

**ATTACHMENT THEORY: CONCEPTUALIZATION AND  
MEASUREMENT OF SCHOOL ATTACHMENT SCALE  
TOGETHER WITH ITS IMPLICATIONS FOR SCHOOL  
PSCHOLOGY IN ALBANIAN PUBLIC HIGH SCHOOLS**

Author: Mehmet Aslan

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Supervisors: Prof. Assoc. Dr. Voltisa Lama & Prof. Mimoza Shahini

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## **DECLARATION**

I hereby declare that the present PhD thesis is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at “European University of Tirana” or other institutions. The word count is 60,160 words.

## **ABSTRACT (ENGLISH)**

*Much as students feel attached to school and have good relations with teachers, peers, and school settings they are more likely to be successful and avoid misconducts like; truancy, dropout, drug addiction etc. considering they would be with teachers and peers by extracurricular activities that help them spend more time at school rather than going home or to any other place for after school activities which eventually underlie crucial impact on their achievements or failures. Correspondingly, the prerequisite of vigorous research together with a robust theoretical base provided by Attachment Theory is basis in obtaining a healthy process of School Psychology; a developmental framework that has both adaptive and maladaptive indications for comprehension of secure and insecure attachment.*

*Framework of School Attachment and risk factors are provided with a five scaled assessment: 1) Students feelings for school, 2) Students interest in learning, 3) Students attitudes towards peers, 4) Students attitudes towards teachers, and 5) Students perception of school as behavioral tendencies of adaptive and maladaptive implications for school psychology. Study primarily aimed at validation of a self-report through a five-scaled assessment of School Attachment based on the data collected from high school students (N=1506) with equal distribution of regions (N=6; prefectures). The scale was adapted from Regional Educational Laboratories model used in 2011 to assess School Attachment in American high schools based on Hirschi's Social Control Theory. The reliability of the entire scale was  $\alpha = 0.737$  with no mean difference between participant schools but with a mean difference of 1.55 in gender as high schools had more female students according to INSTAT.*

*The study overall introduces findings of adolescent experiences at school, aiming at comprehension of factors that nurtured or restrained senses of care, interest, respect, belonging, and trust; likewise conceptualizing the grade, gender, and demographic differences among adolescents.*

**Keywords:** Attachment Theory, School Attachment, School Psychology, developmental framework, adolescent experiences, adaptive and maladaptive implications.

## **ABSTRAKTI (ALBANIAN)**

*Shumë nxënës ndihen të lidhur me shkollën dhe kanë marrëdhënie të mira me mësuesit, nxënësit dhe ambjentin shkollor, ata kanë prirjen të jenë të suksesshëm dhe të shmangin sjelljen e keqe, si: mungesat e pajustificuara, largimin nga orët e mësimi, varësinë ndaj drogës etj., duke marrë parasysh faktin se ata janë me mësuesit dhe bashkëmoshatarët e tyre në aktivitete jashtëshkollore, të cilat i ndihmojnë ata të kalojnë më shumë kohë në shkollë, se sa duke shkuar në shtëpi apo në ndonjë vend tjetër për aktivitete passhkollore, të cilat luajnë një rol vendimtar në arritjet apo dështimet e tyre. Përkatësisht, kushtet paraprake të studimit intensiv bashkë me bazën teorike, të siguruar nga teoria e afeksionit (terheqjes) janë tabani i sigurimit të një procesi të shëndetshëm të psikologjisë shkollore; një strukturë zhvillimore që i përmban të dyja si treguesit adaptues dhe keadaptues për të kuptuarit e afeksionit të sigurtë dhe të pasigurtë. Struktura e afeksionit ndaj shkollës dhe faktorët rrëzikues të tij përbëhen nga pesë tregues vlerësimi: 1) ndjenjat e nxënësve për shkollën, 2) interesi i nxënësve për mësimin, 3) sjellja e nxënësve ndaj bashkëmoshatarëve të tyre, 4) sjellja e nxënësve ndaj mësuesve, dhe 5) perceptimi i shkollës nga nxënësit si prirje bihejviorale e implikimeve adaptuese dhe keadaptuese për psikologjinë shkollore. Ky studim kishte për qëllim në radhë të parë konstatimin e një raporti vetjak përmes një vlerësimi prej pesë faktorësh të afeksionit shkollor, bazuar në të dhënat e grumbulluara nga nxënësit e shkollave të mesme (n=1506) me shpërndarje të barabartë rajonesh (n=6; prefektura). Vlerësimi është mbështetur në modelin e laboratorëve edukativë rajonalë, të përdorur në vitin 2011 për të mundësuar afeksionin shkollor në shkollat e mesme amerikane, bazuar në teorinë sociale të kontrollit sipas Hirsch-it. Vërtetësia e të gjithë vlerësimit ishte  $\alpha = 0.737$  pa dallime të konsiderueshme ndërmjet shkollave pjesëmarrëse, por me*

*një dallim të vogël prej 1.55 në gjini, duke qenë se shkollat e msemë kishin më shumë nxënëse femra sipas INSTAT-it.*

*Ky studim parashtron mbi të gjitha gjetje të eksperiencave të adoleshentëve në shkollë, duke synuar të kuptuarit e faktorëve që kanë ushqyer apo frenuar ndjesitë e kujdesit, interesit, repsektit, përkatësisë dhe besimit; si edhe të konceptuarit e klasës, gjinisë, dhe dallimeve demografike ndërmjet adoleshentëve.*

***Fjalë kyçe:*** *teoria e afeksionit (tërheqjes), afeksioni shkollor, psikologjia shkollore, struktura zhvillimore, eksperiencat e adoleshentëve, impikime adaptive dhe keqadaptive.*

## **DEDICATION**

*I dedicate my dissertation to my wife Esmeralda, and my two little girls; Leyla and Sara for their spiritual support, patience, and kindness especially for times that I could not be with them. I hope this research will compensate my missing moments with them, make them proud and help them to be successful in their lives as well.*

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## **LIST OF ABBREVIATIONS**

SA: School Attachment

SAS: School Attachment Scale

SFS: Students` feelings for school

SIL: Students` interest in learning

ATP: Attitudes towards peers

ATT: Attitudes towards teachers

SPS: Students` perception of School

AAI: Adult Attachment Interview

SAS: School Bonding Model

ESB: Effective School Battery

ISC-S: Inventory of School Climate-Student

SES: Socio Economic Status

HBSC: Health Behavior in School-Aged Children

PSSM: Psychological Sense of School Membership

SSDP: Seattle Social Development Project

RHC: Raising Healthy Children

SCT: Social Control Theory

SDT: Social Development Theory

SLT: Social Learning Theory

INSTAT: Institution of Statistics

## **CHAPTER I**

### **1. INTRODUCTION**

The developmental models of positive relations between youth and school life have increasingly been areas of interest for researchers, educators and developmental psychologists. Academic achievement and psychological well-being of students require an approach of bonding model in education of today`s modern world as to have each and every student ready to learn and teachers motivated to teach. However, at the very core of attachment studies, there is the belief that security plays a key role in relations regardless the type of relation (M. S. Ainsworth, 1969; Bowlby, 1969, p. 652; Howes, 1999). The significance of School Attachment (SA) is also observed by Kennedy, mentioning that cognitive and personal development of a child happens through comprehensions of the surroundings occurring through “cognitive-affective” structures (Kennedy & Kennedy, 2004). Many other developmental psychologists also emphasized the developmental structure, framework and impacts of attachment in their researches (Bryant, Schulenberg, O'Malley, Bachman, & Johnston, 2003; Eccles & Roeser, 2009; C. A. McNeely, Nonnemaker, & Blum, 2002; Stewart, 2007).

Even though studies have started to establish and emphasize the significance of the interrelations between youth`s attachment to school and subsequent outcomes of academic performance such as; marks, truancy, dropout, expelling, graduation percentages etc. (Blum, 2005; Libbey, 2004), more research is needed on the field to conceptualize school attachment in understanding how attachment influences school performance, its impact on adolescent development, its impact on psychological well-

being etc. in particular on high school students as they represent the youth of the society they live in. Although there have been some longitudinal researches investigating the impact of SA in regard with behavior and academic achievement (Catalano, Oesterle, Fleming, & Hawkins, 2004; Hawkins, Guo, Hill, Battin-Pearson, & Abbott, 2001) they indicated lack of samples and variables from specific nations as they were more of worldwide studies and they left out samples from adolescents which is a vital period of development. A study based on a specific nation and its youth from high schools by trying to conceptualize SA's influence with variant variables could contribute to a better comprehension of attachment studies. For instance, policy makers, school psychologists, pedagogues and other related entities may have higher interest in such studies when they see that school attachment can influence academic achievement from 10th to 12th grades and these governing entities would invest more on enhancing students' attachment feelings to foster not only academic performance but also adolescent development, their psychological well-beings, avoiding misconducts and other further sides of school attachment variables with their positive effects. An approach like this would help to develop a profound look into the betterment of educational and psychological services and supply us with important predictors for strong, healthy, academic development of adolescents. The present study in this regard aims at providing thus far mentioned analysis of nationwide samples from high school students as the representatives of the youth and the society they live in.

The present study - together with scant data on the issue - essentially introduces findings of high school students' perceptions, experiences of school life and environment as well as the demographic differences like; region, gender, grade, socio-economic status (SES) among adolescents in regard with their level of attachment as to

measure and conceptualize the hypotheses related with adaptive and maladaptive implications of senses like; care, interest, respect, belonging, trust etc. which also correspond with Social Control Theory's (SCT) bonding variables (Attachment, Commitment, Involvement, and Belief). As a consequence of the usage of Attachment Theory and its components as measurement tools, it was observed that they play key roles: Particularly the attachment model based on Hirschi's (SCT) Social Control Theory (1969) which was also used in this study and was consisted of five-scaled measurement which was adapted from Regional Educational Laboratories included: 1) SFS: Students' Feelings for School 2) SIL: Students' Interest in Learning 3) ATP: Attitudes towards Peers 4) ATT: Attitudes towards Teachers 5) SPS: Students' Perception of School.

Adolescents in grades tenth, eleventh and twelfth (N=1506; n=676 male and n= 830 female) were surveyed in late December 2015 and early January 2016. The total number of pupils enrolled on upper secondary schools was 124.619 with 61.163 male and 63.456 female students according to Institution of Statistics (INSTAT), so more than 1% of the total target population was reached; proportionately the findings could be generalized for all public high schools in Albania. The survey questions were developed in accordance with above mentioned five scales as to obtain results and data on five main hypotheses mentioned in the coming section (See; Statement of the Problem, Hypotheses).

### **1.1. Statement of the Problem**

Attachment, bonding, connectedness are some of the major terms used to define the reciprocal positive relations not only for individuals but also for institutions like schools

where youth can cultivate healthy, protective relations with its community and environment. On the other hand, in Albania this field has long been neglected as Gladiola Musabelliu (2006) mentioned in country chapters allotted for Albania from “The Handbook of International School Psychology”; the department of psychology could only be established at Tirana in 1996 with only 42 not well-trained students, the first school psychologists (N=10) were graduated in 2000 (Jimerson et al., 2006). Musabelliu (2006) also mentioned some other major problems after applying a survey to all existing school psychologists (N=11) by reaching following results as the major problems in the field: 1) The ratio of school psychologists to students was 1 psychologist to 580 students, 2) they had a very low status in their working places 3) very low salaries and lack of public support for the enhancement of the services, 4) not many opportunities for professional development, 5) very low job satisfaction levels, mainly due to low salaries 6) most of the schools did not have counseling offices and a school psychologist had to provide psychological services for two or more schools (Jimerson et al., 2006).

Considering invaluable data provided by Musabelliu together with Boce and Bashi in understanding the current situation of psychology and school psychology in Albania, the main issue was well defined by the psychologists themselves: “School psychology is still young in Albania; thus, it suffers from the problems and challenges of a new field” (Jimerson et al., 2006, p. 12). Although the data sheds a critical viewpoint on school psychology, the investigation is based on the system, people within the system – especially psychology as a new field- and the challenges they have had to face consequently. However, the student, the recipient of the school psychology services, is left to be further studied, considering they are in the best position to provide feedback

about the product provided for them. To this end, this study aims at providing findings on youth and their interactions with school life, peers, teachers and services provided for them.

## **1.2. Research Problems**

1. Is School Attachment Scale (SAS) based on five components (SFS, SIL, ATP, ATT, SPS) measured by the respective test items as suggested by the SAS?
2. Is SAS a reliable measurement scale to be used in Albanian culture, in particular for students from public high schools?
3. Are all five components of the SAS model consistent with one another?
4. Is there a statistically significant difference between girls and boys with respect to their overall school attachment scores?
5. Are girls attached to school more than boys in terms of five components of SAS and demographics?

