

Effect of the School Facilities Factor and Sport Activities Factor on Parents in terms of Private and Public School Choice at Riyadh City Saudi Arabia

Faisal Alsaudi

School of Education, University of Hull, United Kingdom

Copyright © 2015 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Abstract There are several , primarily carried out in the Western World, that have explored the reasons why parents' choice a school, which they consider best meets their children's needs and parental aspirations for their children. In order to contribute to the established knowledge it was essential to conduct an explore into parents' reasons for their selection private or public school in the Kingdom of Saudi Arabia (KSA). Such an investigation had not been conducted previously. This article details deterrent a factors highly regarded as effecting parental decision making: school facilities factors and physical education and sport activities factor. Analysis and discussion along with the study's conclusions and recommendations will be cited. Randomly selected parents, whose children attend private or public schools in Riyadh City, Saudi Arabia were invited to complete a standardised questionnaire after which to participate in a semi-structured interview to identify factors that influenced their preference for school. Two methodologies analysis of the reasons given highlighted demonstrating the frequency of cited range of reasons: school facilities, Such as computer services, the classrooms are a good environment and the school has a good theatre. Also the sport activities factor, For example, good outdoor games. And good indoor games those identified as the main elements that influenced their selection decision making.

Keywords Saudi Arabian Parent's Perceptions, School Facilities, Physical Education and Sport Activities

1. Introduction

Governments across the world are spending huge amounts of money to establish contemporary schools that meet the needs of the modern generation. For instance, 21% of USA schools are more than fifty years old, with another 50% at least thirty years old, investments of hundreds of billions of

dollars are now needed on new construction and retro-fitting of this school stock (USA Office of Education Research and Improvement, 2000; NEA, 2000). In KSA, although 40% of schools are modern, characterised by high quality good lighting, comfortable chairs in all classrooms, libraries, laboratories for the computers and sciences, theatres, suitable air-conditioning and interactive playgrounds, \$1.5 billion dollars is still required annually to refurbish and modernise the remaining 60% of schools to be fit for purpose in the 21st Century[30]

The above implies that school buildings represent a significant factor relevant to parental school choice. This is not only for parents, but also for policymakers, because they know that whilst modernised buildings in themselves do not make for an outstanding school, the ambiance encourages students to want to attend and learn. Students take a pride in their surroundings and the fact that they belong to a prestigious institution that they can be proud of. As such, parents are more likely to select modernised schools than those that are antiquated.

2. Review of Literature

The quality of school buildings and its importance in the educational process

The quality of school buildings is very important in creating an appropriate, attractive and welcoming environment for teaching and learning. This has resulted in various national and international conferences, such as early 1957 in Geneva, where it was recommended to establish schools consistent with the requirements of contemporary life, and to provide a suitable environment for all students regardless of differences of social classes or race. The outcome of the conference recommended that head teachers, teachers and parents should participate in the design of future schools. A similar international conference was held in Baghdad in 1964, where in addition to the above suggestions,

it was suggested that development of the building of schools would increase students achievement by helping students in artistic, cultural, sports and social education activities. This has resulted in a growing body of studies generating evidence that indicates a relationship between the design of school buildings and learners' attainments. For instance, Christopher [22] believed that the school building design impacts positively on the educational process and students' achievement. Further, he took into consideration the ideas, suggestions and perceptions of teachers regarding appropriate designs of schools. Similarly, Dressler [27] agreed with Christopher [22] in terms of taking on board the points of view of teachers in the developmental process of school designs.

Some researchers, such as, Aloude [12] exploration was to change the concept of school by transforming school from a building where knowledge and information is delivered to an interactive exciting stimulating teaching and learning centre. From this viewpoint, school is a place where the learner and the teacher produce relevant, realistic resources relevant to teaching, learning and the practice of the cultural and social activities within attractive welcoming rooms designed to cater for the needs of gifted, less able, disenfranchised and disabled students.

More recent reviews have consistently found positive significant relationships between building quality and academic outcomes [27,28 , 37] . For instance, several studies focussed on building attributes of schools that may affect student achievement, and which in turn influenced parents in their choice of school. These attributes will now be discussed and will be grouped under four categories – age and design of the building, air conditioning and lighting, advanced technology and sport activities.

Influence of age and design of buildings on students achievement

McGuffey and Brown [51] studied the influence of building age on Grade 4, 8 and 11 students in Georgia, USA. They found a significant correlation between the age of the building and many interior facilities, such as light, acoustics, colour, temperature, and lack of resources that together were associated with academic outcomes. Equally, McGuffey [52] identified a number of studies that examined the possibility of a relationship between the structural condition of buildings and student performance in standardized tests. Indeed, there are a number of studies that link student achievement with building quality, newer buildings, improved lighting, thermal comfort and indoor air quality, as well as specific building features such as science laboratories and libraries. For instance, Darder & Apshur [26] found Latino children in Boston schools were affected by the poor condition of the school buildings, the lack of bright well-lit classrooms, dismal bland brown tiles on the walls, and a lack of books and other teaching materials. O'Neil and Oates [54], meanwhile, investigated the impact of school facilities on student achievement, behaviour, attendance and teacher turnover. They found that better school building conditions

were positively associated with outcomes in standardised tests. Evans and English [31] supplement this by showing that children living in poverty are at higher risk of experiencing socio-emotional difficulties, and that this risk can be partially explained by the exposure to sub-optimal environments. Consequently, children living in poor urban environments may be particularly affected by the condition of their school buildings. Whilst this aspect has been identified in a variety of studies to date, it has not been investigated as a sole entity, viz. students matched into groups with an exciting modern building compared against drab, uninviting, miserable rundown buildings. Thus, the age of school building can be accurately measured to ascertain the extent of influence school buildings have on how students feel about themselves, teachers, loyalty to the school community, the importance they place on respect, appreciation and their psychological and mental potential. On the other hand, poor school facilities have been identified as probably affecting students negatively, resulting in high levels of absenteeism or dropping out of school due to the lack of a welcoming ambiance, modern classrooms, laboratories or sports grounds, all of which have come to be seen as obstacles to achievement.

Effects of air conditioning and lighting on student achievement

There are a considerable numbers of studies investigating the effects of lighting and air conditioning in the classroom on student achievement. For example, Al Amayreh [1] postulated that schools should provide various kinds of learning environments, such as, choosing welcoming colours for the walls of classrooms, shaded and spotlight lights, quiet corners or areas with large, bean-filled brightly patterned cushions for quiet reflective thought, modern work stations and large conference type areas for group work. Cash [19] , meanwhile, found that comfort factors appeared to have more of an effect on student achievement than modernising or modern structural factors, while Earthman [28] added other factors to those seen as enhancing learning: temperature rates, heating and air quality. Earthman [28] and Heschong Mahone Group [36] each reported high achievement associated with schools that were air conditioned, were less noisy external environments, less graffiti, and classroom furniture and with student lockers in good repair. They postulated that this was the result of students working in well-lit conditions with fresh air. Hence, they ranked lighting next in order of criteria that had positive effects on student learning outcomes, as optimal levels of natural daylight offered the most positive effect [50]

Supporting this assertion, Jago and Tanner [39] cited the results of seventeen studies from the mid-1930s to 1997, showing that the consensus was that appropriate lighting improves test scores, reduces off-task behaviour, and plays a significant role in student achievement. Similarly, Luckiesh and Moss [46] determined that lighting and its quality related positively to student test scores. Veitch [64] , however, argued that regardless of the quality and quantity of lighting

it had no effect on the mood or performance of students. In a different but related study, Knez and Kers [44] explored the effect of lighting and gender to find that females were more perceptive to light than males. Whilst there is contradictory evidence, all the elements of the school environment must be designed to assist students to fulfil their ambitions and fulfil their potential in an unthreatening, pleasant, welcoming environment. This leads us to consider the role of modern technology in providing and supporting pleasant active environments and safe havens for students.

