

**Study of the Impact of Students' Access to Internet and its  
Impacts on their Relationship with their Teachers and on  
their Academic Engagement: A Case Study of four  
Schools in UAE**

دراسة تأثير استخدام الطلاب للإنترنت وتأثير هذا الاستخدام على علاقتهم  
بأساتذتهم ومشاركتهم الأكاديمية: أربع مدارس في الدولة كنموذج

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## **Abstract**

This study aims to analyze the impact of internet use on the academic performance of students and student-teacher relationship. The relationship of the student with teachers is significant in providing academic help, guidance, and directions. However, the trends are changing as internet is taking over the role of teachers. The study analyses the case of four schools and findings suggest that internet has a negative impact on student's teacher relationship thus adversely influencing the academic performance. The study recommends the need for designing academic structure that offers more connection of student with the teacher and reduces the need for internet use for any kind of help and guidance.

## المخلص

تتناول الدراسة أثر استخدام الانترنت على الطلاب وعلاقتهم بمعلميهم، ومن ثم أثر ذلك على التحصيل الأكاديمي للطلاب. حيث أن لعلاقة الطلاب بالمعلمين أثر واضح على تحصيلهم الأكاديمي، وإرشادهم وتوجيههم. وبما أن الانترنت حالياً قد يحل محل المعلمين، فإن هذه الدراسة تلقي الضوء على أربع مدارس خاصة في دولة الإمارات العربية المتحدة، وتبين النتائج الأثر السلبى للانترنت على علاقة الطلاب بالمعلمين، وبالتالي على التحصيل الأكاديمي للطلاب.

توصي الدراسة بالحاجة الملحة إلى إنشاء طرق تواصل متنوعة بين الطلاب والمعلمين وتقليل الحاجة لاستخدام الانترنت قدر المستطاع.

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# **1. Introduction**

## **1.1. Background of the Study**

Student-teacher relationship has a significant importance in the academic as well as social lives of students. A teacher has authority over the students because of his superiority in knowledge, position or status and supremacy. Student-teacher relationships have lifelong effects on student's academic, professional and social growth. The students who have good, constructive and helpful relations with their teachers are more successful in professional and social life than those with rather differing relations (Adeyele & Yusuff, 2012). The student, who is in constructive communication with their teacher on the frequent basis, has interpersonal relation with the teacher and get frequent guidance and appreciation then he is predicted to be more trustful of a teacher. These students present more seriousness to the subject matter that is delivered to them, show good decorum and ethical behavior. In addition, these students are more likely to achieve distinction in studies. Hence good student-teacher relationships, engage students in the learning process and encourage their longing for more and more knowledge especially in the subject matter of their interest and taste (Rimm-Kaufman & Hamre, 2010).

In the past few decades' typical student-teacher relationship has transitioned into more open and modern type. The paradigm of student-teacher relationship has shifted from punishment intervention based on prevention-based, through the establishment of school communities. In these communities, ethics and norms of student-teacher relationship inside and outside of the classroom are created along with academic schedules (Banks, et al., 2005). In early times teachers used Pavlov's classical conditioning method to attain or enforce a desirable behavior in students. With so many advancements and awareness students, today are not that easy to manipulate. Today teachers are required to be more open and flexible according to students' temperaments and mind-sets. Yet still in many typical education institutes particularly state-owned institutes' teachers use their authority and teaching status to achieve their teaching goals other than understanding their learning their students' behaviors and then applying suitable modern teaching techniques. Banks, et al. (2005) noted that result-oriented teaching doesn't

only depend on effective curriculum but also on students' academic and social motivation and continuous engagement from teachers in students' lives.

In today's world, academic achievement minus the social or professional development is of no use. And constructive and positive student-teacher relationship plays a vital role in building students' social and professional attitudes. According to Hattie, (2007) quality of the student-teacher relationship is one of the significant influencers on knowledge accomplishments. And many studies of the past are the evidence of literacy and development through positive student-teacher relationship. For example, Roorda et al. (2011) associates excellence of student-teacher relationship with learning drive in students, Cornelius-White (2007) links positive student-teacher relationship increase in student engagement and reduction in troublesome behaviour and Spilt et al. (2012) states that negative or uncooperative student-teacher relationship results in conflicted behaviours and poor performance of students.

There are many factors that affect this student-teacher relationship in today's modern and advanced world. One of these is the use of the internet. Today world is enjoying developments in advanced technologies of communication. The ever updating and upgrading technology has reduced the whole world into a 'Global Village'. But as every invention has its negative effects, technology too has its evils as well as of its perks. Advanced communication technologies where can help students a lot in being informed, keeping up the world and enlightened. It can also be the cause of damaging young minds and thinking abilities. Today users of internet at the student age are mostly using it be connected to social networking sites or SNSs (Harb, 2011).

Prominent social networking sites that are used all over the globe are Facebook, WhatsApp, and Twitter. These sites are used to interact with all types of one's relationships. Almost two-thirds of the world's population that is using the internet, use networking sites as communication and connection tool. Social networking sites (SNSs) are online forums and communities where people can communicate with each other on topics of common mutual interests, whether for the professional, personal or academic purpose (Spilt et al., 2012).

There exists a direct relation between internet usage and academics of any student. The increasing use of internet and its related technologies have brought a flood of opportunities for improving methods and techniques of knowledge gain. Before the internet and before all these advanced and quick ways of information, the teacher was the only source of knowledge besides

books. And once the lecture was delivered it could not be accessed again. Modern techniques like e-learning, distance learning, and virtual lectures etc. use internet resources as a source of information and means of communication (Harb, 2011).

Previous studies and research have proved that revolution of the internet has great influence on accomplishments and behaviors of students and the routine and character of educators has changed and improved (Giles, 2009). Kelly et al., (2007) characterize this paradigm shift of change in teacher's methods as, from student-teacher to teacher-facilitator framework. The Internet provides incomparable connection to the large population of students, and having them participate through a rather accustomed channel can prove to be a very effective method to transfer information and knowledge of different sorts e.g. academic routines, schedules, and news. It also provides teachers another effective and rather an enjoyable way to communicate with the students. This new method of communication also enables the educators to have discussions and get reviews from the students they teach.

This development of internet and its use in education system gives birth to some interesting questions about student-teacher connections on SNSs and their influence on the student-teacher relationship in practical life and alternatively the effect of student-teacher relationship on student-teacher connections on SNSs. The very informal and frank tone of SNS communication can result in many undesirable outcomes in the student-teacher relationship, that is why in many countries, communication via social networking sites among students and teachers has prohibited altogether (Spilt et al., 2012).

## **1.2. Statement of Problem**

In general experts and academics have extensively researched the student-teacher relationships inside the classroom. These studies have examined different aspects of the student-teacher relationship and compared the effectiveness of each of them. They studied the effects of different personalities of both students and of teachers on student-teacher relationship. the findings from these studies are based on demographical factors as gender, age, and culture. This study has investigated one of the eternal factors affecting student-teacher relationship which is the use of the internet. Many of the studies done earlier that examines the effects of internet use on the student-teacher relationship are very comprehensive or have numerous purposes and these studies do not give enough consideration to what students' opinion on the matter. This dissertation focuses dominantly on the interpersonal and emotional aspects of the

student-teacher relationship. Student-teacher relationship can have different outcomes in lives of a student, depending on the quality of this relationship. The positive outcomes of good student-teacher relationship might be self-motivation, academic engagement, and social and professional development.

Almost no student of this modern world can escape the use of the internet, so it has significant involvement in their lives. Their use of internet has different impacts on their social relationships one of them being a student-teacher relationship. Also, the use of internet also affects their academic engagement and these effects of this impact can both be positive and negative.

### **1.3. Purpose of the Study**

The purpose of this study is to conduct an in-depth analysis of student-teacher relationship in order to investigate its impacts on students' academic engagement. The study investigates the effects of student-teacher relationship on students' academic engagement and the impacts of the internet on the student-teacher relationship as well as on academics of a student. The study aims to investigate the interpersonal feelings and connections that students have toward their teachers and interpersonal feelings of teachers towards their students. And in what way these feelings and connections are affected by the communication and connection of students and teachers via internet resources.

#### **1.3.1. Objectives of the Study**

- To examine the significance of student-teacher relationship and students' academic engagement
- To examine the impacts of internet on student-teacher relationship and academic performance
- To correlate the samples and recommend strategies for academic policies for future use

### **1.4. Rationale of the Study**

The study has significant importance in the field of education. Student-teacher relationships are foremost in any discussion relating to the field of education. Education is the behavioral management field of study that offers knowledge and skills required to understand, define and

control students' inspiring behaviors, inside and outside of the classrooms. So, the study of student-teacher relationship has great importance for the students, academics, and scholars of the Education field of study.

The research on the student-teacher relationship and effects of social networks on this relationship is a very important as a topic of research itself. The ever-increasing use of social networking sites by students and teachers demands the investigation of its impacts on social lives and relationship of students and on their academics. And there is not very much research already done on these issues. The research and studies that are available have the very wide subject matter or have multiple purposes. This study is novel in its specific emphasis on particular aspects of the use of social networking sites that concern the relationship of the student with their teachers. While much research available focused on impacts of social networking sites on students and teachers. Yet these previous studies have provided different sources of information that backs this study.

This study also has a lot of significance in the context of United Arab Emirates (UAE), because of the fact that there is almost zero research done pertaining to subject matter of this research. The analysis and findings of this research will benefit both researchers and the educators of UAE. There also are many implications of this study for the administrators and policymakers of educational institutes. The negative of positives findings of this research can help administrators formulate the policies about the communication and connection of students and teachers via social networking sites. This study also has significant importance for future researchers of this subject matter. The findings and conclusions of this study will act as a secondary source of information and literature for the future researchers.

## **1.5. Research Hypotheses**

H1: Teacher-student relationship has a significant relationship with the academic engagement of student in schools.

H2: Internet has a moderating impact on students' Academic engagement and teacher's student relationship in schools.

Teachers possess enough knowledge and experience in the subject matter that qualifies them to be the teachers. Students normally follow the teachers' instructions because students have trust in their teachers. They relate to their teachers and have respect for them.

Having positive communication and connection between the teacher and the students results in a good relationship between them that makes students more engaged in their academics.

## **1.6. Structure of Dissertation**

This dissertation is organized into five chapters excluding the abstract and bibliography. The 1<sup>st</sup> chapter that titled 'introduction; is designed to give the brief context of the study. Explain the problem statement and purpose and significance of this study. This chapter also formulates research question and hypothesis of this study.

The second chapter reviews the available literature on the subject matter of this dissertation, explains and defines different terms used in this dissertation that formulates the conceptual framework of this study and also formulates the theoretical framework of this study that defines and explains relative theories of this study. The third chapter is designed to explore the overall methodology of this study. Research philosophy, design, methods of data collection and methods of data analysis and population and sampling is explained in this chapter. This chapter will also explain the instrumentation of this study the instruments used and their reliability and validity will be explained in this chapter. It will also describe the computer software used in the analysis of data collection. This chapter also illustrates the ethical considerations of this study considered before data collection. The fourth chapter is the results and findings section. It will explain in detail the results and findings of the qualitative and quantitative data analysis. It also includes the discussion of findings of this study with the findings of previous studies. Chapter five incorporates the summary, key findings, recommendations, implications, limitations, the scope for the future researchers and the conclusion of the study.

## 2. Literature Review

This chapter includes the theoretical framework of this study and the review of the related literature on the subject matter of this dissertation. Literature review reviews and analyze the findings and methodologies of previous studies in the subject matter of this research and tries to establish the ideas, situations, and concepts for this study

### 2.1. Theoretical Framework

In a theoretical framework, three theories of social sciences are discussed that explains the three objectives of this dissertation. The description of all three theories explains the impact of student-teacher relationship and internet on students' academic engagement. Which serves as a theoretical evidence for this dissertation and supports its objectives.

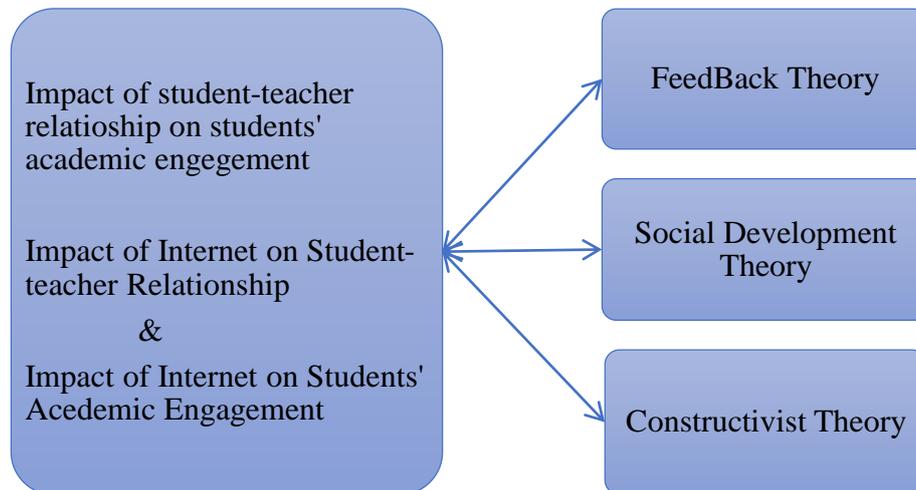


Figure 2.1-1: Theoretical Approach to Study

#### 2.1.1. Feedback theory

According to Pelling and White (2009), Feedback represents a critical tool that is adapted for enhancing the learning process. This exists among the students and teachers, students and students, students and schools providing a channel of communication between all parties in an education system. The essence of feedback can be described in multiple areas which include workplaces Roca and Gagné (2008) and in clinical studies Van de Ridder et al. (2008). In the education sector which is the primary focus of this paper, students require providing feedback to their teachers to ensure that the teachers can be able to adjust their teaching pace and teaching materials for suiting their student's needs. Students can equally offer feedback to their peers to

ensure that they may coordinate with each other on different projects and assignments. As noted by Roorda et al. (2011), students can often offer feedbacks to their schools for the sake of devising policies and regulations for accommodating their learner's needs such as achieving more democratic atmospheres. Ultimately, feedbacks generate a plausible balance among the different stakeholders in a school system and assisting them in operating in a stabilized equilibrium (Pianta et al., 2012). This is affirmed by Martin and Dowson (2009) who noted that feedback represents one of the most potent influences on the learning and achievement process and can be adopted in enhancing an overall effectiveness in classrooms. In this case, the significance of feedback is equally broadly praised in the agile but vibrant relationship between the supervisors and other students.