## **1.3. Hypotheses**

1. The five hypothesized components; Students` Feelings for School (SFS), Students` Interest in Learning (SIL), Attitudes towards Peers (ATP), Attitudes towards Teachers (ATT), and Students` Perception of School (SPS) of the School Attachment Scale (SAS) are measured by the respective test items as suggested by the SAS.

2. The School Attachment Scale is reliable to be used in Albanian context to measure students' school attachment in public high schools.
3. All five components (sub-scales) are correlated positively with one another indicating that the SAS components are consistent with one another.
4. There is no statistically significant difference between girls and boys with respect to their overall school attachment scores.
5. Girls are attached to school more than boys based on the outcome dimensions of five components of SAS.

#### **1.4. Significance of the Study**

Academic achievement or school performance is very much related with students' relation with school, if they have good relations with their schools they would stay more for extracurricular activities and attend classes with contentment. However, studies indicate that only 50% of students are having attachment to schools (Blum, 2005), considering attachment is opposite of isolation, the other 50% might be feeling alienated from communal activities or school life (Milsom, Schulz, & Rubel, 2011). School attachment is also related with well-being, sociological, pedagogical, and psychological development of youth as it is one of the essential elements that help students gain skills for facing challenges and achieve success (Benson, 2002; Blum, 2005; Scales, 2005). Studies conducted on youth resiliency held developmental elements like attachment as positive predictors on resiliency enhancement for the future of youth (Benson, 2002; Blum, 2005; Bryan, Day-Vines, Griffin, & Moore-Thomas, 2012; Scales, 2005). SFS, SIL, ATT, ATP and SPS are some of the common variables used to investigate

adolescent development as well as safety, caring, engagement, involvement, commitment etc. which are majorly studied as measurement scales by researchers (Blum, 2005; Booth, Farrell, & Varano, 2008; Bryan et al., 2012; Catalano et al., 2004; Eccles & Roeser, 2009; Libbey, 2004; Shochet, Dadds, Ham, & Montague, 2006; Zurbriggen, Gobin, & Kaehler, 2012). School attachment was also considered as a negative predictor for misconducts and risk factors like; truancy, dropout, failure, delinquency etc. (Bryan et al., 2012; Gottfredson, Gottfredson, Payne, & Gottfredson, 2005; Libbey, 2004) as attachment was mentioned to be a strong and significant motivational factor for both adolescents and adults, in particular on academic achievement outcomes.

Together with rising interest of the researchers and the conceptualized significance of attachment studies implemented on adolescents; psychologists, counselors, pedagogues, curriculum designers, governmental and non-governmental policy making agents are getting more and more devoted in full comprehension of attachment variables and establishment of the safe havens that can cultivate adolescents' attachments to their schools (Bryan et al., 2012; Catalano et al., 2004; Eccles & Roeser, 2009; Libbey, 2004; Smith & Sandhu, 2004). On the other hand, it is worth to mention of a complexity: Attachment studies have also been worked under variant study fields (psychology, counseling, development, pedagogy, sociology, health studies etc.), that caused in variance of terminology as well; school attachment, connectedness, engagement, involvement, bonding, support, climate, student perceptions, attitudes towards peers, teachers etc. which according to researchers are involving similar meanings and somewhat causing confusion on the studies of the field (Bryan et al., 2012; Catalano et al., 2004; Eccles & Roeser, 2009; Libbey, 2004; Shochet et al., 2006; Smith & Sandhu,



2004). Even though different approaches with different frameworks and terminologies brought up new and intriguing results; interrelated structures and similar measurement scales with similar variables used in research caused too much confusion, furthermore there have been diverse findings on the same topic (Libbey, 2004). In the present study, it is aimed to investigate adolescents' attachment feelings not only to their schools but also to their peers and teachers as well as their interest in learning and perceptions of school life as a whole with above mentioned five scaled measurement variables (SFS, SIL, ATT, ATP and SPS), thus to emphasize these variables as positive predictors for adolescents' development and well-being, the phrase attachment was preferred throughout the study. Although attachment studies are mostly derived from Bowlby's (1969) Attachment Theory, Hirschi's (1969) four dimensional model of Social Control Theory (SCT) based on "attachment, commitment, involvement and beliefs" was also taken as the main base model to conceptualize adolescent development in regard with school life. The present study analyzed attachment variables (SFS, SIL, ATT, ATP and SPS) to identify the relation between school attachment and adolescents' well-beings.

### **1.5. Research Aim & Approach**

Adolescence is a transitional and developmental period that occurs between childhood and adulthood, coexisting together with diverse challenges of development and resulting in adaptive or maladaptive behavior dependent on the type, degree, and circumferences of the challenge. Puberty with its concrete biological changes is the initiation of adolescence and the challenges brought together with it. Nevertheless, there are other changes occurring through less concrete processes like social, emotional and psychological modifications. Negligence or lack of support during the development of

such processes would cause severe harms on their future lives of adulthood. Maladaptive behaviors may occur as less severe as in; peer pressure, academic challenges, family problems and as more severe as; truancy, drop out, academic failure, substance usage, juvenile crimes, suicidal tendencies etc.

On the other hand, one of the significant challenges that appear for schools is to find ways and strategies to address students` developmental and academic needs in a fashion of preventing maladaptive behaviors and fostering adaptive behaviors. Motivation, mental well-being and behavior of students are generally shaped to the degree of these needs being met by schools (Baker, Dilly, Aupperlee, & Patil, 2003; Eccles & Roeser, 2009; C. A. McNeely et al., 2002). Stage-Environment Fit theory on this issue especially covers the significance of schools` capacity to meet students` developmental needs (Eccles et al., 1993; Eccles & Roeser, 2009; Midgley, 2014). The general aim of this study is to investigate the impact of attachment factors on students` school life using the theoretical framework drawn from the study of attachment and its derivation SCT. The major objectives of this study are:

1. Present findings on Albanian adolescents` experiences and school life to better comprehend adaptive and maladaptive behaviors using SAS model, furthermore to obtain data for school psychology.
2. Conducting a research on the student, the recipient of the school psychology services, thus providing invaluable feedback for enhancement of these services.
3. Understanding attachment levels of students by conducting the School Attachment Scale through SFS, SIL, ATT, ATP and SPS as the measurement components.

4. Outline a general viewpoint on demographics of youth in Albania in regard with gender, grade, region, and socio-economic status (SES).

### **1.6. General Outline of the Thesis**

Chapter two is consisted of theoretical structure and analytical model in four major parts, addressing;

- Theoretical Framework of Attachment Theory
- School Psychology and School Attachment
- Adolescence Development
- Theoretical Foundations of School Attachment

Chapter three presents a detailed description and logic of the methodology used in addressing the research goals. The chapter also contains a description of the empirical study through a pilot testing of Stage 1 survey procedures and presents its validation and reliability.

Chapter four is dedicated to a pilot study as preliminary procedures of stage 1 survey and its analysis through following headings: 1) Scope of the Pilot Study, 2) Significance of The Pilot Study, 3) Findings and Discussion, 4) Results and Discussions, 5) Case Study I, 6) Case Study II, and 7) Results of Pilot Study. Together with results obtained from stage 1 analysis of the pilot study, the implementation of the stage 2 survey questions was done to the target population.

Chapter five involves the results of the survey questionnaire with empirical analysis as Stage 2 through SPSS program. Data is presented and discussed in relation to each and every objectives and hypotheses mentioned in introduction. The results are interpreted through the lens of aforementioned theories of Attachment, School Attachment Scale and SCT (See Chapter 1).

In Chapter six, Stage 1 study results are interpreted together with other major findings of the Stage 2 as to comprehend, compare and conceptualize with the overall objectives and hypotheses of the research. The theoretical framework of School Attachment in Albania is drawn in the light of the findings and the ways of its contributions are detailed together with complementary findings through the present study as well as an emphasis noted for further research.

Chapter seven is dedicated to conclusions and overall summary of findings obtained and interpreted in previous chapters.

Five Appendices are presented:

- APPENDIX A (Stage 1 Survey Procedures)
- APPENDIX B (Stage 2 Survey Procedures)
- APPENDIX C (Statistics of Reliability Test)
- APPENDIX D (Frequency Tables)
- APPENDIX E (Consent Papers From Ministry of Education and Sports)

## CHAPTER II

### 2. THEORETICAL STRUCTURE AND ANALYTICAL MODEL

In this chapter the review of theoretical structure and analytical model of Attachment Theory in relation with SA as well as the conceptual framework of SCT that guided this study are presented. The chapter involves four parts. **The first part** is the review of Attachment Theory as the basis of all attachment models. Theoretical foundations of SA as well as adolescent development are overviewed in regard with Attachment Theory and SCT. **The second part** is the review of the theoretical model of SCT that was also implemented in this study. The Social Control Theory is reviewed in this part as the basis of SCT; thus the structures, functions and developmental framework of SA are presented. **The third part** contains the principles, validations, and assessments of the theoretical framework of SAS together with measurements of the model. The principles, validations, assessments, and measurements present a guideline for this study as they did for other studies conducted on SA. **The fourth part** presented a detailed overview of studies conducted on youth, attachment, adolescent development etc. in regard with SA within Albanian context.

In Chapter II the previous studies implemented on SA are reviewed as a whole to map out a general overview of SA and its measurement scales, thus the differences in approaches, conceptualizations, variables, and associations are presented in this section to further study on the standards of measuring SA.

## **2.1. Theoretical Framework of Attachment Theory**

Attachment as a concept in regard with SA goes along with many other names such as; connectedness, bonding, engagement, belonging etc. however as a theory, it derives its roots from John Bowlby, the founder of the theory and Mary Ainsworth, the developer and co-founder of the theory who also brought up a new face to it. They both have deep conceptualization of attachment with a similarity seen on both thinkers and can be considered co-workers in creating the theory; they thought of attachment as a deep long-lasting emotional connectedness that bonds one individual to another that is beyond space and time (M. Ainsworth, 1973; Bowlby, 1969).

Attachment primarily, not only as a theory but also as a pioneering model, has been developed throughout John Bowlby's lifespan. It basically studies the development of unique and strong fondness between a child and its parent through which the child seeks comfort and security from the parent or caregiver. Since parent is the first person encountered by the child, the theory is about the first experienced relationship and its impact on child's whole life. This first attachment experience has impact on all other later developed relations as it teaches the child about how to develop trust on others for support and maintenance. The senses of belief, self-esteem, and efficacy are also influenced as they learn how to rely on other people. At this point, it is worth to mention the significance of secure attachment, because it promotes dependence and independence - the abilities of relying on the others and the self - at the same time. Together with birth children need to have a primary caregiver, so they can feel safe and secure. Substitution of the primary caregiver with another accustomed adult can also happen for temporary moments through which the secondary attachment occurs

(Bowlby, 1960a). The senses of security, belief, safety etc. encourage the child to further explore the surroundings, especially through play which also helps the child to experience other feelings like; stranger anxiety, worry, fear etc. during when the need for comfort arises. It is important that the child finds close, physical contact from primary or secondary attachment figure in such cases. The physical comfort may turn into verbal or some other formats as they grow up (Bowlby, 1958).

## **2.2. Historical Context of Attachment Theory**

Although Bowlby and Ainsworth are two independent psychologists their approaches may indicate some controversial influences of Freud, especially on his thoughts of psychoanalysis as well as ethology, developmental psychology, automation, cognitive development etc. In this regard, Freud's thoughts on development are worth to quote to see the origins of attachment: "So long as we trace the development from its final outcome backwards, the chain of events appears continuous, and we feel we have gained an insight which is completely satisfactory or even exhaustive" (Freud, 1920, p. 167). After all, the opinions and perceptions we have gained today on attachment theory have a deep developmental background. Bowlby mainly composed his theory through following works; "The Nature of the Child's Tie to His Mother" (1958), "Separation Anxiety" (1960b), "Grief and Mourning in Infancy and Early Childhood" (1960a) and "Attachment and Loss Vol. I and II" following the years of 1973 and 1982. Mary Ainsworth also studied the same theory and formulized her innovational attachment patterns through following major works; "Child Care and the Growth of Love" (1965), "Infancy in Uganda: Infant Care and the Growth of Love." (1967), and "Patterns of Attachment" (1964)

### 2.2.1. John Bowlby

Bowlby's interest in infant-mother relation was raised while he was working under the supervision of Melanie Klein who believed that children's complications were stemming from inner conflicts deriving from libido, thus refuting external factors. Bowlby opposing Klein's approach, started to think of empirical methods in proving family factors on these conflicts. In his early studies he suggested that by following about mothers experiencing difficulties with their children, the tendency for clinical research and theoretical approach can be observed:

“Having once been helped to recognize and recapture the feelings which she herself had as a child and to find that they are accepted tolerantly and understandingly, a mother will become increasingly sympathetic and tolerant toward the same things in her child” (Bowlby, 1940, p. 23).