Information Technology and associated equipment (Modern technology)

As stated above, websites and other technologies are used by some schools to allow parents to follow up their children's homework, alert them to any emergency, or if the school is looking for parents to volunteer to participate in some school activity or event. Numerous studies have found that the use of modern technology to communicate with parents encourages the US parents to become involved in their children's studies and motivated them to do their homework as it is very convenient for parents to contact teachers directly. Tobolka [61] concluded that:

Communication improves students' interest in their coursework and provides their parents with more knowledge about daily class activities. I found that parents felt more involved in their student's school activities and more connected to me.

These ideas have had a big influence on Arab states. For example, Mohammed [53] defined an ideal school as one that complements traditional teaching methods with the implementation of very sophisticated modern technology. Thus, ideal schools encourage students' self-learning, as well as giving them the opportunity to connect into a variety of different learning sources (local/global), and to access information in its various forms (audio/visual) through specifically designed laboratory rooms. Goulding and Kyriacou [35] confirmed that:

With increased use of teacher controlled whiteboards it will be important to ensure that pupils still have the opportunities for the autonomy and experimentation afforded by technology such as graphics calculators and computers and that personal constructions are discussed and shared with the whole class.

Fakhrudin et al. [32] explored the potential of E-learning technology, such as computers, projectors, white boards, interactive boards and televisions, aimed at assisting teachers to effectively deliver academic subject matter. He found that students reported this educational process to be more interesting, much easier, more rapid and more successful in assisting them to retain information, compared to traditional teaching methods, while teachers reported a visible increase in students using and developing their logical deduction thinking processes. Supporting these findings, Mahmoud and Abdul Rashid [47] argued that technology is very

important in the educational process, enhancing students learning capabilities, logic and interest in learning. Moreover, another positive aspect of E-learning takes into account students' individual differences and needs, by providing diverse sources and assistance, thereby, helping students to learn at their own pace and according to their own abilities, personal traits and potential. This includes students experiencing learning difficulties, such as dyslexia, or physical disabilities: i.e. "technology plays a crucial role in all types of disabilities particularly in the education of students who suffer from writing difficulties. Therefore, there should be many ways in which technology can overcome these difficulties and improve the skills of students" [32]

Similarly, Robert [55] claimed that the collaborative element of E-learning provides an effective learning environment as it provides opportunities for students to share learning experiences, whilst building knowledge through discussions and interacting with peers and teachers, together leading to an improvement in communication skills, along with the promotion of essential thinking skills.

In addition, Robert [55] highlighted the importance of collaborative E-learning in terms of psychological aspects, such as a decrease in anxiety; encouraging acceptance of help and supervision from peers, parents and teachers. Abdul Qadir [4] confirmed that E-learning enabled learners to be more active and more independent in their collaborative learning through the establishment of communities with other learners around the world, thereby expanding students' understanding and tolerance of different cultures, customs and religions.

Fakhrudin et al. [32] also reported their findings that E-learning contributed to rapid teaching and learning, thereby, saving time and effort compared to learning by traditional means. These researchers concluded that E-learning saved 40% of time compared to traditional teaching methods by promoting effective communication between home and school; parental monitoring of children's progress; enhanced relationships between students, schools and members of their society, as well as boosting students learning. Kosakowski [45] noted that parents, businesses and community members can use technology as a springboard to become more involved in the activities of neighbourhood schools. All can help through technical support, helping parents to use e-mail to facilitate communication with teachers and administrators, reducing unnecessary distractions by parents. Equally, businesses can also utilise email to help mentor students and prepare them for the workplace.

In contrast, there are various identified negative aspects of E-learning through computer usage that may have adverse effects on students, such as the weakening of social relationships through addiction. Students spend many hours in front of their computer screens immersed in the internet, and the computer culture may serve to disconnect them from the real world and inhibit the development of conventional

friendships characterised by physical interaction. Thus, Al-Mousa [10] reported that students suffered from loneliness, weak social skills, a lack of a sense of humour and of essential conversational skills. He also found that teachers and students become dependent upon technological tools rather than textbooks, papers and pens because, as stated, technology makes teaching easier for the teachers and allows students easy access to a massive store of knowledge. Al-Mousa concluded, though that, education has managed to create an information-rich environment contributing to the enrichment of learners' knowledge, and that it has also been able to transform learners from mere recipients of knowledge to active participants, and from consumers to shrewd critics.

Implications of the use of modern technology on student attainment

A significant number of research studies compare E-learning with other forms of learning environments, such as classroom instruction. For instance, Al Masloh [8] conducted a study on secondary school students in Medina, KSA the sample of the study was two groups every group include 25 students were in separated classrooms one of classroom is equipped by advanced computer programs but other classroom was unequipped by computer as the researcher aims to determine the effect of the use of computers on the academic attainment of students in mathematics and. He found statistically significant differences between students who studied mathematics using computer programs compared to students who studied mathematics in the conventional method.

Similarly, Al-Mutairi [11] conducted a study on secondary school students in Riyadh, KSA, the sample was two groups every group comprise 15 students in two different classrooms one of the classroom was equipped by the computer but other classroom was unequipped by the computer because the researcher aims to test science results against the effectiveness of E-learning. He found that there was a statistically significant positive relationship between the test results and the use of E-learning.

Nevertheless, other studies conducted across the world have shown no statistically significant differences between conventional instruction and modern technology teaching. For instance, Al Da'alj [5] examined the effect of technology on secondary school students in mathematics and found no statistically significant differences between those who had been taught conventionally and those who had been taught with the aid of modern technology. His findings correspond to those of Al Twaim [15], who tested the effect of technology on secondary school students of Arabic language. Al Twaim found no statistically significant differences between students who studied Arabic using computer programs and those who studied by the conventional method. Similarly, in Nigeria, Yusuf & Afolsbi [68] conducted a study aimed at determining the impact of technology on the attainment of 120 private school students in the Alahia model. The researcher analysed the examination results using a T-test technique to compare between the two groups,

but found no statistically significant differences between students who studied the Alahia model via the computer and students who were subject to conventional instruction.

Al-Mousa [10] suggests that one reason for these mixed outcomes may be that teachers are sufficiently qualified in the use of computer technology to deliver subject matter and knowledge effectively. Alternatively, it could be that students may not have the abilities to assimilate the subject matter and knowledge via technological means. Additionally, not all subject matter or curricula content is conducive to being delivered via technology tools. Large or very large class sizes will probably weaken the impact of technology due to a lack of sufficient computers and/or white board usage due to students being too far away to be able to read that which has been written or transferred onto the screens.

3. Physical Education and Sport Activities

Physical education and sport are seen as very important in students' education and thus parental school choice. Aweys [13] argued that illiteracy is not confined to the person who is not able to read or write or use the computer, but must include the person who fails adequately to exercise. This fact was highlighted in Thailand during a conference in 1999, at which it was highlighted that over 100,000,000 students worldwide are deprived of or fail to participate in any form of physical education. Consequently, Jomtien [41] stated that whilst institutes of education focus upon the mental developmental aspects of students, they tend to ignore aspects concerning physical activities despite physical activities having a significant impact upon academic achievement. Supporting this, Aweys [13] posits that the increase in the status of physical education is an indicator of the enhancement of the civilising progress of communities to contemporary human society, while Sibley and Etnier [59] highlight that:

The mind and body are one entity, and that anything that happens to one will affect the other. Physical educators therefore believe that the "whole child" comes to school to be educated and that this requires both mental and physical training.

