’s potential and skill improvement an ego oriented student develops success perceptions according to norm- referenced standards such as outperforming others and demonstrate superior ability with little effort related to sports, task oriented athletes typically demonstrate greater levels of persistence, commitment, and perceived competence, as a result, they are relatively uninfluenced by a loss of confidence. By contrast, ego oriented individuals with low confidence levels are significantly less likely to demonstrate positive achievement related attitudes, all of this ties together when the student athlete moves into the academic realm. If he or she retains a strong self perception as a competent athlete and continues to identify with their athletic role this may enhance their self confidence even in academic. If, however, their self-identity as an athlete is too exclusive, that may be “linked to negative academic related outcomes (Ryska, V. 2004).

Accordingly, then, to self determination theory, if the student- athlete has internalized and integrated the self- confidence provided to him by athletics in

to his sense of self, that can transfer over to academics. The internalization can either be externally regulated, that is, motivated by reward or punishment, or interject, or developed through a self-imposed control of behavior through internalized pressure, the importance of Ryska's Study therefore is that it shows that how a student- athlete participates in high school sport is related to; his or her scholastic competence in a manner consistent with the goal perspective and self- determination theories (ibid).

If the sport participation is too excessive, and ego- oriented, this leads to lower scholastic outcomes if, however, a student- athlete is talks- oriented, this leads to lower scholastic outcomes; if, however, a student athlete is task- oriented and is able to generalize the confidence sports gives him or her, scholastic success can follow Spots translates in to academics, socialization referees to the perceptions, attitudes and behaviors which are acquired as a result of participation in organized sports formerly, the sport socialization process impacted girls negatively, because being a girl and being an athlete were not associated with each other. However, changes in the patterns of sport socialization among girls have resulted in more positive a outcomes for female student- athletes ,as result, more girls are reporting that participation in sports made them feel more positive about their bodies and perceived themselves as being more popular and easy to like (Ryska V., 2004).

While these results refer primarily to non-cognitive benefits, Ryska (2003) concludes that how sports is conducted at a high school can have a major impact on whether or not sports contributes to academic achievement. If the "psychosocial climate "of sport at a school serves to improve athletes' 'task motivation, athletic identify and personal autonomy "then this will lead to a positive relationship between sports and academic thus, coaches must take care to focus on task master, to give athletes some personal control over their training, and encourage the development of self identify among student athletes based on a balanced set of information sources, in addition to studying high school athletes, have also examined whether or not college, level athletes are able to translate sports participation into better grades. They argued that most of the literature on this issue has been equivocal and uncertain because,

more often than not, any academic advantage demonstrated by student athletes represents a precursor to, rather than a result of sport participation moreover, inconclusive results also stem from attempting to explain this complex relationship on the basis of sport participation (ibid).

Ryska V. in lieu of finding a direct link, therefore, he sought a bridge built on goal-oriented behavior to connect sports and academics, using achievement goal theory, referred to research that has identified various cognitive and behavioral correlates of motivational goal orientations among students including perceived causes of success and failure, self-perceptions of ability, and the use of strategies that facilitate goal directed behavior and thus the extent to which students focus on either learning new skills and improving upon previous performance or demonstrating their ability in a socially comparative manner can have a significant impact on the quality of their involvement in, and commitment to, the academic environment and Building on the above study, the again found that task oriented as opposed to ego oriented athletes, because they, define personal competence in terms of self referenced standards of performance such as task master, performed better in sports, and are better able to transfer their level of competence into academics. Ego-oriented athletes and students, studies in both sports psychology and educational research have found, become prone to task avoidance, reduced effort, heightened anxiety, concentration disruption and withdrawal from the activity in the face of failure (Ryska V.2004).

The importance of the task oriented versus ego oriented construct with regard to transferring athletic to academic skills is twofold. First, studies showed that learning and study strategies such as monitoring oneself, and engaging in goal directed behavior, leads to better academic achievement. Thus, students who are able to monitor their progress vis-à-vis a learning goal, as they work academically, do better additionally, strategic approaches to schoolwork a paper to be related to the type of goal perspective adopted by students that is, students who are largely task oriented in class are more likely than their ego

oriented peers to engage in self- instruction, programmatic learning techniques, and higher order information processing (ibid).

The clinching fact to Ryska Vestal's confabulation of theory to find a bridge across athletics and academics is that "several theorists have contended that motivational goal orientations generalize across achievement contexts and remain relatively consistent whether demonstrated in school or sport , thus , task -oriented athletes will be task - oriented students as well, as quoted by Ryska Vestal (2004), found strong evidence for the generality of motivational goal perspectives across the domain of sport and academic among high school students, thus , the criteria used by adolescents to measure personal success tend to remain consistent across the contexts of academics and competitive sport In their study, indeed to find that student- athletes who identified with high task goals and low ego goals " made" greater use of academic strategies including information processing , time management, self - testing and concentration skills and thus exhibited greater success as academics, when compared to their low -task, high -ego counterparts overall, they term the tendency of task- oriented student - athletes to be able to transfer skills to academics a priming effect , which allows them to, approach academic tasks in a strategic manner, the findings also found that , while males more readily transfer their approach to sport over to academics, females have an extra 60 steps of coming to appreciate that how they approach sport can have a positive impact on how they strategize in academic matters as of Ryska Vestal (2004).

As a result of this discovered differential, " Further research could use a sport socialization paradigm to determine the personal significance that male and female athletes attaché to their perceived level of competitive sport experienced and its impact on the pursuit of other achievement activities, in sum, and non- cognitive and cognitive measure to outline the structure of a convincing bridge by which some student- athletes are able to transfer their competitive achievement level into sport over to academics ( ibid).

As of the Cogill J and Parr, anecdotal literature continues to establish regulations determine the kind of effect which sports has on academics, and a number of schools have begun to create programs like the double club in; order, to assist athletes in better balancing their lives between sport and academics ( Cogill J. and Parr A., 2006).

As of , Hook D.E., multiple intelligence theory certainly presents educational theorists with a tool by which athletic prowess could be measured as one of the seven types of multiple intelligence, presumably either the spatial or the bodily- kinesthetic types ,and the problem of transfer solved by ignoring it but convincingly demonstrated that what makes a good athlete also makes a good student, and that what is needed is not programs built on a false mind-body split, but a clear understanding of the desirable construct which creates a so-called “priming effect “for improved academic performance in athletes (Hook D.E.,2005).

As Guedes C., research has to be examined the issue of whether or not participation in sports can lead to improved academic outcomes for high school students, on the anecdotal level, many studies and reports indicated that highly counterintuitive nature of this proposition, not only is school culture on both the high school and college level embroiled in a debate over the primacy of athletics over academics, but a number of studies have documented how poorly student-athletes have done academically. Moreover, the pressures created by the professionalized of sports at the collegiate and high school levels has not only demoralized the traditional values of sports culture, and all of the values – oriented benefits. Sports are said to give a person, but has lead to numerous abuses which further undermine the viability of the “Student-athlete “construct (Guedes C., 2007).

In the context of this highly negative environment, a number of researchers continued to argue that participation in sports can help some students achieve more academically. Most of these arguments have been based on what are termed the non cognitive benefits of sports, not only that it builds character, but more importantly that, Sports, if not demoralized by win-only pressure, can

build self-esteem, confidence and motivation which can and do transfer over into academic affairs. Moreover, the motivation to participate in sports on a higher level (for high school students, the motivation to move on to college or even professional sports), While deemed a pipedream by some researchers; nonetheless has been found to keep many students in school, especially African –American men. In most cases, if these student-athletes did not have their eye on college sports participation, they might have dropped out of high school. In this indirect manner, then, sports does lead to improved (if still substandard) levels academic achievement. A number of other indirect impacts of sports on overall school graduation rates and the graduation rates of demographic subgroups of students are also marshaled in the literature to support the idea that sports support academic success. But the crux of the question remains; does participation in sports lead to better academic achievement one strictly cognitive level? Many studies have found that sports participation is correlated with higher academic achievement (ibid).

As of Trudeau F., as he reported that seek to determine if participation in sports actually makes participants smarter and thus better able to achieve academically are few however Only, presented a mixed construct the sense of mixing non- cognitive and cognitive strengths to explain how participation in sports can actually sharpen a student’s abilities when it comes to academics. If an athlete is task- and goal –oriented then he or she is much more likely to transfer their sense of confidence and motivation into any other life context, including academics, and , more pointedly, more likely to make use of studying and learning strategies that are proven to improve academic performance. By this bridge, then, task oriented athletic behavior translates into using strategies to improve academics and actually does improve academic outcomes. This construct, combining motivation and intelligence, offered a strong positive ink between certain kind of participation in sport and high academic achievement among high school students (Trudeau F., 2010).

As of Amanda Exner (2009), as he argued on the relation of Academic and physical , performance by his master thesis that entitled in school physical education : impact on academic performance and health status Among us Adolescents: He argued that us Adolescent suffer from rising obesity rates and inferior academic performance compared to international papers;

One potential solution to both problems is to increase opportunities for physical activity via in school physical education. In addition to improving health status, research shows that physical activities improves academic skill learning , concentration, memory , class room behavior , and general academic performance, However , little is known about the impact of moderate or high levels of in – school physical education on long- term academic out comes including educational attainment and cognitive performance, as Amanda Exner argued that no moderate , and high levels of physical education(PE) an academic and health outcomes of us adolescents his research result indicates that students who had moderate to high levels of physical activity within P.E reported tower attention problems during class and more years of post – high school educational attainment that students who had no P.E additionally, students who had moderate levels of physical activity within PE had lower body mass index than students who had no PE There was a negative effect of P.E on academic achievement as measured by grade point average , and there was no effect of PE. On cognitive performance as measured by a standardized verbal test. As of him the benefits of PE for reducing attention problems, increasing years of education and lowering body mass index warrant further study to examine the extent to which improved attention and health could enhance academic performance (Amanda Exner, 2009).

The research in this arena continued and suggested that connecting physical education to academic achievement could validate the need for policies requiring in – school physical activity, Which would not only improve health status but potentially improves academic performance of adolescents (ibid).

As of Jarrett O.S as he explained that attention and concentration are enhanced following acute bouts of either coordinative exercise or normal sport

lessons provided in physical education class in adolescent children coordinative component of the exercise may explain the significant performance differences coordinative exercise may explain the significant performance differences. Coordinative exercise may activate parts of the brain responsible for attention and concentration (Jarrett O.S., 1978).

According to Sigtusdottir I.D., as he explained that, One recent study on public school children has shown that the relationship between fitness and academic achievement remained significant after controlling for both socioeconomic status and race ethnicity, the relationship between physical activity and academic achievement was still evident after parental education had been controlled (Sigtusdottir I.D., 2006).

According to Tomporowski as he suggested systematic exercise program may enhance the development of specific types of mental processing which are considered important for both academic achievement and for cognitive function across an individual entire life span).A positive relationship exists between physical activity and cognition with primary and middle –school age children gaining the most benefit in terms of enhanced cognitive function, perceptual skills, attention and concentration are all improved by a bout of physical activity , but perceptual skills seem to benefit the most from prior exercise, as of the author as he tried to emphasized that there is no difference between acute and chronic effects of physical activity on cognition so it is unclear if there are any additional benefit of a longitudinal programmed or whether children simply benefit from each bout of exercise under taken. The impact of physical education, activity, and sport, on class room behaviors, that may impact on academic achievement. Physical activity has a positive effect on academic achievement young people under taking additional generally demonstrate increased brain function, improved self esteem and better behavior (Tomporowski P.D., 2008).

Three longitudinal intervention studies from France (Armour K., 2008) , Australia (Dwyer T., 1983) and Canada (Shephard R.J., 1984) on children

were consistent in showing that when the amount of time dedicated to physical activity was increased, the teachers reported better behavior and higher motivation in pupils towards their academic work. As of Shephard study which stated that increased time dedicated to physical education at the expense of academic instruction 80% of the teaching staff were in favor of activity program, with the remainder holding a neutral point of view (Shephard R. J., 1997).

As the author Armour and Lowden designed living for sport program this program consisted of physical activity and sport programmed developed to target pupils displaying poor class behavior and other characteristics such as disaffection from school. Followed by the intervention pupils attitudes and behavior had improved in school – life the class moves initiatively (Armour K., 2008), (Lowden K, 2001).

As of Lowden K., emphasized that small, classroom based interventions can also have an effect on classroom behavior. The class moves “ initiative demonstrated that physical activities designed to promote relaxation increased not only class behavior but concentration and focus (Lowden K, 2001).

The unique nature of physical activity program is both simple and effective at improving school behavior, therefore creating both and psychological advantages physiological and psychological advantages for the participants (ibid).

The impact of physical education on psychological & social benefits, may impact on academic achievement. Mental health in wading self- esteem and self- a confidence the national longitudinal study of adolescent health reported positive association between physical activity and several components of mental health, including self-esteem, emotive well-being, spirituality and future expectations (Trudeau T., 2010).

Physical activity is significantly related to increased self esteem and speculated know on effects of these are benefits in all aspects of school life, including improved class room behavior and academic performance (Shepha4red, 1996).

The influence of physical activity on self – esteem may be influenced by the activity mode undertaken, although opposite behavioral modifications have been observed across aerobics, strength, dance and flexibility activities (Strong W., 2005).

In one way or in another as the reviewed literature verified that physical activities are very valuable for the development of both mental and physical phenomena and the two are intertwined in apposite compartment in connection with this to justify the correlation of the two variables it is evidence that to teach and civilize the mind our body and body organs will play their own role by communicating the mind with the Environment this communication is very vital to transfer data to the mind then the mind will skill up its capacity and proficiency, this process is directly associated with the academic and physical proficiencies.

## **CHAPTER THREE**

### **3. THE RESEARCH METHOD, PROCEDURE AND SOURCES OF DATA**

#### **3.1 METHODOLOGY OF THE STUDY**

The purpose of the study is to investigate and examine the root causes for the unscientific perception of the aforementioned subjects up on the correlation of academic and physical proficiencies and at the same time to make prediction up on the generated attributes and phenomena (variables). Therefore the researcher has been customized and employed descriptive correlation method to render the study. Because it allows collecting the data via data collecting instruments and which is appropriate to give description and as well to see the correlation (association) of the phenomena.

##### **3.1.1 METHOD OF THE STUDY**

Quantitative & qualitative methods have been used to get information from the identified participants of the study at the appointed study area. In this regard, as quantitative data gathering tools questionnaire has been prepared for both students and PE teachers. In the qualitative aspect interview and focus group discussion have been applied to collect data from the school community specially those of physical education teachers and the appointed participants of the study in addition to what is said check list has been customized as data gathering instruments in a qualitative orientation.

##### **3.1.2 POPULATION AND SAMPLING PROCEDURES**

The subjects in this study are preparatory students who are enrolled for a natural science in 2005 E.C, in the Lideta Sub-city preparatory schools.

In the identified (appointed) study area there are two preparatory schools and each of them accommodates five sections in the grade 12<sup>th</sup>, and each section accommodates 54 students on average with a total of 540 and the research has been encompassed all the aforementioned sections.

In order to render the study, the researcher has been employed purposive sampling methods to appoint the population size. Accordingly, in each the five section of grade 12<sup>th</sup>, ten students within each section has been appointed. The appointing procedure of those candidate participants is based on (according to) their academic status that stood one up to ten of the first and second semesters of the 2004 E.C, academic year while they were grade 11<sup>th</sup>; subsequently the total population size of the study is 100.

### **3.1.3 METHOD OF DATA COLLECTION**

Data collection is a systematic way of gathering information which is relevant to research purpose or question, accordingly by having this concept, in order to obtain adequate information for the study, the researcher has been customized both the primary and secondary source of data. From the primary source of data the researcher has preferred the three types of primary data collecting tools (instrument). Such as,

#### **1. Questionnaire:**

Questionnaire has been operational zed (customized) for both those the main subjects of this study as well those PE teachers who are available at the appointed study area and has the feature of positive and negative alternative reply. And as the nature of the questions consisted as the closed and open ended in accordance of its necessity, justifications are expected for those certain replies the justifications vis-à-vis those open-ended items that has been constructed for both the teachers and students would have been analyzed and interpreted in a qualitative compartment at the discussion part while the qualitative part has been completed.

## **2. Interview:**

Semi-structured interview, this method of interview has features of both structured and unstructured interviews, for the structured one the researcher has constructed structured items as a road map for the unstructured one and therefore the researcher uses open ended questions as a structured compartment in connection with this the aforementioned procedures the technique helps to the facilitator (interviewer) in order to be consistent with those interviewing items not to be bewildered and baffled for those all participants (interviewees) while the interviewer interviewing them to render the operation and the technique, as it is the aforesaid construction of interview items the interviewer has adjusted (made) a set of pre-planned core questions for guidance. Thus the interview is administered only for those school physical education teachers in the **appointed study area**.

## **2. Focus group discussion:-**

Focus group discussion has been set up (adjusted) for those of physical education teachers in the compound of the schools for the length of 45 minutes for both schools in order to cross-check and see the dichotomy of individuals' experience and the reality of their experience within a set of discrepancies while the interviewees individually interviewed and later on what they discussed in a group, in a form of focus group discussion (FGD). As the research (the study) which is deliberative one subsequently the size of focus group participants determined in that compartment and the number of the participants is six with the cameraman and the facilitator (mediator of the discussion). The nature of the those discussion questions are semi-structured to give direction, point of reference and freedom to those participants as they to talk what they feel, faced and what they experienced in their entire career epoch. The data that obtained from the interviewees as well focus group participants is captured in two ways such as:

- Audio recording with Tape recorder this is practicable only for the interview part for later transcription and
- Video recording with video camera this is viable only for focus group discussion
- The research notes to be completed at the end of each interviewee interview and as well focus group discussion participants.