He found his thoughts in conjunction with the theories of psychoanalytic object-relations proposed by Fairbain (1954) and Winnicott (1965). However he developed his independent approach. He conducted his first empirical studies with a detailed study of 44 cases in London Child Guidance Clinic through which he was able to make connections between the problems and maternal separation and/or deprivation. He also worked at Tavistock Clinic in London which provided him the chance to reach measurable methodologies and statistics as a psychiatrist and psychoanalyst. He recorded valuable data on “Forty-Four Juvenile Thieves: Their Characters and Home Lives” (Bowlby, 1944), containing statistical tests and histories of the case studies.

Ethological concepts were presented to better explain infant development, like sign stimuli which could be external or internal psychological processes, however he was



criticized by psychoanalysts for being behaviorist, as he was also criticized when he portrayed an obvious division between social learning theory's dependency and the new perception of attachment. John Bowlby overall, remodeled our apprehensions about the relation between a child and its mother that goes through separation, deprivation, and loss. He had an unconventional approach of defining the concept as he first started to construct his theory; he thought that attachment was not necessarily reciprocal, an individual could have attachment feelings to another one that was not felt the same way by the other individual (Bowlby, 1969). In other words, a person may have attachment feelings with another person which is not necessarily shared; attachment was also explained by Bowlby as something that can be observed through some particular patterns of behavior characterized by children, such as the search for affinity with the caregiver or attached figure, in particular when the child is threatened, stressed, upset or bored (Bowlby, 1969).

#### **2.2.2. Mary Ainsworth**

Ainsworth same as Bowlby, believed that human circumstances could be enhanced through psychology and profound research. She worked with Bowlby for more than three years during when they grew a mutual interest and devotion on attachment studies. They were both interested in maternal deprivation, but Ainsworth went beyond that to study infant development, especially in regard with security aspects. She first started her famous research that went beyond observation in Uganda which was also regarded as studies first conducted on infants in 20th century. She developed a list on infant-mother relation which later on helped her to build her security patterns;

- *Crying when the mother leaves*

- *Following the mother*
- *Showing concern for the mother`s whereabouts*
- *Scrambling over the mother*
- *Burying the face in the mother`s lap*
- *Using the mother as the safe haven when in a strange situation*
- *Flying to the mother when frightened*

Greeting her through smiling, crowing, clapping, lifting the arms, and general excitement (M. D. S. Ainsworth, 1967).

Ainsworth also observed that babies were using their mothers as bases for security to return anytime needed. As her initial field of study on security, she suggested that infants with secure attachment have more courage to investigate the surroundings as they would know they can return to their mothers whenever needed. She also noticed the differences of development between infants concluding that cultural differences, stress factors and family problems are passing onto infants (M. D. S. Ainsworth, 1967).

Ainsworth`s Baltimore research brought her studies to a higher level as she started to think if behaviors derived from attachment could be universalized. To this end, she compared the data obtained in Uganda to the one in Baltimore and she was happy to see that almost all of the attachment behaviors were similar. She wanted to test her theory of “secure base” and she decided to make up a “strange situation” to observe babies` reactions in a more stressful setting. The strange situation test is now used in many studies of development. It is basically an observation of twenty-minute infant play in an

unfamiliar setting (room) as both familiar and unfamiliar grown-ups enter and leave the setting. The overall aim is to figure out child`s behaviors in relation with attachment. Ainsworth reached following results also known as three basic attachment patterns;

- *Secure Attachment*
- *Anxious-Ambivalent insecure attachment*
- *Anxious-Avoidant insecure attachment*

Mary Ainsworth broadened the approaches of attachment theory as she opened new fields of research that led the theory find new channels of advancement. She also found empirical ways of testing on Bowlby`s approaches. The fourth pattern, “Disorganized/disoriented Attachment” later on was added by Main and Solomon as they could not categorize three groups of children in the conducted experiment on Stranger Situation (Main & Solomon, 1986, p. 113). The discovery was important in determining the behavioral risk factors for adolescent and adult disorders that may occur after infancy. Ainsworth also presented new ways of experimentations on infant-mother relationship through above-mentioned formulated attachment patterns.

#### *Secure Attachment*

As the first pattern of attachment it is considered to be the healthiest developed attachment behavior. Children that have gone through secure attachment had experienced utmost care and sensitivity. Thus, they gain abilities of trusting and counting on the attached figure as they know that their needs are going to be met. Consequently they build self-esteem in constructing new relations with other people; they have the capacity to get the best possible outcomes from opportunities; they gain

skills in taking part with activities that require productivity and creativity; they are capable of solving encountered problems as they develop a wider perception to the world; and they gain resiliency on emotions, physical difficulties, challenges etc. (M. D. S. Ainsworth, 1967).

#### *Anxious-Ambivalent insecure attachment*

Ambivalent children are considered of those who are gone through an unbalanced caregiving which was mostly not responsive when care was needed, and even when care was given it was not consistent. Although such children show some signs of attachment to caregiver as in clinging and looking for comfort, they still get upset or bored easily and they find it difficult to trust the adult figure. Some of their characteristics could be observed as; immature behaviors, most of the time feeling helpless, hectic, inactive, grumpy, moody, whiney etc. They could also be in search for more attention, hyperactive, and experience difficulties in getting back from negative situations (M. D. S. Ainsworth, 1967).

#### *Anxious-Avoidant insecure attachment*

Avoidant insecure children would have gone through senseless, unexpected, declined, refuted, intrusive caring by the adult figure. They seem to have lost their dependency feelings due to lack of trust and reliance feelings, thus they act as if they are independent of the adult figure and they try to meet their requirements by themselves. Some of their characteristics could be observed as; they might be able to achieve some certain things with their self-reliance and independent feelings but they always feel uneasy in society, they are more duty oriented, they have difficulties in building close relationships as they avoid such relations and display carelessness in such matters,

creativity is restrained in them, they don't easily ask for help, and they may have sudden emotional outbreaks (M. D. S. Ainsworth, 1967).

### *Disorganized/disoriented Attachment*

Disorganized/disoriented children would have gone through extreme negligence, abuse, chaos, and other extreme negative environmental settings and caregiving. They often feel confused and frightened towards the adult figure. Some of their characteristics could be observed as; highly alert to dangers, mostly distracted, having difficulties in concentrating, most of the time afraid of others, often in panic, might display unexpected, weird, extreme, stressful behavior, which could cause great surprise on the others and adults may find them difficult to cope with. They would have very sensitive feelings when criticized and they would display oppositional behavior or viewpoint (Main & Solomon, 1986).

Although John Bowlby and Mary Ainsworth are founders of the theory there were other researchers who conducted valuable studies on the field. Rudolph Schaffer who conducted further studies on attachment (Schaffer & Emerson, 1964), Christoph Heinicke performed extra reunion and separation researches (Heinicke & Westheimer, 1966), and Ambrose as one of above mentioned researchers of that period (1961) studied on social behavior. Gerber, Brazelton, Kennell, and Klaus are also among many others who brought the theory to today's modern understanding. T. Berry Brazelton (1992) "Touchpoints: Your Child's Emotional and Behavioral Development" as well as many other works in "Infants and mothers: Differences in Development" says "Normal babies are not alike" (T. B. Brazelton, Robey, & Collier, 1969), Gerber (1998) with her work entitled "Dear Parent: Caring for Infants with Respect" on difficulties of the first

weeks, and doctors Kennel and Klaus who worked together for many years brought up the concept of bonding together with attachment as bonding occurs from parent to infant and attachment occurs from infant to parent (Klaus & Kennell, 1976).

### **2.3. New Directions on Attachment Theory**

Attachment since its initiation as a theory has long been studied and implemented in numerous researches. The Minnesota study, outlined by Alan Sroufe (1983), was one of the major longitudinal studies on the relationship between secure attachment and caregiving quality. Many other researchers, apart from Bowlby himself, who worked with Mary Ainsworth and her students working under her supervision enriched and helped the theory's advancement.

Although attachment has been highly valued in regard with infant-mother relations, due to confusions on attachment bond and trauma bond there have been fatal mistakes as well. Death of Baby P in England in 2007 as a criminal case due to beatings and parental abuse underscored a fatal misconception of attachment theory, because the theory centralizes human safety first than emphasizes the significance of infant-mother relation. Schwartz (2015) gives a detailed table on differences between attachment bond and trauma bond: "An attachment bond makes the infant safe and is the basis of Winnicott's facilitating environment. The trauma bond is not safe. It is a desperate exercise in self-preservation" (Schwartz, 2015, p. 258). Particularly, in clinical work, Slade mentions that "Attachment theory informs but does not determine clinical work" (Slade, 1999). It is internationally regarded as a frame of reference in treating trauma (Arikan & Karanci, 2012; Zurbriggen et al., 2012).

Researchers have been trying to apply attachment into several fronts; some of them are; therapy, all types of relations (particularly couples), throughout lifespan, developmental psychology, industrial-organizational psychology (in regard with employer, employee, work and workplace), adolescence development, SA etc. The theory is still emerging among psychoanalysts, psychologists, and scholars in general. There is a long growing history of conceptions that find their origins in theories of attachment. Each and every development has been contributing to its maturation and expansion Table 2.1.

**Table 2.1 - Summary of Theoretical Framework of Attachment Theory and Its Development Process by Author, Content and Contribution to the Field**

Author	Content of the Study	Contribution to the Field
Freud, S. (1955)	<ul style="list-style-type: none"> <li>-The psychogenesis of a case of homosexuality in a woman. In 3. Strachey (Ed.and Trans.)</li> <li>- The influence of early environment in the development of neurosis and neu-rotic character</li> <li>- Forty-four juvenile thieves: Their characters and home lives</li> <li>-The nature of the child's tie to his mother</li> </ul>	<p>influences of Freud on Bowlby, especially on his thoughts of psychoanalysis</p>
Bowlby, J. (1940, 1944, 1958, 1960, 1969, 1973, 1982.)	<ul style="list-style-type: none"> <li>- Grief and mourning in infancy and early childhood</li> <li>- Attachment. Attachment and Loss: Vol. 1. Loss.</li> <li>- Infants and mothers: Differences in development</li> <li>- Attachment and loss (vol. 2), Separation: Anxiety and anger</li> <li>- Attachment and loss: Vol. 1 second edition. Attachment.</li> </ul>	<p>Attachment primarily, not only as a theory but also as a pioneering model, has been developed throughout John Bowlby's lifespan. It basically studies the development of unique and strong fondness between a child and its parent through which the child seeks comfort and security from the parent.</p>
Ainsworth, M. S. (1965, 1967, 1969, 1973, 1978, 1979)	<ul style="list-style-type: none"> <li>- Child care and the growth of love.</li> <li>- Infancy in Uganda: Infant care and the growth of love, Baltimore</li> <li>- Object Relations, Dependency, and Attachment: A Theoretical Review of the Infant-Mother Relationship</li> <li>- The development of infant-mother attachment</li> <li>- Patterns of attachment: A psychological study of the Strange Situation</li> <li>- Infant-mother attachment</li> </ul>	<p>Ainsworth same as Bowlby, believed that human circumstances could be enhanced through psychology and profound research. They were both interested in maternal deprivation, but Ainsworth went beyond that to study infant development, especially in regard with security aspects. Ainsworth reached following results also known as three basic attachment patterns;</p> <p>Secure Attachment</p> <p>Anxious-Ambivalent insecure attachment</p> <p>Anxious-Avoidant insecure attachment</p>
Main and Solomon, (1986)	<ul style="list-style-type: none"> <li>-Discovery of a New,Insecure-Disorganized/Disoriented Attachment</li> </ul>	<p>Discovery of a New,Insecure-Disorganized/Disoriented Attachment</p>

	Pattern	Pattern
Schaffer & Emerson, (1964)	-The development of social attachments in infancy	Monographs of the Society for Research in Child Development
Heinicke & Westheimer (1966)	- Brief separations	Extra reunion and separation researches
Ambrose, J. A. (1961)	- The development of the smiling response in early human infancy	An experimental and theoretical study of their course and significance.
Brazelton, T. Berry (1969, 1992)	- Infants and mothers: Differences in development - Touchpoints. Child's Emotional and Behavioral Development	Brought the theory to today's modern understanding. Implemented studies on early infancy.
Klaus & Kennell (1976)	- Maternal-infant bonding: The impact of early separation or loss on family development	They worked for many years and brought up the concept of bonding together with attachment as bonding occurs from parent to infant and attachment occurs from infant to parent.
Sroufe, L. A. (1983)	- Infant-caregiver attachment and patterns of adaptation in preschool: : The roots of maladaptation and competence	The Minnesota study, outlined by Alan Sroufe was one of the major longitudinal studies on the relationship between secure attachment and caregiving quality.
Schwartz, J. (2015)	- The Unacknowledged History of John Bowlby's Attachment Theory	detailed information on differences between attachment bond and trauma bond
Slade, A. (2006)	- Attachment Theory and Research: Implications for the Theory and Practice of Individual Psychotherapy with Adults - Attachment and coping as	Set differences between attachment theory and clinical work.
Arikan & Karanci (2012)	facilitators of posttraumatic growth in Turkish university students experiencing traumatic events	Used Salde's opinion as a frame of reference in treating trauma.