Bailey [18] cites the adage that a "healthy body leads to a healthy mind," and that physical activity can support intellectual development in children", and Talbot [60] holds that physical education assists students to gain respect for the body - their own and others', as well as contributing to the combined improvement of brain and body, that in turn increases an understanding of the role of aerobic and anaerobic physical activity in health. The following sub-section, therefore, will discuss the implications of physical education on students in terms of health and aspects of educational attainment, since there is a large body of literature demonstrating that school is an appropriate environment in which to encourage students to participate in physical activities.

Importance of Physical Education in aspects of the health of students

The World Health Organization [67] highlighted that schools have a significant contribution to make in effecting an improvement in students' health and behaviour. Parallel to this, Armstrong and McManus [2] found that managers of physical education departments considered that health-related fitness "was the second most important objective of physical education" with happiness of students rated as their prime objective. Martens [48] has strongly emphasised that practitioners' major aim should be to "turn young people on to physical activity for a lifetime" Alexandrov's [6] findings, meanwhile, confirmed the statistically significant positive effects physical education has on blood cholesterol, thereby, reducing blood pressure and heart diseases, while Strong et al. [58] argue that as school becomes increasingly the centre for promoting physical activities, physical education has an important role in improving psychological health and mood, and in reducing blood pressure and thereby preventing or reducing various diseases.

On the other hand, a study conducted in Kuwait City by Al-Amari and Zilab [9] assessed the perceptions of school students regarding their knowledge about physical education and the role of health education. The researchers found that physical education did not make a significant impact in the promotion of students' health, because "students did not want to do P.E. Increasing evidence of less interest to participate in school physical education and, even more alarming, concern that students have stopped caring about physical education as they have not found progress in terms of health aspect" (ibid. p. 310)

Primarily, these researchers attributed this lack of interest or concern to physical education teachers not being specialists; frequently lessons were conducted by inexperience non-specialist teachers, and schools do not possess appropriate equipment or facilities. Thus, Al-Amari and Zilab [9] concluded that physical education had no effect on students' health due to a lack of enthusiasm on the part of students.

According to Reference [20]

In the United States, between 1980 and 2002, obesity prevalence doubled in adults aged 20 years or older and overweight prevalence tripled in children and adolescents aged 6 to 19 years 3-5 by 2020

Despite these findings some researchers, such as Green and Riley [34] believe that there is no single solution that can protect students from obesity unless schools provide health programmes, preferably shared by several groups. "Treatment Programmes have evolved in many school settings and reports have indicated a great deal of success. These programmes coordinate efforts among administrators, guidance counsellors, nurse-teachers, food service personnel, classroom teachers, parents, and perhaps more importantly, physical educators" (ibid. p. 917). Parallel to the above, youths in KSA are living in a world made easy by affluence

that has led to the prevalence of obesity, which is spreading rapidly, with rates among students aged 6- 18 years increasing from 18% in 2001 to 21.8% in 2005. Fouad Niazi, who carried out the study from which these figures are drawn, indicated the main reasons that contribute to the spread of obesity among Saudi students as being television programmes that encourage students to eat, along with the fact that they did not practice sports activities which lead to a loss of weight [57].

This is another factor which parents will take into consideration as they strive to choose schools, particularly favouring ones where there are high standards of physical and sports activities, in order to protect their children from diseases and the onset of obesity. This is in line with Brownell and Kaye [18], who argued over 30 years ago, when parental participation was not widespread as it is currently, that parents should play a significant role in terms of the design and development of academic schemes of work; school selection and the design of appropriate physical activities and a sensible selection of food for their children, particularly those who attend school dinners.

Relationship between Physical Education and Academic Achievement

Some research has demonstrated the importance of physical education in the promotion of student achievement. Thus, Reference [42] highlights that:

Physical educators were grasping for ways to justify exercise and physical education programmes. If it could be shown that activity programmes contributed to intellectual development then they would gain credibility and be justified.

Based upon the research cited above and below, there has been a parallel development in the belief that physical education contributes to intellectual development and hence academic achievement, because the functions of the mind and the physical body are one entity. Whatever happens to one automatically has some effect on the other through the body's chemical reactions. Human and animal studies Reference [40] have demonstrated that the areas of the brain involved in movement and learning are inextricably connected, and that physical activity could increase those neural connections. Consequently, those who support physical education advocate the need for long-term strategies since quality physical education will positively contribute to cognitive thought processes and concentration levels, leading to improved academic achievement. Reference [56] explored the outcome of increased physical education on academic scores. They assessed 759 US children, testing them before and after involvement in standardised controlled physical activities. They concluded that because of the acknowledged importance and mental health benefits of Physical Education activities, school administrators must be encouraged to incorporate effective health-related Physical Education programmes into their school timetable. Equally, it is important to dispel any concerns and the false belief that

students' academic performance will be adversely affected by 'wasting' valuable time on Physical Education activities when they could be spending this time more profitably on academic subjects.

Thus, the result of this study is consistent with studies that have investigated the impact of physical education on academic outcomes of US students. Reference [59] asserted that:

Physical activity may actually be related to improved cognitive performance and academic achievement and provides evidence for the argument that physical activity should be a part of the school day for both its physical health and cognitive benefits.

In Saudi Arabia, Al Jaji [7] concluded that the parents certainly give a great deal of consideration to the provision of physical education in terms of school choice in the expectation of increasing their children's academic achievement. Further, when he examined the reasons that stimulated parents to select a particular school, participants cited the most important factors that influenced them as being physical education, a friendly caring administration, extra curricula activities, examinations results, teachers, and facilities within the school buildings.

Not all research supports the contention that there is a strong relationship between physical activity and academic performance. For instance, Reference [20] reported that there were positive social effects from being involved in physical education, but no evidence of any benefit to academic performance. As a consequence, they concluded that physical education was not a significant factor for parents in their choice of school.

Collins and Snell [23], meanwhile, found from their study in Hampshire, England, that the most important reason for selecting a school was its reputation. "Parents did not consider child mix, sports facilities, access or building quality to be determinants of a school's reputation. These parents would seem to have a more academic view of what constitutes a reputation".

In summary, from the findings of the studies cited above, some researchers advocate spending more time in physical education as it has positive impact on concentration, health, and academic outcomes, while other studies concluded that physical education did not play any pivotal role in students' academic attainment. As a result, parents are much less likely to identify a preference for physical education as they do not perceive it as likely to raise their children's academic achievement.

4. Research Design, Data Collection

Research Questions

Three research questions guided this study:

Does the strength of the school facilities factor affect

parents' decisions to enter their children into public or private schools in Riyadh, KSA?

Does the strength of the sport activities factor affect parents' decisions to enter their children into public or private schools in Riyadh, KSA?

Why do parents select particular private or public school for school facilities factor and sport activities factor?