There are multiple feedback models that have been postulated which include linear, cyclic, and connected models (Shute, 2008). In regard to the linear model, it demonstrates on the extent in which a simple relationship between the provider of the feedback and the receiver of the feedback. This is contrary to a cyclic model which demonstrates that the dialogue between learners and teachers is critical to the success of learning. As noted by Huxham (2007), the ideal feature of a feedback is oriented on its capacity of consistently maintaining all components in check at an optimal point. Lastly, the connected model takes into consideration of the growth of a student's learning experience towards the process of integrating knowledge acquisition from the teachers and from peers appreciating that learning is a social process. The relevance of this theory to the current topic of study can be attributed to its relationship between feedback, success of an education system, media for provision of feedback as critical factors between the teacher and student's relationships. As noted by Pianta et al. (2012), the emergence of internet ensures that the relationship between the teachers and students feedback are posted promptly, not limited by venue, and members having a potential of joining conversations from any point they feel to be ideal. Hence, the feedback theory can be adapted to demonstrate the pros and cons of adopting internet to the relationship between the teachers and students. For instance, Mazer et al. (2007) evaluated the communication patterns between the students and their teachers on Facebook for developing guidelines for effective dialogue on social networking sites. Their findings demonstrate that privacy, respect and distance are areas for caution when it comes to the issues of social networking sites communication at the school level.

### **2.1.2. Social Development Theory**

According to Roth and Lee (2007), the major theme of Vygotsky's theoretical framework is that the social interaction plays a significant role in the development of cognition. The theory hypothesizes that all function in the child cultural development is in existence in social levels and later in individual levels, between individuals (inter-psychological) and later inside an individual (intra-psychological). Additionally, Fox and Riconscente (2008) argued that another aspect of the Vygotsky's theory could be attributed to the fact that the potential for cognitive development is dependent on the zone of proximal development. This is identified as a level of development attained in an event the children actively engage in the social behaviors. Ideally, an overall development of the zone of proximal development is dependent on a comprehensive social interaction. Fernyhough (2008) argued that the range of skill that can be established with the adult guidance of peer collaboration is normally exceeding what can be attained individually. Hence, this theory explains the concept of consciousness as the end product of the socialization process. Similarly, the use of social networking sites in interactions between the learners and teachers is a social practice whose success is dependent on the extent in which consciousness is integrated into the interaction.

According to Traxler (2009), in the current practice, the learners have gained capacities of using computers, mobile technologies, having access to internet and adoption of course management systems for their coursework and sending instant messages. All these areas are critical in social influences and interaction on cognitive development as highlighted in the Vygotsky's theory. As noted by Bovill et al. (2011), students are supposed to play an active role in the learning process. In this case, the traditional method of teaching is not adopted as both students and teachers play a reciprocal role to one another.

The social development theory is ideal for the area of focus in this study. The use of the internet can be used as a determinant of the instructional design composed for encouraging or discouraging the interaction and collaboration of students. The consistent culture and traditions within the environment offer an immense contribution to the cognitive processes of learners. Also, in context of Zone of Proximal Development which represents the second concept of the theory, it demonstrates the extent in which the social interaction between the teachers and learners through the internet can contribute to development guided by a competent individual. As noted by Shabani et al. (2010), this represents the gap between what the learners could learn independently and what they cannot learn without the assistance of others. It is this gap that is filled by the use of internet and other facets of modern technology. Additionally, Mills (2011)

noted that the social development theory dominant framework is founded on the capacity of social interaction playing a critical role in cognition development. The teachers and student's interactions could be implemented through scaffolding with the interface between the learners and teachers taking the form of participation. This means that the students must actively participate for the sake of creating a potent learning environment. They must be in a position of reciprocating the learning process by offering reactions, comments or feedback to their educators.

### **2.1.3. Constructivist theory**

According to Woo and Reeves (2007), the social constructivist theory demonstrates on the extent in which and reasons why social contacts and interaction are critical for learning. The concept constructivism and social constructivism are interchangeably employed and included in the generic concept constructivism by Gordon (2009). This concept forms the proposition that every person mentally constructs the world of experience through cognitive processes while at the same time social constructivism has a social instead of individual focus. According to Yilmaz (2008), the constructivist theory generates the foundation used in appreciating the extent in which internet usage emerges from a reciprocal relationship between individual factors, their behaviors, and the environment. Hence, adopting the theory in the context of internet use, it is worth hypothesizing that learning about internet use offers fresh insights, which can guide adoption of best practice in internet use. The emergence of new technology and internet leads to the eruption of new ways of the internet (Gordon, 2009). In this case, by new thinking and new self-concept teachers and students may embark on using the internet in different ways.

The constructivist theory is built on the Expectation Discomfort Theory and the Channel Expansion Theory that had been developed in explaining the impacts of learning as it relates to internet use. For instance, Taylor (2008) demonstrated that the expectation discomfort theory highlights that exposure to information relating to specific internet technology or environment leads to beliefs or cognition regarding the technology. On the other hand, the channel expansion theory demonstrates the ideal communication media that can be used on internet. Hence, the constructivist theory can be used in the current study in evaluating the relationship between teachers and students, and the role of the internet. This is since the constructivist theory highlights on the need of addressing the issues of how learners naturally learn best. The modern technology tends to support these attempts provided it is employed appropriately by the

instructor. Also, the environment of multidimensional interaction among the instructors, learners, and others in the cyberspace facilitates the learners in joining a cycle of constructing their truths and later testing them against the realities of others and their environment. As noted by Risse (2007), the social constructivism stresses to the idea that learning is a social activity or practice that occur in an event people work collaboratively. In this case, in teacher-student relationships, learners tend to gather knowledge for the sake of internalizing from distinct sources in their environment. These sources can be inclusive of electronic and print sources, first-hand experiences and often a teacher in the traditional role of knowledge provider. Nevertheless, the role of a teacher ought not to be limited to that of the provider of knowledge but should equally be inclusive of facets of coaching, guiding and facilitating. This means that the use of the internet can positively or negatively impact the existing relationship between the teachers and students.

## **2.2. Review of the Related Literature**

### **2.2.1. Teacher-Student Relationship**

In a relationship between the teachers and students, teachers play a critical role in the trajectory of students in the entire formal schooling experience (Jeynes, 2007). Despite the majority of research regarding teacher-student relationships having evaluated on the elementary years of schooling, teachers are supposed to leverage on the opportunity of supporting students' academic and social development at all levels of their schooling. According to Roorda et al. (2011), in line with the attachment theory, a positive teacher-student relationship facilitates the students assuming feelings of safety and security in their learning environments and offering to scaffold for their critical social and academic skills. Ideally, teachers who are involved in supporting their students in the learning environment have a potential of positively impacting their social and academic outcomes which is fundamental for the long-term trajectory of school and eventually their employment opportunities. Additionally, Baker et al. (2008) argued that in an event where students form positive bonds with learners, classrooms are perceived as having supportive spaces where learners can actively engage each other academically and socially productive avenues. In this context, the positive teacher-student relationships are characterized by the presence of closeness, warmth, and positivity. To affirm this analogy, Cox and Williams (2008) argued that students had a positive relationship with their teachers adopt them as a secure base from which they leverage on exploring the classroom, school setting in both academically and socially, to assume academic challenges, and operate on social-

emotional development. This is inclusive of peer's relationships, development of self-esteem and self-concept. Through the already established secured relationship, learners learn about socially typical behaviors, academic expectations, and the extent to which they achieve their overall aspirations.

According to Alexander, Ellis, & Mendoza-Denton (2007), the nature of the student-teacher relationship is different in different cultures e.g. in Australia teachers are believed to be the equals of students but have more knowledge than the students. In countries like China and India teachers are believed to have responsibilities like parents, to guide students' lives (Zhan & Lee, 2004). In America, student-teacher relationship is very friendly in general. Middle Eastern countries like U.A.E and Saudi Arabia students and teachers have a very formal relationship. This formal relationship is because of the intimidating and coercive power of teachers. Students believe that teacher has the power to punish them, as he feels necessary, following the boundaries of course. This power comes from the rules, regulations, and culture that teacher can punish students and this power has the negative effects on student-teacher relationship and students' ability to perform (Januarti & Ghozali, 2013). Only a few students believe that this kind of power actually results in their success (Teven & Herring, 2005).

Usually, respect and trust are the base of a student-teacher relationship. Trust and respect in students for their teachers is because of the fact that teacher is professional and socially superior. But this formality in a student-teacher relationship is changing now due to many factors. The student-teacher relationship is defined by two factors; firstly, personal and social backgrounds of both teachers and students affect their relationship as ethnicity, faith and other socio-economic statuses (Zhan & Le, 2004). Other social factors include age difference and the gender of both teachers and students (Goodboy & Bolkan, 2011). Secondly, abilities of teacher also affect their relationship with their students. E.g. their level of intelligence, subject expert knowledge, general knowledge, experience their ability to be up-to-date and use new teaching techniques (Teven & Herring, 2005).

There are many mixed views of different authors on ways that student-teacher relationship impacts students' academic engagements. According to Richmond et al., (1987) good student-teacher relationship does not guarantee students' high achievements in academics and society. Contrary to Richmond many studies as Adeyele & Yusuff, (2012), Finn (2012) and Lessard et al. (2010) confirm that good and healthy student-teacher relationships greatly part in improving the performance of students and their academic and social outcomes.

### **2.2.2. Role of Internet in Student-Teacher relationship**

To understand the role of the internet in teacher-student relationships, it is ideal to evaluate the role of social capital. Adopting the definition of Steinfield et al. (2008), social capital demonstrates the manner in which individuals can be connected through social networks and the adoption of norms of reciprocity and trustworthiness as the need arises. All these issues of the internet are directly related to social capital and interaction between all involved individuals in an education sector. Teachers in the educational institutions tend to direct the education of students and might often draw on multiple subjects which include reading writing, mathematics, science, and history (Penue et al., 2009).

As demonstrated by Durlak et al. (2011), one of the ideal factors contributing to an optimum student teacher learning is the capacity of developing an ideal relationship with the students. This is identified as the relationship that ultimately plays the role of a motivator to the parties involved in the learning experience. The relationship is inclusive of incorporating different techniques strategically designed for the sake of enabling teachers possessing different personalities, varied teaching styles and those teaching in distinct fields for developing human relationship skills that can guide in increasing the student's efforts and participation. To affirm this, Leithwood et al. (2010) noted that the teacher-student relationship had been demonstrated as a critical influence on the entire school and behavioral adjustment.

Additionally, Durlak et al. (2011) pointed out that the teacher-student relationship has a direct association with the behavioral competence and better alignment in the schools. This is inclusive of the teacher-student relationships having a direct relationship with unfavorable outcomes which include negative school attitude, school avoidance, and hostile aggression. Particularly, the teachers who are involved in the provision of emotional supports, rewarding competence and promoting self-esteem are perceived as being one of the factors that decrease the vulnerability of the high-risk students in response to the stressful life events. In the modern practice, Steinfield et al. (2008) argued that the internet represents one of the primary sources of news and revolutionizing of the global operations. In this context, it forms a prime learning tool for teaching the students on issues of history and linking it to the current events.

Therefore, the internet plays a significant role in linking the learners and teachers in a harmonious practice that offers mutual gain among the included stakeholders. In a different research by Steinfield et al. (2008), the findings noted that teachers have a believe that internet

user practices and content creation habits of teachers and students to be extensively distinct. Generally, the preferred results of a positive relationship are varying to set a learning experience approachable and inviting the students to learn. A teacher and a student possessing good communications, respect in the classroom and showing interests in teaching from a point of view of the teacher and learning from the student tend to establish a positive relationship in their classrooms (Vescio et al., 2008; Jennings & Greenberg, 2009).

### **2.2.3. Role of Internet in Students' Academic Achievements**

According to Bowen (2009) in spite of the fact that there have been numerous social, financial, and ecological components that are the reason of burden on students in the previous decade, the rate of students failing or dropping-out is still a noteworthy national issue. Current measurements demonstrate that college students are under enormous burden because of higher scholastic principles in many nations, and it has turned out to be more imperative than any other time in recent years for teachers to energize their students and motivate them to graduate and for higher studies. In any case, with an ever-increasing number of students being distracted by the internet and technical lives, in what way will this influence their education? It is noted that even the students who do graduate from school, many of them do not have the aptitudes to guide them for the future.