### **Secondary source of data:**

#### **1. Literature review:**

Literatures have been taken as the secondary source of data in order to underpin and consolidate the primary data sources and it is the bed rock to see the delineation (a clear cut line) between what is saying those literatures and the primary data sources based on the operationalised phenomena (entities, attributes and variables) by associating or disassociating the attributes with the dependent variable of the study and the literatures are organized in the manner of their thematic form.

#### **2. Check list:-**

Check list has been administered on one hand to quantify and preserve (maintain) the sample size of the main subject of this study with their full information like their gender, grade level, respondents' status and what have you as well as, as a secondary data it asks and cross-checks the grade score of the attendants of the study in physical education subject matter to determine whether the attendants of the study are high achiever as of other subjects in PE or not and as well the check list, it has been accommodates other requests that should be raised in the learning engagement of the preparatory school to implement and foster PE subject with its fully modus operandi and protocol (set of rules).

### **3.1.4. METHOD OF DATA ANALYSIS**

The analysis of the whole study would have been interpreted, based on the nature of the data collection methods and both qualitative and quantitative procedures would have been employed. Accordingly these data like interviews focus group discussions and the check list have been treated in a qualitative manner whereas the data that obtained via questionnaire would have been interpreted and analyzed in a quantitative manner as a result the operationalised data would have been described in the form of tabulations and graphs, in the case of tabulation percentage has been used to analyze the items of the questionnaire.

Likewise in the aforesaid manner the interviewed data from those of the interviewees has been administered and described qualitatively. At the end all the questionnaires that prepared for the teachers and students as well as the focus group discussion items, the check list and what have you would have been attached at the end of the paper as an appendix.

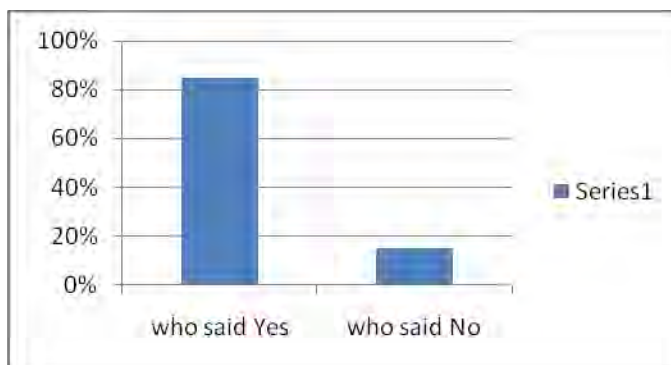
## CHAPTER FOUR

### 4. DATA ANALYSIS, INTERPRETATION AND FINDINGS

The collected data all the way through the distributed questionnaire to the respondent and the attendant of the study has been tried to analyze with a tabular form. Based on each table what it shows, there is analysis and interpretation according to the spirit and motive of the presented questions, one by one (one at a time), in fact the analysis and interpretation would have been tried to express in the manner of both quantitative and qualitative way. Each table shows the quantitative result based on the collected data as well under them there is also the qualitative result in a descriptive compartment and approach.

**Table one** of Q#1. Which stated that, do you think that students, who participated in physical exercise and activities are disadvantaged in their academic achievement?

# Of respondents who said <b>Yes</b> in percentage (%)	85%
# Of respondents who said <b>No</b> in percentage (%)	15%



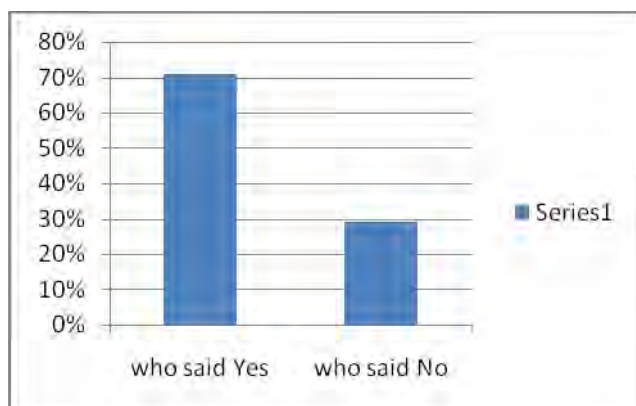
**Figure 1**

**Description:** As the tabulation indicated that those of who participated in physical exercise and activities are not disadvantaged in their academic arena

to be successful on it, but the remaining participants of the study responded in a contrary manner.

**Q#2 of table 2:** comprised that, do you feel that school physical education is a part of natural science streams, like biology, chemistry and what have you?

# Of respondents who said Yes in percentage (%)	71%
# Of respondents who said No in percentage (%)	29%



**Figure 2**

**Description:** As the figure indicates that 71% out of the total respondent of the study feel (sensed) physical education in the school, as a natural science stream or part of natural science discipline like Biology, chemistry and what have you, not by category, but by its own substance and the remaining participant of the study never be agreed by the former response. Their justification is that if it be part of natural science discipline it would be appear in both grade 10&12 national examination of Ethiopia like other science subjects.

**Table 3** of Q#3: stated that, do you think that physical fitness development as it supports for your academic achievement?

The response showed that;

# of respondents who said Yes in percentage	94%
# of respondents who said No in percentage	6%

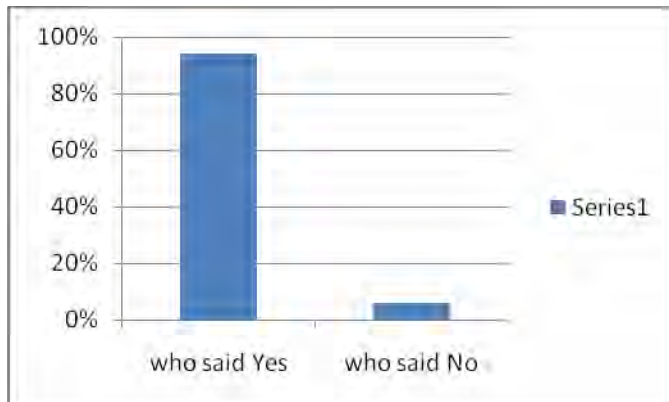


Figure 3

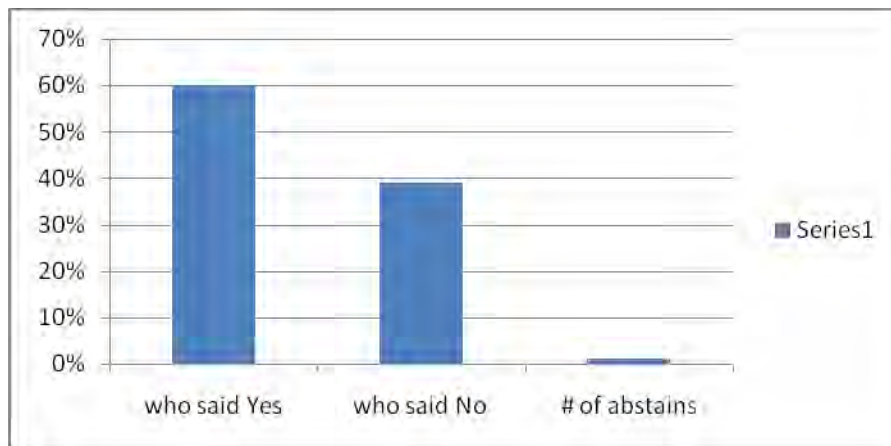
**Description:** As the table indicated that 94% of the respondent replied as physical fitness development supports for the academic achievement in relation to this the rest participants of the study responded in a contrary manner, their justification is that on one hand they assumed participating in PE as it consume much time, due to this reason they prefer to focus on other subjects on the other hand they explained as physical fitness development any connection with academic achievement.

**Table 4** of question number four comprised that, is that being healthy full in your physical condition not directly or indirectly associated with your academic achievement

The response showed that;

# of respondents who said Yes in percentage	60%
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# of respondents who said No in percentage	39%
# of reserved respondents to say either of the two (yes or no) is	1%



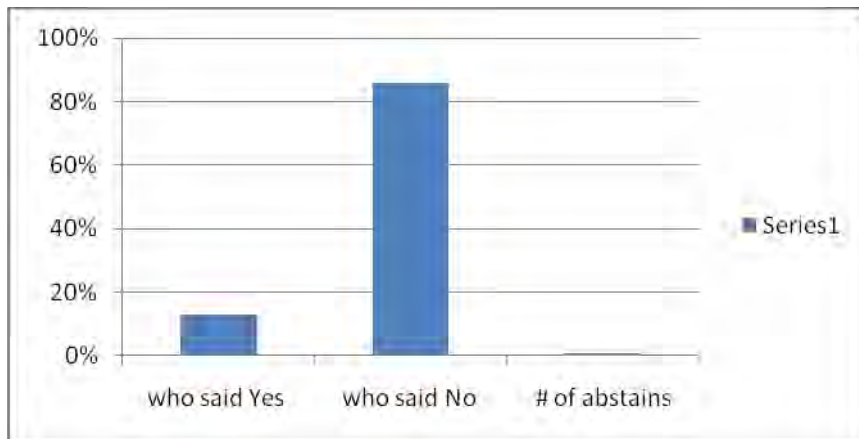
**Figure 4**

**Description:** as what observed on the tabulation 60% of the respondents suggested that either directly or indirectly being healthy full in a physical terms (conditions) does not have any association with academic achievement whereas 39% of the participant of the study do not agree with the response of the former, who said yes or no more connection at all, beside this 1% of the respondent reserved himself to say either of the two responses.

**Table five**, question number five of the questionnaire that provided to the participants of the study that consists of, do think that being fit in a physical terms (conditions) as it affects your academic achievement in a negative manner?

The response showed that;

# of respondents who said Yes in percentage	13%
# of respondents who said No in percentage	86%
# of reserved respondents to say either of the two (yes or no) is	1%

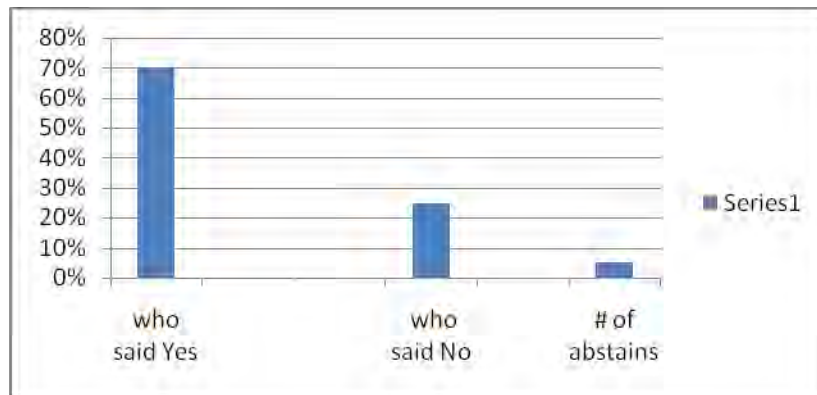


**Figure 5**

**Description:** As the figure of the table indicated that 86% of the respondents said that there is no any negative effect by being fit in a physical orientations (conditions) on the academic achievement whereas 13% of the participant considered as there is a negative effect being physically fit on the academic orientations (conditions) to be achieved likewise 1% of the participant has been reserved to say yes or no according to the provided questions spirit.

**Table six** of question #6 on the questionnaire stated that involving moderately in physical activities starting at a childhood age till your entire life is very decisive for the academic achievement at any level do you agree?

# of respondents who said Yes in percentage	70%
# of respondents who said No in percentage	25%
# of reserved respondents to say either of the two (yes or no) is	5%

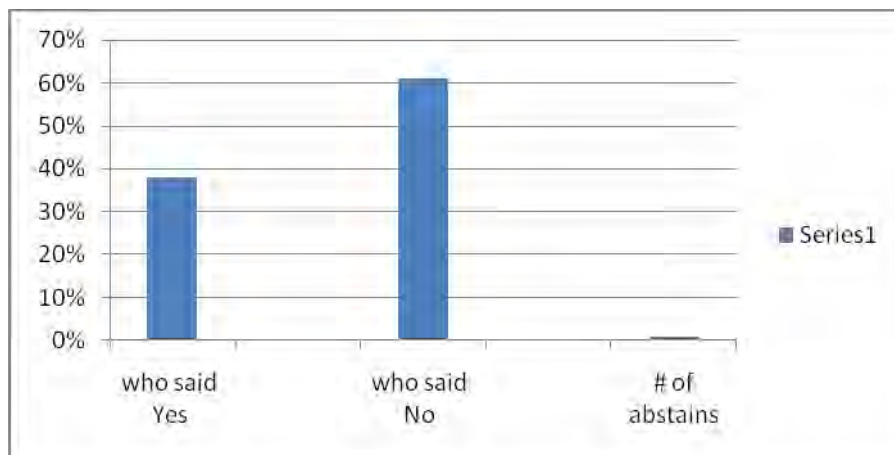


**Figure 6**

**Description:** As the table declared that 70% of the attendant of the study agreed by the question, which is involving moderately in physical activities by starting at a childhood age till their entire life is considered as very decisive for their academic achievement at any level whereas 25% of the respondent did not agree by the aforesaid item, still the 5% of the participant showed reservation to say nothing based on the provided alternative of the item.

**Table 7** of question #7 on the provided questionnaire to the participant of the study which stated as, while you are completing your educational engagement, would you have an interest to be physical education professional? Their response showed that;

# of respondents who said Yes in percentage	38%
# of respondents who said No in percentage	61%
# of reserved respondents to say either of the two (yes or no) is	1%

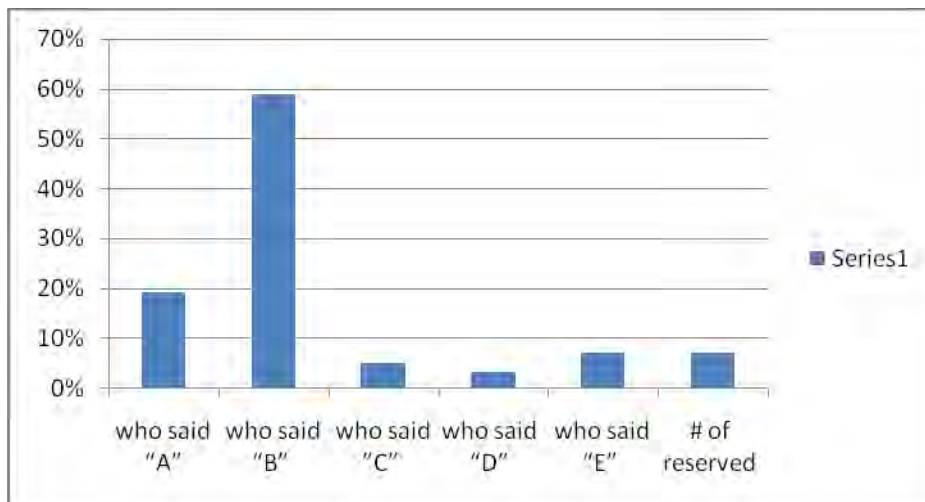


**Figure 7**

**Description:** As the figure pronounced and manifested that 61% of the participant of the study responded as they do not have any interest to be physical education professional while they completing their preparatory educational engagement or while they would have got the chance to join the higher educational engagement, whereas 38% of the participants of the study have been reflected their interest to be physical education professional and to join the higher educational engagement of physical education in the contrary the remaining 1% of the participant showed reservation to be an attendant of the study on the aforementioned item.

**Table eight** of question #8 of the questionnaire which stated as when you complete your preparatory educational engagement, the researcher wishes to all of you to join higher education. If it is true as of the researcher, what would be your choice in the field of study arena? The operation and customization of the item showed that;

# of respondents who said "A" or Engineering fields are	19%
Thos of who said "B" or Medicine & related fields	59%
Thos of who said "C" sport science & related fields (specializations)	5%
Thos of who said "D" or Teaching except sport science	3%
Thos of who said "E" or Applied natural science fields	7%
# of reserved respondents to say any of the provided choices	7%

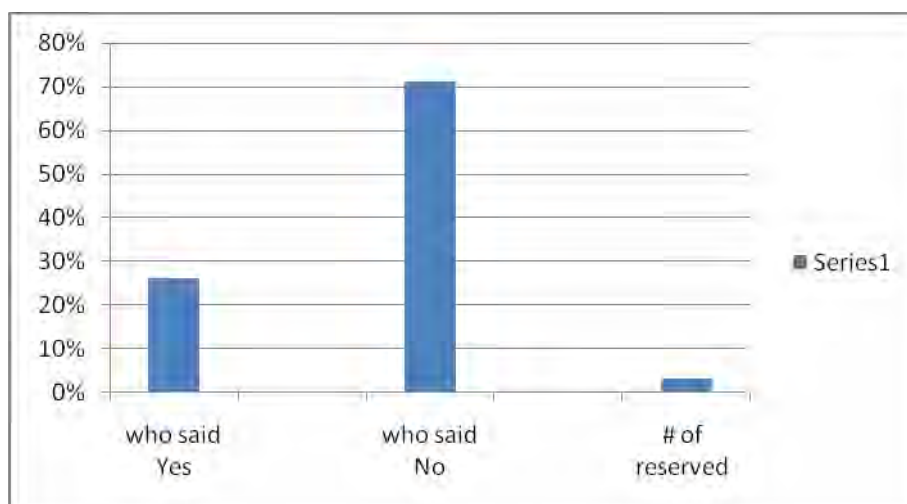


**Figure 8**

**Description:** As the figure indicated that 19% of the participants preferred to study Engineering fields, 59% of the attendants preferred to study Medicine related fields, only 5% of the participants decided to study sport science and related specializations, 3% of the respondents decided to study teaching specializations except sport science and 7% of the respondents preferred to study applied natural science fields whereas 7% of the attendant showed reservation to appoint any of the provided alternatives.

**Table nine**, question #9 of the questionnaire that stated as, have you ever been participated in inter and intra school sport competitions? The response showed that;

# of respondents who said Yes in percentage	26%
# of respondents who said No in percentage	71%
# of reserved respondents to say either of the two (yes or no) is	3%



**Figure 9**

**Description:** As the figure depicted that 26% of the participants indicated as they participated within and without school sport competitions in a contrary way 71% of the respondents pronounced as they never participated in any sport competition throughout their entire waiting of school life or even their life of outside the school environment whereas the remaining 3% of the attendants reserved to share their experience on what is asked to them.