Research design, Data Collection

A descriptive approach to research has been taken to describe the parents' perception of public and private schools in Riyadh, the capital city of Saudi Arabia. A descriptive research approach can be broken down into two categories:

1. Survey study
2. Correlational research Alassaf [3]

A survey design was judged to be the most appropriate for the present study for a number of reasons. According to Reference [64,34] survey studies allows researchers to obtain information about the case, facts, activities, phenomena, moral, personal experiences, behaviour and answers to events. Questionnaires also offer the advantage of allowing sufficient time for the respondents to reflect on their answers. The questionnaire was sent to a large sample at the same time assists researchers in generating data, as the amount and variety of data that can be gathered through a questionnaire are greater than that which can be obtained by other instruments, such as interviews or observations [66]. Moreover, the researcher is able to obtain data about the sample using several approaches, such as face-to-face interviews, telephone interviews, postal or hand-delivered questionnaires and online surveys. Cohen et al [24] confirm that obtaining data typically involves "structured or semi-structured interviews, self-completion or postal questionnaires, standardized tests of attainment or performance, and attitude scales". Finally, using a survey study is commonly used in educational studies to describe what exists without asking about the reasons: Cohen et al [24] , "the most commonly used descriptive method in educational research". In this study two methods were used to collect the data: questionnaires and Focus Group interview instrument offers an understanding of why parents' choice private or public for their children. Also, Focus Groups were used in the expectation that they would enrich the validity of the questionnaire by developing an understanding of factors that attract parents to make a particular school choice. Kitzinger [43] supported this sentiment when he stated that "Focus Group discussion of a questionnaire is ideal for testing the phrasing of questions and is also useful in explaining or exploring survey results".

In this study 15 schools (eight private and seven public schools) were randomly selected by choosing schools from each list, starting from the number ten, then selecting number twenty, then thirty and so forth. These represent approximately 9% of both types of school in Riyadh.

Table 1. Random Selection of Schools

Type of School	Total	Sample
Public schools	76	7
Private schools	87	8
Private and public schools	163	15

The student population from the selected eight private schools and seven public schools was a total of 6,554. Lists of parents were obtained through the head teachers in both types of school, being representative of the various groups of parents. For each list, the first, or second name was chosen as the starting point, followed by every tenth name after that to form the research sample. If a sibling, or a non-Saudi student, appeared in the selection process, the next name on the list was taken instead, with the count recommencing from that point.

5. Analysis and Discussion of Findings

Descriptive Analyses

School Facilities

This section reports parents' answers to the question: Does the strength of the school facilities factor affect parents to enter their children into public or private school in Riyadh City, KSA? This sub-question reports participants' answers to four dimensions, in order to distinguish between the parents perceptions of school choice and factors of learning environment. Each dimension contains a table of the participant's ratings followed by a comparison of the results for each item in tables and a detailed comparison of the differences between the ratings of different items.

Table 2 illustrates that the most important items in respect to school facilities for parents who sent their children to public school were, first, number 4: the school has good library services, which was rated at 3.41 with a standard deviation of 1.135; second, number 2: the school has

computer services, which was rated at 3.38 with a standard deviation of 1.138; third was number 5: the school has good laboratories for computers and sciences, rated at 3.25 with a standard deviation of 1.106. On the other hand, the less important items were number 3: the school has good internet services, rated at 2.65 with a standard deviation of 1.101 and number 6: the school has a good theatre, rated at 2.95 with a standard deviation of 1.102.

In regard to parents who sent their children to private school, the most important item was number 2: the school has computer services, which was rated at 4.01 with a standard deviation of 0.943. The second most important item was number 1: the classrooms have a good environment, rated at 3.78 with a standard deviation of 1.091. While the third important factor was number 5: the school has good laboratories for computers and sciences, rated at 3.67 with a standard deviation of 1.075. Number 6, the school has a good theatre, follows this, being rated at 3.44 with a standard deviation of 1.201. The less important items were number 3: the school has a good internet service, rated at 2.91 with a standard deviation of 1.172 and number 4: the school has good library services, rated at 3.32 with a standard deviation of 1.048.

In summary, the most important educational facilities factors that influenced parents to choose a public school are:

- The school has good library services
- The school has computer services
- The school has good laboratories for computers and sciences

While the most important educational facilities factors that influenced parents to choose a private school are:

- The school has computer services
- The classrooms have a good environment (enough lights, comfortable tables and nice carpet, air conditioning).
- The school has good laboratories for computers and sciences.
- The school has a good theatre.

Table 2. Mean, and Std. deviation and Rank for each item related to school facilities

Factors	Public			Private		
	Mean	S.D	R	Mean	S.D	R
1. The classrooms have a good environment (enough lights, comfortable tables and nice carpet, air conditioning)	3.23	1.217	4	3.78	1.091	2
2. The school has computer services	3.38	1.138	2	4.01	0.943	1
3. The school has a good internet service	2.65	1.101	6	2.91	1.172	6
4. The school has good library services	3.41	1.135	1	3.32	1.048	5
5. The school has good laboratories for computers and sciences	3.25	1.106	3	3.67	1.075	3
6. The school has a good theatre.	2.95	1.102	5	3.44	1.201	4

Legend: M = Mean. S.D = Standard Deviation. R = Rank.

Table 3. Mean, standard deviation and Rank for each item related to Physical Education and Sports Activities:

Factors	Public			Private		
	Mean	S.D	R	Mean	S.D	R
1. The school has a good swimming pool	1.95	0.988	4	2.51	1.116	4
2. The school has good indoor games.	2.61	1.234	2	2.98	1.158	2
3. The school has outdoor games	3.46	1.129	1	3.31	1.100	1
4. The school has a good playground including swings and slides	2.37	1.118	3	2.68	1.093	3

Legend: M = Mean. S.D = Standard Deviation. R = Rank.

Physical Education and Sport Activities

This section reports parents’ answers to the sub-question: Does the strength of the physical education and sport activities factor affect parents to enter their children into public or private school in Riyadh City, KSA?

Table 5 details the results for this sub-question and reveals a high level of agreement concerning physical education and sport activities. Participants’ responses are tabulated below with a detailed comparison of differences between their ratings for the various different items.

Table 3 illustrates that there are three important aspects of physical education and sport activities for parents who sent their children to public school: the first was number 3: The school has outdoor games, which was rated at 3.46 with a standard deviation of 1.129. This was followed by number 2: the school has good indoor games, rated at 2.61 with a standard deviation of 1.234. Less important items were number 1: the school has a good swimming pool, which was rated at 1.95 with a standard deviation of 0.988, and number 4: the school has a good playground including swings and slides, which was rated at 2.37 with a standard deviation of 1.118.

In regard to the parents who sent their children to private school, the ranking of items followed the same pattern as for public school parents: number 3, rated at 3.31 with a Standard Deviation of 1.100; number 2, rated at 2.98 with a

standard deviation of 1.158, number 1, rated at 2.51 with a standard deviation of 1.116; and number 4, rated at 2.68 with a standard deviation of 1.093.

In summary, the most important physical education factors that influenced parents to choose a public school or a private school are similar:

- The school has outdoor games.
- The school has good indoor games.

Inferential statistics

Independent samples t-test

The independent samples t-test was used to explore if there are statistically significant differences between the two groups of parents in terms of the school facilities and physical education sport factors and school choice decisions

The School Facilities factor

The Independent Samples t-test revealed that there is a significant difference between parents who chose private schools and parents who chose public schools in respect to attitudes to school facilities: $t(384)=4.425$, $p=0.000$ ($p<0.001$). The private school group showed a higher score of 3.52, compared to the public school category, who had a score of 3.14. The parents’ views about school facilities therefore appear to have a significant effect on their school choices.