## 2.4. Attachment and Adolescent Development

After Bowlby and Ainsworth, many researchers tried to understand and determine the influences of early attachment traits to adolescent and adult life. Waters (1978) and Vaughn (1979) were the first to conduct clinical experiments on understanding impacts of attachment on adolescents. Waters studied on forty eight children whereas Vaughn studied with hundred samples. Waters concluded that “environmental stressors” were needed to be assessed as well in order to obtain stable results on attachment behavior. Vaughn, on the other hand, suggested that attachment influences during infancy had impact on later attachment behavior of adolescents and adults.



Other longitudinal studies were conducted to understand the impact of early attachment behavior on adolescent and adult attachment. While stranger situation was used for infant attachment; Barkley's Adult Attachment Interview (AAI) was used for investigation of adolescent and adult attachment.

Waters (2000) conducted one of the first longitudinal experiments on sixty middle class infants fifty of which were sampled again through AAI after twenty years. The results were important in finding the relation between early infancy attachment security and adult attachment security. The negative effects observed twenty years ago were diminished due to social support, income, education etc. External factors on attachment were emphasized. Weinfield (2000) conducted another longitudinal experiment on fifty-nine low-income samples that were observed through stranger situation at twelve and eighteen months and studied again when they were eighteen to nineteen year old adolescents through AAI. Since the samples were from low-income families who suffered severe family problems like divorce, poverty etc. they did not reveal any significant differences of attachment security from infancy to adolescence. It was believed that the poverty and bad environmental settings were variables causing such results. Waters (2000) conducted an experiment over a bigger number of samples (205 families). The findings overall showed that 77% of the adolescents remained with the same secure attachment allotment indicating the same results when they were infants.

These three longitudinal studies were quite significant in a few aspects; environmental factors were emphasized, infancy attachment had a significant influence on adolescence development as well as on attachment patterns and their classifications. These studies also opened the new channels for the studies of attachment; in particular environmental

factor started to be studied more and more among which SA was emerged as a new field of study.

Studies conducted on attachment, overall indicate that styles of attachment have impact on personality traits and professional life of an individual. Thus, environmental factors are also as important as individual's attachment patterns, because both have influence on development; "Developmental Theorists are now looking at much more diverse populations and attachment theorists need to follow their lead" (Austrian, 2013, p. 409)

Although there have been issues on terminology used on SA studies, researchers commonly agreed upon the fact that SA is a significant framework in obtaining positive outcomes over some key components of adolescent development. Among these studies, Bond and her colleagues (2007) found that higher attachment levels to school helped in reaching higher rates of school graduations. Another study conducted on the relationship between SA and dropout at high schools established that measurements of SA scales or variables that were particularly associated with elements of behaviors like disciplinary and attendance issues; emotional elements like school liking and interest; and mental elements like the desire for learning indicated significant predictions of dropout from high schools (Archambault, Janosz, Fallu, & Pagani, 2009).

Emotional and physical development of adolescents was also linked to SA levels of adolescents in many other studies. Shochet and colleagues (2006) presented significant correlation between SA and future and present symptoms of depression over high school students, the later study indicated that the degree of such correlation was even higher than parent attachment (Shochet, Smyth, & Homel, 2007). School attachment, in consideration of its strong correlation with adolescent development particularly on

reduction of deviant behaviors, enhancement of emotional development, academic achievement etc. has a big prospective potential in preventing occurrences of problems among adolescents. Attachment can also contribute to the expected behavioral changes among adolescents as many elements that can help increase attachment feelings can be adjusted within school environments.

Adolescent development happens through some appearances of changes; physical changes, cognitive changes, emotional changes (changes can also be considered development in this regard), social changes, and behavioral changes: “Each section presents basic information about what is known about that aspect of adolescent development and suggests roles professionals can play to help support adolescents” (M. S. Ainsworth, 1969; Association, 2002, p. 5). Although changes happening physically are more visible on adolescents, these changes are just a fragment of the experienced development at that stage of their lives before they enter adulthood. Their brain developments are not strikingly visible compared to their physical appearances; however cognitive development allows them to have a more enhanced capability of reasoning and thinking on abstract things. Emotional development occurs through their feelings of trying to understand themselves, and how they want to be seen by others. Social changes or development occurs as they start to build relations with their peers, teachers and other adults. Thus they start to construct new behavioral patterns with experimental approaches of their cognitive abilities as they are transformed from childhood into adulthood.

## **2.5. Attachment and School Psychology**

The focuses of psychologists that are working together with schools and educational institutions have conventionally been on evaluation, avoidance, and measurement with numerous strategic elements that have impact on educational performance. However, performance enhancement requires complete and solid information of developmental procedures that can be observed both with negative and positive aspects. Furthermore to reach an efficacious application of school psychology, a robust theory and an investigation centered approach are required. In this regard Attachment Theory can be a base model for school psychologists to achieve aforementioned tasks through which psychologists can construct a developmental framework in order to conceptualize emotional, societal, reciprocal interactions of individuals that shape their perceptions of the self, others and the world in general. Attachment as a theory not only addresses development in regard with emotions it also addresses societal development of the individuals through procedures and consequences that occur either adaptive or maladaptive as well as predicting overall performance, pathological well-being, and competence of the individuals. The theory with its capability of providing empirical and theoretical structure for school psychologists also helps them to generate sub-theories, produce measurement scales, policy making plans on individual, institutional, national, and international levels. In this context, the reciprocal interrelations between the child-parent and student-teacher studies also gain meaning as attachment levels and risk factors can be measured with their outcomes related with categorization of attachment.

Since attachment in today`s studies is considered beyond family and the relationship between child and parents, school psychology also seeks to find models that are

appropriate for environments that are beyond family and tries to establish supportive and protective elements in this regard. According to Howes (1999) there are three standards of criterion to reach a healthy attachment beyond family; (1) somatic and emotional judgment, (2) the continuous availability of someone in individual's life, and (3) investing on emotional development of the person. In this regard, the significance of teachers, daycare nannies, counselors, psychotherapists etc. is worth to mention as they may surrogate primary figure of attachment when the individual is provided with efficient somatic and emotional support.

One of the other aspects of schools which should be considered by school psychologists is that they are communal places where students can socialize with others. According to Barber & Muenz (1996) adolescents socialize with others through different aspects like; having close relations with some others, displaying regulated behaviors, and initiating autonomy for psychological development. The approach of seeing schools as social settings indicates that schools provide the first aspect by helping students socialize, especially when they are well-organized to be cultures or environments of caring (Battistich & Hom, 1997). Although there have been different viewpoints on the approach of schools' functions as social environments the scholars majorly agreed on the facts that schools help students experience emotional bonding to each other as they develop attachment feelings (see Libbey, 2004, p. 274), they experience senses like being respected, helped and cared by peers and teachers, in such schools students are felt like being at home (see Libbey, 2004, p. 281). One of the benefits provided by such caring schools is that students experience senses like being part of a bigger group in where they have their roles and contributions as well as such schools give them the chance to have a word in processes of making decisions on activities of the school. The

impacts of such schools on students development is widely appreciated by scholars as such schools bring up systems with value, higher satisfaction, enhanced school performance, and lower delinquency behavior, overall healthy school attachment (Battistich & Hom, 1997). As mentioned thus far, the role of school attachment in preventing delinquency and fostering healthy development is one of the majorly and pervasively agreed influences of SA on students by scholars of their respective fields.

According to literature written on SA, one of the other positive influences of healthy built SA in relation with school psychology is that misconducted behavior, deviancy, and related negative outcomes are visibly reduced, furthermore these positive influences were observed on both males and females and on different societal groups as well as diverse ethnicities (Hirschfield & Gasper, 2011). Together with studies of SA and school psychology the prevention of delinquent behavior in relation with emotional problems, dropout, and such other variant negative aspects were well defined with their proposed models and methodologies.

On the other hand, there also have been some disagreement points on studies of SA in relation with school psychology. One of the major ones was that some researchers believed attachment should be observed as an impact of individual feelings (Goodenow & Grady, 1993), however some other researchers conducted their research by the approach of school's impact-group influence- as the main indicator of attachment (Battistich & Hom, 1997; Bryk & Driscoll, 1988). First viewpoint infers that delinquent behavior is resulted due to missing or lower levels of attachment, thus the investment on improvement or enhancement and support should be prioritized to students` with such deviant behaviors. The second position of the researchers asserts that societal factors or

group effect should be prioritized in order to avoid above mentioned misconducts and to reach positive outcomes of SA. According to this approach, attachment is one of the basic needs of students attending schools which should be answered by fully prepared schools so as to make deviant behavior a reason for failing the school or classes. This is one of the majorly significant points of SA and school psychology studies that should be empirically tested. By doing so, it can be explained if students' individual senses are the sources of their delinquencies and if these feelings have impact of avoiding feelings for SA or is it because students' school life as a communal environment. Some other studies however, proposed a multifaceted approach to SA and school psychology studies. In one of the researches it was found that the quality of relationship between student and teacher could coequally balance the unfavorable outcomes of school environment, in particular it had impact on students' school performance (Konishi, Hymel, Zumbo, & Li, 2010). Among some other researches on SA through the approach of schools as societal groups, the results indicated that students' attachment feelings were diversified inside the schools not among schools, and that attachment feelings were especially derived from their self-esteem. However, the discussion on attachment feelings implies that attachment is personal, by creating a healthy caring school society one can have low levels of influence on students' SA as it's something personal. The major issue on studies of SA and school psychology as mentioned earlier seems to be the lack of empirical researches as there haven't been sufficient studies on cohesiveness of schools and its impact on enhancement of adolescent development. Studies, in general, were centered on school as an organization rather than peer effect, student-teacher interrelations, support etc. were considered as individual level and were centered on students as personal level. Thus, it's worth to mention that multifaceted

studies have been pervasively presented on academic papers, but it's still a discussion question, if influences of SA come from student's individual senses or are those of the schools as organizational communities.

## **2.6. Theoretical Contexts of School Attachment**

Although attachment as a theory dates back to 1960s, SA in regard with School Psychology can be traced from 20th century since when Perry (1914) underscored the significance of school environment in academic achievement, because students are very much influenced of their school surroundings, thus it is one of school's primary duties to provide an atmosphere that is more than a simple "housing" Perry (1914, p. 303). He suggested that school environment should be considered as part of the school, calling it; "esprit de corps", and that it should be advanced by the involvement of director, teacher and students as well as the laypeople (alumni, parents etc.). Since then, there have been numerous empirical studies presenting findings on the significance of SA suggesting that a positive school environment is needed to obtain academic achievement and healthy development of adolescents.

Although SA in a wider sense has been studied by researchers; school community, school connectedness, and school climate had always been part of the research areas in a narrower sense. These research areas indicate similar focuses on SA in general, yet they have partial differences. School community focuses on the human aspect of SA. Interpersonal relations, standards, purposes, morals, school activities, opportunities and decision making processes in relation with human aspect and the surroundings which are held as focus areas (McMillan & Chavis, 1986). School climate is defined through intercommunication of variables like; students, teachers, administrators, schedule,



tangible surroundings etc. as a whole that create the atmosphere of education for students. The intercommunication of above mentioned variables together with measurement of quality and frequentness of intercommunications and interactions of the people at school was described as school culture (Kuperminc, Leadbeater, & Blatt, 2001). However, students' attitude toward school was measured through individuals (Loukas, Suzuki, & Horton, 2006). An individual's experiences through school context was regarded as school bonding. In other words, student's level of connectedness (high or low) was determined through favorable or unfavorable school climate (Wilson, 2004).