**Table ten** of question #10 of the questionnaire which stated as, bringing up via physical education activities arena will give a chance to be fit in a psycho-social, health and even socio- economic orientations, do you agree?

# of respondents who said Yes in percentage	82%
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# of respondents who said No in percentage	14%
# of reserved respondents to say either of the two (yes or no) is	4%

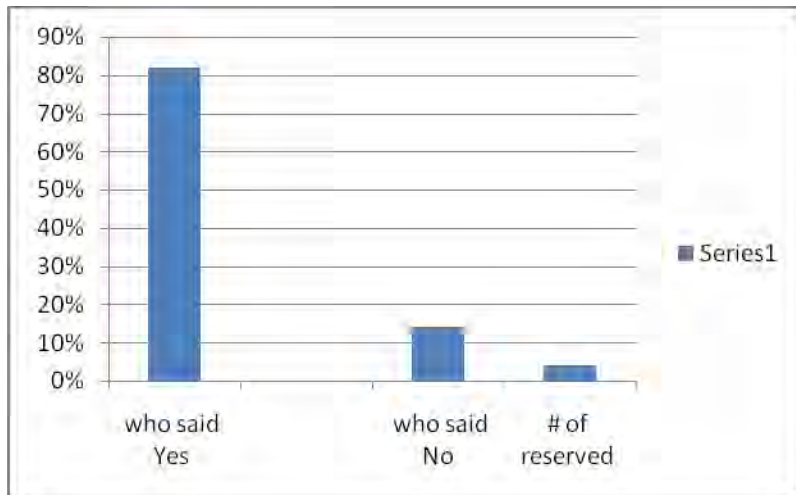
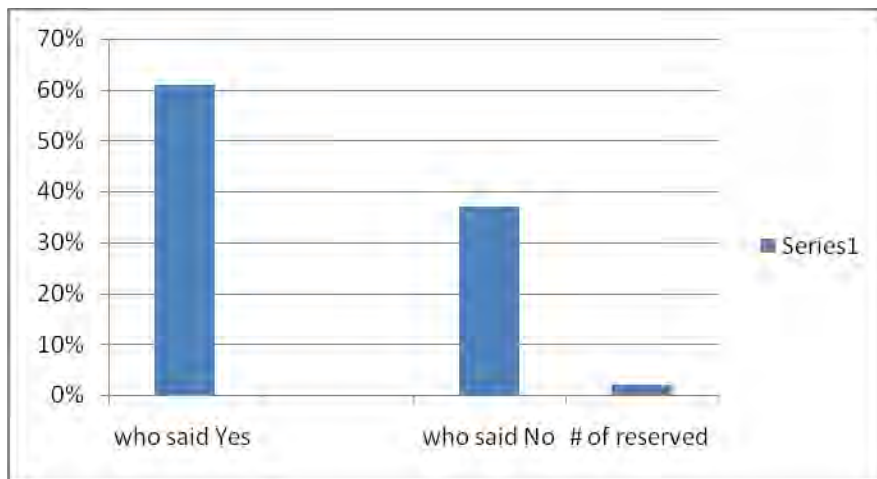


Figure 10

**Description:** As the table depicted that 82% of the respondents agreed by the concept of what is asked and 14% of the participants never agreed by the concept of the question which asked and likewise 4% of the respondent reserved to appoint from the provided alternatives.

**Table eleven** of question #11 on the questionnaire that expressed in a form of, in the long run do like to be a popular sportsman/woman in any competitive team or individual sports like athletics and the like? The operation showed that;

# of respondents who said Yes in percentage	61%
# of respondents who said No in percentage	37%
# of reserved respondents to say either of the two (yes or no) is	2%

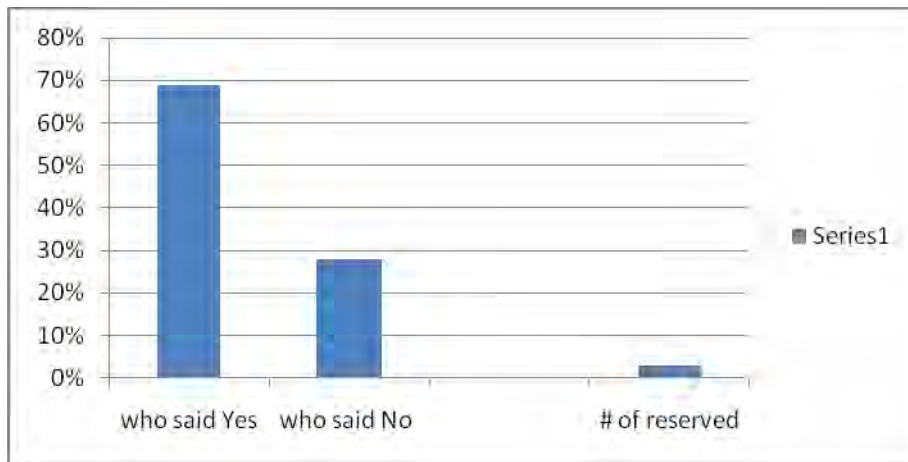


**Figure 11**

**Description:** As the figure indicated that 61% of the participants aspired and sought in the long run to be popular sportsman/woman in any competitive team or individual sports like Athletics and what have you whereas 37% of the attendants refused and repudiated the aforesaid item concepts in another way the remaining 2% of the participants showed reservation to say yes or no based on the presented item concepts.

**Table twelve** of question #12 on the questionnaire which presented in a way that being active in your physic or physical orientation is a precondition to be achieved in a school academic engagement, do you agree? The response operationalised and administered in the following manner.

# of respondents who said Yes in percentage	69%
# of respondents who said No in percentage	28%
# of reserved respondents to say either of the two (yes or no) is	3%

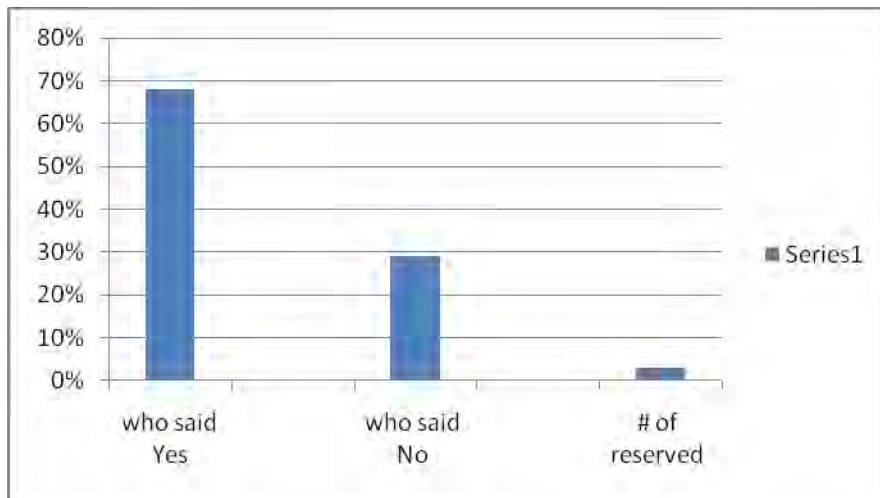


**Figure 12**

**Description:** As the figure #12 depicted that 69% of the participants confirmed as being active in our physic or physical orientation is a precondition to be achieved in a school academic engagement whereas the rest 28% of the attendants repudiated the tenet and central idea of the item having these in mind that the remaining 3% of the respondents reserved to express their own position and point of view.

**Table13** of question # 13 on the questionnaire which depicted such in a way that thinkers like Spinoza and others argued that when we civilized our body our mind will also be civilized in that parameter. Do you agree with those thinkers? Their impression and feeling of the participants analyzed quantitatively as follows.

# of respondents who said Yes in percentage	68%
# of respondents who said No in percentage	29%
# of reserved respondents to say either of the two (yes or no) is	3%

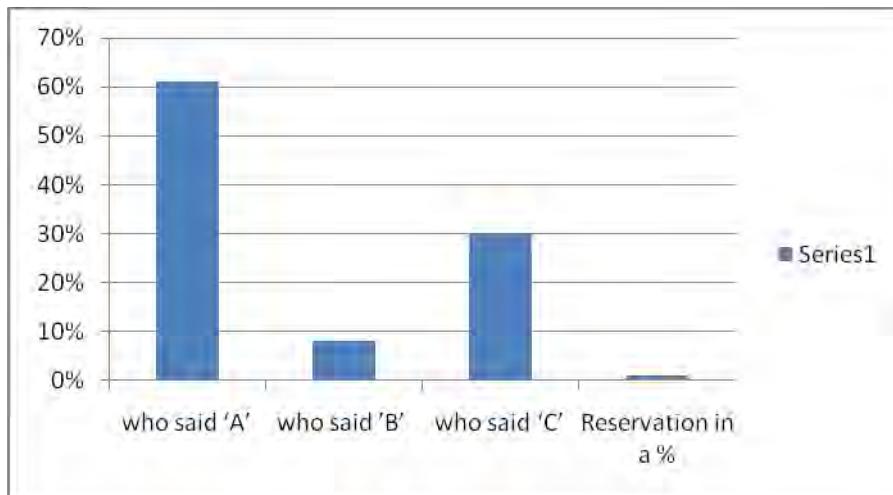


**Figure 13**

**Description:** the figure on the table depicted that 68% of the participants agreed by the assumption and philosophy of those thinkers regarding to the civility of the body to civilized the mind whereas 29% of the attendants refused the philosophy of those thinkers regarding to the civility of the body to the mind the rest (remaining) 3% participants still be quit and relinquish by the assumption that appeared on the item.

**Table 14,** question #14 of the questionnaire which presented such in a way that, as of your perception which one precedes first? The response treated as follows;

Those of who said 'A' or civility of the mind in a %	61%
Those of who said 'B' or civility of the body in a %	8%
Those of who said 'C' or both A and B in a %	30%
Reservation in a %	1%

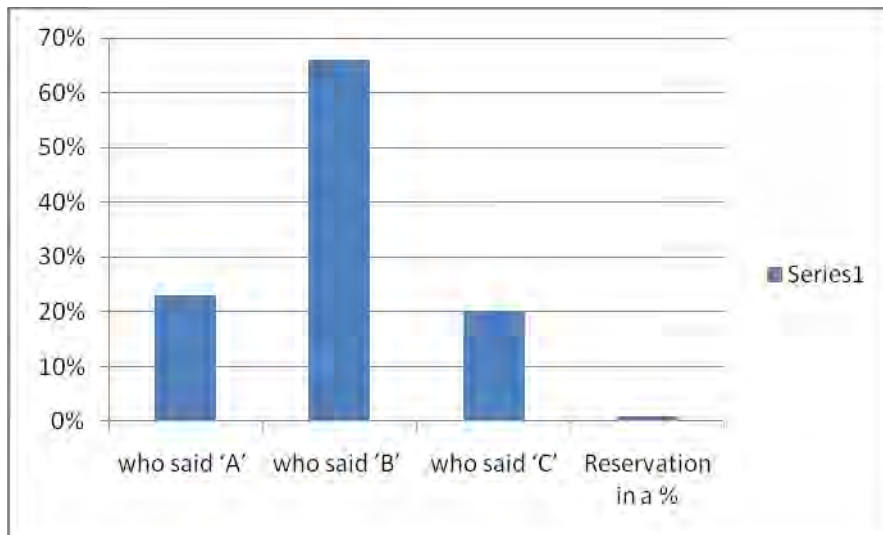


**Figure 14**

**Description:** As the table reflected 61% of the attendants perceived as the civility of the precedes than the civility of the body likewise 8% of the participants perceived as civility of the body precedes first that of the body again 30 % of the respondents perceived as both civility of the mind and body as they should go hand in hand the rest 1% of the respondents showed reservation in this position (point).

**Table15,** question #15 of the questionnaire, which expressed, such in a way that, as of your perception and understanding, which one is mostly disadvantaged, in the school academic engagement to achieve? The response treated as follows;

Those of who said 'A' in a %	23%
Those of who said 'B' in a%	66%
Those of who said 'C' in a %	20%
Reservation in a %	1%

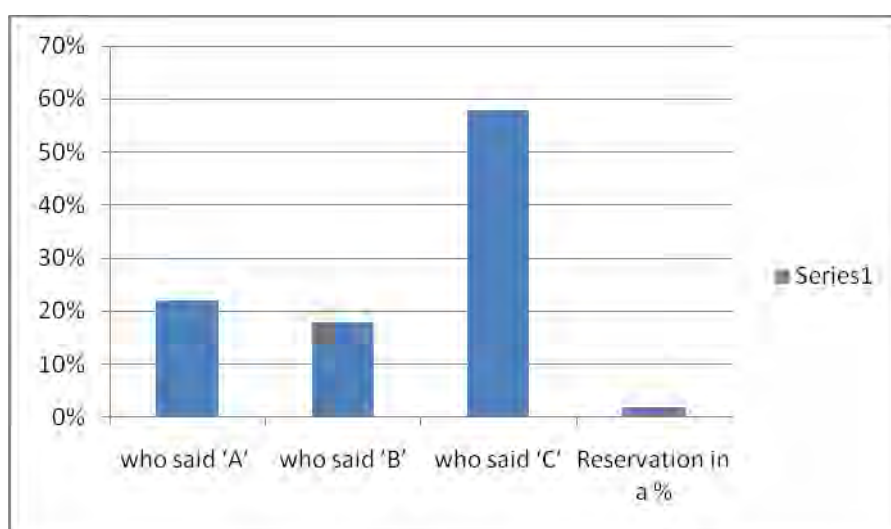


**Figure 15**

**Description:** The figure as it reflected 23% of the participants perceived as those of who regularly participated in physical exercise orientations are disadvantaged in the school academic engagement to be achieved whereas 66% of the attendants perceived and understood that those of who never participated in regular physical activity orientations are disadvantaged in the school academic engagement to be achieved in addition what is said in the former respondents 20% of the attendants perceived and understood that those of some times (in 30 minutes up to one hour, of twice per week) participated in a physical activity orientations are disadvantaged in the school academic engagement to be achieved the rest 1% of the participants reserved to say nothing.

**Table 16** question #16 on the provided questionnaire which stated as in most cases, while your physical education teachers have been thought you the subject matter of which is PE what have been their inclination? The response is that;

Those of who said 'A' or inclined to the theoretical aspect of the lesson in a %	22%
Those of who said 'B' or highly inclined to the practical aspect of the lesson in a%	18%
Those of who said 'C' or moderately, both to the practical and theoretical aspect of the lesson in a %	58%
Reservation in a %	2%

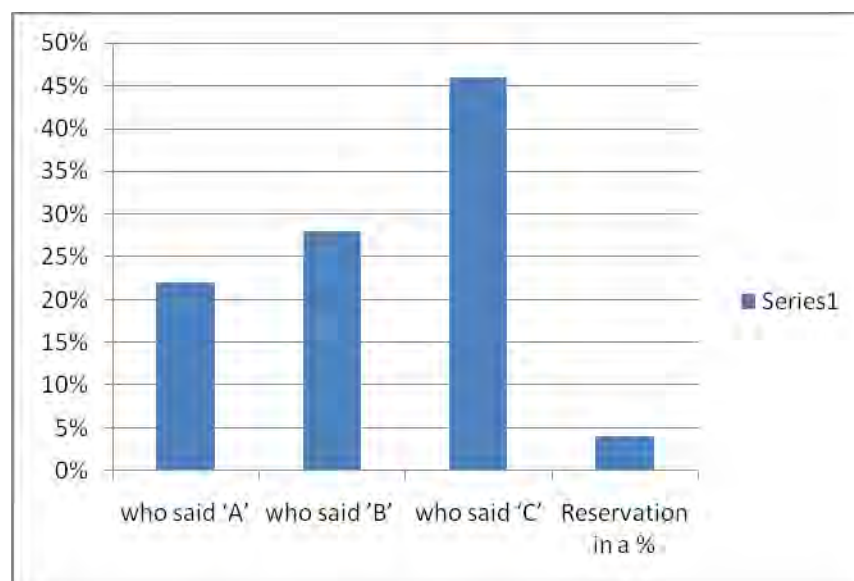


**Figure 16**

**Description:** As the figure depicted that 22% of the participants showed that their teacher inclined to the theoretical aspect of the lesson while teaching the subject matter of PE whereas 18% of the attendants manifested as their teacher highly inclined to the practical aspect of the lesson while 58% of the respondents confirmed that as their teacher moderately inclined for both the practical and theoretical aspects of the lesson and the remaining 2% of the respondents showed reservation to say nothing about the presented item and its alternatives.