Table 4. Results of an independent t test regarding the difference between private and public school choice in respect to the school facilities factor.

school type	N	Mean	Std. Deviation	Std. Error Mean
private	192	3.5200	.79082	.05707
public	194	3.1452	.87090	.06253

School Facilities		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
	Equal variances assumed	3.454	.064	4.425	384	.000	.37478	.08470	.20824	.54131
	Equal variances not assumed			4.427	381.193	.000	.37478	.08466	.20832	.54123

Table 5. Results of an independent t test regarding the difference between private and public school choice in respect to the physical education and sport activities factors

school type	N	Mean	Std. Deviation	Std. Error Mean
private	192	2.7205	.92913	.06705
public	194	2.3127	.94563	.06789

Physical Education and sport activities		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
	Equal variances assumed	.071	.791	4.273	384	.000	.40777	.09543	.22014	.59541
	Equal variances not assumed			4.273	383.980	.000	.40777	.09542	.22015	.59539

The Physical Education and sport activities factor

The t-test results in respect to physical education and sports activities showed that there is a significant difference between parents who chose private schools and parents who chose public schools: $t(384) = 4.273$, $p = 0.000$ ($p < 0.001$). The private school group showed a higher score of 2.72, compared to the public school category, who had a score of 2.31. This explains that the parents' view of Physical Education and sport activities had a significant effect on their school choice.

Overall, therefore, school facilities factors and physical education sport activities factor were statistically significantly more likely to provoke a choice of private school. That mean that the parents believe the school facilities and physical education factor play great role in develop the performance of students for several reasons will be discussed follow section.

6. Discussion of Findings

In this study, two tools were used to collect the data: a questionnaire and a follow-up semi-structured focus group interview. Here, these results of the questionnaires with focus group interview presented in this section will be discussed in relation to the literature review. This will discuss the importance of school facilities factor and physical education in terms of choice of private or public school or reasons given by parents as to why they send their children for the public or private school for the school facilities factor and physical education factor. This issue will be discussed follow sections

School Facilities

School facilities represent an important factor that is relevant when considering parents and their reasons for school choice in the KSA context. Parents perceive that the

education process cannot achieve their ambitions and aims for their children unless pupils are taught in modern, well-equipped buildings where modern technology is utilised. Supporting this assertion, is the need for qualified knowledgeable teachers, who are experienced in the use and delivery of modern technology to disseminate appropriate factual knowledge to pupils, as well as ensuring pupils are correctly taught in its use to permit independent study at home and in the school or public library.

The findings demonstrated that parents perceived this to be one of the essential qualities of schools if they are to stimulate and encourage pupils to attend and effectively learn through taking a pride in their learning environment. Moreover, most parents believed that if such high quality school facilities were made available they would engender a good work-ethic in their pupils, leading towards outstanding academic results. For instance, parents demonstrated a preference for a school that offered specialist classes: Theatre, internet Wi-fi, computer labs, science labs, smart boards, medical care and meeting rooms.

Whilst the factors identified above are considered essential, some parents considered that when evaluating a school in terms of its school facilities, pupils' performance in non-academic aspects was of equal importance. Therefore, cognitive development and human values must also be taken into account in order to nurture the pupil as a whole and not just their academic ability. Therefore, schools with old buildings lacking in modern equipment and a welcoming learning environment, must have elements of risk and disadvantage that can affect pupils' performance, willingness to learn and attendance at school.

The independent samples T-test revealed that the mean of the school facilities factors among parents who chose public schools was 3.14, while the mean in private schools was 3.52. This result also shows that there were significant differences between public schools and private schools in the school facilities factors, at $t(384) = 4.425, p = 0.000$ ($p < 0.001$). In next section reveals the importance of school facilities as a very relevant factor that impacted upon the perceptions of private school parents. In the focus groups interviews, this was supported by Parent 2:1, who stated that:

I have chosen the private school for my son for several reasons: the most important one was the furniture in the school and the technology equipment, because it gives students comfort in the classroom and it helps students to involve and participate in the lesson. It also supports tutors to manage the students. I visited the school, and I found the students very active in learning. In fact, the school furniture reflected the excellence of school.

Additionally, the results of this study showed that KSA parents are concerned about the quality of furniture and the general welcoming environment available in school, because these parents believe that these environmental qualities influence the quality of children's learning attitudes. Hence, these results illustrate that it is perceived that pupils'

willingness to respond positively to the teaching was because of feelings of safety and of being in a 'home from home'.

Findings from the survey and focus group interviews supported one another. For instance, Parent 2.3 indicated the importance of the facilities in the school when stating:

I sent my son to school characterised by modern furniture, such as excellent coloured, comfortable chairs and appropriate air conditioning for the summer time and heat for the winter time. These qualities are very important in classrooms, because it makes the classroom environment welcoming and so successful. For example, my son spends six hours every day in there, so if he is not satisfied and happy he will not learn, because he will feel uncomfortable, want to be at home and be bored.

Such findings as those cited above are consistent with the findings of studies conducted in the US by [51,39 ,26, 18 ,27 ,54] . For instance, Christopher [22], who found that school building design impacts positively on the educational process and pupils' achievement. Furthermore, he took into consideration the ideas, suggestions and perceptions of teachers regarding appropriate designs of schools. These results are supported by a study conducted in some other Arab countries such as Egypt. For example, Amayreh [1] identified positive significant relationships between building quality and academic outcomes, when stating that modern school buildings provide exciting, welcoming high-quality laboratories, a library, resource rooms, theatre equipment with the latest technologies and adequate staff support to allow and encourage pupils to develop their confidence and self-esteem, whilst exploring fact-finding knowledge, improve their skills and increasing co-operative working.

On the other hand, the present study and other previous studies disagree with Veitch's [64] , findings that the quality of furniture and general environment within a school in Canada had no significant effect on children's educational attainment. So, while there is contradictory evidence, all the elements of the school environment must be designed to assist students to fulfil their ambitions and potential in an unthreatening, pleasant, welcoming environment and atmosphere.

Moreover, in the present study it was found that technology is one of the most important of the school facilities factors which stimulate KSA parents to choose a private school. The results of this study revealed the importance of two aspects of technology: first, the importance of using technology in classrooms so that students had more motivation and interaction with teachers during lessons, and, second, the importance of using technology to communicate with parents. For example, some schools allow parents to follow up their children's homework, alert them to any emergency, or if the school is looking for parents to volunteer to participate in some school activity or event.

In the Focus Group interviews, when asked about the top

three reasons for the choice of private or public school, four out of five of private parents indicated that the school facilities factor was important, as well as identifying modern technology as important elements that influenced and attracted them to choose a private school. Hence, the findings from both the survey and the focus group interviews support one another. For instance, Parent 2:5 indicated the importance of using technology during the lesson. He stated that:

Use of technology by the teachers in classrooms is much better than the traditional manner. For example, the teacher who explains an earthquake for the students will use just static images to describe it to them, but when they use computers to explain it through a documentary programme they will attract students to the lesson and it will reinforce the information in them, unlike the traditional manner that made students bored also using technology allow me online access to follow up my son's homework and I can also find out about the school activities, see the list of the names of outstanding students, lists of the names of troublesome students. I usually ask my son to do his homework as it is very convenient for me to contact tutors directly and the school informs me of any emergency with my son. This service has indeed improved the relationship between the parents and school, because it encourages parents to become involved in their children's studies.

These results are also consistent with several previous studies: in the US by ; [55, 61] in Egypt by [53, 4,47], and in Jordan by [45, 31]

Some of the explanations and reasons offered for any decrease in the effectiveness of technology tools upon learner's attainments are primarily related to teachers not having sufficient expertise and experience to use technology in the classroom to deliver knowledge to pupils, in comparison to the knowledge of computers that most pupils have. In addition, is the reported frequency of computer and internet servers crashing, resulting in a loss of valuable work. Similarly, some activities are better delivered through a variety of methods, and/or through what could be termed traditional methods. The onus, therefore, must be upon the school's administration and the teachers to identify which method, or combination of methods, best suits a specific element of teaching and learning. It is equally important to state that some pupils do not have the mental capacity or capability to receive knowledge from delivery through technological means. Hence, there again has to be much flexibility and continuous monitoring to ensure that the most appropriate method, or methods, of delivering teaching are identified for pupils, along with ensuring that teachers gain the appropriate level of expertise and on-going training. It is essential, therefore, that the content of the curriculum is conducive to being delivered via technological tools.