The present age of youngsters lives in a quick innovative world with a wide range of technological advancements and communication occurring around them 24/7. For instance, they might be on an SNS, while chatting on the telephone, sending texts to a companion, and sending an email to another person, all in the meantime. While there might be a few focal points to this, for example, the high schooler figuring out how to compose quicker and multi-task few things at the same time, there may likewise be drawbacks to this advanced level of communication (Williams, 2008).

According to Wise (2009) "Literacy is, in reality, the cornerstone of student achievement, for any student, in any grade". He adds that but unfortunately, knowledge has taken a plunge the previous ten years, which has made teachers question, what to do to enable students to enhance their basic abilities, as say critical thinking, reading, writing and their way to communicate, for an effective future. Many teachers are with the question concerning the modern communication systems is that whether a post-secondary education student can take on school educational

modules in courses like English or Language Arts and that whether or not it is possible to educate them without the use of modern ways of teaching and multi-tasking.

The online networking draws in students and must be analyzed as business visionaries. The medium of the web is promoting with increment in its projects. The intuitive character of online conditions has reached out with long-range informal communication. Attaching through a number of interpersonal communications started similar to a specialty movement, however the time it is a wonder.

The sites are utilized from multiple points of view like creating metropolitan territories, talking, blogging and so forth. Moreover, unique organizations even these days are creating bunches on a few Websites. According to Ellison et. al, (2007) the enhanced use of Internet has turned into an overall marvel for very a few times. What started out just like a leisure activity for a few computer proficient individuals has changed over to a social standard and presentation style for people from around the world. Teens and adolescents have particularly perceived these web locales to have the capacity to contact their companions, share data, re-examine their personas, and grandstand their social lives.

While utilizing the expansion of innovation supportive for getting together with others alongside the acknowledgment on the web, Internet destinations are presently being an action that is done for the most part on the web, with the internet. As indicated by Khan (2009), students who are involved in internet regularly, most of the time, have bad academic performance. Essentially, online networking is contrarily connected with students' education and is significantly more ground-breaking than its points of interest.

Web fixation thusly gave ascend in web use in the most recent few decades. Nalwa and Anand (2003) noted that regular users of internet end up in setting back their duties which consequently results in poor performance in schools. In a similar vein, Karpinski (2009) called attention to that web-based social networking clients dedicated lesser time to their investigations in contrast with nonusers did and along these lines had brought down GPAs. Karpinski and Duberstein. (2009). Also said that among different remarkable diversions of each and every age, Social media remains a noteworthy diversion of the current age.

According to Kist (2012) having online networking in the classroom has been a dubious subject for the last decades. Many guardians and instructors have been frightful of the repercussions of having social media in the classroom. Subsequently, mobile phones have been prohibited

from classroom and schools have blocked numerous prevalent online networking sites. Notwithstanding, notwithstanding grown-up's misgivings, students are utilizing online networking. Schools have understood that they have to fuse these devices into the classroom and standards are evolving. Many schools have started to acknowledge the utilization of web-based social networking in the classroom. In 2013, "Bring Your Own Device" (BYOD) strategy was introduced and have unblocked numerous online networking locales. The researcher like Fewkes & McCabe (2012) have explored about the advantages of utilizing Facebook in the classroom.

National Post (7<sup>th</sup> April 2013) stated that Steve Joordens, an educator at the University of Toronto, along with his college empowered the 1,900 students selected in his basic brain research course to add substance to Wikipedia pages including content that identified with the course. Like different teachers, Joordens contended that the task would fortify the site's brain science related substance, as well as likewise give a chance to students to participate in basic reflection about the arrangements engaged with communitarian information creation. Be that as it may, Wikipedia's all-volunteer publication staff whined that the students' commitments brought about an overpowering number of augmentations to the site and that a portion of the commitments was mistaken.

Facebook speaks to a possibly helpful device in instructive settings. It takes into consideration both a non-concurring and synchronous, open exchange by means of a well-known and routinely got to medium, and backings the combination of multimodal substance, for example, understudy made photos and video and URLs to different writings, in a stage that numerous students are as of now acquainted with. Further, it enables students to make more minor inquiries that they may not generally feel persuaded to visit an educator face to face amid available time to ask. It additionally enables students to deal with their own particular security settings, and regularly work with the security settings they have effectively settled as enrolled clients. Facebook is one elective means for shy students to have the capacity to voice their contemplations in also, outside of the classroom. It enables students to gather their contemplations and eloquent them in composing before focusing on their appearance. Further, the level of familiarity common to Facebook can likewise help students in self-articulation and support more incessant student and teacher.

## **Conclusion**

From the review of the previous studies and the different author's discussions on the three theories of theoretical frameworks the objectives of this dissertation that were set in the first chapter are deducted to be valid. The discussion from different authors and previous studies explains the existence of three relations of this thesis that are

- Impacts of student-teacher relationship on students' academic engagement
- Impacts of use of internet on student-teacher relationship
- Impacts of use of internet on students' academic engagement

### 3. Methodology

Methodology chapter of this dissertation includes conceptual framework, the definition of terms and research framework. Research framework includes the design and methodologies used in this study, which includes population, sampling, instrumentation, data collection and the methods of analysis of data. The aim of this dissertation is to measure the impact of student-teacher relationship and internet on students' academic engagement. This methodology design is in a way to smooth the researcher's way towards her research aim.

#### 3.1. Terms Defined

The whole dissertation is based on the three variables and methodology is designed in a way to measure the kind of relationship among these components and the impact of these variables on each other. The three components of this dissertation are followings

1. Student-teacher relationship
2. Internet
3. Academic Engagement

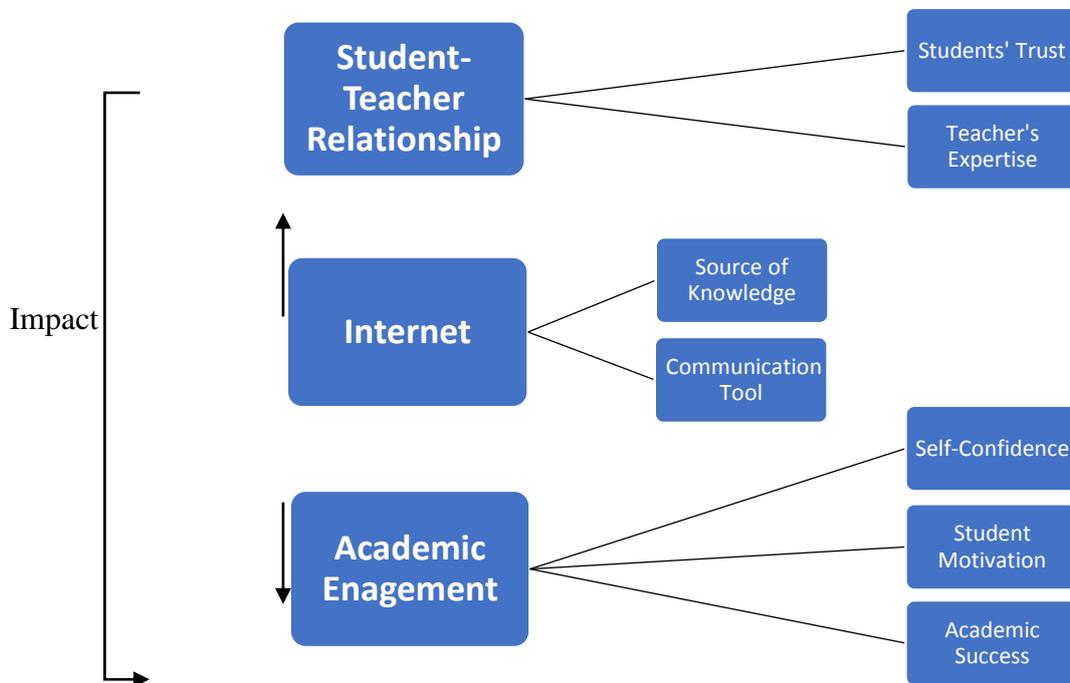


Figure 3.1-2: Relationship between variables of study

### **3.1.1. Student-Teacher Relationship**

In this dissertation, student-teacher relationship is the most dominating variables. For this study, it is pre-decided from the literature review that student-teacher relationship has positive impacts on students' academics. This positive relation between students and teachers in this study is defined by two factors.; students' trust towards their teachers and teachers' knowledge and expertise.

#### **3.1.1.1. Students' Trust**

Students' trust towards their teachers is their assured reliance and confidence in their teachers' abilities and character.

#### **3.1.1.2. Teachers' Expertise**

Teachers' expertise is the basis of their credibility. Teachers are perceived to be knowledgeable in their specific subject matter due to their studies and training.

### **3.1.2. Internet**

The Internet is the worldwide system of networks linked together, which users at one place and a time can get information from different sources worldwide or get connected to any person worldwide if they have the access permissions. This study incorporates two generations of internet use; web 1.0, web 2.0, separately.

#### **3.1.2.1. Source of Knowledge**

Web 1.0 is the 1<sup>st</sup> generation of the internet that was introduced in 1991. It is defined as a mechanism interconnected and linked hypertext information accessed through online networks or internet (Kidd & Chen, 2009). In the early use of the internet, the users could only access the information saved on different online sources around the world. In this generation, users could only access the information saved but were not able to communicate or interact with other users.

This study takes up on use of web 1.0 were students use the internet to access subject matter information. Students get information about a particular topic, that they don't have a full understanding of, from the internet.

### **3.1.2.2. Tool of Communication**

Web 2.0 is the second generation of internet introduced in 1990. Lincoln (2009) describes this generation of internet use a system in which people can interact & communicate with each other and contribute to the saved content and information rather than just accessing it. Thus, the main difference between both generations is that of interactivity. Users interact with each other and contribute through web applications. Social networking sites or SNSs are the types of web 2.0. There are hundreds of definitions of social networking sites or social websites or social media presented by different academics. Ellison and Boyd (2007) describe social networks as the web-based services that let users build a public profile in the contained system, maintain a list of other users of social networks who have things in common with them and share their feelings, ideas and thoughts with their connections. Facebook, Twitter, Instagram, are the examples of social sites or web 2.0.

This study takes into account of web 2.0 use of internet also. It investigates the students use of social networking sites SNSs. Their activities on it, the impact of those activities on their academic engagement and their connection and communication with their teachers through SNSs.

### **3.1.3. Academic Engagement**

According to Newmann, Wehlage, and Lamborn (1992) “students’ psychological effort and investment toward learning, understanding, or mastering the skills, crafts, or knowledge that the schoolwork is intended to promote”. Academic engagement is the combination of academic identification; interest in subject matter, good relationship with teachers, and having school acceptable behavior and attitude and academic participation; studies efforts both inside and outside the classroom. In this study, academic engagement of students is indicated or measured by three factors

#### **3.1.3.1. Self-Confidence**

High level of academic engagement in a student refers to the high level of self-confidence in students. Self-confident students are more likely to perform well and be engaged in extracurricular activities and are more responsible towards studies. Teachers can greatly affect the level of confidence in students depending on how they treat them and what kind of relationship they have with them.

### 3.1.3.2. Student Motivation

Student motivation is defined by Deci (1995) as the blend of people greeting an opportunity to participate in a task, expectation level with him to be successful in a task and the level of appreciation he receives for being successful in that task. In this study student motivation is the level of motivation they receive from their teachers towards performing well in classroom and level of encouragement to continue the hard work and studies after they leave the class.

### 3.1.3.3. Academic Success

Academic success refers to the high achievements in all levels of education. It refers to receiving good grades and teachers praise by a student.

## 3.2. Conceptual Framework

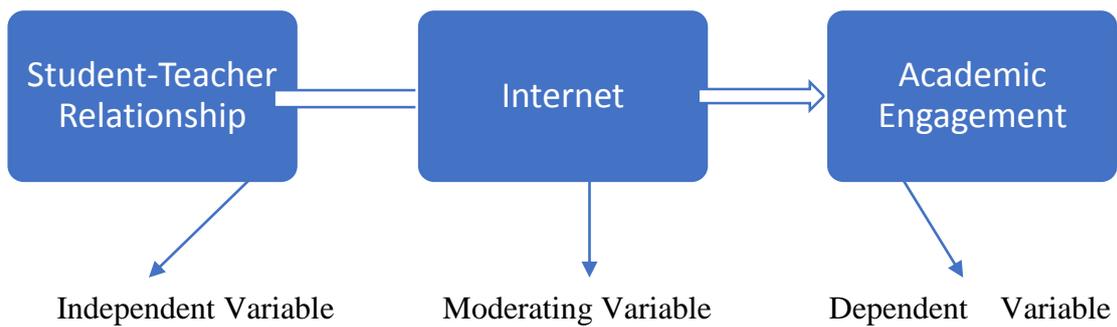


Figure 3.2-3: Conceptual Framework of Study

### **3.2.1. Independent Variable**

Independent variable in research methodology is the variable that is supposed to affect the dependent variable directly. The researcher can control or manipulate the factors defining an independent variable to measure the dependent variable.