**Table17:** question #17 of the questionnaire which stated such in a way that what has been your inclination to the question number16? The response figured out as follows;

Those of who said 'A' or inclined to the theoretical aspect of the lesson in a %	22%
Those of who said 'B' or highly inclined to the practical aspect of the lesson in a%	28%
Those of who said 'C' or moderately, both to the practical and theoretical aspect of the lesson in a %	46
Reservation in a %	4%



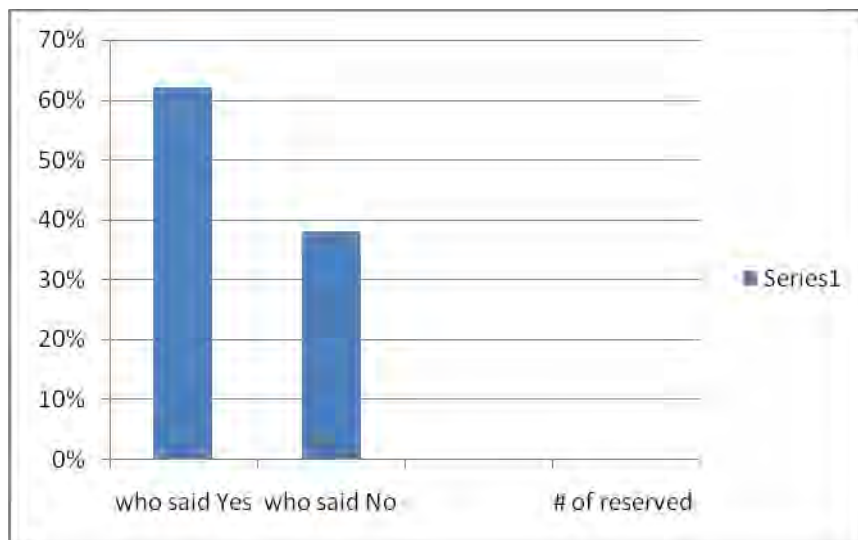
**Figure 17**

**Description:** As what the table screened and displayed out 22% of the attendants, their interest inclined to the theoretical aspect of the lesson whereas 28% of the respondents their interest highly inclined to the practical aspect of the lesson on top of what is said formerly 46% of the participants reflected their interest as which inclined to moderately for both the practical

and theoretical aspect of the lesson and the remaining 4% of the participants are reserved to show and reflect their inclination towards what is asked.

**Table 18** of question #18 on the questionnaire which stated as you have been coming via physical education lessons till today, has it been the lesson interesting? The response has been treated in the following manner;

# of respondents who said Yes in percentage	62%
# of respondents who said No in percentage	38%
# of reserved respondents to say either of the two (yes or no) is	0%

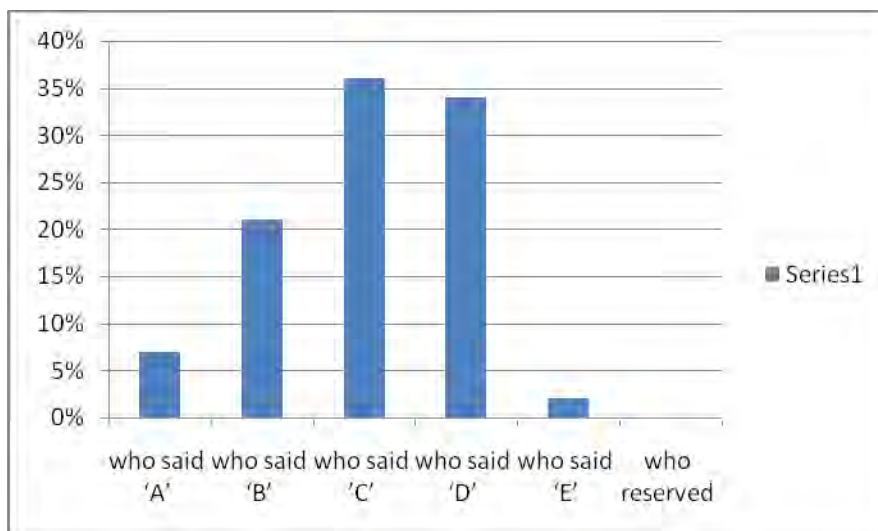


**Figure 18**

**Description:** As the figure declared that 62% of the participants have been interested by the lesson of physical education at school while they were passing through their academic engagement till the preparatory level and by the time this study be carried on and become real, whereas the remaining 38% of the participants confirmed that as the lesson which is PE has not been interesting while they have been learnt till their last stage of school educational engagement (waiting).

**Table 19** of question #19 as usual on the questionnaire which stated in the form of based on your answer to question #18, what has been your achievements(grade score on average, out of,100) in each passage(grade levels)? The response has been treated as follows;

Those of who said 'A' or 50-65	7%
Those of who said 'B' or 66-75	21%
Those of who said 'C' or 76-85	36%
Those of who said 'D' or above 86	34%
Those of who said 'E' or less than, 50	2%
Those of who reserved to react to the question	0%



**Figure 19**

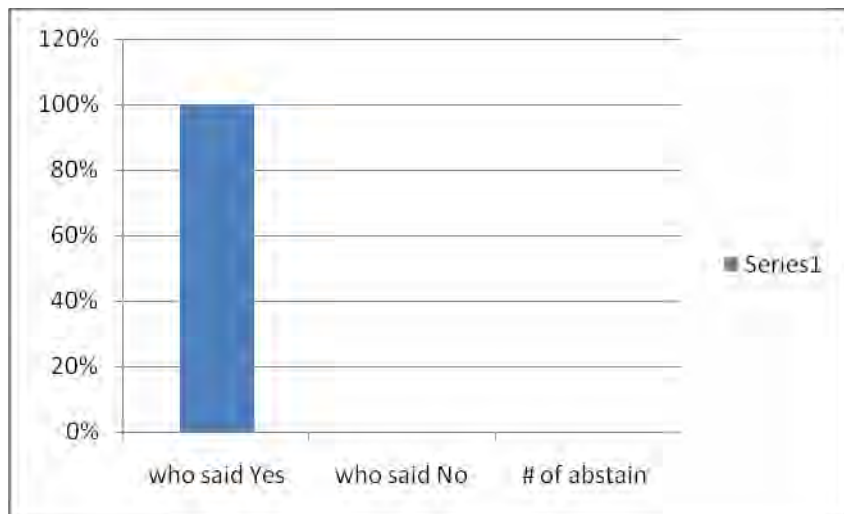
**Description:** As the figure which speaks 7% of the participants affirmed as their Grade score on average were relied between, 50-65 whereas 21% of the participants revealed as their average grade score were relied between 66-75 and those of 36% of the attendants confirmed as their average grade score were estimated b/n 76-85 and on top of what is said by aforementioned participants, 34% of the respondents still revealed their average grade score

which were above 86 whereas the remaining 2% of the attendants announced that as their average grade score failed or under 50 .

Questionnaire has been prepared for PE teachers at the study area, as of the students, and the ramification displayed as the agreement of the method in chapter four, so long as the convenient ion that permitted the analysis of this part treated in the subsequent manner;

**Table one** for question #1 of the prepared questionnaire which is stated as, do you think that students, who participated in physical activities, in any case, are disadvantaged in their academic achievement? The response showed that;

Those who said Yes in percentage	0%
Those who said No in percentage	100%
# of abstain in percentage	0%



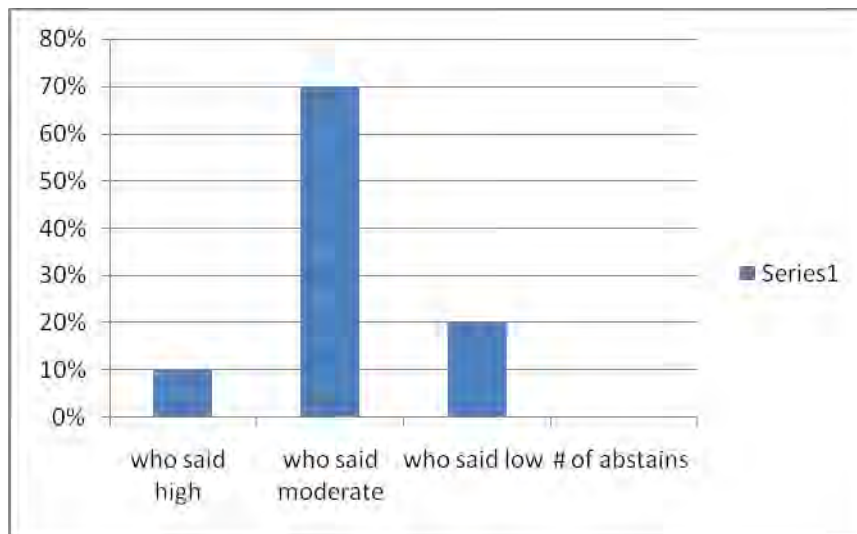
**Figure 20**

**Description:** As the figure displayed that all the participants agreed and perceived that, those who participated in physical activities in any case, are not disadvantaged in their academic achievement.

**Table two** for question #2 of the prepared questionnaire is stated as, in order to produce more professional in the academic sector (aspect) of physical education, students especially those of top (ranked) students should have a

clear understanding and interest about the subject matter of PE, in this regarded, how do you see the interest of those students to take PE as professional career?

Those who said high in percentage	10%
Those who said moderate in percentage	70%
Those who said low in percentage	20%
# of abstains in percentage	0%



**Figure 21**

**Description:** As the figure displayed that 70% of the respondents as they have had a clear understanding and interest about the subject matter of PE to take it as professional career where as 20% of the participants said that the understanding and interest of those top ten (ranked) students is low and 10% of the participants said that the understanding and interest of those top students is high with no abstain.

**Table three** for question #3 of the prepared questionnaire which formulated as, by default our community enforces its child (students), they, to focus on the academics of only cognitive aspect apart from other learning domains like motor learning, do you agree? The ramification displayed in the following manner;

Those who said Yes in percentage	70%
Those who said No in percentage	30%
# of abstains in percentage	0%

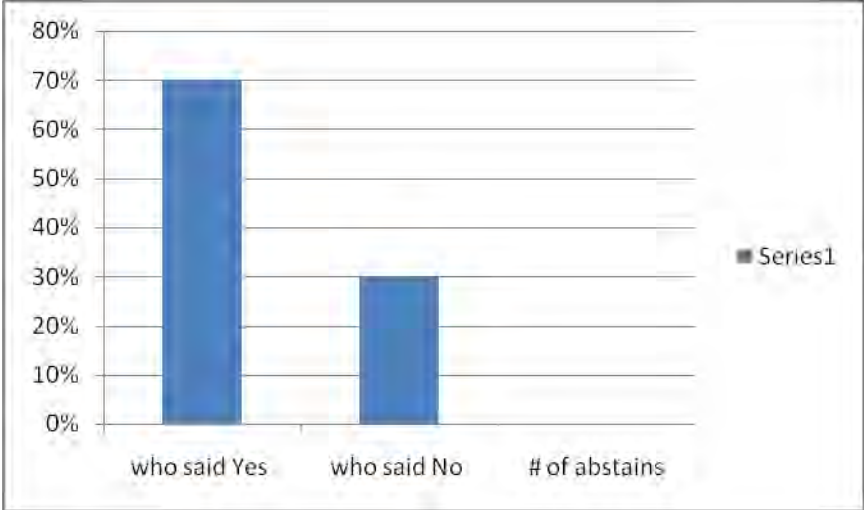
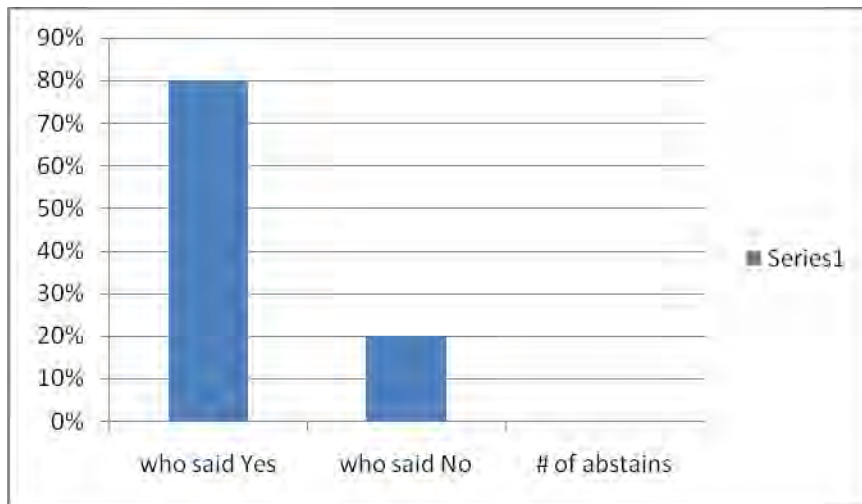


Figure 22

**Description:** As the table figured out 70% of the participants said that yes we do agree that our community by default enforces its child (students) as they, to focus on the academics of only cognitive aspect apart from other learning domains like motor learning whereas 30% of the participants said No we don't agree by the spirit of the provided question with no abstain.

**Table four** for question #4 of the questionnaire that stated as, based on the spirit of question #3 the school community as well concerned officials in the academic sector prioritize those ranked students to focus on the cognitive part of the learning domains apart from the motor learning one and what have you, do you agree with the researcher out looks? The ramification displayed as follows;

Those who said Yes in percentage	80%
Those who said No in percentage	20%
# of abstains	0%

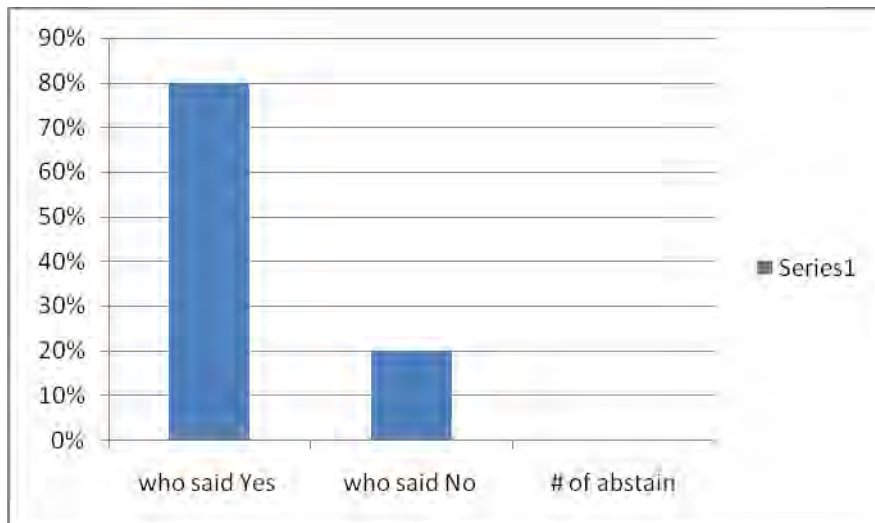


**Figure 23**

**Description:** As the table reflects that 80% of the participants reported as those the community as well as the concerned officials in the academic sector prioritize for those ranked students to focus on the cognitive part of the learning domains apart from the motor learning one and what have you whereas 20% of the participants reported as they do not agree by the spirit of the provided question and the number of abstain is zero.

**Table five** for question #5 on the provided questionnaire which formulated based on question number 3&4 that stated as, those ranked students are not looking Peas a science subject matter (discipline) rather than vocational one this makes those students not to be interested on and neglectful for the subject matter of PE, do you agree with the researcher`s position (hypothesis)? The ramification is stated in the following manner;

Those who said Yes in percentage	80%
Those who said No in percentage	20%
# of abstain in percentage	0%

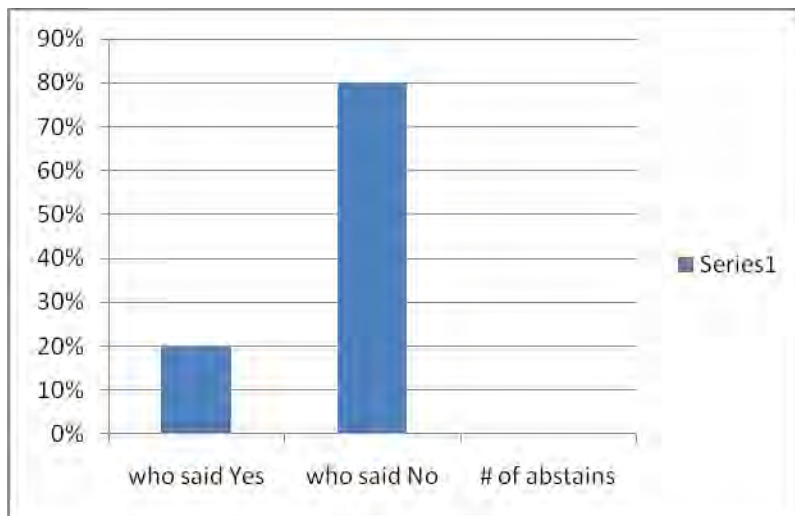


**Figure 24**

**Description:** As the figure displayed that 80% of the participants reported that as they agree with the researcher`s hypothesis (position) whereas the rest 205 of the respondents did not agree with the researcher`s hypothesis (position) with no abstain of any participants.

**Table six** for question #6 on the provided questionnaire is stated as do you think that those ranked students are eager and enthusiastic to be physical education academic professional or applied sport science professional while they are completing their secondary level educational engagement? The ramification reflected as follows;

Those who said Yes in percentage	20%
Those who said No in percentage	80%
# of abstains in percentage	0%

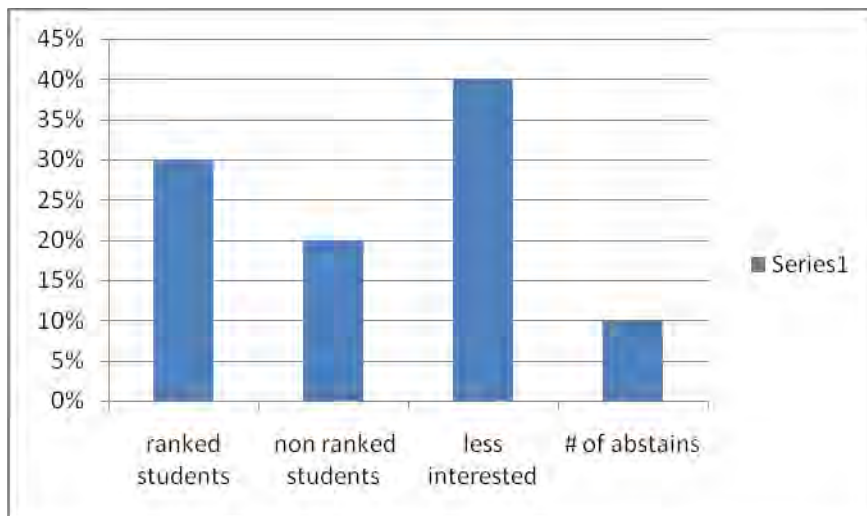


**Figure 25**

**Description:** As the ramification of the figure confirmed that 80% of the participants reported that those top or ranked students as they do not have any eagerness and enthusiastic to be physical education academic professional and what have you whereas the remaining 20% of the participants argued as those top or ranked students do have an eagerness and enthusiastic to be physical education academic professional while they are completing their secondary level of academic engagement with zero abstains.