It can be concluded, therefore, that school facilities were the third most important factor to influence parental school choice in this study. As such, a variety of reasons were given

as to which aspects were the most important, such as a welcoming, stimulating learning environment to encourage pupils to attend and want to learn; pleasant working conditions; colourful, comfortable chairs and tables; air conditioning and heating during the colder months; computers with a good internet service and appropriate use of modern technologies, with the acknowledgement that for some academic subjects more traditional methods or a mixture of both methods are more appropriate and effective; ensuring on-going monitoring of individual pupil's progress and that teachers are up-to-date in their training and expertise to keep abreast with pupils and to enable them to choose the most appropriate teaching and learning method; classrooms that are good, sound learning environments through having sufficient appropriate lights, clean pleasant carpeting; a theatre, as well as support from good library services; and good laboratories for computers and the sciences.

In line with the above and previous studies related to pupils' positive learning outcomes is the important role that Physical Education and Sports Activities play in the overall enhancement of the learning process. This then leads on to the last significant factor identified in this study.

Physical Education and Sports Activities

Physical education in school represents a very important element in the educational process and parents pay great attention to this factor in terms of school choice because it has both mental and physical benefits [56]. The independent samples T-test revealed that the mean of the physical education and sports activities factors among parents who chose public school for their children was 2.31, while the mean in private school was 2.72. This result also shows that there were significant differences between public school and private school in the Physical Education and Sports Activities factors, at $t(384) = 4.273, p = 0.000$ ($p < 0.001$) in favour of private schools. This means that the private school parents selected a private school because they believed that there should be a balance between academic attainment and the physical and mental well-being of pupils. Consequently, the most important physical education and sports activities factors that impacted upon parents, influencing their choice of school, were that the school offered good indoor games and outdoor facilities, such as a playground that had a swing and a slide. Thus, the Physical Education and Sports Activities factor has a significant effect on KSA parents' sending their children to private school rather than public school.

The focus group interview results support these findings, all of the participants had chosen private school specifically because of physical education and sports activities in the school. For instance, Parent 2.3 stated that:

I believe the private school is superior to the public school in terms of sport activities because the private school is supported financially and they have flexibility in decision making. This unlike the public school due the instructions of the Ministry of Education, which were a major cause of failure of the public school in

this respect, Thus, the Ministry of Education should increase the financial support and give the head teachers authority to develop sport facilities in schools to compete with the private schools

These results of this study correspond with prior studies, such as, Reference [7] who found that parents certainly gave a great deal of consideration to the provision of physical education and sport in their choice of private school in the KSA, in the expectation of increasing their children's academic achievement, along with the practice of sports activities, which are considered to be very helpful in developing positive qualities in children and protecting them from ill-health. The above notwithstanding, the result of this present study disagrees with some previous studies, especially that of Collins and Snell [23]

This present study's results indicate the importance of sporting activities in the school in terms of health, as children need to practice sport in order to ensure that they reduce the incidence of diseases like obesity and high blood pressure. In addition, the practice of sporting activities in school was perceived as being very helpful and supportive of children in terms of their physical and psychological health. For example, giving children sound sporting activity experience offers them an opportunity for self-expression and the building of their self-confidence, along with a sense of accomplishment whilst interacting socially with team members and the wider community. Thus, KSA parents rank physical education as a very important factor in choosing a school, because they believe the mind and body are one entity, and that anything that happens to one will affect the other. As such, physical education and sports activities must be of importance.

In the focus group interviews, some of the parents emphasised the role and hence the importance of sport activities in preventing some diseases, especially diseases which are common in KSA. Parent 2.5 mentioned that:

I'm striving to select a school that has a strict sports programme to enhance the sports culture in my son, because I realise there are a significant number of diseases threatening Saudi children such as high blood pressure, diabetes, blood pressure, osteoporosis and so on. Schools have an important contribution to make in effecting an improvement in pupils' health and preventing my son from suffering from these modern diseases.

These results and parental observations are in line with previous research in the US [6,66,59,60,58,] , and in the UK [2,24,16] .

Based on the above and this present study's results, the school is seen as an appropriate environment to encourage pupils to participate in physical education activities, because of the impact upon health as well as the enhancement of educational attainment.

This current study also found that there was a relationship between sports activities, and academic achievement,

whereby the practice of sports activities in school increased the ability of pupils in their learning, and thus helped pupils to achieve academic excellence. In addition, it found that sports competitions in school were perceived as having a positive effect on the cognitive abilities of children since sports activities developed critical thinking and problem-solving skills, created dialogue among pupils and encouraged pupils with their acquisition of knowledge. For example, pupils are very keen to know the history of the game, the importance of the game and how their performance in the game can be enhanced.

Three out of five private school participants in the focus group supported the perception that physical education and sports Activities impact positively on pupils in terms of educational aspects. By way of example, Parent 2:3 stated that:

Sports activities became important in school as they stimulated my son in his learning activities and developed some fine qualities in him. For example, they develop leadership, confidence through being taught the basic principles of tolerance, cooperation and respect which are instrumental in strengthening ties and social networks, and promoting peace and justice, and they helped my son to integrate socially and enabled him to be healthy and strengthened his resistance to disease.

In the results of this study, the most frequently cited reason parents offered was that physical education would increase their children's academic achievement. These findings reinforce previous studies conducted in the US by [42,40,56]

Despite the strong relationship between physical activity and cognitive performance suggested in the present study and by some previous researchers, however, some prior studies disagree, including Collins and Snell's [23]

Thus, they concluded that there was no significant enhancement of academic attainment from involvement in physical education.

In summary, this section has discussed the study's findings and compared them with the findings of related previous research conducted in the field of physical education and sports activities. This study corresponds with some prior studies which found that parents perceive that private schools are superior to public schools, because they believe that physical education and sport activities play a key role in the prevention or reduction of modern diseases that are rapidly spreading among children in KSA, viz. high blood pressure, obesity and high blood cholesterol. Further, it established that consideration must be given to the perception that sports activities assist children to develop their cognitive performance and academic achievement.

Physical education and sports activities are very important factors which are taken into consideration when KSA parents select a school for their children. On the other hand, it is equally significant to stress that it was also found that a minority of parents found no specific relationships between

physical education and academic performance. In other words, they perceived it as having no influence or impact upon pupils' performance. Thus, the physical education and sport activities factor did not affect their decision to send their children to private school rather than public school.

7. Conclusions

In summary, therefore, based on this study's findings, the following conclusions were drawn by the researcher.

In this study, the majority of the parents were highly select the private schools for the facilities school factor and physical education sport activities factor, which means they having an appreciation and understanding of the importance of effective the school facilities on students' performance. For instance, parents demonstrated a preference for a school that offered specialist classes: Theatre, internet Wi-fi, computer labs, science labs, smart boards, medical care and meeting rooms. Also sport activities for example out door game indoor game. Consequently the facilities school factor and physical education sport activities factor have several benefits in terms of student achievement, behaviour, attendance and teacher turnover and avoiding the dropping out of school due to the lack of a some facilities.

Furthermore, this study revealed that:

The results revealed that:

- Private school is perceived by parents as being superior to public school in terms of school facilities.
- Private school is perceived by parents as being superior to public school in terms of physical education and sport activities

Data cited in the results would make a considerable contribution towards a clear, in-depth understanding of the current educational provision in KSA and the ways in which it can be enhanced to meet the challenges of the 21st century global economy.