In this study, student-teacher relationship is the independent variable and is controlled by different questions in the instrument to measure the academic engagement of the students.

### **3.2.2. Moderating Variable**

The moderating variable in research methodology is the variable that affects the strength of the relation between dependent and independent variable. If the moderating variable is significant it can amplify or weaken the relationship between dependent and independent variable.

In this dissertation internet is the moderating variable. It affects the student-teacher relationship and students' academic engagements both separately and the relation between student-teacher relationship and students' academic engagement.

### **3.2.3. Dependent Variable**

The dependent variable in research is the variable that researcher is actually measuring or is interested in. The measure of effects and changes in the dependent variable is the main purpose of the researcher.

In this study students' academic engagement is the dependent variable. It depends on extent and quality of the student-teacher relationship.

## **3.3. Operationalization**

According to Bridgman cited in Wendt (2014) operationalization is the process of defining or arranging variables of research into measurable aspects. It is the arrangement and definition of concepts whose applications can change according to the situation or context into the researcher's favorable context.

This whole dissertation is designed around three components and their impact on each other. The components ability to affect each other gives us different types of relationships among these components. From the Fig 3.2 student-teacher relationship is affecting students' academic

engagement and use of the internet (bring the moderating variable) is affecting that effect of student-teacher relationship on academic engagement. Separating the fig 3.2 gives three direct relations. The three relations that we are studying in this dissertation involving the thesis components are followings

- Impacts of student-teacher relationship on students' academic engagement
- Impacts of use of internet on student-teacher relationship
- Impacts of use of internet on students' academic engagement

In 1<sup>st</sup> relation, academic engagement is the dependent variable and student-teacher relationship is independent. And it relates to the 1<sup>st</sup> objective of this dissertation in which impacts of student-teacher relationship on students' academic engagement are to be measured. In this relation academic engagement is measured through its subcomponents; self-confidence, student motivation and academic success by investigating the impact of subcomponents of student-teacher relationship; student's trust and teacher's expertise, on them. In 2<sup>nd</sup> relation student-teacher relationship is dependent and use of the internet is the independent variable, it relates to the 2<sup>nd</sup> objective of this dissertation which is to examine the impacts of internet use on student-teacher relationship. In this relation, student-teacher relationship is examined through its subcomponents by investigating the impact of one subcomponent of the use of the internet that is a tool of communication. And in the last relation use of the internet is independent and academic engagement independent which relates to the 3<sup>rd</sup> objective of this thesis that is to examine the impacts of internet use on students' academic engagement. In this relation, students' academic engagement is measured through its subcomponents by investigating the impact of another subcomponent of internet use that is a source of knowledge.

#### **3.4. Appropriateness of Research Framework:**

The research framework in fig 3.4.1 explains the research design of this study. This is a conclusive study, which gathers useful data to reach a conclusion. The study aims to explore the information through which it reaches the conclusion about the impact of internet use on academic performance and the teacher-student relationship. Therefore, it deduces results from using experiment or fieldwork. The quantitative data is collected from 4 samples and builds a case analysis of each school.

The study is appropriate to nature or study and the main research question. Through this design, the researcher is able to gather useful information and build case analysis of 4 samples that surrounds the study topic.

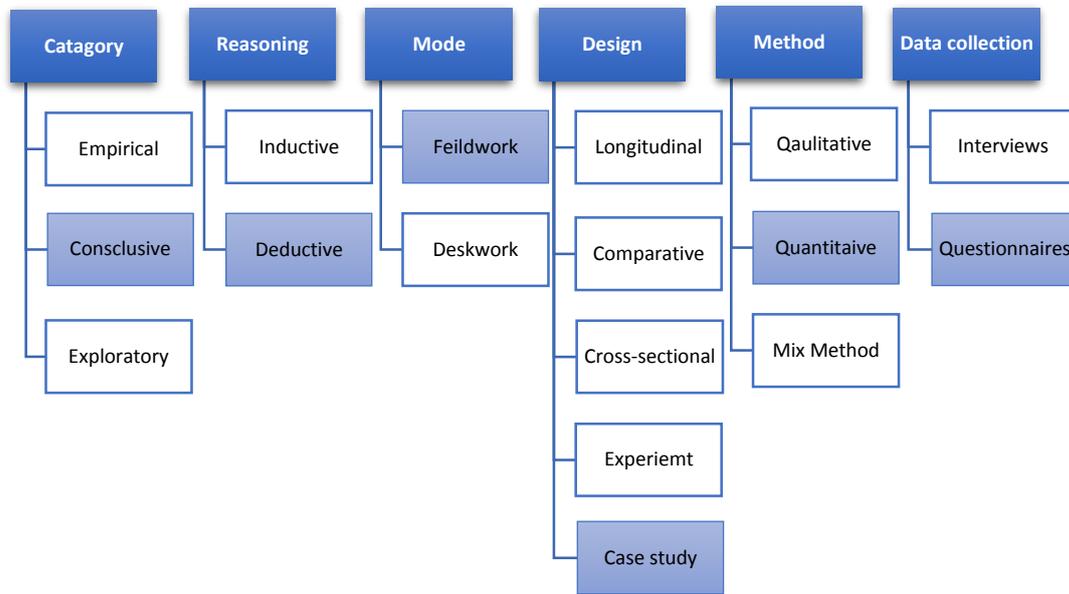


Figure 3.4-4: Research Framework

### 3.4.1. Research Category

This thesis dissertation is categorized as the conclusive research. According to Singh (2007), conclusive research is done to produce findings that are essentially valuable in getting conclusions and making decisions. In these types of research studies, the objectives and the data of the research is plainly defined. Finding from the conclusive research most of the times are used for specific purposes. This research is done to validate and verify the findings of exploratory research.

We established the findings of previous studies on the topics of this dissertation in the literature review. This study is verifying the previous work done in this field and is providing more subject matter information about the student-teacher relationship and use of internet and their

impacts on students' academic engagement the relation that is somewhat new in this study. There is comparatively very limited data available, is the impact of the use of internet on student-teacher relationship. This has also been established from the literature review that there is very limited data available on this factor.

### **3.4.2. Research Reasoning**

The reasoning in this dissertation is done according to deductive reasoning method. In this reasoning method, the research study establishes the hypotheses or research questions based on existing data and then formulates the research strategy to test hypotheses and investigate the research question. This type of reasoning research is intended to investigate and understand a particular case. It starts with the predefined and pre-decided concepts and ideas and ends up testing and investigating the truth of these concepts and ideas.

According to Wilson (2014), deductive explains reasoning from the particular to the general. If a causal relationship or link seems to be implied by a particular theory or case example, it might be true in many cases. A deductive design might test to see if this relationship or link did obtain under more general circumstances.” In this research, the hypotheses and research questions are developed from the existing literature review related to the three aspects of education; student-teacher relationship, use of internet and students' academic engagement, and the methodology of this research are designed to test these hypotheses. In the end, this dissertation is looking for a particular fact that is the impact of a student-teacher relationship affected by the use of internet on student's academic engagement.

### **3.4.3. Mode of the Study**

This dissertation is the fieldwork research because all the data is gathered from the real environment. Although previous research and studies in the subject matter helped developing concepts and ideas and research framework for this research but the real data on which the concepts and framework are applied is gathered from outside environment. However, it is said that fieldwork research always ends on deskwork as a researcher have to analyze the gathered data and note the findings of research. In this research after gathering the data, all data were analyzed through different techniques aiming the research objectives to this dissertation and the final conclusions and findings are developed.

### **3.5. Research Design & Methodology**

Case study research designs are very known research method in social and business research. Case study design intends to study a particular issue or issues within a limited or bounded specific situation, environment or organization. The purpose of this study is to examine the impacts of student-teacher relationship and internet use on the students' academics. This research is carried out in four schools selected from different regions of UAE. This makes this dissertation the case study of these four schools. According to Bryman (2015) in case study design data is gathered on a particular case or cases from a limited environment at a single point in time which aims the collection of quantifiable or numerical data in connection with two or more variables, and these variables and the data gathered is then examined to develop patterns of connection.

In the case study design, quantitative method of data collection is selected to gather the data from four schools. The quantitative method enables the researcher to use open-ended questionnaires and data gathered from these questionnaires can be converted into quantifiable terms and values which is easier to analyze through computer applications and has low margins of human errors. The reasons to choose the quantitative method of data collection are; the high volume of data required for this study and the anonymity of the participants. The data is gathered from the students of the schools and some questions in the questionnaire are sensitive towards the student-teacher relationship, which students might not have been comfortable answering in face-to-face interviews, which could, as a result, affect the reliability and validity of the data, gathered. The questionnaire is designed in a way to protect the identity of the participant's students were very relaxing and comfortable filling the questionnaires honestly, consequently, safeguarding the validity and reliability of data gathered.

### **3.6. Population and Sampling**

#### **3.6.1. Population**

The entire set of objects or people is the focus of the research about which the researcher determines some characteristics (Bless, Smith and Kagee, 2006). For the proposed study population is the entire population of students enrolled in four schools of UAE. The schools are:

- Al Noor school in Sharjah

- Al Shoula School in Sharjah
- Al Hikma School in Ajman
- Dubai International School in Dubai

### 3.6.2. Sampling

“The segment of the population, that is selected for investigation or the subset of the population”. (Bryman, 2015)

#### 3.6.2.1. Sampling Technique

Sampling for this study is done by the method of probability sampling. This method of sampling uses random sampling techniques to create a sample. Reasons for the choosing probability sampling are the (a) making statistical inferences, (b) achieving a representative sample, and (c) minimizing sampling bias. Simple random sampling is the type of probability sampling that is chosen in this study. Simple random sampling is the basic sampling technique where each individual is chosen entirely by chance and each member of the population has an equal chance of being included in the sample. Every possible sample of a given size has the same chance of selection.

#### 3.6.2.2. Dissertation Sample

For the proposed study, the sample selected is the students enrolled in grade 6 to 10 in the four selected schools of study. Students that participated in this study are ranging between the age group of 10-16.

The intended sample size for this research was 400. The 100 questionnaires from each school but after the scrutiny of the filled questionnaires only 300 were included in the study, which represented 75 from each school. The reasons for decreasing the sample size were the incomplete questionnaires, patterns of answers on the Likert scale, and the low number of students willing to participate in the study. Following table shows the sample size from each school and grade separately.

**Table 3.6-1: Sample Distribution Summary**

Name of the School	Grades	
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	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	<b>Total Sample Size</b>
Al Noor School, Sharjah	15	15	10	13	22	75
Al Shoula School, Sharjah	12	15	9	14	25	75
Al Hikma School, Ajman	15	18	10	13	19	75
Dubai International School	10	15	10	16	24	75

### **3.7. Data Collection**

In the process of data collection, the questionnaires were provided with the cover letter stating all the necessary guidelines, the respondents needed while filling out the survey questionnaires. Researcher met the respondents personally and was available for any queries the respondents had.

#### **3.7.1. Instrumentation**

The purpose of this study is to examine different relations among the education concerned components. For this assessment, a survey questionnaire is considered to be the appropriate method for data collection. According to Weiers (1988) following are the benefits of utilizing questionnaires.

- The cost per questionnaire is relatively low.
- Structured information in the questionnaire makes analyzing questionnaires relatively easily.
- Questionnaires give respondents ample time to formulate accurate responses.

The questionnaire designed for this dissertation is adapted from a previous study done in the subject matter by Alshahrani (2013). Alshahrani (2013) used three different already established tools and modified them according to his research. In the proposed study, the questionnaire used is that of Alshahrani (2013) in the same conditions. The three already established tools that Alshahrani (2013) used are

- TPUS: Teacher Power Use Scale, a 30 items scale developed by Schrodt, Witt, and Turman (2007)
- SIRS: Student Instructor Relationship Scale, a modified 36 items scale by Creasey, Jarvis, and Knapcik (2009)
- AEF: Academic Engagement Form, a 114 items scale developed by Richardson and Long (2003)

The selected questionnaire is divided into four parts to incorporate this dissertation

1. The 1<sup>st</sup> part consists of the demographic information of participants.
2. 2<sup>nd</sup> part of the instrument examines the impact of student-teacher relationship on students' academic engagement. The 2<sup>nd</sup> part of the questionnaire has two sections each section separately examines the impact of two sub-components of student-teacher relationship on students' academic engagement.
  - Section 1 examines the impacts of teacher's expertise
  - Section 2 Examines the impacts of student's trust
3. 3<sup>rd</sup> part of the questionnaire examines the impact of internet use as a source of knowledge on students' academic engagement.
4. 4<sup>th</sup> part of the questionnaire is designed to examine the impacts of internet use as a communication tool on the student-teacher relationship.

Five level Likert scales are added to rate the statements and questions in each category.

#### Tool Reliability and Validity

The validity and reliability of the tool can be explained by the fact that Alshahrani (2013) doctoral thesis being accepted at the University of Huddersfield in the UK. The tool is absolutely reliable as it contains the items from already established and many times used and tested scales. The tool thoroughly examines the impacts of internet use and student-teacher relationship on students' academic engagement. The thesis of Alshahrani (2013) is about the examination of power that teachers hold in the classroom. The results of this thesis are very conclusive and presented the facts as they were. And the study is held in the region of Saudi Arabia which is similar to UAE. Both being the part of Gulf countries. So, we can easily replicate this tool in our study pertaining to the perception of Bryman and Bell (2007) about "a systematic and replicable" tool.