**Table seven** for question #7 on the provided questionnaire which stated as who is more interested by the school physical education subject matter? The ramification reflected as;

Those of ranked students in percentage	30%
Those of non ranked students in percentage	20%
Thos who are less interested in the academic subjects like mathematics physics and what have you in percentage	40%
# of abstains in percentage	10%

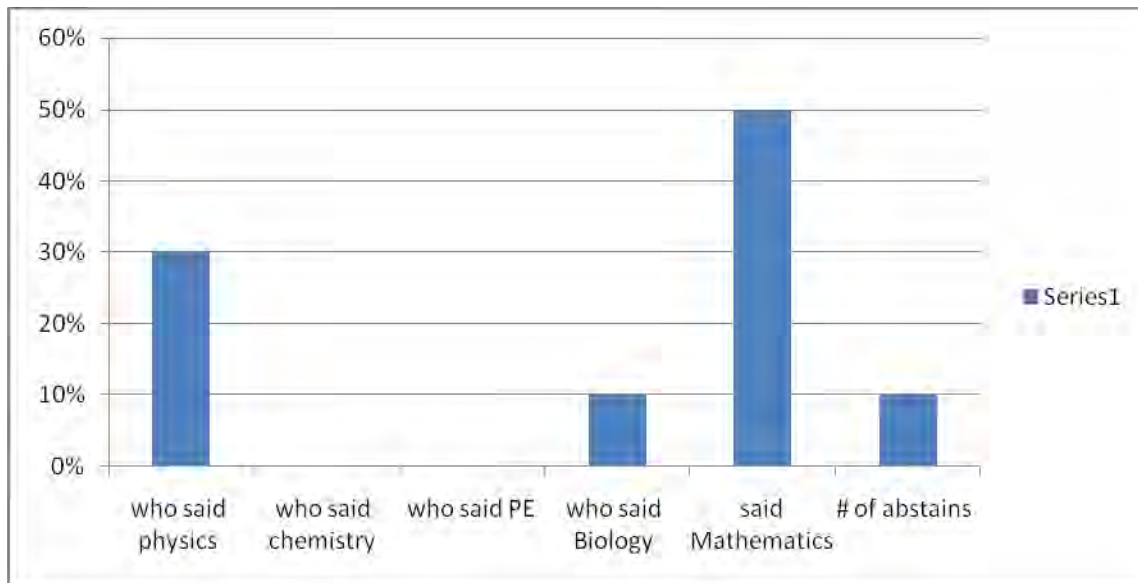


**Figure 26**

**Description:** As the ramification on the table showed that 40% of the participants argued that those who are less interested in the academic subjects like mathematics ,physics and what have you are interested by the subject matter of PE whereas 30% of the participants confirmed as those top or ranked students are interested mostly by the subject matter of PE and 20% of the participants still argued that those of non ranked students are mostly interested by the school physical education subject matter and the rest 105 of the respondents becoming confused to rely on the given alternatives and the researcher takes them as an abstain participants.

**Table eight** for question #8 of the provided questionnaire that stated as, in which science subjects those of top students are highly interested in the school teaching and learning transaction? The ramification displayed as follows;

Those who said physics in percentage	30%
Those who said chemistry in percentage	0%
Those who said PE in percentage	0%
Those who said Biology in percentage	10%
Those who said Mathematics in percentage	50%
# of abstains in percentage	10%

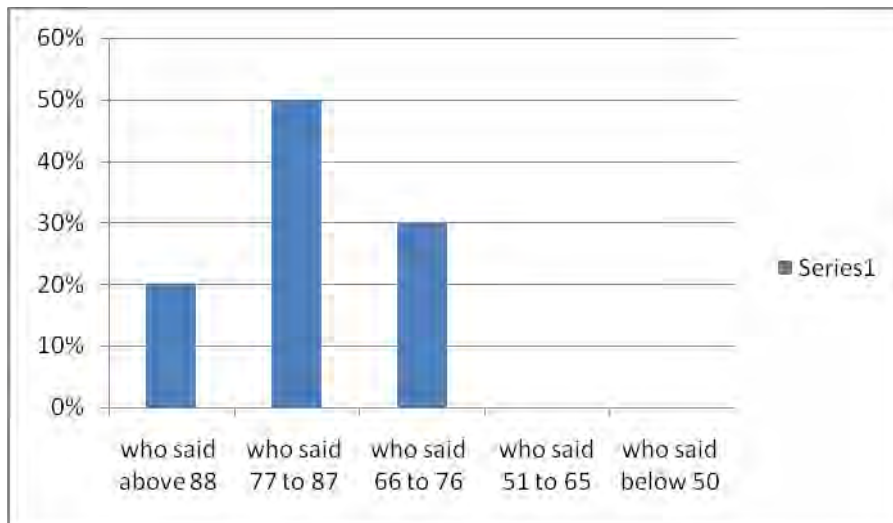


**Figure 27**

**Description:** As the table showed that 50% of the participants confirmed that those top students are highly interested in Mathematics whereas 30% of the participants are still confirming that those ranked students are highly interested in physics subjects and only 10% of the participants are highly interested in Biology subjects and 10% of the participants showed reservation or abstained.

**Table nine** for question #9 of the questionnaire that stated if you be estimated and anticipated the average grade score of those of the top or ranked students in PE subject, in the defined grade level, their result account (rely) on. The reaction of those participants is displayed by the following tabulation;

Those who said above 88 in percentage	20%
Those who said 77 to 87 in percentage	50%
Those who said 66 to 76 in percentage	30%
Those who said 51 to 65	0%
And those who said below 50 in percentage	0%

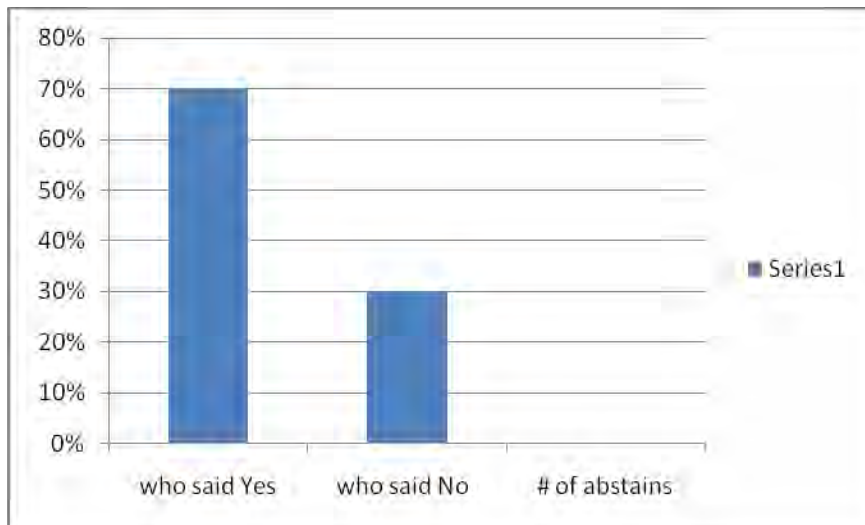


**Figure 28**

**Description:** As the table screened out the ramification which is 50% of the participants confirmed the average grade score of those top students is 77 to 87 whereas 30% of the participants confirmed that the average grade score of those top students estimated as it accounted on 66 to 76 and the rest 20% of the participants confirmed that the grade score of those top students as it accounts above 88.

**Table ten** for question #10 on the questionnaire which stated as, do you feel assume that our today's educational curriculum by its on objective (seba Vs selasa or 70 to 30 principles) as it appreciates and maximizes physical education academician (professionals)? The reaction of the participant displayed as follows in the table;

Those who said Yes in percentage	70%
Those who said No in percentage	30%
# of abstains in percentage	0%

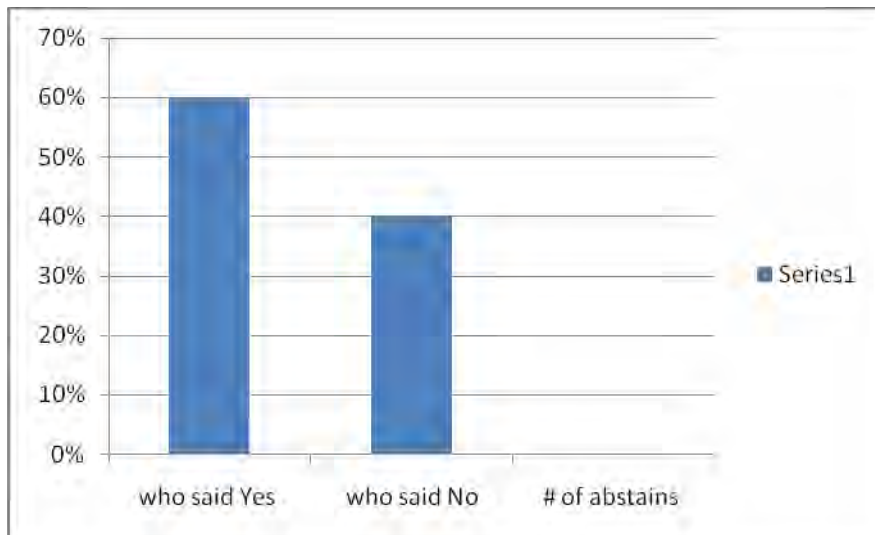


**Figure 29**

**Description:** As the figure reflects that 70% of the participants said yes our today`s educational curriculum by its objective (seba Vs selasa or 70 to 30 principles) as it appreciates and maximizes physical education academicians whereas 30% of the participants condemned and denounces the principles(the concept of question #10).

**Table eleven** for question number 11 on the questionnaire is stated as, is there any organized sport club in the school compound that can address (treat) the student`s interest like athletics volleyball clubs and what have you?

Those who said Yes in percentage	60%
Those who said No in percentage	40%
# of abstains in percentage	0%

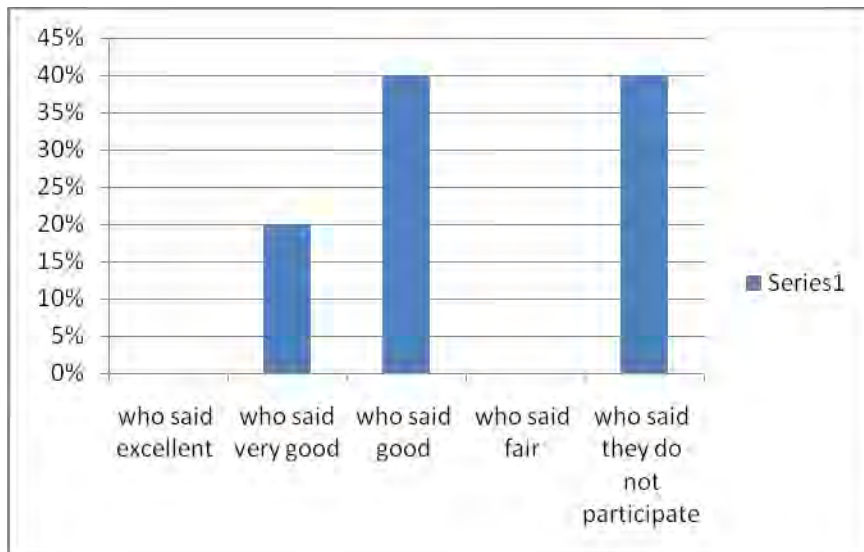


**Figure 30**

**Description:** As the table displayed 60% of the of participants confirmed as there is an organized sport club in the school compound that can address the students interest, whereas 40% of the participants said that there is no any kind of organized sport club in the school compound that can address the learners` interest.

**Table twelve** for question # 12 on the provided questionnaire which formulated as, based on question #11, if there is a sport club within the school, how is there participation of those top (ranked) students? The ramification expressed as follows in the table;

Those who said excellent in percentage	0%
Those who said very good in percentage	20%
Those who said good in percentage	40%
Those who said fair in percentage	0%
Those who said they do not participate at all in percentage	40%

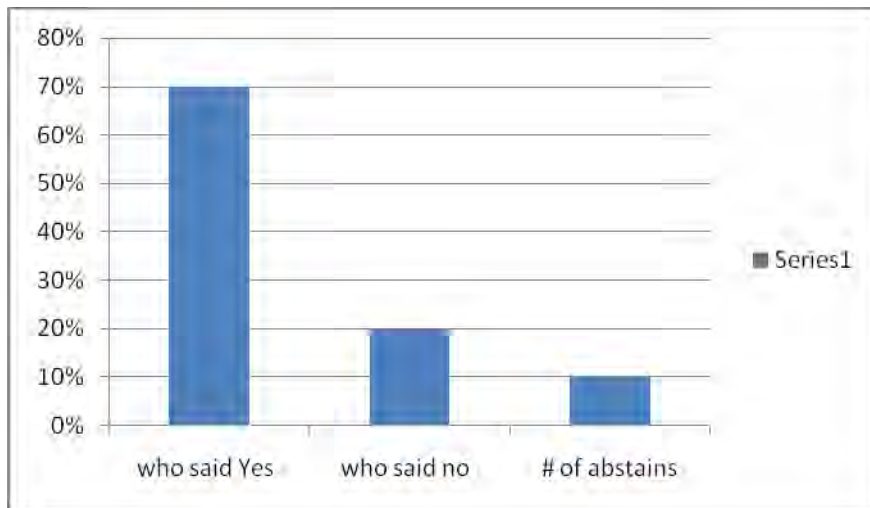


**Figure 31**

**Description:** As usual the table describes 40% of the participants confirmed that even though there is a sport club within the school compound those top students are not participant within the organized club, whereas the other 40% of the participant confirmed that those top students as they participate in the organized sort club within the school compound the remaining 20% of the participants said that the participation of those top students is good and the rest alternative of the question has no any value.

**Table 13** for question number 13 on the provided questionnaire which constructed as, do you (think) that, those top (ranked) students as they watch sport games and news on the television(TV)? The ramification expressed as follows;

Those who said Yes in percentage	70%
Those who said no in percentage	20%
# of abstains in percentage	10%

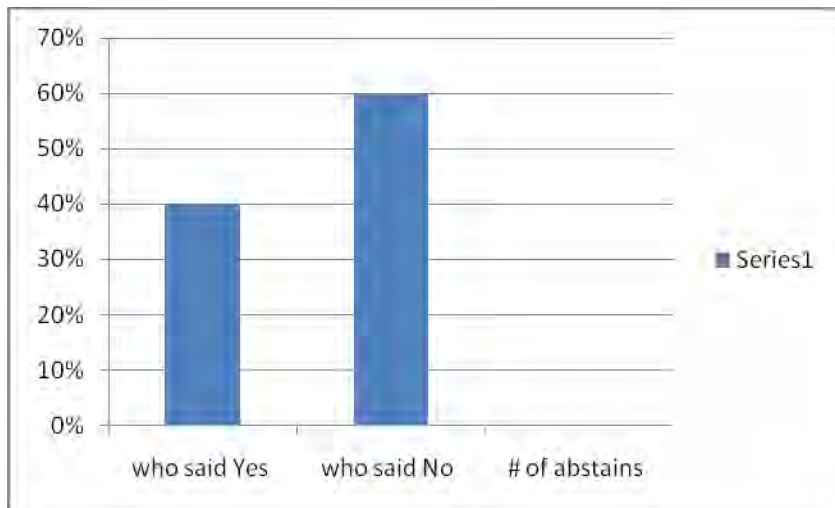


**Figure 32**

**Description:** The table reflected that 70% of the participants confirmed that, as those top students, as they watch sport games and news on the television whereas 20% of the other participants still confirmed that those top students as they did not watch any sport games and news on the television and the rest 10% of the participants prefer to be abstain.

**Table 14** for the question number 14 on the questionnaire which constructed as, do you feel (think) that those top students as they participate (d) in any sport club out of the school compound? The ramification goes as follows;

Those who said Yes in percentage	40%
Those who said No in percentage	60%
# of abstains in percentage	0%

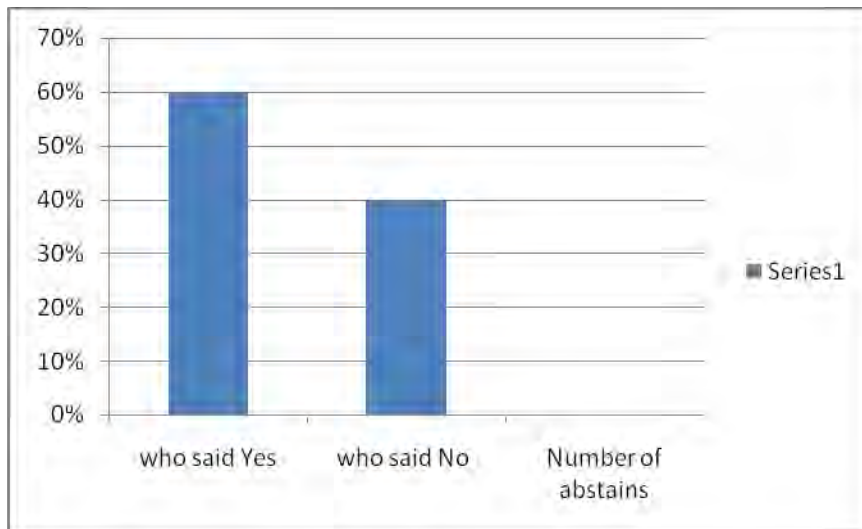


**Figure 33**

**Description:** As the table what it displayed 60% of the participants reported as those top students didn't participate in any sport club, out of the school compound whereas 40% of the participants confirmed that those top students as they participated in the sport club which established out of the school compound, and number of abstains in this part is zero.