Recommendations

This study coincided and is very much compatible with the KSA Ministry of Education's (MoE) 10 billion Saudi Riyals funding intentions (a) to fulfil its aim to provide effective 21st Century challenging educational teaching and learning processes by developing its existing education provision and (b) identifying ineffective and effective teaching/learning outcomes utilising modern technologies.

To support and contribute towards the MoE's enhancement of the educational opportunities currently being offered.

- School facilities this was based upon many participants identifying that it was essential for KSA pupils to be exposed to modern technologies, stimulating teaching methods, and learning within a pleasant well-resourced environment to fulfil their

potential. Introducing such facilities in all public schools could be achieved by establishing in-house personal development schemes; in-service courses; sharing of 'good practice' between pyramid collaborative working groups of local schools; judged 'outstanding' schools mentoring 'failing' schools by teachers collaborating Also, since the effectiveness of the use of modern technologies was identified, these should be established in all schools because (a) in order to ensure that KSA students, our future work force, will be enabled to compete favourably in global markets, (b) to allow parents access to all aspects of their children's educational progress, as well as the ability of the school to contact parents swiftly as and when needed. If all aspects of their children's educational progress are made available, say every month, to parents as well as teachers, this will help identify achievement or lack of achievement, along with weak and strong administrative points, plus the availability of opportunities for parents to be involved in school activities. Offering such facilities will expose any problems and issues before they become serious or out of hand. The above will encourage a positive partnership between parents and school to overcome them quickly, easily and effectively, along with helping to eradicate unacceptable behaviours and weaknesses in administration/teaching culture. In order for the above to occur it would be necessary for MoE to give financial support to improve the facilities of public schools, which lack modern laboratory facilities and equipment, well-stocked libraries, modern sporting stadiums, and attractive, comfortable learning

- Physical exercise assists in maintaining not only good physical health but also good mental health. Both are essential and desirable, therefore, the Saudi parents surveyed here encourage the MoE to ensure that all public schools are furnished with high quality well-equipped gyms, swimming pools and playing fields. These facilities need to be supported by highly qualified specialist teachers bringing them in line with many facilities offered by private schools. In addition to these essential requirements, it is recommended that local, regional and national sporting leagues and competitions are established to encourage student involvement. This is because ensuring that students participate in physical education will not only have positive effects on their physical well-being, but also positively enhance their psychological health, which can improve their cognitive performance and educational achievement. Therefore, physical education and sports activities (the final important factor affecting school choice identified in this study) is recommended because KSA parents believe that participating in physical

activities would have a positive effect on pupils' health, viz. helping to reduce or eliminate the chance of developing some diseases, such as diabetes, high blood pressure, and heart disease, which can be related to obesity and lack of physical exercise. Further, parents believe that taking part in these activities not only enhances the sense of being a team member, but is commensurate with these parental desires and ambitions to ensure their children are given every possible opportunity to compete effectively in modern life.

REFERENCES

- [1] Aamayreh, M. (2011) The Modern school, Message of Teacher. 43, 38-42 (In Arabic)
- [2] Armstrong, N., & McManus, A. (1994). Children's fitness and physical activity. A challenge for physical education. The British Journal of Physical Education, 25(2), 20- 26.
- [3] Alassaf, A. (2010) Introduction to Research in Behavioural Sciences, Riyadh: Dar Alzharia (In Arabic)
- [4] Abdul Qadir, N. (2008) The effectiveness of the program in e-learning for the development of the production skills Science lessons and awareness. Educational and Psychological Studies. 2,113-150. (In Arabic)
- [5] Al Da'alj, M. (2003) Impact of the using the computer in performance of student in Math. Unpublished Master Dissertation. University of King Saud. Riyadh City. (In Arabic)
- [6] Alexandrov AA, Isakova G, Maslennikova GY. Prevention of atherosclerosis among 11-year old school children in two Moscow administrative districts. Health Psychology 1988; 7 (Supplement):247-52
- [7] Al Jaji, A. (2002) The perspectives of parents towered private schools in Saudi Arabia. Journal of Immam Mohammed bin Saudi University, 37. 563-597 (In Arabic)
- [8] Al Masloh, M. (1992) The impact of the use of computers in teaching science on students in secondary school Madinah. Unpublished Master Dissertation. University of King Abdul-Aziz. Medina City. (In Arabic)
- [9] Al Mari, H. Ziab ,A. (2012) Perception Of High School Students in Kuwait Regarding Their Knowledge about Physical Education and The Role Of H
- [10] Al-Mousa, A. (2003) E-Learning, characteristics, benefits, drawbacks. Riyadh: Imam Mohammed bin Saud University (In Arabic)
- [11] Al-Mutairi,S.(1998) Impact of using of computer on secondary school student performance. Unpublished Master Dissertation. University of King Saud. Riyadh. (In Arabic)
- [12] Aloude,K. 2000., The conference of Future school. Abha, 2005.Saudi Arabia.(In Arabic)
- [13] Aweys, M. (2006) The Role of Sport Activities in Arabic schools. Doha . Qatar (In Arabic)
- [14] Al Shimri , A. (1999). The factors influence the parents to choice the private school. King Saud.(In Arabic)
- [15] Al Twaim, A. (2000) Effect of using computers on the performance of primary school students. Unpublished Master Dissertation. University of King Saud. Riyadh. (In Arabic)
- [16] Arab League. (1964) Importance of Modernizing school buildings .Conference of the education Ministers of Arabic Countries, Baghdad. Cairo. 1964. 22-30. (In Arabic)
- [17] Brownell, K. D., & Kaye, F. S. (1982). A school based behaviour modification, nutrition education, and physical activity program for obese children. American Journal of Clinical Nutrition, 35 (2), 277-283.
- [18] Bailey, R. (2006). Physical education and sport in schools: A review of benefits and outcomes. Journal of school health, 76(8), 397-401.
- [19] Cash, C. (1993). A Study of the Relationship Between School Building Condition and Student Achievement and Behaviour. Blacksburg, VA: unpublished doctoral dissertation, Virginia Polytechnic Institute and State University. pp. 1-124.
- [20] Carlson, S.A., Fulton, J.E., Lee, S. M., Maynard, L. M. Brown, D. R., Kohl, H. W., et al.,(2008). Physical education and academic achievement in elementary school: Data from the early childhood longitudinal study. American Journal of Public Health. 98(4): 721-727
- [21] Centers for Disease Control and Prevention. (2004). School health index: A self-assessment and planning guide. Elementary school version Retrieved 12/5/2013 from: <http://www.cdc.gov/nccdphp/dash/SHI/index.htm>
- [22] Christopher. G. (1991). Effect of architecture on education. CEFPI's Educational Facility Planner 29 (1). 10-12
- [23] Collins, A. and M. C. Snell. 2000. "Parental Preferences and Choice of School."Applied Economics, 32(7), pp. 803-813.
- [24] Cohen, L., Manion, L., Morrison, K. & Bell, R. (2011) Research methods in education, 7th edition. London: Routledge.
- [25] Daley, A. (2002). Exercise therapy and mental health in clinical populations: Is exercise therapy a worthwhile intervention? Advances in Psychiatric Treatment, 8, 262-270.
- [26] Darder. W. W. & Apshur, M. S. (1992), Building Condition and Classroom Achievement. CEFPI's Journal, 9-11.
- [27] Dressler, Fletcher B. (1991) American Schoolhouses. United States Bureau of Education Bulletin 1910. Washington, D.C.: Government Printing Office, 1911.
- [28] Earthman, G.I. (2004). Prioritization of 31 criteria for school building adequacy. Baltimore, MD: American Civil Liberties Union Foundation of Maryland.
- [29] Earthman, G. I., & Lemasters, L. (1996). Review of the research on the relationship between school buildings, student achievement, and student behavior. Paper presented at the annual meeting of the Council of Educational Facility Planners International. Tarpon, Florida, October, 1996. (ED416666).
- [30] Economic Journal (2014) School Building Expenses. 11 March. Retrieved, 30/5/2014 from: http://www.aleqt.com/2014/05/26/article_851891.