### **3.8. Pilot Testing**

Pilot testing refers to the verification of components of the tool or the whole tool in the real environment and real-life conditions. It validates the main functionality of the tool before the actual data collection of the research (Hulley, et al., 2009).

Not actual pilot testing is done in this dissertation but is adopted by the thesis of Alshahrani (2013). Before the actual data collection of his dissertation pilot testing was done by Alshahrani (2013) to check the adaptability and readiness of the instrument. It was conducted on the small portion of the sample of the population to guarantee the validity of an instrument that it was ready to gather data. In his study, he conducted two pilot tests. The 1<sup>st</sup> pilot test aimed at the reflection and fulfillment of research objectives in the questionnaire. As the questionnaire was in English it needed to be translated into Arabic to facilitate the participants. So 2<sup>nd</sup> pilot testing was conducted with the aim of ensuring that translation from English to Arabic did not change the meanings of the statements and that new version was the exact reflection of the English version and did, in fact, measure the variables of this dissertation. The feedback received from the 1<sup>st</sup> pilot test was critically examined and changes were made accordingly.

Then Alshahrani (2013) had the tool translated into Arabic to guarantee that all participants understand all the statements and questions clearly. The translation was done by professional translation organization “Alzamil”. After the translation from the company, Alshahrani (2013) had the tool double checked by an Arabic language and linguistics expert. All the questions and statements used in the questionnaire of the proposed study are taken exactly from Alshahrani (2013) version. There are minor changes in the headings of different parts but it does not raise the need for pilot testing so 2<sup>nd</sup> pilot testing for this dissertation is also adopted from Alshahrani (2013).

Alshahrani (2013) sent the final questionnaire to the Arabic students at his university to guarantee that there were no problems or mistakes in the new version as compared to the English version all the students filled the questionnaires with no comments and provided ‘all is good’ feedback on the final version. The final version used in this dissertation is attached in Appendix 1.

### **3.9. Ethical Considerations**

According to Bryman and Bell (2007). In research, ethical issues are of vital importance and these issues should be taken into consideration by the researcher before starting the collection of data. Researchers' 1<sup>st</sup> and foremost responsibility before inviting the participants in his research is, to be honest, and humble to them.

Almost all countries have acting laws to safeguard the personal data of people from being misused. That is why researcher must always ensure the psychical and emotional safety of the participants of his research. Drake (2014) listed common principals of research participation

- Voluntary Participation
- Informed Consent
- Protection from harm:
- Anonymity and confidentiality
- Access authority

During the data collection of this research, all the participants were provided with cover letter as mentioned earlier. The cover letter was also kind of consent forms that briefly described the purpose of this research first and then clearly addressed the above-mentioned issues in detail. And at the end participant's consent was taken by having them agreeing to the terms of participation and signed the cover letter. The data gathered from the participants were kept in complete security and no one other than the researcher had access to it. In addition, the data gathered was solely used for the research purposes and nothing else. Nowhere in the write-up of this dissertation, were the names of the participants mentioned. As promised in the consent or cover letter total safeguard was provided to the participant's information and anonymity.

## 4. Data Analysis and Findings

### 4.1. Introduction:

Data analysis is the major chapter in any thesis. The chapter contains results of data collected from primary sources after proper analysis. In the data analysis chapter, explanation of statistical techniques and result derived from the application of these techniques explain the conclusion of the research. In this research, regression analysis is the main test that offers insights into variable significance. Since the study was about testing the relationship of variables, and the variables were quantitative in nature, this study opts for linear regression analysis while calculating the impact of moderating variable. The analysis of data will follow the discussion of findings.

The aim of this study is to analyze the significant relationship between student-teacher and academic performance of the student. In addition, the study will analyze the impact of internet use on academic performance and student-teacher relationship. The study will test the single hypothesis for all samples. The primary hypothesis of the study is:

**H1:** Teacher-student relationship has a significant relationship with the academic engagement of student in schools.

Internet is a moderating variable in this study i.e. an outside variable that disturbs the relation of dependent and independent variables of study and therefore, the regression also tests the following assumption;

**H2:** Internet has a moderating impact on students' Academic engagement and teacher's student relationship in schools.

#### 4.1.1. Response Rate:

The survey contains samples from four groups. It was collected via personal interaction of researcher with the students. The survey is collected from school children aging 5 to 16. From four different schools as a target, the researcher collects data. The desired sample size was 75 questionnaires from four different schools each. The total sample size remains 300. The researcher attempts to collect 100 samples from all schools among which the complete cases were selected. After obtaining 75 complete cases from each school, there was no more data collection. Therefore, the total number of samples obtained was 362 among which 300 complete cases were selected. The response rate is 83%.

## 4.2. Data Analysis, Interpretation and Discussion:

In part 1, of data analysis, initial testing and demographic analysis will explain the findings. The initial testing means descriptive stat, that counts standard deviation, mean, minimum and maximum value for each variable. In addition, correlation analysis offers insights to correlation among the variables that describe if we can continue with regression or not. Demographic analysis is the main part of this section as it explains the characteristics of the sample collected.

### 4.2.1. Descriptive Statistics:

Descriptive statistics is the statistical calculation of frequency distribution (table 4.2-2). The calculation of mean suggests the average value of observation while the standard deviation shows the distribution of values from mean. Table 1 shows the descriptive stats for each variable. For example, the minimum value of age group is 1 i.e. 5-13 years' students and the maximum is 2 i.e. 13-16 years' students with higher age. This suggests that the observations have a maximum number of 1-16 years of students. Mean may not predict anything in case of age, grade, and school as the variable were qualitative. Therefore, we exclude an explanation of mean for these variables. However, the mean computed for average daily hours spent on the internet is 3.3 which means on an average student spent maximum 3.3 hours using the internet. Similarly, the other variables can be interpreted in a similar way i.e. the observations have high values from the 10<sup>th</sup>-grade student, however, equal from all schools. In addition, the interpretation of other variables relies on mean value as they are quantitative variables. The average score of teacher's expertise is 13.1 and so on for other variables.

Table 4.2-2: Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Age Group	300	1.00	2.00	1.3567	.47982
Grade	300	1.00	5.00	3.2300	1.49819
School	300	1.00	4.00	2.5000	1.11990
Daily hours spent on Internet	300	1.00	4.00	3.3667	1.00445
Teacher expertise	300	5.00	15.00	13.1115	2.14985

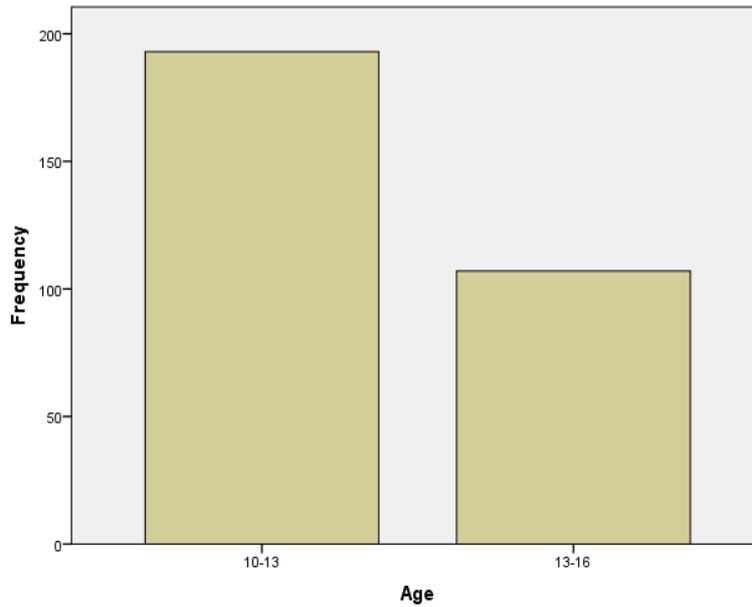
Student trust	300	3.00	15.00	12.3903	3.56497
Self confidence	300	4.00	10.00	8.6245	1.46740
Student motivation	300	4.00	10.00	8.6245	1.46740
Academic success	300	4.00	10.00	8.6245	1.46740
Internet as knowledge source	300	13.00	35.00	30.0037	5.37996
Internet as communication tool	300	13.00	35.00	30.3643	5.00310
Valid N (listwise)	300				

#### 4.2.2. Demographic Analysis

The demographic analysis explains the characteristics of each variable. The demographic variables for this study are four. The first variable is age group. The students targeted were from only two groups among which most of the students were aging 5-13 i.e. 64% of the entire population. The sample collects 35% of the student aging 13-16. Table 4.2-3 presents the tabular analysis where it shows that the complete cases in this variable were 300 among which 63% from 5-13 and 35.7% from 13-16. Figure 4.2-5 illustrates the bar chart for the same variable.

**Table 4.2-3: Age Group**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 10-13	193	63.3	64.3	64.3
13-16	107	35.1	35.7	100.0
Total	30	100.0		

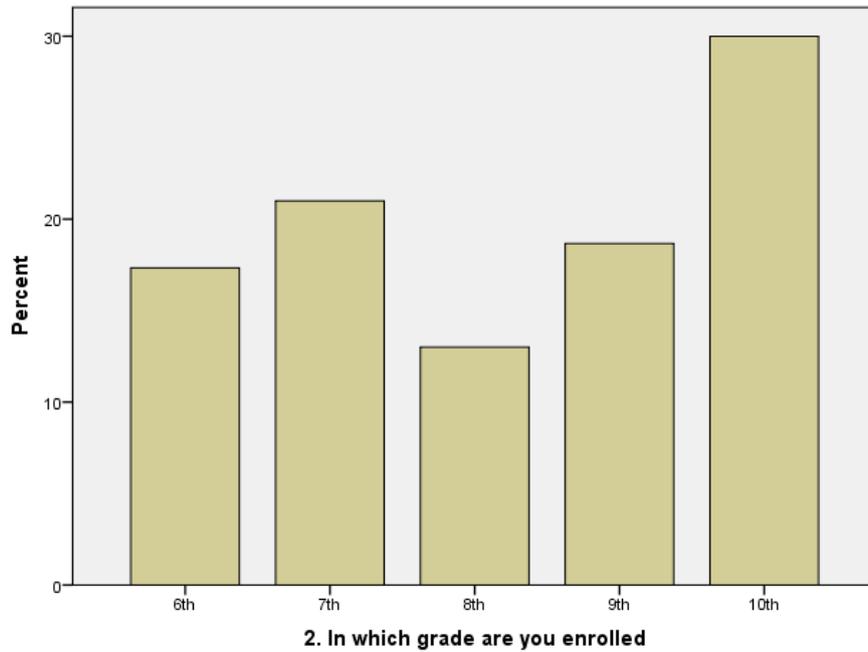


**Figure 4.2-5: Age Group Visual**

The second demographic variable is a grade of students i.e. their current year of study. The data was collected from 6<sup>th</sup> to 10<sup>th</sup>-grade student who has sound knowledge of internet and can respond reasonably to the questions. The largest sample collected from the 10<sup>th</sup>-grade student i.e. 90 students and 30% of entire population. The sample from 7<sup>th</sup> grade is 63 (21%), the 9<sup>th</sup>-grade student is 56 (18.7%), 6<sup>th</sup>-grade student if 52 (17.3%), and 8<sup>th</sup> grade is 39 (13%) as present in table 4.2-4 and figure 4.2-6.

**Table 4.2-4: Student's Grade**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 6 <sup>th</sup>	52	17.0	17.3	17.3
7 <sup>th</sup>	63	20.7	21.0	38.3
8 <sup>th</sup>	39	12.8	13.0	51.3
9 <sup>th</sup>	56	18.4	18.7	70.0
10 <sup>th</sup>	90	29.5	30.0	100.0
Total	300	100.0	100.0	

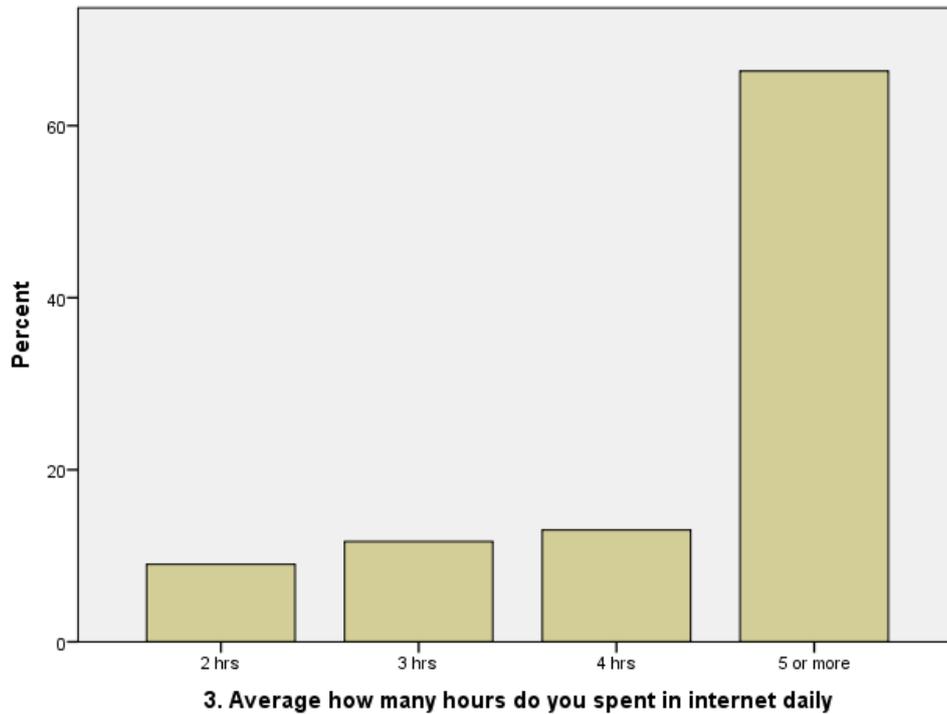


**Figure 4.2.6: Student's Grade**

The students were asked to highlight the frequency of using internet on daily basis. The average usage of internet is 3 hours whereas the students use internet for more than 5 hours. The sample collected shows that the students are using internet for five or more hours (N= 199, 66.3%), 4 hours (N= 12.8, 13%), 3 hours (N= 35, 11.7%) and 2 hours minimum (N= 27, 9%). Table 4.2-5 and figure 4.2-7 presents the tabular and graphical distribution of data frequencies respectively.