**Table 15** for question number 15 on the questionnaire which constructed as, do you feel (think) those ranked students in a class as they are active by watching current(contemporary) sport news via print or electronic Media? So the ramification is displayed as follows;

Those who said Yes in percentage	60%
Those who said No in percentage	40%
Number of abstains in percentage	0%

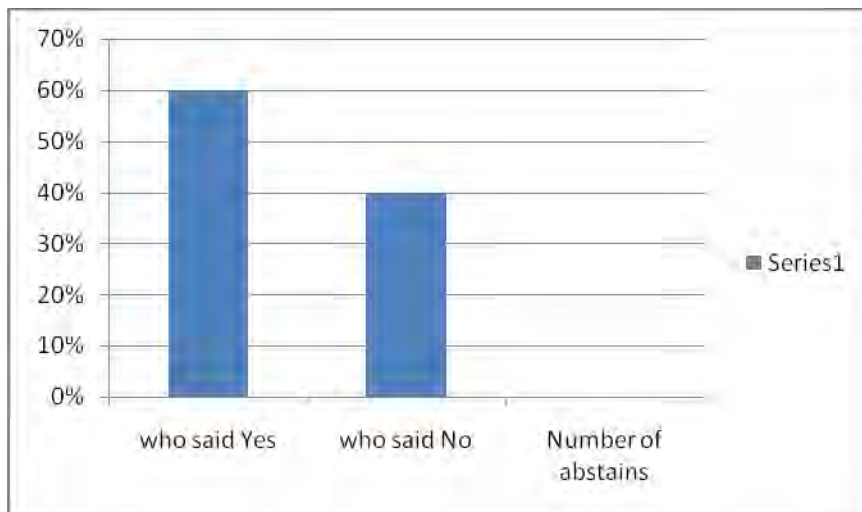


**Figure 34**

Description: As the table screened out 60% of the participants confirmed that those ranked students are active by watching current or temporary sport news via print or electronic Media, whereas 405 of the participants declared that as those ranked students are not active by watching current (contemporary) sport news via print or electronic Media in this case the number of abstains is zero.

**Table 16** for question number 16 on the provided questionnaire that constructed as have you ever been used those ranked students as the demonstrator when you have been taught the practical class of PE for your students? And the analysis displayed as follows;

Those who said Yes in percentage	60%
Those who said No in percentage	40%
Number of abstains in percentage	0%

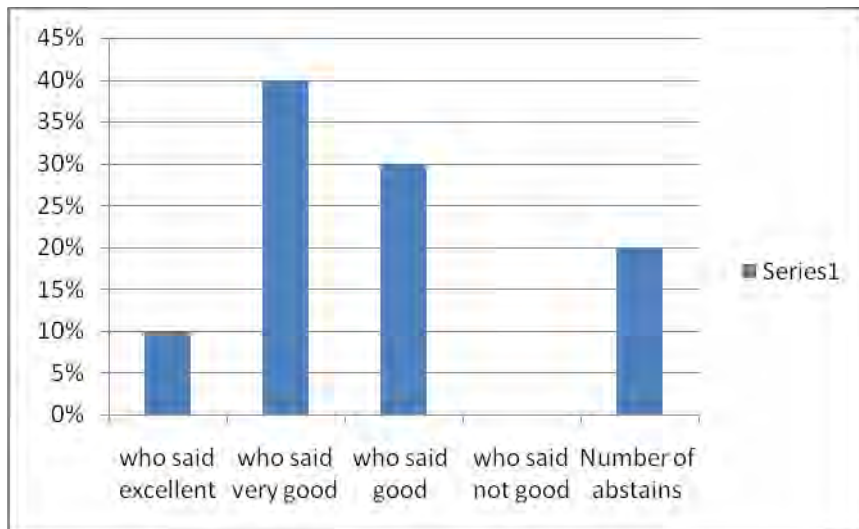


**Figure 35**

**Description:** The figure declared that 60% of the participants confirmed as they have been used those top students as demonstrator while the participants being taught their students in the practical class whereas 40% of the participants said that no we did not use those ranked students as a demonstrator while they (teachers) have been taught their student in the practical class.

**Table 17** for question number 17 on the questionnaire which stated as, if your answer is yes on question# 16, how was their willingness to be demonstrator? The ramification pronounced as follows;

Those who said excellent in percentage	10%
Those who said very good in percentage	40%
Those who said good In percentage	30%
Those who said not good in percentage	0%
Number of abstains in percentage	20%

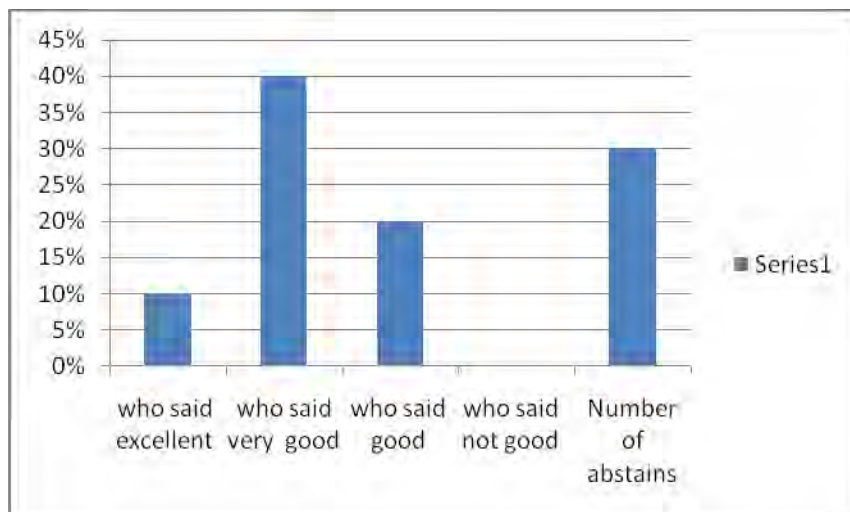


**Figure 36**

**Description:** As the figure pronounced that 40% of the participants confirmed that the willingness of those ranked students to be a demonstrator during practical class of PE, as it has been very good whereas 30% of the participants reported the willingness of those ranked students to be a demonstrator during a practical class, on behalf of the teacher, as it has been good and the remaining 10% of the explained as the willingness of those aforesaid main attendant of this study has been excellent to be demonstrator on behalf of the teacher in a practical terms and the rest 20% of participants are abstained to say anything on the willingness of those main attendants of the study.

**Table 18** for question number 18 as usual on the questionnaire that constructed based on question number 16 that asks only who said Yes on question #16 than the next question is that, how was their efficacy? And the ramification described as follows;

Those who said excellent in percentage	10%
Those who said very good in percentage	40%
Those who said good in percentage	20%
Those who said not good in percentage	0%
Number of abstains in percentage	30%

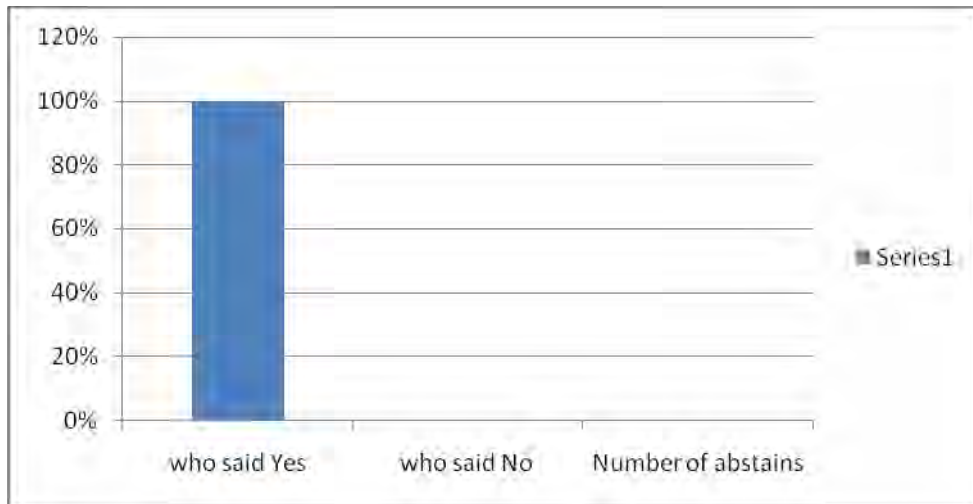


**Figure 37**

**Description:** The figure reflected that 40% of the participants confirmed that the efficacy of the ranked students as it has been very good whereas and still 20% of the participants affirmed that the efficacy of those learners as it has been good but in contrary to what is said by the aforesaid participants 30% of the participants did not want to explain and say anything about the efficacy of those learners , there 10% of the participants affirmed that the efficacy of those learner as it has been excellent.

**Table 19** for the question number 19 on the questionnaire that stated as, do you know who those ranked students in a class are as they are ranked by their academic achievement? So the ramification goes as follows;

Those who said Yes in percentage	100%
Those who said No in percentage	0%
Number of abstains in percentage	0%

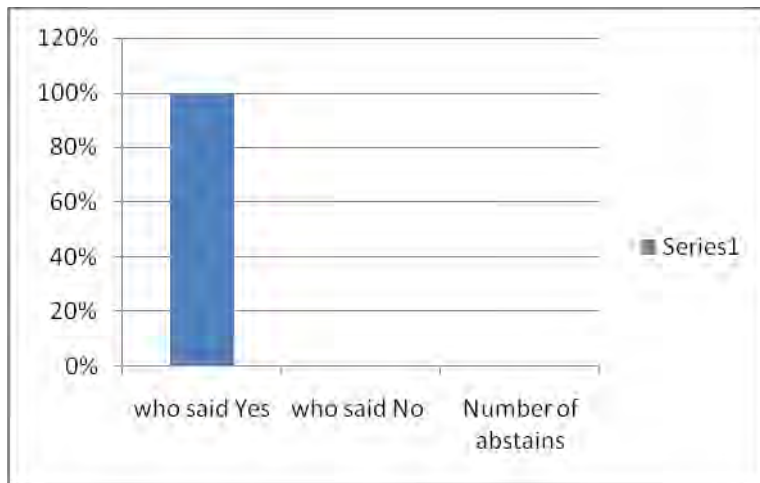


**Figure 38**

**Description:** As the table pronounced that 100% of the participants affirmed as they know those top students by their academic achievement.

**Table 20** for the question number 20 on the questionnaire that constructed based on question number 19 that requests if those participants said yes on question number 19 then they again request to act for the next question which is question number 20 that stated as, do you knew them (the ranked students) by their names? And the ramification goes as follows;

Those who said Yes in percentage	100%
Those who said No in percentage	0%
Number of abstains in percentage	0%

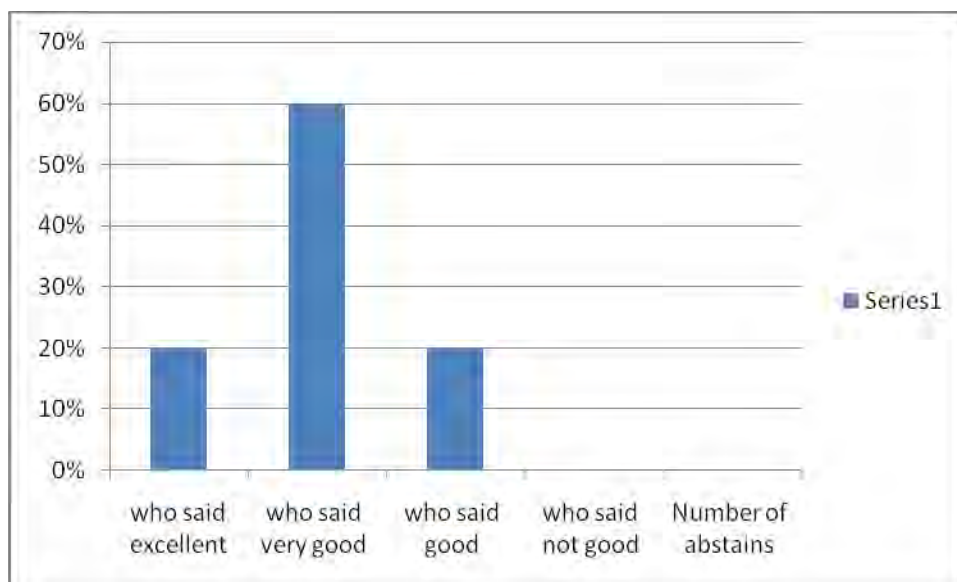


**Figure 39**

**Description:** As the table pronounced that 100% of the participants affirmed that as they knew those ranked students by their names.

**Table 21** for the question number 21 on the questionnaire that constructed based on question number 19 if the answer of the participants is yes then they requested to participate again in the next question which is question number 21 that stated as, how was their participation in a class while you were teaching them? The ramification goes as follows;

Those who said excellent in percentage	20%
Those who said very good in percentage	60%
Those who said good in percentage	20%
Those who said not good in percentage	0%
Number of abstains in percentage	0%

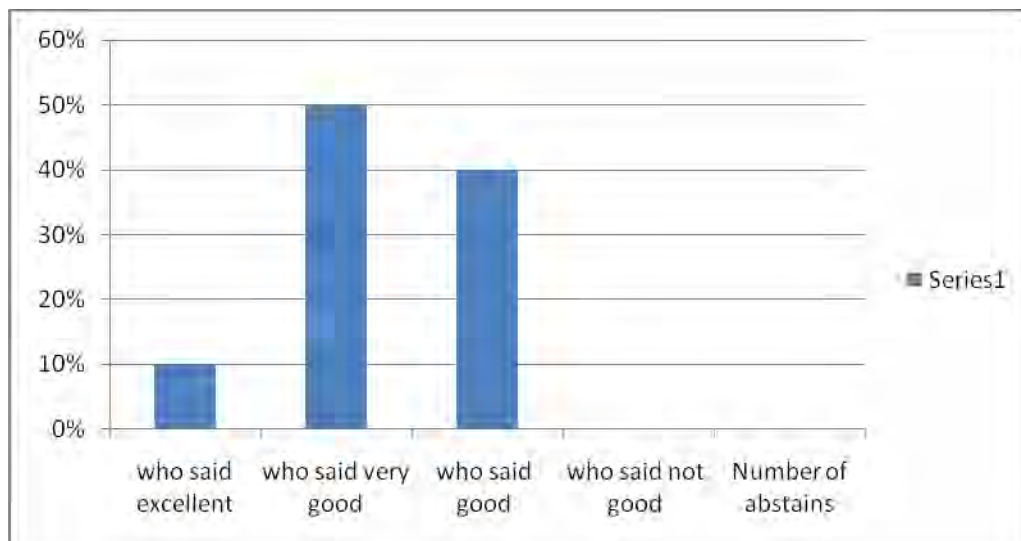


**Figure 40**

**Description:** As the figure proved that 60% of the participants affirmed that the participation of those ranked students in a class while their teacher taught them has been explained as was very good whereas 20% of the participants said that the participation of those ranked students in a class while their teacher taught them, has been explained as was good and the rest another 20% of the participants explained the participation of those students in a class while their teacher taught them affirmed as it was excellent with no abstains.

**Table 22** for the question number 22 on the questionnaire that constructed based on question number 19 for those who said yes for question number 19 and then they again requested to participate on the next question which is question number 22 that presented as ,how is (was ) your relationship with them? The ramification goes as follows;

Those who said excellent in percentage	10%
Those who said very good in percentage	50%
Those who said good in percentage	40%
Those who said not good in percentage	0%
Number of abstains in percentage	0%



**Figure 41**

**Description:** As the table displayed that 50% of the participants affirmed that, the relationship of the PE teachers with those of the ranked students, as it has been very good whereas 40% of the participants confirmed that the relationship of those students and their teachers as it has been good and the remaining 10% of the participants explained the relationship of those students and their teacher as it has been excellent with no abstains.

### **Qualitative data Analysis, Interpretation and Findings of the collected data via interview, focus group discussion and with check list**

In view of the fact that the method of data gathering techniques (procedures) are mixed type that upholds both quantitative and qualitative data gathering and interpretation, the quantitative part of the analysis and interpretation has been done in the aforementioned manner whereas the qualitative part of the data that gathered via interview, focus group discussion and with check list has been tried to analyze and interpret as pursue:

The nature of the qualitative data by its construction has a semi-structured spirit in this regard the researcher enforces to be go through by treating each items.

**Question number one** on the interviewed items that presented in the form of, the researcher of this study observed that in most cases ranked (top) students are not interested in the school physical education subject matter particularly in the practical session. Do you agree with the researcher? In this regard the interviewees said that yes most of the time those what you said top ten or ranked students showed certain reservation to participate especially as you said in a practical session of the subject but on the other hand even though they are a few in number there are some top students who are interested by the subject matter of PE, on top of what is said by those interviewees, all of the assured that the number of those interested top students by the subject matter of PE is not satisfactory while they (the interviewees) compared with the interest of the other none achiever students with in a class.

**Question number two** on the interviewed items that presented in the form of, what is your observation regarding to the interest and motivation of those top students to attend the class of PE? For this question all interviewees are equally argued that the interest and motivation of those top ten students regarding to attending of PE class is not so good because they said even some students claiming that by saying, is that fair? when we prepare a note book for PE subject for them (ranked students) a note book and paper shall be organized and set ready only those science subjects like Mathematics,

Physics and what have you and they said that those students especially preparatory students it is better if we concentrated and focused on those science subjects that will appear in the national examination of Ethiopia so the interviewees said that the attention consternation, interest and motivation of those students is not based on the intent and contents of the subject but their focus the subject what it appears in the national examination. Therefore the intention of those students is they preferred if they don't attend the class especially practical class of PE, those interviewees said that even there is a difference in the grade score of PE exams of those top students in the theoretical exam of PE those students will be scored 40 out of 40 but in the practical exam most of those students will have been scored 20 up to 30 out of

60 therefore this shows as said the tendency of those students for the practical class is very low.