The literature on types of SA, in general indicate that SA encompasses thus far mentioned concepts; school community, school climate and school connectedness, considering that it attempts to measure all the variables related with school in determining the attachment level of students. In this study, SA as the SAS was given through the emphasis of five-scaled measurement tool (See Introduction and Methodology for more details). The literature reveals the infrastructure of this study as well, however it is also worth to mention that this study is taking SA as the roof of above mentioned types of SA and SAS in particular which was widely reviewed in the second part of this chapter (see Chapter I, part II).

### **2.6.1. School Attachment and Organizational Studies**

Since schools are organizations, SA had been very much studied under organizational attachment studies which helped in comprehension of school environment and its particular characteristics. As a consequence, theories on organizations with a focus of human aspect are crucial in comprehension of SA.

Tagiuri, Litwin, and Barnes (1968) studied on theories of environment and organizations and proposed organizational environment with three level model and defined interior environment of the organization as; (a) experiences of members, (b) organization`s influences on their behavior, and (c) values of specific set of traits (Tagiuri et al., 1968, p. 27). He later on developed his three leveled model with a fourth one defining them as: "...configuration of enduring characteristics of the ecology, milieu, social system, and culture constitute a climate, Just like a specific composition of individual traits build the personality, he concluded as follows; ecology, the physical side of the environment; milieu, people within the environment; social system, the interrelations between people within environment; and culture as the beliefs, norms, and values shared within the environment (Tagiuri et al., 1968, p. 23).

Other than Tagiuri`s four leveled model, there have been numerous studies conducted on school environment in an attempt to systemize, conceptualize, classify and determine the variables that make of environmental factors as well as their impacts on SA. J. F. Murphy, Weil, Hallinger, and Mitman (1982) suggested a structure for academic climate that urges students to achievement with an emphasis on standardized climate which stimulate people within the organization to act with expected behaviors and explain academic press as the key for achievement that can be reached through both students and staff; "degree to which school forces press for student achievement on a school-wide basis" (J. F. Murphy et al., 1982, p. 22). They also emphasized the significance of school regulations and class activities that foster academic press.

McDill, Rigsby, and Meyers Jr (1969) studied on some high schools` instructional and social climates and reached six elements of school environment: Student perception of

intellectualism-estheticism, the relations between school staff and students through SPS (students' perceptions of school) particularly the stressors for academic achievement; academic emulation, a medium for academic success; scientism, with a focus on science; cohesive and egalitarian estheticism, highlighting intellect as a criteria for status and students' social unification within school's communal system; academically oriented student status system, a medium of academic success between peer associations; and humanistic excellence, a factor of drive in increasing students' attraction and maintenance for social sciences.

Moos (1973) suggested another six level theoretical standpoint to determine variables of environment and study their relations with behavior in an analytical way: behavior settings, behavioral and environmental features with the purpose of defining student's experiences and behaviors; organizational structure, systematic relations between an organization's divisions and their standpoints; ecological dimensions, factual ergonomics of an organization as in architecture, location, internal design etc.; psychosocial characteristics and organizational climate, development of the individual, relationships, maintenance of the infrastructural and divisional aspects of the organization; functional or reinforcement properties of environments, mechanisms of control on motivational aspects of specific behaviors, and personal and behavioral characteristics of the inhabitants, personal traits of people living in the organization. He asserted that "categories of dimensions are nonexclusive, overlapping, and mutually interrelated" (Moos, 1973, p. 652). Moos, Clayton, and Max (1979) later on suggested a four divisional system including: physical setting, organizational factors, human aggregate and social climate. After a considerable revision, he suggested a further developed nine social environment ratio (Moos & Moos, 1994).

To enhance and formulize a healthy school concept Hoy and Fedman (1987) suggested a seven dimensional and three leveled structure in order to reach, maintain and test the well-being of communal relationships in a school. They stressed the concept of health as: “healthy school is one in which the teachers, administrators, and the board are in harmony, and the school meets both its organizational and people needs as it pursues its missions” (Hoy & Tarter, 1992, p. 75). (1) For school board level; institutional integrity was mentioned as a school`s ability of preserving its scholar dignity from outer factors. (2) For Administrational level; initiating structure, was the leader`s rules of behavior aiming at success; consideration, targeting equilibrium of communal relations with expected leader behavior; resource support, indicated administrative behavior in provision of needed materials for school; and principal influence was referring the principle`s skills in having influence over superiors. (3) For teacher level; morale, stated the communal feelings between teachers, and academic emphasis, referred to the extension of pressure over students for achievement. Later on together with Kottkamp in 1991, Hoy and Tarter advanced Organizational Health Inventory (OHI), making it specific for teachers basing on above mentioned theoretical approach.

Bryk and Driscoll (1988) proposed three essential elements that constitute a school aiming to examine the structural and interpersonal characteristics of the school as an organization, consisting: A common agenda of activities, activities and schedules that were shared by students and teachers that connect them to each other as well as to the customs and norms of the school; formal organizational characteristics, organizational characteristics among adults in regard with their formal responsibilities and collegiate interactions; and shared value system, as in norms, values, and beliefs among people that construct the culture of the school system as a community.

Gottfredson (1986) proposed the Effective School Battery (ESB) for the subordinate school environment assessment. The earliest ESB on student outcome related elements was covering 12 bodies: Positive Peer Formations, Education of Parents, Anticipated Educational Outcomes, Communal Competency, Societal Unification, SA, Avoiding Punishment, Obtaining Reward, Integration, Self-Knowledge, School Performance, and Reliance on Regulations. The ESB on teacher outcome elements were involving seven bodies: Occupational Fulfillment, Interaction with Pupils, Class Management, Professional Competency, Security, Friendly Attitude, and Perspective of Integration.

Student outcome elements were revised after analysis of constructional basics on ESB by Gottfredson from 1999 to 2005, including following four bodies of assessment: Social background, educational and familial context of students; peer relations, formations and relationships among pupils; attitudes and psychosocial development, well-being and development of students through their attitudes toward academic performance, practices of regulations, school as a whole, and self-perception; and school experiences, school system on punishment and reward for pupils (Gottfredson et al., 2005).

S. Brand, Felner, Shim, Seitsinger, and Dumas (2003) presented the Inventory of School Climate-Student (ISC-S) with an emphasis of Students' perception of School (SPS) and its environment. ISC-S was proposed after a couple of factor and item analysis and consisted of 11 sub-measures: Supporting Teacher, Consistent and Clear Expectations and Regulations, Pupil Achievement/Commitment Guidance, Positive Peer Relations, Negative Peer Relations, Rigidity of Disciplines, Decision-Making Process and Student

Involvement, Educational Compatibility\Innovation, Assistance of Cultural Diversity, and Issues of Safety.

### **2.6.2. Tagiuri's Taxonomy of Organizational (School) Climate**

Tagiuri et al. (1968) developed a four-scaled classification for School Environment: ecology, milieu, social system, and culture. Although Tagiuri's classification of School Climate intrigued a structural approach to organizations it was later on perceived as taxonomies that were based on aspects of valence; "Studies of social networks in the organizational arena have taken varying approaches over time..." as they "...focused on whether ties between nodes existed or not with a relational content approach" (Labianca, 2014, p. 240).

#### **2.6.2.1. Ecology**

Ecology in regard with school addresses physical aspects rather than people within the school which covers the instruments, facilities, some services, constructs, supplies, and materials (Anderson, 1982). The impact of school's ergonomics and tangible environment on learning was measured by Mendell and Heath (2004). They presented findings on the effect of moistened buildings which caused more absences and low academic achievements on students. On another study, Shendell, Barnett, and Boese (2004) presented a higher correlation between school climate and health of students, particularly the noise in the classes was found to be intervening with learning; however enlightenment of the classes was found to be increasing the academic achievement.

The advancement of technology was also mentioned by Perera (2008) as the increase in computerized schools influenced many aspects of schooling; data analysis, curriculum

development, assessment, equipment etc. K-12 schools were investigated by Hohlfeld, Ritzhaupt, Barron, and Kemker (2008) (2008) proposing that schools with better economy in regard with SES were more prone for technological development according to the result they presented on the differences between accessibility and support. Leithwood and Jantzi (2009) presented a research on school size and its impact on students; they suggested that students with low SES background indicated higher performances in small sized schools. Jayaratne (2012) suggested that ergonomics should be considered under catering services due to increasing demand.

#### 2.6.2.2. *Milieu*

It is about the characteristics of the people within the school system (Tagiuri et al., 1968), also considered with two aspects of human factor; (a) students` characteristics in regard with family, ethnicity, performance etc. and (b) teachers` characteristics with their experiences, academic and credential backgrounds.

Studies conducted on School Milieu indicate a significant correlation between SES and academic achievement as students from low SES scored low averages (Konstantopoulos & Borman, 2011; Lee & Bryk, 1989).

The influence of SES was mentioned in accordance with performance: School performance in other words, Academic achievement was effected by the socio economic status as those who belonged to high socio economic status showed higher performances (Tok & Dupak, 2015). Many other studies highlighted the significance of counseling activities in regard with school psychology that aimed academic matters as well through which presented findings indicated that counseling activities at a school increased rates of passing from high-stake exams (Bruce, Getch, & Ziomek-Daigle,

2009; Jannati, Khaki, O Sadat Samadi Sangtarashani, Peyrovi, & Amiri Nojadeh, 2012; Lemberger, Selig, Bowers, & Rogers, 2015; Luck & Webb, 2009; Wyatt, 2009).

#### 2.6.2.3. *Social System*

Social System refers to established and non-established operational designs and the interrelations among populations and their divisions within the organization of a school (Tagiuri et al., 1968). The positive impact of decision making through encouraging participation of students on teacher discourses and values are mentioned by Leech and Fulton (2008) in regard with schools' social system. Although Feuer and Mayer (2009) emphasized the importance of student's priority in decision-making process of the school, they could not provide precise data indicating its concrete influence.

As mentioned earlier on milieu of school that counseling activities have positive impact on students' achievements, in the same study conducted by Benner, Allor, and Mooney (2008) suggested that social system of a school is positively influenced by interaction of pupil learning results and social elements. Supportive approach in regard with academic achievement from teachers, counselors, and admin staff has many advantages for pupils' success (Benner et al., 2008). According to some other studies social well-being factors and well-ordered school systems have positive impact on students' performances; likewise safety at school had positive impact in reducing disruptive attitudes of the students (P. L. Brand et al., 2008; Fenzel & O'Brennan, 2007; Stone & Han, 2005). Other recent studies mentioned the significance of social competence and its impact on academic achievement: The findings presented indicated that competence in social skills and systems of schools (as in private vs. public) were given as important predictors of school (academic) achievement, in this regard, high scored students and



low scored students in achievement reflected significant differences for their overall competencies (Shujja, 2013). The design of school system and features of SES context was also mentioned to influence dropout and truancy risks (Lavrijsen & Nicaise, 2015).

#### 2.6.2.4. *Culture*

According to Tagiuri et al. (1968) culture for a school system, features same characteristics with a community or society as people and their interrelations with each other determine the same beliefs, norms, and values. Studies conducted on school culture emphasize the importance on strategic plan that should be implemented at the very beginning in regard with ecology, milieu and social system: “Organizations, including schools, should make building culture part of a planned strategic effort” (Fisher, Frey, & Pumpian, 2012, p. 5). The academic performances of students are also considered and related with institutional culture of a school as it helps the administrative staff to achieve targeted goals (J. Murphy, Smylie, Mayrowetz, & Louis, 2009; Robbins, 2001).

Identification of the kind of culture within a school is also considered significant and studies indicate that culture is one of the major devices to initiate and maintain an organization (Fox, 2013). Variables based on several different cultures practiced at different schools can be used to conceptualize school culture profiles; moreover they can be used to enhance school practices by all means, including academic achievement, instructional quality, achieving targeted goals etc. as Daud, Raman, Don, Sofian, and Hussin (2015) reached results on a study conducted types of school cultures: “An organizational culture which is both strong and appropriate with the aspirations of the

members in the organization can help preserve excellence in the organization and help in achieving aims and objectives” (Daud et al., 2015, p. 10).