**Table 4.2-5: Daily Internet Use**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2 hrs	27	8.9	9.0	9.0
3 hrs	35	11.5	11.7	20.7
4 hrs	39	12.8	13.0	33.7
5 or more	199	65.2	66.3	100.0
Total	300	98.4	100.0	



**Figure 4.2-7: Daily internet consumption**

The samples were selected from four different schools and hence, the samples are equal from each school i.e. 75 from all schools as present in table 4.2-6 and figure 4.2-8:

**Table 4.2-6: Schools of Students**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Al Noor School, Sharjah	75	25.0	25.0	25.0
Al Shoula School, Sharjah	75	25.0	25.0	50.0
Al Hikma School, Ajman	75	25.0	25.0	75.0
Dubai International School	75	25.0	25.0	100.0
Total	300	100.0	100.0	

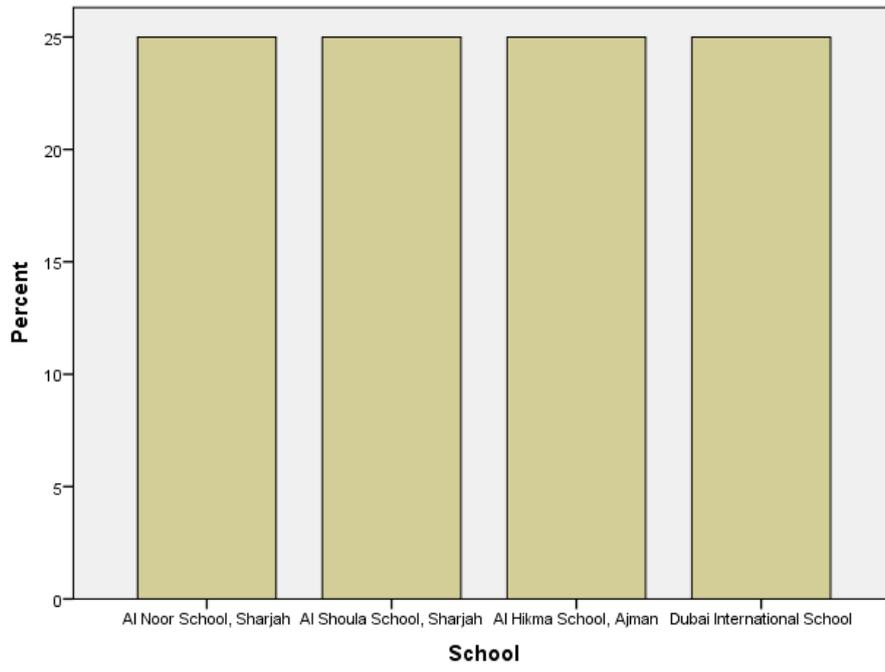


Figure 4.2-8: Schools of Students

### 4.3. Correlation Analysis

Correlation analysis is the analysis of correlation that describes the significance of the variables. The condition is that each variable must have .50 significances of higher to be qualified as significant.

In this research, we have computed correlations for four samples independently. The variables were first applied computation as of statistical procedure. After adding the relevant variables, a new variable was formed i.e. dependent, independent and moderating variable. The correlation stats are applied to computed variables.

#### Sample 1: Al Noor School, Sharjah

From sample 1, we analyze that the significance or correlation among variable is high. Academic performance is .967 significant to student-teacher relationship whereas its significance to the internet in 1. This suggests internet has a higher moderating impact on both dependent and independent variables in case of sample one i.e. Al Noor School, Sharjah. The Correlation chart of sample one is present in table 4.3-7:

**Table 4.3-7: Sample 1 Correlations**

		student teacher relationship	academic performance	internet
student teacher relationship	Pearson Correlation	1	.967	.968
	Sig. (2-tailed)		.000	.000
	N	54	54	54
academic performance	Pearson Correlation	.967	1	1.000
	Sig. (2-tailed)	.000		.000
	N	54	54	54
internet	Pearson Correlation	.968	1.000	1
	Sig. (2-tailed)	.000	.000	
	N	54	54	54

School = Al Noor School, Sharjah

#### Sample 2: Al Shoula School, Sharjah

From sample 2, we analyze that the significance or correlation among variable is high. Academic performance is .969 significant to student-teacher relationship whereas its significance to the internet in 1. This suggests internet has a higher moderating impact on both

dependent and independent variables in case of sample one i.e. Al Shoula School, Sharjah. The Correlation chart of sample one is present in table 4.3-8:

**Table 4.3-8: Sample 2 Correlations**

		student teacher relationship	academic performance	internet
Student teacher relationship	Pearson Correlation	1	.969	.969
	Sig. (2-tailed)		.000	.000
	N	65	65	65
academic performance	Pearson Correlation	.969	1	1.000
	Sig. (2-tailed)	.000		.000
	N	65	65	65
internet	Pearson Correlation	.969	1.000	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

a. School = Al Shoula School, Sharjah

### **Sample 3: Al Hikma School, Ajman**

From sample 3, we analyze that the significance or correlation among variable is high. Academic performance is .920 significant to student-teacher relationship whereas its significance to the internet is 1. This suggests internet has a higher moderating impact on both dependent and independent variables in case of sample one i.e. Al Hikma School, Ajman. The Correlation chart of sample one is present in table 4.3-9:

**Table 4.3-9: Sample 3 Correlations**

		student teacher relationship	academic performance	internet
student teacher relationship	Pearson Correlation	1	.920	.920
	Sig. (2-tailed)		.000	.000
	N	75	75	75
academic performance	Pearson Correlation	.920	1	1.000
	Sig. (2-tailed)	.000		.000
	N	75	75	75
internet	Pearson Correlation	.920	1.000	1
	Sig. (2-tailed)	.000	.000	
	N	75	75	75

School = Al Hikma School, Ajman

### Sample4: Dubai International School

From sample 2, we analyze that the significance or correlation among variable is high. Academic performance significance to student-teacher relationship is 1 whereas its significance to the internet in .972. This suggests internet still has a higher moderating impact on both dependent and independent variables in case of sample one i.e. Dubai International School. The Correlation chart of sample one is present in table 4.3-10:

**Table 4.3-10: Sample 1 Correlations**

		student teacher relationship	academic performance	internet
student teacher relationship	Pearson Correlation	1	.972	.972
	Sig. (2-tailed)		.000	.000
	N	75	75	75
academic performance	Pearson Correlation	.972	1	1.000
	Sig. (2-tailed)	.000		.000
	N	75	75	75
internet	Pearson Correlation	.972	1.000	1
	Sig. (2-tailed)	.000	.000	
	N	75	75	75

a. School = Dubai International School

In sum, the correlations from sample 1-3 show higher internet influence both variables, whereas in sample 4 the moderator has a slightly lower impact in comparison to a significant relationship between the academic performance and student-teacher relationship.

#### **4.4. Regression Analysis**

Regression analysis is the statistical linear model testing where variables are tested to find the linear relationship between them. Internet is a moderator variable and therefore, it is computed as independent variable minus internet and a new variable is formed i.e. moderator. The impact of moderator on the relationship between academic performance and student's teacher relationship is tested for all four samples.

Regression analysis will help in analyzing the significant relationship between academic performance and student-teacher relationship as well it studies the significant impact of moderating variable on these.

For a moderator, to have a significant impact, it is important that two other variables must have a significant relationship with each other, therefore, we have calculated regression analysis to find significance between independent and dependent variables first and later study the moderating impact.

As the aim of the study is to analyze the impact of the internet on student-teacher relationship and academic performance, this regression analysis will test the hypothesis or assumptions of this research. The regression analysis will test the following hypothesis:

H1: Teacher-student relationship has a significant relationship with the academic engagement of student in schools.

H2: Internet has a moderating impact on students' Academic engagement and teacher's student relationship in schools.

#### **Model:**

As our research model, there were five basic variables added to create a new variable such as student's trust and teacher's expertise creates a student-teacher relationship. The variables self-confidence, motivation and success combine to create academic engagement. The internet as a source of knowledge provider and communication tool combines to create internet as a variable.

## Regression Testing:

### 4.4.1. Sample 1 = Al Noor School, Sharjah

The regression summary of sample 1 is present in table 4.4.1. The summary suggests that there is a significant relationship between academic performance and student's teacher relationship as significant having impact of the moderator.

**Table 4.4.1-11: Sample 1 Regression Analysis**

<b>Variables Entered/Removed<sup>a,b</sup></b>					
Model	Variables Entered	Variables Removed	Method		
1	moderator, student-teacher relationship <sup>c</sup>		Enter		

a. School = Al Noor School, Sharjah  
b. Dependent Variable: academic performance  
c. All requested variables entered.

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 <sup>b</sup>	1.000	1.000	.05767

a. School = Al Noor School, Sharjah  
b. Predictors: (Constant), moderator, student-teacher relationship

<b>ANOVA<sup>a,b</sup></b>						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	1201.164	2	600.582	180553.350	.000 <sup>c</sup>
	Residual	.170	51	.003		
	Total	1201.333	53			

a. School = Al Noor School, Sharjah  
b. Dependent Variable: academic performance  
c. Predictors: (Constant), moderator, student-teacher relationship

<b>Coefficients<sup>a,b</sup></b>				
Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta		
1	(Constant)	.005	.054		.100	.921
	student teacher relationship	.424	.003	.540	165.346	.000
	Moderator	-.432	.003	-.497	-152.036	.000

a. School = Al Noor School, Sharjah

b. Dependent Variable: academic performance

### Interpretation and discussion of results for sample 1:

In the above model, the hypothesis testing for the study is as:

There is a significant relationship between the academic performance and student's teacher relationships because of the following assumptions of regression analysis are true:

#### *Assumptions of Regression Analysis:*

The assumptions of regression analysis suggest the following results:

- 1- The model summary suggests that the model tested is significant i.e. p-value less than 0.05 for academic performance and internet use.
- 2- The assumption of linearity is true in this case as the R square is above 0.2 in addition; the curve estimation shows a linear curve as below:

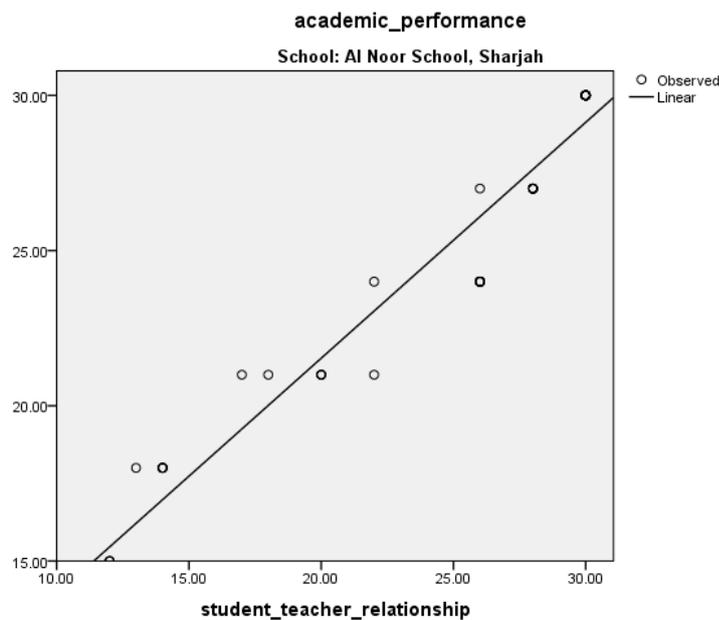


Figure 4.4.1-9: Linear Curve Estimation, Sample 1

3- There exists dependency of DV on IVs as the value of the standardized beta coefficient is not zero, therefore the dependency is Student's teacher relationship (42%).

4- The impact of moderator i.e. internet is -.432. The magnitude is negative which suggest the inverse significant relationship. This means that on average 43% of times the internet can reduce the impact of student's teacher relationship on academic performance. The unit increase on the internet will decrease the student-teacher relationship by 43%.

4- The model is perfect for the value of r square is 1 for academic performance and student's teacher relationship.

**Concluding Note:**

The results of regression analysis suggest that there exists a significant relationship between student-teacher relationship and academic performance of students, however, the moderator has a significant and negative impact on the academic performance.