**Question number three** on the interviewed items that presented in the form of most of the time the grade score of those top students in physical education subject is not that much satisfactory especially when we compare their grade score with the other subjects like Mathematics, physics and what have you grade scores. If you agree with this narration, what would be the case to that? As those interviewees said that those ranked students grade score is not that much satisfactory because most of the time those students are not interested to participate in the practical class of PE so the exam result of them in practical class is very low that they score 20 up to 30 out of 60% hence those ranked students are very active not in a practical aspect of the subject matter of PE but they are too active on the theoretical aspect of the subject matter so as those interviewees said that the total grade score of those students should not be more than 70 up to 75 out of 100 but those students can score a better grade in the other subjects like Mathematics physics and what have you, as those interviewees said that the cause for aforesaid grade score is the disinterestedness of those students and their weird assumption to the subject matter.

**Question number four** on the interviewed items that presented in the form of, do you feel that those top students in a class take or consider PE as a subject matter like other science subjects? For this question and its derivation all the interviewees are equally said that now a days the attitude of the school community and a little bite the community as the whole is improved as they said if we compare the attitudes of today with a year before, so in this respect as those interviewees said the attitude of those top students showed improvements but still there is certain remaining part that those learner being indoctrinated by the pseudo perception and;

stereotype of the community by being projecting from what is said it is possible to this and that about your question and to say yes it is difficult and still to say no still it is too difficult but it is possible to say there is a way of looking PE as a science but in numbers those students who looked PE as a science is not more than 1%, here what those interviewees commonly agreed is that as the reasonable evidence the learner argued, if PE would be a science and it categorized in a branch of science the period that is given to PE class per week wouldn't be one period with this assumption and what they (the top students) indoctrinated by their society it is difficult or it seems too difficult for those students to think by assuming PE as a science.

**Question number five** of the interviewed items that is presented in the form of, who are mostly interested in the physical education practical session in a class of students when we compare those top students with the rest one? The interviewees commonly agreed that the question is not vague; it is clear and possible to respond directly by saying those none academic achievers are more interested in the physical education practical session without any gender discrimination, whereas in the contrary those ranked students always showed certain reservation on the practical session of the subject matter of PE, unfortunately and rarely one or two students among those ranked one may be interested in the issue that what we are talking about not to say the interest of all ranked students towards PE subject matter is zero even some times as those interviewees said that you may get top competitive ranked students in the competitive sports that can represent the school in the either inter or intra sport competition but as the interviewees said that the minority couldn't be the representation of the majority even within those ranked students.

**Question number six** on the interviewed items that presented in the form of, how do you evaluate the academic achievement of those ranked students in view of their physical performance? As the interviewees said that to clearly

express and articulate the physical appearance of those ranked students as they what look like, it is better if we compare the physical appearance of those the top one with none top students rather than defining and expressing by their own existence of those the ranked students therefore as the interviewees said, as their physical appearance of those top students is not visible and satisfactory, physically they are sluggish, pathetic scrawny and weak apart with their none massiveness due to this and that reason the character that aforesaid debilitate and incapacitate the physical performance of those ranked students whereas those academically none achievers have been appeared in a good position in both cases of by appearance and efficacy.

**Question number seven** on the interviewed items which is presented in the form of, have you ever observed that those the top students in their academic engagement (career), when they participated in an, inter and intra school sport competition? In all study areas of the study all the interviewees commonly and confidentially enunciated that as there is a sport club within the school and all those interested students requested to be the member of the club so as by default we (the interviewees) be expecting those ranked students to be a member of the club but in most of the case in practical terms those the ranked students they did not be the;

member of the sport club for this reason that those student who did not a member of the sport club couldn't have the chance to participate not only in the intra school sport competition but also in the an inter school sport completion the main reason to this or reservation of those ranked students as of the interviewees as they pronounced and enunciated that not to be participated in the sport club of the school is that those students(the top) are disinterested by the practical session of the subject matter of PE consequently the participation in the club by its very nature it demands participants to be active in practical terms, in its all in all transaction and momentum(impetus).therefore as they (the interviewees) said the answer for

your question is even though it is difficult to say no ,confidentially it is possible to say their number is insignificant and immaterial.

**Question number eight** on the interviewed items that presented in the form of, what is the attitude of the school community towards the subject matter of PE in relation to other science subjects? Here all the interviewees equally argued that by saying now days the outlook of the school community and the community at large is almost it is improved but before years ago there was the undermining and deflation of the subject, considering the teacher of PE not as professionals, qualified personnel because most of the time of before years ago there were the scarcity of qualified professionals due to this those who taught PE in schools were not professionals but experienced personnel by their own effort and endeavors due to that the outlook of the community was somehow perverted and distorted but the interviewees said to consolidate their argument at this moment onwards the outlook of not only school community but also the community at large considering PE as a science and looking those PE teachers as equally qualified professional just as other science subject professionals;

as those interviewees said not only the attitude of the community but also the focus of the governments is coming to in a good mood and frame of mind so the condition of the work place vis-a -vis the facility to make the subject matter vivid all most becoming fair and good.

**Question number nine** on the interviewed items that presented in the form of, most of the time it is sensible and observable that the parents as well the school community motivates and enforces their students in general to focus on the academic subjects and to study hard in that orientation if it is so, why not they (those parents& the school community) advised those learners to be active in the physical exercise or physical fitness arena? In a corresponding Comportment and approach, the interviewees agreed with the researcher's observation and perception of the societal attitudes, and the interviewees said that as a stereotype the attitudes of the society still today it is not changed and it is reflected on, in this contemporary society and those the ranked students

have been indoctrinated and up loaded by the issues which we have been talking (as the interviewees said) and consequently those students by taking the perception of their community as a norm their preference in life influenced by their parents interest and satisfaction thus our society has a great respect and admiration for those Medical science and Engineering field of studies and professionals at large and as much as possible if it is not be by chance the preference of those ranked students while they tried to choice out a field of study that has been tilted and inclined to those aforementioned field of studies. The other reason that those interviewees that has been raised during the interview time the salary difference between aforesaid field of studies professionals and the rest disciplines including physical education field of study professionals.

### **Focus group discussion (FGD) items analysis, interpretation and ramification**

The focus group discussion (FGD) is a rapid assessment, and which is semi structured data gathering method in a purposively selected set of participants gather to discuss issues and concerns based on a list of key themes drawn up by the researcher/facilitator (Kumar 198).And the researcher constructed and design certain questions as the bench mark for the focus group discussion purpose so that the constructed items and the discussion that made on those items by the participants has been treated in the following compartment:

**Question number one** on the focus group discussion items that presented in such a way that, in most cases, in any where, the educational curriculum is designed according to the bloom`s learning domains, such as cognitive, psychomotor and affective domains in this regard how do you evaluate the school over all teaching and learning transactions in a particular way by focusing on the psychomotor one? The attendants of the FGD confirmed and later on tried to come up with the common argument about the contents of the physical education text books in each grade levels as the text it contains all the

three learning domains as what Bloom suggested but said the discussion participants we teachers while we are teaching the subject matter always focus on the theoretical part by ignoring (apart from) the rest two domains which are the affective and psychomotor part the reason for this as the participants said on one hand the school environment is not conducive and the other reason as of the participants what they said is the attitude interest and even efficacy of the teacher for the practical aspect of the lesson is a determining force so that all the participants of FGD agreed as they haven't been taught according to the spirit of what the FGD item it requests during the teaching and learning transactions in a particular way by giving attention (focusing on) the psychomotor one (aspect).

**Question number two** on the FGD items that presented to the participants of it, in such a way that as thinkers like Descartes, Spinoza and others, advocated that to achieve in a cognitive terms (aspects) at large, it is advisable (they advised) that first to achieve in a physical terms (aspects), in this respect how do you evaluate the overall momentum of those the top (ranked) students in a class of the school? The participants of FGD by accepting and appreciating those thinkers way of thinking towards body mind relation and as what thinkers' advocated and provoked the inalienability of body(physical) performance with that of the mind. Among those thinkers Spinoza consolidates the correlation argument of physical proficiency with that of the mind (intellect) for him physical proficiency is a stepping stone or projection to the intellectual curiosity and maximization of it and he states in words that, "Teach the body to do many things this will help you to perfect the mind and come to the intellectual level of thought" even as the participants of FGD said that during the discussion the Olympic motto (slogan) says that in grade 11<sup>th</sup> text book of Ethiopia in the contemporary context while this study is carried on "the sound body to the sound mind" the hermeneutics of the phrase consolidates that the thinkers' thought towards the correlation of physical proficiency to perfect the mind and to come to the intellectual level of thought when the participants of FGD described the perception of our;

community vis-à-vis physical activities and its value to enhance human intellectuality is not as what the aforesaid thinkers perceived due to this our society undermines not only the subject matter of PE but also those PE professionals so that the society advised to their children not to participate in the physical activity arena in a strict sense and later on not to be physical education professional and as the participants said that this societal doctrine and thought makes the learner specially those of the top (ranked ) students to be neglect full and reluctant towards the subject matter of PE, as a subject said those participants those ranked students, for the purpose of their grade score to take the rank (to be stood one up to ten in this case) they may focus on the theoretical part of the subject matter by neglecting the practical one due to this reason and that those ranked students most of the time never scored more than 75% in PE subject but in other subjects they strived to score more than what they scored in PE and in practical terms they scored what they dreamed(that`s what the participants said).

**Question number three** of the FGD items on the discussion which is presented in the form of as a stereotype in our society it is thought that being active in physical terms especially at the childhood period as an deterrent and impediment to the future academic success of the child (learner) in this regard what is your assumption (contemplation) towards the societal thought? The participants confirmed that the problem which is raised by the researcher is the existing phenomenon within the society as the participants explained, by the aforesaid perception, the society couldn`t see the PE professionals as professional just as other professionals that what they or the community denounces their children not to give time for physical activities throughout their child up brining (rearing) , the society at large perceives those who are physically strong and densely massive individuals as they think by their muscle and the society perceives as those physical strong and massive (muscler) individual as they don`t think by their mind ,considered their mind as it empty and bare rather considered as they think by their physical power

that generated via physical activities and sport at large so this perception and the like of the society taken by the researcher as a stereotype and pseudo perception not only the researcher but also the participants of the study in each category described that the perception of the society as it is not a scientifically examined researched one rather as the participants argued such the societal outlook lacks objectivity and highly biased and prejudiced.

**Question number four** of the FGD items and of the discussion, which is presented in the form of, do you think that those of the top (ranked) students in a class of the school would have an interest to on one hand, join in the higher educational career (engagement) of PE as a natural science stream, and on the other hand, to take PE as a career in their future professional arena? As those attendants suggested that as long as there is no any interest at all, upon those top(ranked) students to be a professional in sport science arena and even said the participants we are taught PE for several years specially those of grade 12<sup>th</sup> students and whom ,who joined the university and whom who had a chance to meet with us after they joined the university and when we asked them about their field of study said the attendants no one said I am joined the department of sport science rather those students would have been said we are joined this department and that department confidentially so no one would like to be a sport science professional by his /hers own choice and may be said the participants of the FGD, unless some once confidence and potential is becoming low to other science field of studies no one would like to choice SPSC department to join it and later on to become SPSC professional and even academician at large.

**Question number five** of the FGD items and of the discussion, which presented in the form of, as you are a PE (SPSC) professional (teacher), in the teaching and learning arena, have you ever seen that the learner who achieved in both academic and physical proficiencies, in other words those learners who have become active and competent in both phenomena? The participants said that in relative speaking yes even though there number become discouraging

,sometimes we can get some students who are active and competent in both phenomena but when we focus on the their number still it is discouraging because it is difficult to get more than four or five students in a total population of a school and to calculate the size of those students within a sub city simply it is possible to multiply the numbers that have been found in a school by the number of preparatory schools that existed within the sub city in case of your study said the participants confidentially so as the participants recommended to increase the number of those ranked students they to be active in the referred attributes first as the participants said that the societal attitude should be deconstructed and the society by itself and the government vis-à-vis today's existing SPSC professional should be exhaustively collaborated on one hand to change the image of the society by pushing and enforcing into the reconstruction and image building process of HPE(health and physical education) discipline on the other hand to:

**Check list which prepared to observe the physical features of the study are**

<b>Observed phenomenon</b>	<b>Remarks(ratings)</b>						
	Excellent	Very good	Good	Fair	Poor	Bad	
The availability of playground in the study area.							
Facilities (equipments).							
Average grade score of the participants in a defined grade level, in PE subject from the document.							
Availability of qualified PE teachers							
The availability of organized sport club in the study area							
The participation of those ranked students in the sport club within the study area							
The participation of those attendants of the study in the sport club out of the study area							
The significant contribution of those ranked students to the sport club of the study area							
The work load of those PE teachers per week.							

Maximize human capital by dragging and pulling those ranked students and the community at large into the reality and objective of HPE the maximization process of human capital in the subject matter of SPSC to have the subject mutual acceptance by any one and those ranked student.

### **Qualitative interpretation of observed phenomena at the study area**

Things in the study area have been observed according to the aforementioned tabulation as what it requests and the observed phenomena are tried to interpret as pursue:

The availability of the play ground in the study area of the two schools in the appointed sub- city as the researcher observed he has given poor rating (remarks) for the first study area and subsequently fair for the next study area the first study area even though it becomes a new school it is not comfortable to render PE practical class at all because there is no any court at all In the contrary the second one is quit better than the former one because at list there is a ball games` court except the Foot ball court which is not available at the study areas and in the athletic arena the situation is not conducive to teach any kinds of either the field or track events, all these were the observation of the researcher in relation to the availability of the play grounds in the identified areas. Equipments (facilities) in both study areas are all most negligent except the balls in other words there is no any equipments in both schools this makes that those teachers to focus and concentrate on only the theoretical aspect of the lesson as those participants said that the theoretical aspect of the lesson makes the learner to be tedious and ruse less on the subject matter especially those ranked students have become too much reluctant on the practical aspect. The average grade score of those participants per academic year in PE subject matter is most probably not exceed more than 75% in a practical speaking their result would be laid around 65 up to 75 in percent, accordingly the researcher remark (rating) for which he observed in this aspect is good but;

in contrary as what the researcher observed the none participants of this study had a better grade score in PE subject even if we compare with other subjects.

Availability of PE qualified professionals, as the researcher observed and informed by the concerned administrators (HRMO or Human resource management officers) of the schools from the first study area there was 11( eleven) total PE teachers of whom (among them) two teaches are MSC holders in SPSC and the rest one are BED holders whereas from the second study area there was only five total PE teachers and all of them are BED holders therefore the remark (rating ) of the researcher is very good.

Regarding to the availability of organized sport clubs which is able to address and maintain the interest of those participants (ranked students) in the physical activities arena, as the researcher observed and informed that even though the clubs are restricted by certain clubs like ball games specially foot ball and volleyball in both study areas students have been participated in this case as the participants of FGD announced that the number of participants of those ranked is low even to put in numbers the total amount of participants of the ranked students from 100 participants of this study or in other words from those of 100 ranked students that stood one up to ten in each class of that which the study area accommodated were not more than two as the department chair person explained and the researcher remark in this is perspective not good not to say bad.

As the participants of the discussion affirmed and as the researcher assessed (observed) that among those 100 participants of the study who are ranked one did not participate in any sport clubs that organized out of the school compound within the cub-city like (rating) is poor on the observation check list table. As those FGD participants individually interviewed and raised during the discussion part as well the researcher tried to observe the contribution of those ranked students in the school sport club, it is almost deterred, in other words those ranked students participation is possible to say zero. And the work load of those teachers who have been taught in the study areas within the sub-city is fair.

## CHAPTER FIVE

### 5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

Based on the obtained data; the analysis, interpretation and sorting out of findings have been carried on, subsequently the researcher enforced to come up with the remaining part according to the objective and motive of the study, hence findings would have been summarized based on the motive of the study then by sanding on the summarized findings the conclusion would have been grown up (developed) vis-à-vis, what is found at hand, then the researcher has been forwarded his own reflection in order to the study to be vivid. **As aforementioned comporments findings have been summarized as pursue:**

**As the overall spirit (motive) of reviewed literatures reflected about the correlation of the two attributes, the two variables are positively correlated in** this regard the perception and understanding of the primary actors of the study on the correlation of the two attributes is positive, the outlook and perception of the participants substantiated by,

. 94% of the respondents believed that physical fitness development, as it supports and fosters the academic achievements of the learners.

. 60% of the participants, as they believed that, being healthful in physical aspects, as it does not have any negative effect, directly or in directly on the academic achievement of the learners.

. 86% of the participants, as they affirmed that being fit in physical terms (conditions) as it has no any negative effect on the academic achievement of the students.

. 70% of the participants, as they believed and affirmed that, involving moderately in any physical activities starting at (from) a childhood age till the entire life of a being is a decisive for the academic achievement of learners.

. 68% of the participants as they believed and affirmed that civility of the body or being active in physical terms, as it is, a precondition to the civility of the mind in any aspects.

. 66% of the participants as, they believed reflected that those who never participated in a regular physical activity orientations are mostly disadvantage in the School academic achievement to achieve.

Paradoxically enough to the aforementioned premises that drive and enables to speak confidentially about the association of academic achievement and physical proficiency, in other words suggested that at the existing school context, those who have been participating in any physical activities are disadvantaged by their academic achievements. Due to 61% of the participants reflected that, as they don't have any interest to be physical education professional in connection with this only 5% of the participants wishes to study physical education in a higher education level to be PE professional but 61% participants would like to be a popular sport person in the long run.

. Even though those participants believed and affirmed about the positive association of academic achievement and physical proficiencies, their physical proficiency is not compatible with the academic achievement what they do have, this incompatibility of their academic achievement with the physical proficiency that they do have at the existing condition, while the study carried on, has been substantiated by on one hand the interest and experience that the participants would have, towards physical activities and physical education subject matter at large specially for the practical session of the subject, on the other hand their average grade score of PE subject is an evident for their inefficiency on their physical conditions, fitness and what have you.