Together with technological developments and other prerequisites, high performances expected from students, as well as the need for communal success and integrity are increased proportionally. Adolescents that are lacking in one or more of these aspects have less chance in furthering their studies and/or maintaining their socio-psychological well beings. Accordingly, the literature in part I overall suggest that attachment with all its aspects is one of the vital requirements in providing support for adolescent development. SA in particular with its physical aspects of environment, staff, culture, ecology etc.; academic aspects of learning, interest, achievement, performance, instruction etc.; and psychological aspects of development, general well-being, integrity, satisfaction, etc. are all essential components that have impact on student, teacher, administrative, school, and governmental outcomes. Chapter II as a whole, together with part I, II, III and IV discussed the literature in regard with above mentioned three variables of SA.

**Table 2.2 - Summary of Theoretical Foundations of School Attachment in regard with Tagiuri’s (1968) four scaled model on School Attachment**

	<b>Ecology</b>	<b>Milieu</b>	<b>Social System</b>	<b>Culture</b>
Perry, A. (1908)	significance of school environment in academic achievement	school environment should be considered as part of the school, calling it; “ <i>esprit de corps</i> ”	Involvement of director, teacher and students as well as the laypeople (alumni, parents etc.)	school’s primary duties to provide an atmosphere that is more than a simple “housing”
McDill, Rigsby, & Meyers (1969)			Students’ conception of intellect & esthetics	- Academic ambition - Science - Human factor in perfectionism - Success based student recognition
Moos (1973, 1979)	-Ecology elements - Environment of behaviors - Tangible	-Traits of the people and individuals living within the organization - Assembled people	Construction of the institution	Endorsement features and Utilitarian settings

ambience

Murphy, Weil, Hallinger, & Mitman (1982)			<ul style="list-style-type: none"> <li>- Rules of accomplishment</li> <li>- Activities of accomplishment</li> </ul>	Anticipations on accomplishment - Standards for accomplishment - Reinforcement for accomplishment
Anderson (1982)	Physical aspects rather than people within the school.	The instruments, facilities, some services, constructs, supplies, and materials.		
McMillan & Chavis (1986)			Interpersonal relations, standards, purposes, morals, school activities, and opportunities	-School community focuses on the human aspect of SA - decision making processes in relation with human aspect
Hoy and Tarter (1987, 1992)		<ul style="list-style-type: none"> <li>-Organizational uprightness</li> <li>- start point of infrastructure</li> <li>- Deliberation</li> <li>- Supplication of resources</li> <li>- Self-esteem</li> </ul>		The rephrase of academic achievement and its perception by teachers
Bryk & Driscoll (1988)		<ul style="list-style-type: none"> <li>- Features of institutional standards</li> </ul>	<ul style="list-style-type: none"> <li>- Accepted calendar of activities</li> </ul>	Norms & values accepted and shared by individuals Mental well-being and progress
Gottfredson (1986, 2005)		<ul style="list-style-type: none"> <li>- Communal basis</li> <li>-Contentment</li> <li>- Occupational training</li> </ul>	<ul style="list-style-type: none"> <li>-Attitudes toward peers</li> <li>- Reciprocal relations of students and teachers</li> <li>- Class settings</li> </ul>	- Measurements of school life -integrative behaviors - student oriented freedom - individual safety
Helen (1993)		(a) students` characteristics in regard with family, ethnicity, performance etc. (b) teachers` characteristics with their experiences, academic and credential backgrounds		
Kuperminc, Leadbetter, & Blatt (2001)		School milieu is defined through intercommunication of variables like; students, teachers, administrators, schedule, tangible surroundings etc.		Intercommunication of variables together with measurement of quality and frequentness of intercommunications and interactions of the people at school was described as school culture.
Brand et, al.		<ul style="list-style-type: none"> <li>- Openness to new</li> </ul>	<ul style="list-style-type: none"> <li>- Supporting</li> </ul>	<ul style="list-style-type: none"> <li>- Clear and consistent</li> </ul>

(2003)		instruction methods	teachers - Unfavorable student interrelations - Favorable student interrelations - Process of decision and involvement of students	rule policies and anticipations - Engagement, success, and training of students - Rigidity of rules - Inclusiveness and support for cultural diversity - Security issues
Powers (2003) Lee & Bryk (1989) Konstantopoulos, (2006) Benner et al., (2008)		Studies conducted on School Milieu indicate a significant correlation between SES and academic achievement as students from low SES scored low averages		
Wilson (2004)	Individual's experiences through school context was regarded as school bonding.			student's level of connectedness (high or low) was determined through favorable or unfavorable school climate.
Shendell (2004)	higher correlation between school climate and health of students	-The noise in the classes was found to be intervening with learning. -Enlightenment of the classes was found to be increasing the academic achievement.		
Mendel, Heath (2004)	school's ergonomics and tangible environment on learning was measured.	presented findings on the effect of moistened buildings which caused more absences and low academic achievements		
Stone & Han, (2005) Fenzel & O'Brennan (2007) Brand et al., (2008)	safety at school had positive impact in reducing disruptive attitudes of the students		well-ordered school systems have positive impact on students' performances	-social well-being factors.
Loukas, Suzuki, & Horton (2006)		Students' attitude toward school was measured through individuals.		
Perera (2008)			-Advancement of technology -Data analysis, curriculum development, assessment, equipment etc.	-Computerized schools influenced many aspects of schooling

Hohlfeld et. al. (2008)	K-12 schools were investigated		According to the result they presented on the differences between accessibility and support.	Schools with better economy in regard with SES were more prone for technological development.
Leithwood & Jantzi (2009)	School size and its impact on students	Students with low SES background indicated higher performances in small sized schools		
Jayarathne (2012)			Ergonomics should be considered under catering services due to increasing demand.	
Robbins & Sanghi, (2007) Murphy et. al, (2009)		Administrative staff should achieve targeted goals.		The academic performances of students are also considered and related with institutional culture of a school -positive impact of decision making - participation of students on teacher discourses
Leech & Fulton (2008)				
Bruce et al., (2009) Wyatt (2009) Luck & Webb (2009) Jannati, et. al, (2012) Lemberger et. al, (2015)		-Significance of counseling activities in regard with school psychology	-Presented findings indicated that counseling activities at a school increased rates of passing from high-stake exams  -They could not provide precise data indicating its concrete influence on school system.	Emphasized the importance of student's priority in decision-making process.
Feuer & Mayer (2009)				
Fisher et. al, (2012)		Importance on strategic plan that should be implemented at the very beginning.		
Fox (2013)				Culture is one of the major devices to initiate and maintain an organization.
Malik & Shujja (2013)			Significance of social competence and its impact on academic achievement	
Labianca, G., et. al, (2014)	Structural approach to organization			
Lavrijsen & Nicaise (2015)			The design of school system and	

		features of SES context was also mentioned to influence dropout and truancy risks	
Daud et. al, (2015)	several different cultures practiced at different schools can be used to conceptualize school culture profiles	enhance school practices by all means, including academic achievement, instructional quality, achieving targeted goals etc.	-Study conducted types of school cultures
Tok & Dupak (2015)		The influence of SES was mentioned in accordance with performance	

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## 2.7. Theoretical Approaches on School Attachment

There have been several theoretical approaches on SA. Three developmental theories were suggested by Catalano et al. (2004), including Attachment Theory (M. S. Ainsworth, 1979; Bowlby, 1969), Social Control Theory (Hirschi, 1969) and the Social Development Model (Hawkins & Weis, 1985).

Attachment Theory as mentioned thus far in Chapter II is about a person`s search for bonding, connection with others via communal interrelations. Social Control Theory is about person`s search for developing connections with parts of society as in schools that involve control of the behavior by supporting dedication to social standards related with that part of the society. Social Development Model refers to child`s learning design of behavior as they explore their surroundings. Control theory provides a wider conceptualization of attachment to parts of societal organizations in particular schools. For instance, engagement and devotion are perceived to be within communal process that helps attachment; loyalty within societal parts is observed as a result of attachment,

and as an agent that has impact on outcomes of expected behavior (Catalano et al., 2004).

Progress based environmental models, adolescent development theories, and Social Capital Theory had been categorized to be the foundations of SA by Whitlock (2006). Environmental models in regard with development presented by Lerner, Lewin-Bizan, and Warren (2011) emphasized the interrelation of intrinsic and extrinsic aspects of the organization, personal, social, uniformed, and recorded structures. Belief, standards, and interaction were described as vital social supplies by Social Capital Theorist Hollenbeck and Jamieson (2015). Adolescent development theories however were mentioned with the significance of conceptualizing the circumstances that influence enhancement of personal skills and the essentiality of identifying youth as mobile attendants within their surroundings (Case, 2015).

The stage-environment fit theory (Eccles et al., 1993) appears to have a core function in comprehension of SA. The theory suggested that personal interventions that determine traits as in mental well-being, aspirations, and attitude are all contexts of social climate at a school. Five central developmental necessities are meant to be referred by schools; autonomy, competence, adult support, supervision, and peer acceptance. Many studies conducted on diverse facets of SA used this theory as a reference of framework to conceptualize student connection and their needs for development (Eccles, Early, Fraser, Belansky, & McCarthy, 1997; C. A. McNeely et al., 2002; Whitlock, 2006).

It is apparent that a noticeable amount of theories in relation with sociology, psychology and pedagogy tried to conceptualize SA. Although these theories diversify on various aspects, attachment of individuals and organizations through communal interrelations

was among the common grounds. The thrusting forces under this system may occur with discrepancies, nevertheless it is commonly accepted that students tend to develop attachment strings to people and schools. The discrepancy is mainly based on the ways SA is defined as a variable.

### **2.7.1. Definitions of School Attachment**

SA as a recently developed concept is similarly used as School connectedness, School Engagement, School Climate, School Involvement, Students satisfaction, School Bonding etc. (Libbey, 2004) as well. In particular, attachment, bonding, and connectedness have been used to define the same thing by many researchers (Catalano et al., 2004; Thomas & Smith, 2004). Diversity in terminology and analysis of variables together with other structures has been an obstacle to studies due to inconsistency of which inconvenient analysis and results caused confusion on previous and present studies (O'Farrell & Morrison, 2003). Moreover, the meta-analysis conducted on SA by Libbey (2004) unclosed the fact that variables of SA had been used to assess unrelated structures. This revelation brought up an intriguing fact on terminology of SA which was defined, named, assessed in many ways. Libbey (2004) established nine different factors; belonging, engagement, extracurricular activities, discipline, school liking, voice of the student, peer interaction, teacher support, and safety. Libbey discovered that all these variables were evaluated differently, not measured as one superior to the other, and were regarded with positive student performances as in achievement, integration and expected behavior. The discovery also presented the complexities of SA and emphasized the significance of conducting researches studying variant measurements of adolescents' attachment feelings for school.



Libbey's (2004) portrayal of SA was based on student-school interactions. Many other researchers who used the terminology as well conceptualized SA as youth's perceived practices of school caring, attitudes towards peers and teachers, senses of affiliation to staff and climate etc. (Bonny, Britto, Klostermann, Hornung, & Slap, 2000; Hall-Lande, Eisenberg, Christenson, & Neumark-Sztainer, 2007; Thomas & Smith, 2004; Wilson, 2004).

SA was also described in regard with students' senses of support, inclusion, respect, acceptance by staff and peers within school community (Shochet et al., 2006; Shochet et al., 2007). This student oriented approach was first established by Goodenow and Grady (1993) emphasizing student's psychological well-being when felt accepted by peers and staff in the school and class. Although the approach was developed by Shochet et al. (2006) and Shochet et al. (2007), it is important to mention Thompson, Iachan, Overpeck, Ross, and Gross (2006) as he presented variables of SA; belonging, positive peer and teacher influence, mobile participation to extracurricular activities and school liking.

Although there seems to be some different viewpoints on definition of SA, it is obvious that most of the literature has reached to a certain degree of consensus on some of the SA variables; Students' feelings for school (SFS), Students' interest in learning (SIL), Attitudes towards peers (ATP), Attitudes towards teachers (ATT), and Students' perception of School (SPS) are among the most accepted variables. These individual and organizational elements are contributors to student's overall degree of attachment to school.

### 2.7.2. Dimensions of School Attachment

Studies indicate that SA as a wider framework is consisted of student oriented aspects of commitment, security, acceptance and belonging (Battistich & Hom, 1997; Hawkins et al., 2001; Richmond, Milliren, Walls, & Kawachi, 2014). Scholars like Brown and Evans (2002) suggested four aspects; power, engagement, belief, and belonging, however a good number of researchers disregarded the significance of safety, degree of support taken from school personnel, experienced autonomy, and internalization of customary values. The consensus appeared on variables such as; feelings, interest, attitudes towards peers and teachers, and perception in regard with belonging and engagement\commitment. Engagement and\or commitment were accepted measurements for student`s level of efforts used on attitudes and perceptions of the school; belonging indicated the level of student`s feelings and interest used to become part of the school culture.