The results suggest that in Al Noor School Sharjah, the assumption is true that the internet has a moderating impact on student's teacher relationship. The impact is negative that suggest that the increased use of the internet can decrease the academic performance and student-teacher relationship.

#### 4.4.2. Sample 2= Al Shoula School, Sharjah

The regression summary of sample 2 is present in table 4.4.2. The summary suggests that there is a significant relationship between academic performance and student’s teacher relationship as significant having impact of the moderator.

Table 4.4.2- 12: Sample 2 Regression Analysis

<b>Variables Entered/Removed<sup>a,b</sup></b>					
Model	Variables Entered	Variables Removed	Method		
1	moderator, student-teacher relationship <sup>c</sup>		Enter		

a. School = Al Shoula School, Sharjah  
b. Dependent Variable: academic performance  
c. All requested variables entered.

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 <sup>b</sup>	1.000	1.000	.00000

a. School = Al Shoula School, Sharjah  
b. Predictors: (Constant), moderator, student-teacher relationship

<b>ANOVA<sup>a,b</sup></b>					
Model	Sum of Squares	df	Mean Square	F	Sig.
1	1057.846	2	528.923	170452.250	.000 <sup>c</sup>
	.000	62	.000		
	1057.846	64			

a. School = Al Shoula School, Sharjah  
b. Dependent Variable: academic performance  
c. Predictors: (Constant), moderator, student-teacher relationship

<b>Coefficients<sup>a,b</sup></b>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	.006	.055		.100	.911
	student teacher relationship	.429	.003	.541	155.346	.000
	Moderator	-.429	.000	-.605	-152.04	.000

a. School = Al Shoula School, Sharjah  
b. Dependent Variable: academic performance

### Interpretation and discussion of results for sample 2:

In the above model, the hypothesis testing for the study is as:

There is a significant relationship between the academic performance and student’s teacher relationship because the following assumptions of regression analysis are true:

#### *Assumptions of Regression Analysis:*

The assumptions of regression analysis suggest the following results:

- 1- The model summary suggests that the model tested is significant i.e. p-value less than 0.05 for academic performance and internet use in sample 2.
- 2- The assumption of linearity is true in this case as the R square is above 0.2 in addition; the curve estimation shows a linear curve as below:

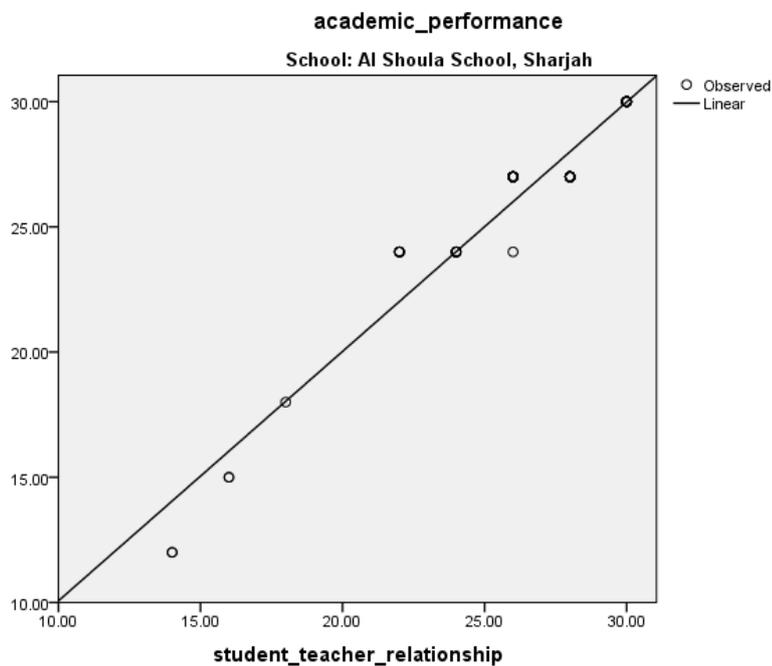


Figure 4.4.2-10: Linear Curve Estimation, Sample 2

3- There exists dependency of DV on IVs, as the value of the standardized beta coefficient is not zero; therefore, the dependency is Student's teacher relationship on academic performance is direct and positive.

4- The impact of moderator i.e. internet is  $-.429$ . The magnitude is negative which suggest the inverse significant relationship. This means that on average 43% of times the internet can reduce the impact of student's teacher relationship on academic performance. The unit increase on the internet will decrease the student-teacher relationship by  $.43\%$ .

4- The model is perfect for the value of r square is  $0.940$  for academic performance and student's teacher relationship whereas with moderator impact the model is perfect at  $1$ .

**Concluding Note:**

In comparison to Al Noor School Sharjah, the results of Al Shoula School Sharjah are similar i.e., the assumption is true that the internet has a negative impact on student's teacher relationship and academic performance of the student. The increased use of the internet can decrease the academic performance and student-teacher relationship in sample 2.

#### 4.4.3. Sample 3= Al Hikma School, Ajman

The regression summary of sample 3 is present in table 4.4.3. The summary suggests that there is a significant relationship between academic performance and student's teacher relationship as significant having impact of the moderator.

Table 4.4.3-13: Sample 3, Regression Analysis

<b>Variables Entered/Removed<sup>a,b</sup></b>						
Model	Variables Entered	Variables Removed	Method			
1	moderator, student-teacher relationship <sup>c</sup>		. Enter			

a. School = Al Hikma School, Ajman  
b. Dependent Variable: academic performance  
c. All requested variables entered.

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 <sup>b</sup>	1.000	1.000	.00000

a. School = Al Hikma School, Ajman  
b. Predictors: (Constant), moderator, student-teacher relationship

<b>ANOVA<sup>a,b</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1129.920	2	564.960	16033.250	.000 <sup>c</sup>
	Residual	.000	72	.000		
	Total	1129.920	74			

a. School = Al Hikma School, Ajman  
b. Dependent Variable: academic performance  
c. Predictors: (Constant), moderator, student-teacher relationship

<b>Coefficients<sup>a,b</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.000	.000		.100	.911
	student teacher relationship	.429	.000	.441	155.346	.000
	moderator	-.429	.000	-.619	-152.04	.000

- a. School = Al Hikma School, Ajman
- b. Dependent Variable: academic performance

**Interpretation and discussion of results for sample 3:**

In the above model, the hypothesis testing for the study is as:

There is a significant relationship between the academic performance and student’s teacher relationship because the following assumptions of regression analysis are true:

*Assumptions of Regression Analysis:*

The assumptions of regression analysis suggest the following results:

1- The model summary suggests that the model tested is significant i.e. p-value less than 0.05 for academic performance and internet use in sample 3.

2- The assumption of linearity is true in this case as the R square is above 0.2 in addition; the curve estimation shows a linear curve as below:

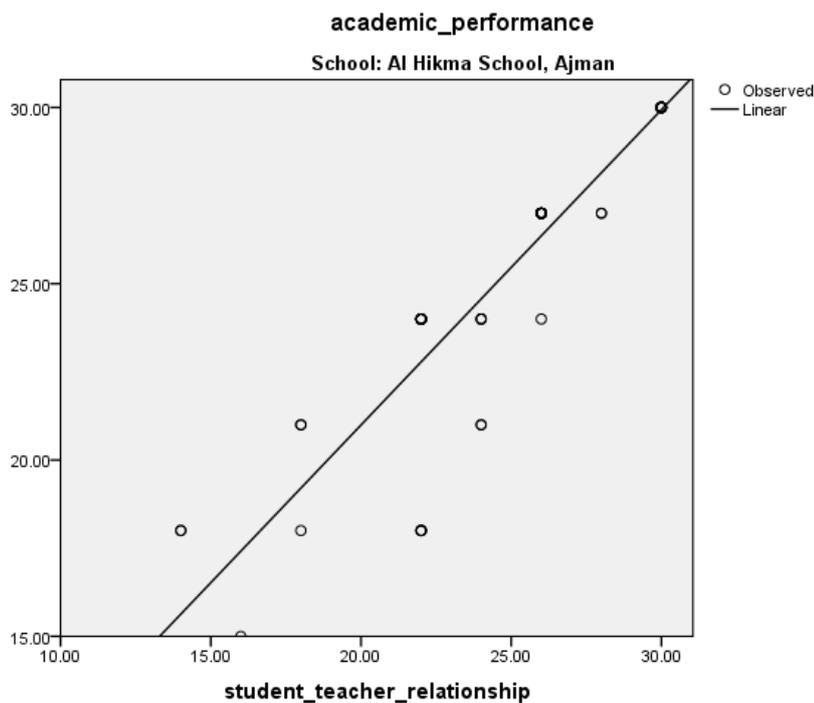


Figure 4.4.3-11: Linear Curve Estimation, Sample 3

3- There exists dependency of DV on IVs, as the value of the standardized beta coefficient is not zero; therefore, the dependency is Student’s teacher relationship on academic performance is positive and direct.

4- The impact of moderator i.e. internet is -.429. The magnitude is negative which suggest the inverse significant relationship. This means that on average 43% of times the internet can

reduce the impact of student's teacher relationship on academic performance. The unit increase on internet will decrease the student-teacher relationship by .43%.

The tolerance level of moderator is .402

4- The model is perfect for the value of r square is 0.846 for academic performance and student's teacher relationship whereas with moderator impact the model is perfect at 1

### **Concluding Note:**

In comparison to first two samples, the results of Al Hikma School Ajman are similar i.e., the assumption is true that the internet has a negative impact on student's teacher relationship and academic performance of the student. The increased use of the internet can decrease the academic performance and student-teacher relationship in sample 3.

#### 4.4.4. Sample 4= Dubai International School

The regression summary of sample 4 is present in table 12. The summary suggests that there is a significant relationship between academic performance and student’s teacher relationship as significant having impact of the moderator.

Table 4.4.4-14: Sample 4 Regression Summary

<b>Variables Entered/Removed<sup>a,b</sup></b>					
Model	Variables Entered	Variables Removed	Method		
1	moderator, student-teacher relationship <sup>c</sup>		.	Enter	

a. School = Dubai International School  
b. Dependent Variable: academic performance  
c. All requested variables entered.

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 <sup>b</sup>	1.000	1.000	.00000

a. School = Dubai International School  
b. Predictors: (Constant), moderator, student-teacher relationship

<b>ANOVA<sup>a,b</sup></b>						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	1770.480	2	885.240	152.3245	.000 <sup>c</sup>
	Residual	.000	72	.000		
	Total	1770.480	74			

a. School = Dubai International School  
b. Dependent Variable: academic performance  
c. Predictors: (Constant), moderator, student-teacher relationship

<b>Coefficients<sup>a,b</sup></b>						
Model	Unstandardized Coefficients	Standardized Coefficients		t	Sig.	
		B	Std. Error			Beta
1	(Constant)	-4.796E-14	.000		.000	1.000
	student teacher relationship	.429	.000	.514	55936958.209	.000

moderator	-.429	.000	-.515	-56053776.990	.000
a. School = Dubai International School					
b. Dependent Variable: academic performance					

In the above model, the hypothesis testing for the study is as:

There is a significant relationship between the academic performance and student's teacher relationship because the following assumptions of regression analysis are true:

*Assumptions of Regression Analysis:*

The assumptions of regression analysis suggest the following results:

- 1- The model summary suggests that the model tested is significant i.e. p-value less than 0.05 for academic performance and internet use in sample 2.
- 2- The assumption of linearity is true in this case as the R square is above 0.2 in addition; the curve estimation shows a linear curve as below:

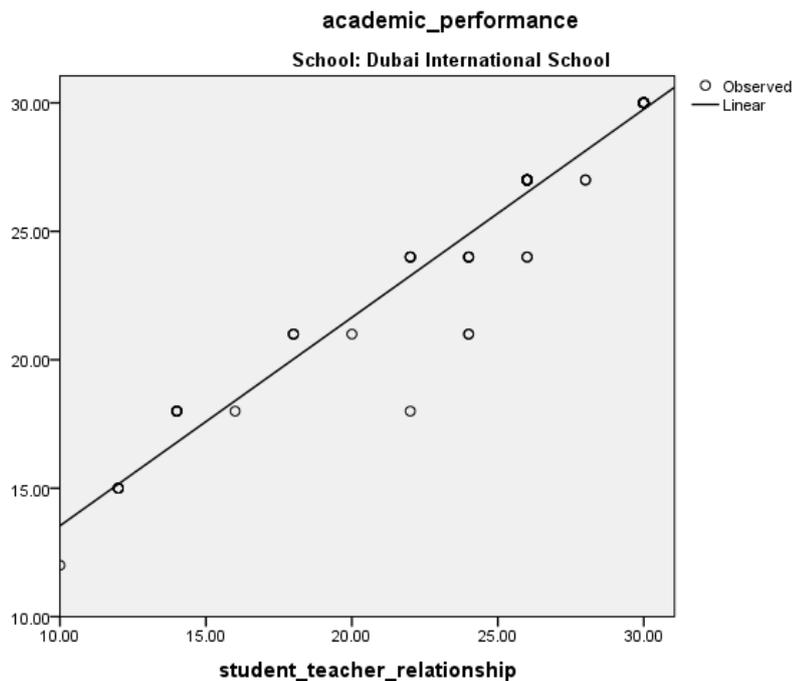


Figure 4.4.4-12: Linear Curve Estimation, Sample 4

3- There exists dependency of DV on IVs, as the value of the standardized beta coefficient is not zero; therefore, the dependency is Student's teacher relationship on academic performance is .945 and magnitude is positive.