## **5.1. FINDINGS THAT OBTAINED FROM THE DISTRIBUTED QUESTIONNAIRE AND GATHERED DATA FROM THE TEACHERS OF PE AT THE APPOINTED STUDY AREAS**

As the participants affirmed that even though the number of those achievers who are achieved in both attributes of academic and physical proficiencies, are less in number, the participants confirmed that, as there are some students who are top by their academic performance, as well competent by their physical proficiency, thus, this is an indication of the association of those attributes (variables). In relation to this and other findings as what they affirmed, the hypothesis of the study that pronounced in its all over spirit is accepted, in addition the following summary of findings consolidates the acceptance of the hypothesis.

. As of 70% respondents of the study, who were teachers of PE at the study areas observed and affirmed that, those top students by their academic achievement are highly indoctrinated and deceived by the societal pseudo perception towards physical education profession and even subject matter.

. As the 80% of the participants pronounced and reflected that the school community vis-à-vis concerned officials of Education within the sub city prioritizes those top students to focus on only to the cognitive domains of learning apart from the rest learning domains like motor learning and what have you.

. Still as the 80% of the participants suggested that those top students would not have been considered PE subject as a science one, rather they looked it as a vocational and technical matters.

. As the 80% of the teacher participants as they believed and observed that those the top students in each class of the schools in the context of appointed study area, they wouldn't have any interest to the subject matter of PE, and to be physical education professional at large in the long run , in their future professional career.

As the PE teachers who were the participants of this study experienced and affirmed that in the school context those students who are less interested in the academic aspect is highly interested and effective in PE subject matter specially by the practical aspect of the subject matter. Whereas those top students are very weak and disinterested by the subject matter of PE especially by the practical aspect of the subject. In this regard paradoxically enough 100% of those teacher participants affirmed that those who participated in physical activities in any case never be disadvantaged in their academic achievements.

## **5.2 CONCLUSION**

Based on the major findings of the study the following conclusions have been drawn. The basic motive of the study is to show the association, or else the disassociation or the neutrality of the two attributes based on with the outlook and interest of those top students on one hand to the association of the two variables and what have you and on the other hand to the physical proficiency, to assure the motive all things that can be done to make the motives viable and trustworthy , have been done in this regard the reviewed literatures have been justified the positive association of the aforementioned variables in the study, not only the reviewed literatures that approved the positive correlation of the variables but also the data that gathered via questionnaires interviews and what have you and the analyzed data, in both quantitative as well qualitative compartments and their findings vindicated the association of the two attributes. In this aspect the second motive of the study was to examine and assess whether the pseudo perception of the community makes those the study participants (those top ten students) to be biased and prejudiced upon the worthiness of physical proficiency ,in this regard even though those students justified & vindicated the association of physical proficiency with that of academic proficiency, they are not committed to substantiate their achievement in the academics arena by their physical proficiency.

As the findings screened out those the participants (the top ten students) indoctrinated by their societal attitudes, perceptions that makes the students not to have physical proficiency because by the societal pressure the students enforced not to give a time for physical activities that enables them to develop physical proficiency as what they achieved in the academic orientations due to these reasons the interest and eagerness of the students to be active in physical terms is becoming declined and distorted, by this motive it is difficult to get in the long run the quality physical education professional in both attributes of physical and academic proficiencies, in this regard all we human beings should be given an attention to the calling of philosophy of nature which preaches, "human life by its nature demands individuals, to be active in both physical and mental orientations, denying this fact (reality) by giving a great focus(concern) to one part, will be considered as abuse of human nature", this calling is substantiated by the teaching of Spinoza which is "Teach the body to do many things this will help you to perfect the mind and come to the intellectual level of thought". And it is evident that even though the number of those achievers who achieved in both attributes (academic and physical proficiencies) are less in number, at the study areas there are the top students in the academics aspect and as well very competent and very fit in the physical conditioning arena hence it is possible to say that the study justifies in a practical terms the association of those the two attributes (academic achievement and physical proficiency), even though in this regard the interest and motivation of the majority academic achievers of the participants would have been very discouraging to be efficient and competent by their physical proficiency the reason to this position of the participants is that they are highly indoctrinated and oppressed by the societal stereotype and pseudo perception towards physical proficiency and physical conditioning at large in this regard the community thinks that, on one hand ,

as those attributes (academic achievement and physical proficiency) as they do not go hand in hand or associate one to the other in a positive compartments, on the other hand the community thinks that the one who are fit and

competent in a physical terms as he thinks by his physical power rather than the mind, in a metaphorical and allegorical expression of the community is that in order to solve any social problem those who are physically fit and proficient as they precede and prefer to solve the problem by their physical power rather than by their ability of reasoning, logical analysis and critical thinking at large in this regard the converse is true as the communities pseudo perception and stereotype, this position of the community makes those the ranked students to be biased and prejudiced in a position for physical fitness, physical conditioning and physical proficiency at large, this attitude ( outlook) is a deterrent driving force that makes those academic achievers not to be interested and effective on the school engagement of physical education subject matter specially practical lesson of the subject. In order to challenge the societal attitude and to pull up those ranked students in to the reality by extricated their pseudo perception that preached and induced by their community, it will be expected from the existing PE professionals to be a model and forerunner in both aforementioned narratives and teach the community in that parameter and then it will be an easy task to produce quality PE professionals in both narratives by making a fertile ground to those academic achievers, they to come up into a decision to be a quality PE professional in both narratives this may assure the worthiness and dignity of PE professionals.

### **5.2.1 RECOMMENDATIONS**

As the finding of the study affirmed that out of 100 participants who are academically high achievers, only 4% of the participants are competent and effective by their physical proficiency, in this case, even though the 4% of the participants assured in practical terms, as there is a positive association between academic achievement and physical proficiency by being effective in both narratives (attributes), and this position helps to deconstruct the societal perception towards physical proficiency.

- In order to proliferate quality PE academician and professional who are effective in both narrations (academic achievement and physical

proficiency) in the long run, the existing PE professionals, academicians and what have you, **would be a role model** at all levels to attract those academic achievers in to PE profession.

- The existing PE academician and professionals as well, by being a role model not only by those aforementioned narrations but also by the academic and professional ethics and humanity at large, should challenge the societal perception towards physical profession, physical activities and physical power that generated through exercise.
- The positive correlation (association) of physical proficiency with that of academic achievement is not understood in our community so in this regard the state together with the PE professionals and with the concerned bodies, it is expected to teach and train the society to have a positive attitude.
- Students not only the academic achievers but also the rest one together with those who are achieved in the physical proficiency arena, should have a clear understanding about inseparability of body with mind, intellectual development with that of physical development and at the end the positive association of academic achievement and physical efficacy. And even every body should know the side effect of the separation of those the two narrations.
- At the end the researcher wishes further studies to be carried on in this arena specially in the area of correlations of physical proficiency and academic achievements by taking the sample from those who had physical performance as an independent variable, whereas academic achievement as a dependent variable and publications to be proliferated

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# APPENDIX I

ADDIS ABABA UNIVERISTY  
SCHOOL OF GRADUATE STUDIES  
COLLEGE OF NATURAL SCIENCES  
DEPARTMENT OF SPORT SCIENCE

**Questionnaire, which is prepared for the attendant of this study, in Lideta sub-city, preparatory students of top ten, in a classes of the schools.**

Dear attendants and respondents of this study, the information that you deliver and convey via the organized questionnaire serves only for academic purpose and assumed to be filled by preparatory students in the aforesaid sub-city and its schools, so far and so forth, for the devotion as well willingness and collaboration of you to give me the required information, reliable reply based on your intuition for those of the provided questions below. The research heart fully would like to forward his appreciation and gratitude.

**Direction:** circle only your assumed reply for the given alternatives for each item.

1. Do you think that students, who participated in physical, exercise activities, are disadvantaged in their academic achievement?

A) Yes                      B) No

If your answer is yes please justify, your answer reasonably.

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2. Do you feel that school physical education is part of natural science streams, like biology, chemistry and what have you?

A) Yes                      B) No

If your answer is no, please substantiate your answer.

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3. Do you think that physical fitness development supports for your academic achievement?

A) Yes                      B) No

If your answer is no, as usual please, substantiate it.

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4. Is that being healthful in your physical condition, not directly or indirectly related with your academic achievement?

A) Yes                      B) No

5. Do you think that being fit in a physical condition, as it affects your academic achievement in a negative manner?

A) Yes                      B) No

6. Involving moderately in physical activities starting at a childhood age till your enter life is very decisive for your academic achievement at any level, do you agree?

A) Yes I agree              B) No I don't agree

7. While you are completing your educational engagement, would you have an interest to be physical education professional?

A) Yes                      B) No

If your answer is no, please justify your answer in a logical sense.

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8. When you complete your preparatory educational engagement, the researcher wishes to all of you to join higher education. If it is true, as the researcher wishes, what would be your choice of field of study?

- A) Engineering fields
- B) Medicine and related fields
- C) Sport science and related specializations
- D) Teaching except sport science
- E) Applied, natural science fields

9. Have you ever been participated in - inter and intra, school sport competitions

- A) Yes
- B) No

10. Bringing up via physical Educations, Activities arena, will give a chance to be fit in a psycho-social, health and even socio-economic, orientations, do you agree?

- A) Yes
- B) No

Whatever your answer if it be, but substantiate it.

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11. In the long run, do you like to be a popular sports man/ woman in any competitive team or individual sports like athletics, and the like?

- A) Yes
- B) No

If your answer is no, please justify it reasonably.

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12. Being active in our physic or physical orientation is a precondition to be achieved in a school academic engagement, do you agree?

- A) Yes I agree                      B) No I don't agree

13. Thinkers argued that when we civilized our body, our mind will also be civilized in that parameter. Do you agree with those thinkers?

- A) Yes                      B) No

14. As of your perception, which one precedes first?

- A) Civility of the mind  
B) Civility of the body  
C) Both of them at equal rate.

15. As of your perception, understanding, which one is mostly disadvantaged in the school academic engagement to achieve?

- A) Those of who regularly participated in physical exercise orientations.  
B) Those of who never participated in regular physical activity orientations.  
C) Those of who, some times (30minutes – one hour, of twice per week) participated in a physical activity orientations.

16. In most cases, while your physical education teachers have been taught you the subject matter, what has been their inclination?

- A) Inclined to theoretical aspect of the lesson.  
B) Highly inclined to practical aspect of the lesson.  
C) Moderately, both to the practical and theoretical aspects of the lesson.

17. What have been your inclinations to the question #16?

- A) Inclined to A.  
B) Inclined to B.  
C) Inclined to C.

18. You have been coming via physical education lessons till today, has it been the lesson interesting?

- A) Yes                      B) No

19. Based on your answer to question #18, what has been your achievements (grade score on average, out of, 100), in each, passage (grade levels)?

A) 50-65

B) 66-75

C) 76-85

D) above 86

E) Less than, 50

**Thank you, for your endeavor and the time that you spent on, to make this study viable.**

**Our Earthly life demands, individuals to be active in both physical and mental orientations, denying this fact is considered as abused of human nature. (Philosophy of nature)**



3. By default our community enforces its child (students), they, to focus on the academics of only cognitive aspect apart from other learning domains like motor learning, do you agree?

A) Yes

B) No

4. Based on the spirit of question #3 the school community as well concerned officials in the academic sector prioritize those ranked students to focus on the cognitive part of the learning domains apart from the motor learning one and what have you, do you agree with the researcher out looks?

A) Yes

B) No

5. Based on question #3 & 4 those ranked students are not looking PE as a science discipline (stream) rather than vocational one this makes those students not to be interested on and neglectful for the subject matter of PE, do you agree with the researcher`s position?

A) Yes

B) No

6. Do you think that those ranked (top) students are eager and enthusiastic to be physical education academic professional or applied sport science professional while they are completing their secondary level educational engagement?

A) Yes

B) No

7. Who is more interested by school physical education subject matter?

A) Those of ranked (top) students      B) those of none ranked (top) students

C) Those, who are less interested in the academic subjects like Mathematics, physics and what have you

8. In which science subjects, those of the top or ranked students are highly interested in the school teaching and learning process and transaction?

A) Physics

B) Chemistry

C) Physical education

D) Biology

E) Mathematics

9. If you be estimated and anticipated the average grade score of those of the top or ranked students in PE subject, at a defined grade level, their result estimated to rely (account) on.

- A) Below 50                      B) 51 to 65                      C) 66 to76                      D) 77 to 87  
E) above 88

10. Do you feel or assume that our today's educational curriculum by its own objective (seba Vs selasa or 70 to 30 principles) as it appreciates and maximizes physical Education academician (professional)?

- A) Yes    B) NO

11. IS there any organized sport club in the school compound that can address (treat) the student's interest like athletics, volleyball clubs and what have you?

- A) Yes    B) No

12. Based on question #11, if there is a sport club within the school, how is the participation of those top (ranked) students?

- A) Good                      B) Very good                      C) Excellent                      D) Fair                      E) they don't participate at all

13. Do you feel (think) that, those top (ranked) students watch sport games and news on the television (TV)?

- A) Yes    B) No

14. Do feel (think) that, those top ten (ranked) students as they participate (d) in any sport club out of the school compound?

- A) Yes    B) No

15. Do feel that, those the top ten students in a class as they are active by watching current (contemporary) sport news via print or electronic Media?

- A) Yes    B) No

16. Have you ever been used those top (ranked) students as the demonstrator when you have been taught the practical class of PE for your students?

- A) Yes    B) No

17. If your answer is Yes on Question #16, how was their willingness to be a demonstrator?

- A) Not good                      B) good                      C) very good                      D) excellent



APPENDIX III  
ADDIS ABABA UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
COLLEGE OF NATURAL SCIENCES  
DEPARTMENT OF SPORT SCIENCE

**Semi -structured interview and focus group discussion items, on the study topic, which is entitled:” attitudes on the correlation of academic and physical proficiencies,” the case of top ten preparatory students in each class, at Lideta sub city.**

Dear the focus group discussion attendants and interviewees (physical Education teachers at the study area) of this study as the practitioner and the stakeholder of, on one hand this study, and on the other hand, by being the subject teacher of PE, the researcher kindly pronounces and enunciates that the purpose of this study is only for academic orientations upon aforesaid title of the study, with the intention that, to be this study viable and fruit full the researcher demands information, you to convey and deliver, so as, the situation going on, as what, the study requests .For the willingness as well collaboration and devotion that you paid the researcher would like to express his heartfelt appreciation and gratitude.

**Guide lines the provided items has the spirit of semi-structured kind, with the intention that, it is possible to respond the items as you feel and senses the item based on the experience that you have via your entire teaching and learning process.**

1. The researcher of this study observed that in most cases the top ten students are not interested in the school physical education subject, particularly in the practical session. Do you agree with the researcher?

2. What is your observation regarding to the interest and motivation of those the top students in the academic achievement of their attending class?
3. Most of the time the grade score of those top students in physical education subject is not that much satisfactory especially when we compare their grade score with the other subjects like, mathematics, physics and what have you, grade scores. If you agree with this narration, what would be the case to that?
4. Do you feel that those top students in a class take or consider PE as a subject matter like other science subjects?
5. Who are mostly interested in the physical education practical session, in a class of students, when we compare those the top students with the rest one?
6. How do you evaluate the academic achievement of those top students in view of their physical performance?
7. Have you ever been observed that those the top students in their academic career when they participated in the inter school and intra school sport competition?
8. What is the attitude of the school community towards the subject matter of PE in relation to other science subjects?
9. Most of the time it is sensible and observable that the parents as well the school community motivates and enforces their students in general to focus on the academic subjects and to study hard in that orientation if it is so, why not they (those parents & the school community) advised those learners to be active in the physical exercise or physical fitness arena? In a parallel manner.

## **The focus group discussion part items**

1. In most cases, in any where, the educational curriculum is designed  
According to the Bloom's learning domains, such as cognitive, psychomotor and affective domains in this regard how do you evaluate the school over all teaching and learning transactions in a particular way by focusing on the psychomotor one?
2. As thinkers like Spinoza, Rene Descartes and others, advocated that to achieve in a cognitive aspects at large, it is advisable (they advised) first to achieve in a physical terms (aspects), in this respect, how do you evaluate the overall momentum of those the top ten students in a class of the school?
3. As a stereotype in our society it is thought that being active in physical terms especially at the childhood period considered as an impediment to the academic success of the learner, in this regard, what is your assumption (contemplation) towards the societal thought?
4. Do you think that those of the top ten students in a class of the school would have an interest to, on one hand, join in the higher educational career (engagement) of PE as a natural science stream, and on the other hand, take PE as a career in their future professional arena?
5. As you are a PE teacher, in the teaching and learning arena, have you ever seen that the learner who achieved in both academic and physical proficiencies, in other words those learners, when they have become active in both phenomena?

## APPENDIX IV

**Check list which prepared to observe the physical features of the study area**

Observed phenomenon	Remarks(ratings)						
	Excellent	Very good	Good	Fair	Poor	Bad	
The availability of playground in the study area.							
Facilities (equipments).							
Students activity at a break time in the school compound							
Availability of qualified PE teachers							
The availability of organized sport club in the study area							
The participation of those top(ranked) students in the sport club within the study area(school)							

<p><b>he participation of those attendants of the study in the sport club out of the study area (school compound).</b></p>							
<p><b>The significant contribution of those ranked (top) students to the sport club of the study area ( school)</b></p>							
<p><b>The work load of those PE teachers per week.</b></p>							

**Number of PE teachers that have been participated in the study**

**Female 6**

**Male 14**

**Total 20**

**Status: all are first degree holders and two of them are Msc candidates and all of them, do have more than five years experience in PE teaching.**

“This thesis is my original work and has not been presented for a degree in any other University, and that all sources of material used for the thesis have been duly acknowledged”, a signature of confirmation by;

1. Advisor: Solomon Teka (Dr.) \_\_\_\_\_

2. Kibruyisfa Berihun (Rsearcher):\_\_\_\_\_

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