- [31] Evans, G. W., & English, K. (2002). The environment of poverty: Multiple stressor exposure, psychophysiological stress, and socioemotional adjustment. *Child Development*, 73, 1238–1248.
- [32] Fakhruddin, K. Nasser, U. & Jihad, M. (2006) General teaching methods in the information age, Dar Alktab. UAM (In Arabic)
- [33] Faramaw, A (2003) The role of technology in the development of writing in the disabled. Egypt: Egyptian Center for Social Sciences Information Resources. [In Arabic]
- [34] Green, C and Riley, C (2012) Physical Activity and childhood Obesity strategies and solutions for school and Parents. *Physical Activity*, 4, 915-919
- [35] Goulding, M., & Kyriacou C. (2008). The role of ICTs in learning algebra: a systematic review. *Research in Mathematics Education*, 10(1), 93-94.
- [36] Heschone Mahone Group. (1999). Daylighting in schools: An investigation into the relationship between daylighting and human performance. Sacramento, CA: California Board for Energy
- [37] Higgins, S.; Hall, E.; Wall, K.; Woolner, P.; & McCaughey, C. (2005). The impact of school environments: A literature review. London, United Kingdom: The Design Council. Retrieved, 23/6/2013 from [http://www.designcouncil.org.uk/resources/assets/assets/pdf/Publications/The%20Impact%](http://www.designcouncil.org.uk/resources/assets/assets/pdf/Publications/The%20Impact%20)
- [38] International Office of educational Geneva, (1957) The current of building school. The international Conference twenty of General Education in Geneva. Cairo: Ministry of Education .40 (In Arabic)
- [39] Jago, E. and K. Tanner (1999). Influence of the School Facility on Student Achievement: Lighting; Colour. Athens, Georgia: Department of Educational Leadership, University of Georgia. Retrieved, 14/8/2013 from: <http://www.coe.uga.edu/sdpl/researchabstracts/visual/html>
- [40] Jensen, E. (1998). Teaching with the brain in mind. Alexandria, VA: Association for Supervision and Curriculum Development.
- [41] Jomtien, C. (1990) Securing the needs of basic education. International conference around the Education for all. Thailand, March 1990, 5-9
- [42] Kirkendall, D. R (1985). Effects of physical activity on intellectual development and academic performance. In G. Stull & H. Eckert (Eds.), *Effects of physical activity on children* (pp, 49-63). Champaign, IL: Human Kinetics.
- [43] Kitzinger J. (1995) 'Introducing focus groups', *British Medical Journal* 311: 299-302.
- [44] Knez and Kers, (2000) Effects of Indoor Lighting, Gender and Age on Mood and Cognitive Performance, *Environment and Behavior*, 32, 6, 817-831.
- [45] Kosakowski, J. (1998). The benefits of information technology. [Internet], 1998 Retrieved, 7/12/2013 from: <http://chiron.valdosta.edu/whuitt/files/techbenefits.html>
- [46] Luckiesh, M.t & Moss, F. K (1940). Effects of classroom lighting upon educational progress and visual welfare of school children. *Illumination Engineering*, 915-938.
- [47] Mahmoud, W. and Abdul Rashid, B. (2009) The role of technology education in the educational process and the development of thinking. Yemen: University of Aden. (In Arabic)
- [48] Martens, R. (1996). Turning kids on to physical activity for a lifetime. *Quest*, 48, 303-310.
- [49] Malina RM, Koziel S, Bielicki T. 1999. Variation in subcutaneous adipose tissue distribution associated with age, sex, and maturation. *Am J Hum Biol* 11:189–200.
- [50] Mayron, L. W., Ott, J., Nations, R. and Mayron, E. L. (1974). Light, radiation, and academic behaviour. *Academic Therapy*, 10(1), 33–47.
- [51] McGuffey, C. W. & Brown. C. L. (1978). The impact of school building age on school achievement in Georgia. *CEFPI Journal*. 16.6 - 9.
- [52] McGuffey, C. (1982). Facilities. In Walbert, H. J. (Ed.) *Improving educational standards and productivity*. Berkeley, CA: McCutchan, 237-288.
- [53] Mohammed, A. (1997) The role of parents in develop the educational process in perspective of the head teachers. Master Dissertation. University of Aden , Yemen (In Arabic)
- [54] O'Neil, D. J., & Oates, A. D. (2000). The impact of school facilities on student achievement, behavior, attendance, and teacher turnover rate in central Texas middle schools. Retrieved 12/8/2013 from <http://www.shwgroup.com/Research/O%27Neill%20Article-3rd.pdf>
- [55] Robert, J. (2005) "An Evaluation of Teacher Training for Triarchic Instruction and Assessment" Retrieved 12/1/2013 from <http://www.shwgroup.com/Research/O%27Neill%20Article-3rd.pdf>
- [56] Sallis, J. F., McKenzie, T. L., Kolody, B., Lewis, M., Marshall, S., & Rosengard, P. (1999). Effects of health-related physical education on academic achievement: Project SPARK. *Research quarterly for exercise and sport*, 70(2), 127-134.
- [57] Saudi Press Agency, (2006) Obesity among Saudi school students. Retrieved 10/9/2014 from <http://www.spa.gov.sa/details.php?id=368046>
- [58] Strong, W.B., Malina, R.M., Bliemke, C. J.R., Daniels, S.R., Dishman, R.K., Gutin, B., et al., (2005). Evidence based physical activity for school-age youth. *Journal of Pediatrics*. 146:732-737.
- [59] Sibley, B. A., & Etnier, J. L. (2003). The relationship between physical activity and cognition in children: a meta-analysis. *Pediatric Exercise Science*, 15(3), 243-256.
- [60] Talbot, M. (2001). The case for physical education. *World summit on Physical Education*.—Berlin, 39.
- [61] Tobolka, D. (2006). Connecting teachers and parents through the Internet. *Tech Directions*, 66(5), 24-26.
- [62] U.S. Department of Health and Human Services. *Healthy People 2010*. (Conference Edition, in Two Volumes). Washington, DC; January 2000.
- [63] USA Office of Education Research and Improvement, 2000; NEA, Retrieved, 14/10/2013 from

<https://www2.ed.gov/pubs/TeachersGuide/oeri.html>

- [64] Veitch, Revisiting the Performance and Mood Effects of Information About Lighting and Fluorescent Lamp Type, *Journal of Environmental Psychology*, 17, 3, 253-262, 1997.
- [65] Wisker, G. (2007). *The postgraduate research handbook: Succeed with your MA, MPhil, EdD and PhD*. Palgrave Macmillan.
- [66] Wimmer, R., & Dominick, J. (2000). *Mass media research: An introduction* (6th ed.). Belmont, Calif: London: Wadsworth
- [67] World Health Organization. (1991). *Consultation on strategies for implementing comprehensive school health education/promotion programs*. Comprehensive school health education: Suggested guidelines for action. Geneva:
- [68] Yusuf, M & Afolabi, A. (2010) Effect of computer assisted instruction. *Dar Al Madinah* (In Arabic)