The research by National Longitudinal Study of Adolescent Health conducted on 80.000 adolescents from grades 7th to 12th with 127 schools were analyzed by C. McNeely and Falci (2004). The data indicated that there was a mediocre correlation ( $r = 0.43$ ) between two questions of three about belonging, subsequently Catalano et al. (2004) presented two variant aspects of SA; attachment and commitment. Attachment was required to measure human factor in relation with school and commitment was required to measure student`s perception of the school, and attitudes towards peers and teachers which were used in the present study as well.

The studies conducted on SA have reached some specific variables; among them three were most common. C. McNeely and Falci (2004) suggested support, commitment and

belonging as the major variables of measurement for SA. Support indicated senses of acceptance by school society particularly by peers, commitment (to some it was defined as engagement), was defined through students effort of interactions with teachers and heavily based on student`s mobility, belonging was determined as a feeling for being accepted within organizational units of the school.

### **2.7.3. Measuring School Attachment**

Since SA was defined by variant definitions, and only a couple of diverse variables were agreed upon; measurement process was also implemented through various ways. Some scholars scanted researches like meta-analysis on SA to conduct surveys constructed on a few units of variables with a large number of sampling (Bonny et al., 2000; C. A. McNeely et al., 2002; Resnick et al., 1997). Others proposed some certain measurement tools expecting students to go through diverse types of questions, thus targeting at reaching data on students` senses for communal and environmental aspects of schools (Battistich & Hom, 1997; Thomas & Smith, 2004; Whitlock, 2006). However, recent researchers were mostly focused on standardized measurements like; Social Bonding Scales by Wisconsin Youth Survey and Psychological Aspects of School Membership (Shochet et al., 2006; Shochet et al., 2007) to investigate SA. One of the recent standardized surveys, developed by BS International for the Corporation for National & Community Service (2011) was SA Survey which was partially used for the present study as well.

One of the earliest studies investigating SA by Resnick et al. (1997) proposed five-scaled survey to build a variable for SA. Some other scholars implemented five-scaled system to obtain data on diverse forms of SA (Bonny et al., 2000; Loukas et al., 2006;

C. A. McNeely et al., 2002; Resnick et al., 1997). The scale consisted of: “I feel safe in my school,” “I feel close to people at this school,” “The teachers at this school treat students fairly,” “I feel like I am part of this school,” and “I am happy to be at this school,” The five-scaled system was also used by C. McNeely and Falci (2004) with an addition of the sixth one taken from the meta-analysis of Add Health: “How much do you feel that your teachers care about you?”. The data was scored through Likert Scale with the pervasively used version of “strongly agree” to “strongly disagree”. Only one of the questions was related with teacher-student relationship with the emphasis of justness rather than support of teachers or mutual interactions which made it difficult to conceptualize engagement factor and further investigation of teacher-student interactions.

Another meta-analysis data of 2001 and 2002 from Health Behavior in School-Aged Children (HBSC) was used by Thompson et al. (2006) to build a variable for SA. The survey scales showed little contrast to the Add Health items; nevertheless a proportionate variable was built by scoring data with six-scaled survey: “How do you feel about school at present?,” “Other students accept me as I am,” “I feel safe at this school,” “Most of the students in my class(es) are kind and helpful,” “When a student in my class(es) is feeling down, someone else in class tries to help,” and “The students in my class(es) enjoy being together”. Likert Scale of 1-“strongly disagree” to 5-“strongly agree” was again used to score the data. Only the last item was given 4 scales with a multiplication of 1.25 to proportionate with the other items. The emphasis was given to students` feelings of belonging to units constructed by peers and their acceptance. On the other hand, the data could not provide tangible knowledge on interactions between staff (adults) and students once again.

Goodenow and Grady (1993) recognized the lack of measurements constructed to put emphasis on interrelation between the individual and societal circumstances within schools as it stood an obstacle for further studies on the field which eventually led her to establish a new measurement tool to investigate SA. Many worldwide researchers used her design as well (Shochet et al., 2006; Shochet et al., 2007). She proposed PSSM (Psychological Sense of School Membership) aiming at the correction of the problem (Goodenow & Grady, 1993). Adolescence perception of belongingness together with psychological aspects of students within school climate was emphasized through PSSM which also contributed in comprehension of SA together with elements of psychology.

The framework of PSSM constructed an agreeable validity with consistent interval strength ( $r = .875-.884$ ) of 18 components. Although not many studies enlarged their investigation of SA via this survey, the question on belonging found interest as it was seeking to find if belonging could be dichotomous or continuous as a variable. It was observed that students' responses on belonging (to school) were rather negative and under the starting point which led her to an evaluation of describing belonging as it either exists or does not exist and students must attain a certain level of belonging to take risk factors by indicating commitment to school (Goodenow & Grady, 1993).

Four of the 18 components are related with student-teacher interactions. From the four questions 2 were in fact the same, yet coded in reverse. One of the three that evaluated student-teacher relations could provide data on reciprocity of their interactions involving following statement: "There's at least one teacher or adult in this school that I can talk to if I have a problem." The other statements emphasized students' perception of support from teachers; engagement or commitment was not aimed: "Most teachers at

my school are interested in me” (Goodenow & Grady, 1993). Although support from teachers is a significant component of SA it is not a well-designed item for analysis of teacher-student interactions.

School environment and SA was investigated in regard with senses of victimized and violence by Wilson (2004) as well. Seven components were involved to measure SA: “when someone breaks the rules, teachers and administrators take appropriate action,” “all students who break the rules at this school are treated the same no matter who they are,” “I like school,” “I look forward to going to school,” “I have a teacher who really cares about me,” “my teachers listen when I have something to say,” and “my teachers tell me when I do a good job.” The mean of the whole samples were defined through calculating the means of each and every student. High and low attachment levels were determined depending on students` responses ranked above or below the mean which resembled Goodenow and Grady (1993) PSSM design in this regard as it searched for the variable of dichotomous or continuous to measure SA.

Some other studies also analyzed the interactions between adolescent aggression and SA (Thomas & Smith, 2004). They implemented an online questionnaire to 282 girls and boys with the age groups of 7-19 from 47 states in the USA. They obtained data on SA through one question only: “How do you feel about school?” However they assessed the peer relations with another question: “Do your classmates like you?” Other SA related questions were focused on students` perception of school regulations, staff fairness, and senses of loneliness with an overall mean of 15.3. The difficulty on measurement of these variables was arisen as SA responses were considered separate in calculations of the overall SA instrument.

Three aspects of SA were evaluated by Whitlock (2006) using seven-scaled measurement: Adolescent-adult interactions; adolescent perception of all adults in regard with being looked after, relied on, and appreciated; and adolescent perception of themselves in regard with being cared by adult supervision and caring for the reliance of adults on them. The result was observed as  $\alpha = .81$  through seven items consisted of; “Adults at my school don’t respect what people my age think,” “Adults at my school care about people my age,” “Adults in my school listen to what I have to say,” “At school there is a teacher or some other adult who believes that I will be a success,” “I trust the adults in my school,” “Adults in my school push me to do my best,” and “I care about the school I go to.” The scale was assessed through Likert scale of 5 points (from Strongly Disagree to Strongly Agree) and provided valuable data on Engagement\Commitment as three questions were particularly designed to measure student-teacher reciprocal relations.

#### **2.7.4. Predictors of School Attachment**

Bonny et al. (2000) established analytical elements of demographical and social backgrounds of students in relation with SA via Add Health statistics. Students at the top risk of health issues were prioritized through school interferences. It was observed that white students indicated more attachment than black ones, boys were more attached than girls, suburbanite students were more attached than urbanite ones, and students with low educated parents showed low levels of attachment.

Several other variables indicating other aspects of SA were found by other researchers as well. C. A. McNeely et al. (2002) once again used statistics of Add Health to reveal some other variables of SA according to which extracurricular activities were seen to

have positive impact on students' attachment levels; they also had higher test results, and showed less dropout issues. C. A. McNeely et al. (2002) suggested that the stage environment fit theory can help us to conceptualize the results on extracurricular activities. Thus it was mentioned that older students indicated low levels of attachment due to their demands on more freedom as they wanted less adult control or administrative authority over them. Developmental approach with their changing needs was mentioned to be essential to avoid such problems as the component of environmental fit theory.

The correlation between SA and the settings of school was also identified by C. A. McNeely et al. (2002). Class settings with control issues caused low SA among students, when students were faced with rigid rules due to minor problems like alcohol possession they also indicated low levels of SA; however students from less populated schools showed higher levels of SA compared to the ones with larger populations. Furthermore, students from segregated schools due to their races or ethnicities reflected higher levels of SA and the ones from mixed schools indicated low SA.

Research implemented by (Eisenberg, Neumark-Sztainer, & Perry, 2003) analyzed the relation between peer disturbance, SA levels and academic success. Less harassed students showed higher SA levels. On the other hand, the variable used for SA was majorly based on five level (Likert Scale) and asked if what was the level of student's feeling of liking the school which was targeting students' overall senses for school, but not enough to determine their attachment levels to peers, staff, admins, regulations etc. Consequently the research provided valuable data on peer disturbance and its impact on students' overall feelings for school without referring particular aspects of SA.



Another research by Thomas and Smith (2004) suggested that too much school administrative authority or control over students as in excessive supervision, discipline etc. lowered SA levels among students; unfair treatments of the students by admin staff like discrimination, dividing students into units and treating them according to their units, and not enough reaction to bully issues as well as offensive cases were among other reasons occurred to cause low SA levels. It was observed that a good number of adolescents who were responsible for bullying or harassment issues regarded themselves with low self-esteem and thought to be liked less by their peers. They (%80 of them) even defined their perceptions of schools with hatred words. The study suggested that such students should be given more support and care to avoid isolation, loneliness etc. The research indicted parallel results and suggestions with Eisenberg et al. (2003) study; they also mentioned the link between violence and victims of violence as one was contributor of the other and eventually resulted in low levels of SA.

Another dimension of the SA was held by Thompson et al. (2006). They found that age was also a mediator for SA as younger youth was perceived to indicate higher levels of SA compared to elderly adolescents. SA was observed to be higher among following groups of students; the ones living with both parents, the ones with high academic achievement, the ones who took part in extracurricular activities, and the ones who liked to socialize with their peers. It was also identified that school characteristics were significantly having impact on SA. Big schools with many students showed low levels of SA and a curve was seen in the data indicating the negative correlation between percentages of ethnicity and SA; schools with either high numbers of black or white students indicated higher levels of SA than the schools with mixed ethnicities. They also observed that girls had higher SA than boys. However, some findings showed

contrast with earlier studies; they suggested that there wasn't a significant relation between SA and minor ethnicity, urbanite living and/or high levels of parental education weren't important factors for SA. Nevertheless, parent inclusion, SEN of the families, and other predictors were promptly analyzed within the research findings.

PSSM was used by Shochet et al. (2007) to investigate youth comprehension of school climate and its relation with SA through parent involvement as a predictor and measurement tool. Intrinsic elements were compared with extrinsic elements in particular; school climate with parental involvement and their impact on SA. Adolescents with age groups of 12-18 as secondary school suburbanite students from Brisbane were chosen with 171 samples. The findings referred parental attachment as a significant variable of SA in relation with school climate elements. It was suggested that parental attachment had an effect of 25% on SA and students' conceptualization of school climate. It was also suggested that parental attachment had a role of mediator between school climate and SA. Consequently, they inferred that good parental attachment was a contributor to students' overall attachment to peers, teachers, school settings etc. Students with high levels of parental attachment also showed higher performances and took part in extracurricular activities as they felt more secured. However, the results inferred that the level of teacher attachment could not be determined well enough due to students' enhanced attachment feelings by parents. Thus, the findings revealed the fact that SA should be considered with variant onsets by including personal characteristics, parents, school settings etc.

### **2.7.5. Outcomes Associated with School Attachment**

The studies implemented on SA majorly analyzed the student achievements in relation with family, school climate, communal effects, autonomy, school rules, peers, units occurred within social contexts etc. as to measure outcomes as well as variables. (Eccles et al., 1997; Eccles et al., 1993). Students' perception of school as a communal environment and its relation with behavioral problems was first established and studied by Battistich and Hom (1997). It was observed that younger students at elementary level were indicating less problematic behaviors when they had higher scores of senses for societal attachment to school. Although the findings were not quite similar with SA approaches, the emphasis of communal interactions was an important variable of SA as well. The significance of SA as a protection design in preventing misconducts and problem behaviors such as abuse, drug usage, violence, etc. was emphasized by Resnick et al. (1997) through the analysis of Add Health statistics. It was also suggested that SA had a consequent impact on avoiding suicidal thoughts and stress.