4- The impact of moderator i.e. internet is  $-.429$ . The magnitude is negative which suggest the inverse significant relationship. This means that on average 43% of times the internet can reduce the impact of student's teacher relationship on academic performance. The unit increase on the internet will decrease the student-teacher relationship by .43%.

4- The model is perfect for the value of r square is 0.945 for academic performance and student's teacher relationship whereas with moderator impact the model is perfect at 1.

### **Concluding Note:**

In comparison to first three samples, the results of Dubai International School are similar i.e., the assumption is true that the internet has a negative impact on student's teacher relationship and academic performance of the student. The increased use of the internet can decrease the academic performance and student-teacher relationship in sample 4.

### **4.5. Discussion of results:**

The results from all sample suggest that internet has a significant impact on dependent and independent variable. This means that the use of internet in schoolchildren can decrease the relationship with their teachers as a source of knowledge provider and hence have a negative impact on academic performance.

The study aims to analyze the impact of internet use on academic performance and student-teacher relationship. In previous studies and practical terms, the student-teacher relationship in a positive way helps the student to improve his academic performance. However, with the prevalence of internet students are less dependent on teachers and therefore, the relationship between student and teacher is weakening. This suggests that internet is playing the role of teachers and therefore, the student's no longer seek teacher's expertise and trust his guidance as they trust internet as a knowledge source and communication tool. The results clearly indicate that teacher-student relationship is direct and significant to student's teacher relationship, however, with the introduction of internet use, the relationship is weakening.

The results were similar in all four samples i.e. no sample shows distinctive results. The collective result of this study is that internet is negatively influencing the student-teacher relationship and academic performance.

## **5. Conclusion & Recommendations**

### **5.1. Summary of Study**

This study focuses on student-teacher relationship and its impact on the academic success of the student. The aim of the study was to find the relationship between academic success and student-teacher relationship. The study applies a quantitative methodology. The study is a cross-comparison of schools. It analyses the data collected from four different schools in UAE. The aim was to analyze the moderator impact of the internet on academic performance and the teacher-student relationship.

This study provides an overview of how teacher-student relationship is significant to academic performance and the role of internet use for academic purpose influencing the academic success. In views of Adeyele and Yusuff (2012) student-teacher relationship plays a vital role in the academic success of student as well as on student's motivations for his life. The study explored the literature review providing relevant theories, constructs, and themes. The study contends the results of previous literature and concludes that the authoritative role of teacher over students is justified, as the teacher is superiors in knowledge, status, position, and supremacy.

As per earlier studies, the student-teacher relationship is lifelong and it has positive impacts on student's academic life. The students are more successful when constructive and helpful relations with teacher exist (Adeyele & Yusuff, 2012). However, in the age of the internet, the knowledge source and communication tool for the next generation has altered several aspects of academic life. Students are no longer found indulge in positive academic activities and they are least considering teachers as a source of information provider.

This study analyses the student-teacher relationship and academic performance of student significance and concludes that in all four sample, the relationship is positive and direct. This validates the results of previous studies in the context of student-teacher relation and academic performance of the student. However, the study in an attempt to analyze the current scenario of internet use, suggests that more the use of the internet will decrease the student-teacher relationship to have an excellent academic performance. This study suggests that student-teacher relationship is significant for students for a successful academic life, however; the use of internet has changed the game.

Students now have started using the internet as a source of knowledge provider and communication tool for their academic help. They rely less on teacher's expertise and support. There is a transition in student-teacher relationship and internet is the factor that aids this transition (Banks et al., 2005). In today's academic world, the role of teaching has transformed a lot. Teaching that once depended on effective curriculum and student's social and academic motivations are now transformed. The more addiction of internet is causing the students to follow their desired readings and helping materials provided by the internet. This shows that teachers are lacking control on what student seek advice from or source of helping material (Harb, 2011).

Past examinations and research have demonstrated that upset of the web has an extraordinary impact on achievements and practices of students and the routine and role of teachers has changed (Giles, 2009). Kelly et al., (2007) portray this change in perspective of progress in educator's techniques as, from instructor to educator facilitator system. The Internet gives a unique association with the extensive populace of students, and having them take part through a fairly acclimated channel can end up being an extremely compelling technique to exchange data and learning of various sorts e.g. scholastic schedules, timetables, and news. It likewise gives instructors another successful and rather a charming method to speak with the students. This new strategy for correspondence likewise empowers the instructors to have discourses and get audits from the students they educate.

This advancement of web and its utilization in training framework brings forth some fascinating inquiries concerning understudy instructor associations on SNSs and their impact on the understudy educator relationship in viable life and then again the impact of understudy instructor relationship on understudy instructor associations on SNSs. The extremely casual and honest tone of SNS correspondence can bring about numerous unfortunate results in the understudy instructor relationship that is the reason in numerous nations, correspondence through informal communication locales among students and educators has prohibited.

The study finds the relations between student-teacher relationship and academic success of the student, and internet impact on it. However, the explanation of key findings provides more detail.

## 5.2. Key Findings

The study collected data from four different sampled schools. The case analysis of each school is similar. This is because the sample includes the similar characteristic of each population. For example, the student's age and grade were similar. The students enrolled in 6th, 7th, 8th, 9th and 10th grade were the population of this study. The students were asked simple questions so they can properly answer. The researcher selects 75 complete cases from each school and performs statistical analysis.

The descriptive analysis provides an overview of variables i.e. the nature of variables as quantitative and mean values. The correlation analysis suggests the correlations between dependent, independent and moderating variables. The correlation in each sample was above 0.50 which suggests that the variables are a good fit for regression testing.

The regression testing provides the test of the main assumption of the study. The assumption of study is that there is significance between academic performance and student-teacher relationship. In addition, the study assumed that internet has a moderating impact on this relationship. Since the study does not assume the type of impact, the results of study clarify negative impacts of internet use. It was found that internet has a negative impact, which means it decreases the student-teacher relationship for achieving academic success. The previous literature can support the results of the study.

As supported by Bovill et al. (2011), students should assume a dynamic part in the learning procedure. For this situation, the conventional strategy for educating has not advanced as the students and educators assume a complementary part to each other. Therefore, there exists significance in student-teacher relationship to achieve academic success.

The social development theory has support to the results of a study in the context of the internet use as a determinant of the instructional outline created for empowering or debilitating the cooperation and coordinated effort of students. The steady culture and conventions inside nature offer a massive commitment to the psychological procedures of students. Additionally, in the setting of the second idea of the hypothesis, it exhibits the degree in which the social communication between the educators and students through the web can add to improvement guided by an able person (Shabani et al. 2010). However, our results suggest that the internet use is decreasing the student-teacher relationship. It is, therefore, assumed that students do not

utilize the internet as means of communication to the teacher, rather they depend on the internet for guidance.

Shabani et al. (2010), this speaks about what the students could learn autonomously and what they cannot realize without the help of others. The gap filled by the utilization of web and different aspects of present-day innovation is leading to weakening the student dependency on teachers. Furthermore, Mills (2011) noticed that the social advancement hypothesis predominant structure is established on the limit of social cooperation assuming a basic part in perception improvement. This implies the students should effectively take an interest in making a powerful learning condition. They should be in a place of responding the learning procedure by offering responses, remarks or criticism to their instructors. However, the result of the study suggests that students are utilizing the internet as a source of connection to their teachers. Therefore, the internet is influencing this relationship as a one-unit increase in internet use can decrease the chances of trust on teacher's expertise by approximately 42% in all samples.

As substantiated by Risse (2007), the social constructivism contends to the possibility that learning is a social practice that occurs on an occasion people work cooperatively. For this situation, in teacher-student connections, students tend to assemble information for disguising from unmistakable sources in their condition. These sources can be comprehensive of electronic and print sources, direct encounters and frequently an instructor in the customary part of information supplier. By and by, the part of an educator should not be constrained to that of the supplier of learning, however, ought to similarly be comprehensive of features of instructing, managing and encouraging. This implies the internet use has either positive or negative influence the current connection between the educators and students. Therefore, the study of Risse (2007) is valid and this study supports the internet use as negatively influencing student-teacher relationship and academic success in schools of UAE.

### **5.3. Recommendations**

The study has few recommendations for designing the academic settings. In the key findings above, it is true that education is a social development of student and teacher plays a significant role in overall student's life. Therefore, there need significant measures to be taken such as increasing the attention teacher gave to a student. The main recommendation of this study is that the teachers must engage students in activities where they depend directly on teacher's

support more. This will help in reducing internet use. In addition, this will help teachers in controlling student's source of helping material.

Engaging student's more in physical activities rather than letting them find the solutions themselves can help reduce the use of the internet. The study is applicable to the students of secondary schools and therefore, they are not in the age of maturity to understand the positive use of the internet. In addition, parents do not allow students to use internet much and whenever they get the time they can use the internet for entertainment. Therefore, the study recommends teachers and academic policymakers to design the study curriculum that engages student directly with teachers and promote a healthy student-teacher relationship. This will help in the positive development of the student in the context of academic success and social life. This also suggests that teachers will continue to play their role and internet cannot take over their role in society.

#### **5.4. Implications**

This study is applicable to students above primary education. The study implies that the students in their academic career need advice and help. Teachers are the source of help for a student at an early age. Internet, on the other hand, has negative impacts on student-teacher relationship. Since students are naïve and do not know the positive use of the internet, the internet use can influence student's academic and social development. The study implies that the teachers have a critical role in student's personal development in all aspects and therefore, for academic perspectives, students must rely more on teachers.

#### **5.5. Limitations (Challenges to current study)**

The study is limited in terms of time and findings. The study is applicable to the current scenario of students in UAE schools and therefore, it does not validate the findings on any other population. In order to verify the results on other populations, the questionnaire can be used for the future purpose. However, in similar situations, the results will be similar. The study assumes the negative impact of internet use on student-teacher relationship and academic performance of the student. It is limited in terms of findings such as the reasons behind the internet use and frequency of using the internet. The study only compares the results of four samples, as the aim was to explore the cases in selected schools. Therefore, it has limitations.

## **5.6. Scope for further study**

As per the limitations, the future areas of the study include finding the frequency of internet use and impact on student's academic performance. In addition, the future studies can find the following themes;

- How is the internet impacting the academic success of students?
- With the prevalence of the internet, is there a chance of diminishing the role of teacher with the takeover of the internet?
- How academic policymakers and institutions can help in the promotion of positive internet use that has positive impacts on student's academic success?

## **5.7. Concluding note:**

In conclusion, the study is significant in terms that it analyses the impact of internet use by students of secondary schools. The study suggests that more use of internet decreases the dependency of a student on the teacher. This could result in several situations, and though the study does not analyze the situations, it only concludes that the internet use can adversely influence the students' academic success in early age. Therefore, policymakers and academic institutes need to develop and design strategies to overcome this situation.

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## Appendix 1- Questionnaire

### Part 1

#### Demographics

1. In what age group are you
  - 10-13
  - 13-16
  
2. In which grade are you enrolled
  - 6<sup>th</sup>
  - 7<sup>th</sup>
  - 8<sup>th</sup>
  - 9<sup>th</sup>
  - 10<sup>th</sup>
  
3. Average how many hours do you spend on internet daily
  - 2 hours
  - 3 hours
  - 4 hours
  - 5 hours or more

Sr. #	Part 2 Section 1				
	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	My teacher's lectures are clearly organized and well delivered				

2.	I can tell my teacher really knows how to teach by the way he/ she organizes the class and delivers instruction					
3.	When my teacher discusses course information, I can tell he/she is a credible source in the content area					
4.	I can tell by the way my teacher speaks with the class that he/she is an expert in the content area of the course					
5.	My teacher communicates in ways that demonstrate advanced knowledge/ expertise in the content area of the course.					
6.	Information from the internet is more appropriate than teacher information.					
<b>Part 2 Section 2</b>						
7.	My teacher demonstrates commitment to the class by being authentic and genuine when interacting with students.					

8.	I find myself identifying with my teacher because we have a lot in common.					
9.	My teacher builds rapport with the class by relating to students in an open and approachable manner.					
10	I see things from my teacher's perspective.					
11	I feel that I can relate to my teacher as a person because of the personal stories and illustrations he/she shares with the class.					
12	I feel that my teacher and I share a common perspective.					

**Part 3**

Based on internet as a source of knowledge rate the following statements

13	I can do well in my course(s) if I want to.					
14	If I decide to learn something hard, I can do so.					
15	I can come up with my own solutions to problems.					
16	I can get good grades in my course(s).					

17	When I get stuck on a question, I can eventually work it out for myself.					
18	Using the internet has an impact on my self-confidence in class.					
19	When I do not understand something on the course, I search in the web rather than asking the teacher.					

**Part 4**

Based on internet as a tool of communication rate the following statements

20	The teacher is concerned with the needs of his or her students.					
21	It's not difficult for me to feel connected to my teacher.					
22	I feel comfortable sharing my thoughts with my teacher.					
23	It's easy for me to connect with my teacher					
24	I feel comfortable depending on my teacher.					
25	If I had a problem in my class, I know I could talk to the teacher.					

26	I know my teacher could make me feel better if I had a problem					
----	--	--	--	--	--	--