A longitudinal research in Australia on 2000 surveyed sample groups of age 12-14 with 12 months by Shochet et al. (2006) targeted to obtain data on the relations between SA and mental health. It was observed that SA could predict on both girls' and boys' depression problems that might occur in the future even when they were controlled for previous depression problems. The reversal investigation of data indicated that mental health could not predict SA scales, in other words, while SA could be a predictor for mental health issues, mental health could not predict on the future levels of SA. However, they suggested that SA could not predict anxiety and that it should be studied on different scale rather than with SA variables. The results overall inferred that past

studies could not determine how strong was the correlation between SA and youth depression problems.

School violence in relation with SA was studied on 2000 sample of students in Colorado through which Wilson (2004) structured his research by investigating SA and school environment to conceptualize aggressiveness and victimization. Seven items of school environment were used; Knowledge and Fairness of Discipline Policies, Feelings and Attitudes Toward School, Student Peer Relationships, Student-Teacher Relationships, Condition of Campus, Respect for Authority, and Presence of Gangs. A mean for school environment was designated for each participant school and was given to each person of that school. Schools that scored below the designated mean were referred to be negative environments and the ones that scored higher than the mean were referred to be positive environments. However, it was resulted that school environment could not predict possible occurrences of victimization and aggressiveness with expected levels. On the other hand, for the individual level such as a student's senses of SA, it could be an important predictor for victimization and aggressiveness. Consequently Wilson (2004) suggested that school environment as a significant aspect of SA should be studied without an emphasis of its predictive effects but rather with its direct impact on victimization and aggressiveness.

School environment and SA was also studied by Loukas et al. (2006) who identified school environment with versatile and multifaceted aspects like interrelations between individuals, institutional and educational variables. The research analyzed four features of school environment; adherence, dissension, peer rivalry, and contentment of school services in relation with youth misconduct issues and stress factors by investigation of

overall SA levels of students. The samplings of 489 students were chosen from three different schools within central suburbanite regions of Texas with age groups of 10-14. The hypotheses were based on the four characteristics of school accordingly; the high scales of adherence, low scales of dissension, low scales of rivalry, and high scales of contentment were to determine the high scales of SA. By reaching high scales of SA, consequently it would lead students to low scales of misconducts and depression problems. The data revealed fractional approval of the above mentioned hypotheses. Students` comprehension of adherence, dissension, rivalry and contentment together with their perception of early age misconduct issues were preordained variables of SA. However, rivalry could not be related with SA, and prediction of depression problems via SA could not be confirmed as youth were already inclined to the stress problems when they reached adolescent ages which could occur with or without high scales of SA. On the other hand, the results indicated positive outcomes on school environment and its contribution to SA scales which could help misconduct problems of students in the future.

Negative behavioral problems and their relation with levels of SA had been studied by many other researchers as well; however Bonny et al. (2000) emphasized SA with its influence on expected or wanted behavioral patterns. It was revealed that there was a significant correlation between variant expected manners and SA such as; capacity enhancement, increased interest in school activities, less health issues, less demand for medical help, less substance usage etc. The data overall inferred that SA has positive impact on advancement of positive outcomes and prevention of unwanted manners.

Communal senses of belonging and support by teacher were found to have dissimilar impact on the starting point of few risky health manners by C. McNeely and Falci (2004). Youth who were developing healthy relations with their teachers and getting enough care and fairness from them were also more likely to prevent themselves from starting a bad habit or conduct a misbehavior such as; substance usage, tendency for violence, abusive manners with other genders, suicidal thoughts etc. On the other hand, it was observed that senses of belonging were not necessarily meant for prevention of misconducts and unwanted manners. Students who liked to be at school, be part of social climate of the school could not necessarily prevent themselves from starting one of the above mentioned misbehaviors as their senses of belonging might have come from their desire to be part of risk groups who are sharing same habitual problems. It was eventually mentioned that teacher support was more vital and had better outcomes than senses of belonging, particularly belonging to peer units. This finding led C. McNeely and Falci (2004) to make a significant division on SA; “conventional” attachment and “unconventional” attachment. The students that were more inclined to have belonging senses to peer units, accepted by them and took part in social activities were identified as “conventionally” attached who were also more likely to stay away from risk factors. Students that were part of peer units due to social acceptance only and were not active enough in interrelation activities were categorized as “unconventionally” attached.

Academic achievement through peer attachment that comply with school enhancement could be supportive and have positive outcomes, however group or unit attachments that were malignant to educational outcomes were identified by Arhar (1990) to be negative attachment. Hazard involving factors and manners were also mentioned by Kirby

(2001) with similar approach. He scanned 300 researches on sexual abuse factors in youth and found that the risk factors could be explained in two segments; peer unit of the person and communal rules that the peer unit complies with.

Commitment or engagement was established as a third aspect of SA by C. McNeely and Falci (2004) addressing the level of student-teacher interactions. Nevertheless, they could not provide data on its relation with prevention of risk factors and avoidance of their starting points as they could not build an evaluation for commitment from the data of Add Health. However, the other two aspects; support from teacher and belonging were measured to be less effective in lessening the risk factors.

#### **2.7.6. School Attachment Interventions**

Although the research mostly implemented descriptively, many other studies also contributed to SA by providing valuable data on discovery of variant variables, aspects and interventions measuring different sides of SA. The mentoring system of students were analyzed by King, Vidourek, Davis, and McClellan (2002) with a focus on constructing relations, endorsement of esteem, deciding on aims, and school performance. It was discovered that students taking part in the mentoring system were showing important differences and higher scales of interrelations with their social environment as in family, peers etc. it was subsequently revealed that mentoring systems are helpful in increasing SA.

Two longitudinal researches were abstracted by Catalano et al. (2004) which were providing interventions that helped to improve SA scales among students. SSDP (Seattle Social Development Project) and RHC (Raising Healthy Children) were studied by Catalano et al. (2004). SSDP analyzed the interrelations between student, teacher,

and parental education. It was revealed that a healthy SA had impact on prevention of adolescent misconducts such as; criminal assault, harassment, gangster group participations, performance issues, substance usage, sexual abuse, violence etc. RHC was developed as sub-construction of SSDP and used more or less same aspects and eventually provided data on SA's influence in reducing unwanted behavior patterns and endorsed expected manners in regard with adolescent development. The researchers consequently indicate that overall high scales of SA might help for a better development of youth and it could be achieved through training of teachers, students, and parents.

**Table 2.3 - Summary of Theoretical Approaches on School Attachment**

Author	Evaluation scales and Structural Model	Focus Areas	Measurement Scales
Hawkins, (1985)	-School Attachment ( $\alpha = .86$ ) -School Belonging ( $\alpha = .76$ ) -School Outcome Value ( $\alpha = .73$ )	The way that attachment occurs from students to other people (peers & adults) as well as to school they go to.	Single Scaled Measurement
Goodenow & Grady, (1993)	Feeling of School Belonging in relation with individuals' Psychological well-beings ( $\alpha = .77$ and .88)	Sense of membership, sense of being loved, cared, believed in and respected that comes from teachers, friends as well as individuals initiatives in taking part extracurricular activities	Single Scaled Measurement
Resnick et, al. (1997)	School Attachment ( $\alpha = .78$ )	Sense of closeness to adults and peers, sense of commitment to school, contentment feelings, fair treatment by teachers, issues occurring with teachers, secure feelings while at school -Students' independence and reciprocal affections	Single Scaled Measurement
Battistich & Hom, (1997) Hawkins et. al, (2001) Richmond et. al, (2014)	Students' Feelings for School as Societal Organization ( $\alpha = .91$ ) 1) In regard with School ( $\alpha = .74$ to .78) 2) In regard with Peers ( $\alpha = .73$ to .75) 3) Academic Disaffection ( $\alpha = .72$ )	-Support and care oriented relationships -School attachment, school system, utilitarian approach for autonomy, peer interactions, peer manners, peer control, feelings of contentment with school, school activities involvement, significance of school performance, issues on manners in general Extracurricular participation, trouble issues while at school, paying attention to homework and studies during and after school time, peer interactions, reciprocal interaction between teachers and students, senses of closeness to	Three Scaled Measurement
McNeely et. al, (2002)	1) School Attachment ( $\alpha = .79$ ) 2) Class Management ( $\alpha = .83$ ) 3) Involvement in after school activities ( $\alpha$ : not presented)		Three Scaled Measurement



		others, commitment to school, senses of contentment at school, fair treatment, secure feelings while at school	
Bonny et al. (2000)	School Bonding ( $\alpha = .77$ )	Senses of closeness to others at school, commitment to school, feelings of contentment with school, fair treatment, secure feelings while at school	Single Scaled Measurement
Wilson (2004)	1) School Attachment ( $\alpha = .74$ ) 2) School Environment ( $\alpha = .81$ )	School contentment, likes to go to school, teacher recognition when a good behavior is conducted, teachers listen to students and care for them, fair treatment of students, positive senses and approaches to school, school policies, teacher-student interactions, students' senses of respect for teachers	Two Scaled Measurement
Brown and Evans (2002)	1. School Attachment ( $\alpha = .86$ ) 2. Involvement in after school activities ( $\alpha$ : not presented)	Engagement, Trust, Senses of membership, Authority Extracurricular activities within school; arts, sports etc. Fair treatment from teachers, pleased with my portfolio, school is difficult, teachers like and recognize when good behavior is conducted, teachers have senses of affection for me, good relation with peers, I am well-known by others, my peers try to be like me, peers seek help from me,	Two Scaled Measurement
King et al. (2002)	1. School Attachment ( $\alpha = .80$ ) 2. Peer Attachment ( $\alpha = .72$ )		Two Scaled Measurement
O'Farrell & Morrison, (2003)	1) Interactions at school ( $\alpha$ : not presented) 2) Senses of membership, alienation and self-perception ( $\alpha$ : not presented) 3) Adult acceptance and inclusion ( $\alpha$ : not presented) 4) Attitudes to the given tasks ( $\alpha$ : not presented) 5) Parental control and future predictions ( $\alpha$ : not presented)	1) Interactions at school 2) Senses of membership, alienation and self-perception 3) Adult acceptance and inclusion 4) Attitudes to the given tasks 5) Parental control and future predictions	Five Scaled Measurement
Thompson et al. (2006)	1) School attachment ( $\alpha = .77$ ) 2) Involvement in after school activities ( $\alpha$ : not presented) 3) Allotted time for given tasks ( $\alpha$ : not presented) School Attachment ( $\alpha = .87$ )	Secure feelings while at school, solidarity among students, contentment feelings while with peers, polite and helpful attitudes from students, peer perceptions and comparisons, involvement in after school activities	Three Scaled Measurement
Battistich, Schaps, & Wilson (2004)	1) School Environment and feelings ( $\alpha = .81$ ) 2) Educational ambitions ( $\alpha$ : not presented) 3) Educational expectancies ( $\alpha$ : not presented) 4) Respect and belief in authority ( $\alpha = .79$ ) 5) Positive teacher-student relations ( $\alpha = .63$ ) 6) School Liking ( $\alpha = .82$ )	1) School Environment and feelings 2) Educational ambitions 3) Educational expectancies 4) Respect and belief in authority 5) favorable student-teacher interactions 6) School Liking 7) Assignment directives in learning 8) Self-confidence in Academic performance 9) Senses of being alone	Nine Scaled Measurement

		7) Assignment directives in learning ( $\alpha = .87$ ) 8) Self-confidence in Academic performance ( $\alpha = .83$ ) 9) Senses of being alone ( $\alpha = .83$ )		
Loukas, Suzuki, & Horton, (2006)	School attachment ( $\alpha = .75$ )	-Dissension -Adherence -Rivalry -Contentment with courses -Senses of closeness to others and belonging feelings to school, satisfaction with school, fair treatment from teachers, secure feelings at school	Five Scaled Measurement	
Shochet et al., (2006) Shochet et al., (2007)	Feeling of School Belonging in regard with Psychology ( $\alpha = .89$ )	Senses of membership, senses of being cared, liked, respected, and trusted by teachers and peers, taking part in school activities Senses of closeness to others, senses of belonging to school, contentment feelings while at school, fair treatment from teachers, secure feeling while at school	Single Scaled Measurement	
Loukas et al. (2010).	School attachment ( $\alpha = .73$ )	interrelation of intrinsic and extrinsic aspects of the organization, personal, social, uniformed, and recorded structures significance of conceptualizing the circumstances that influence enhancement of personal skills and the essentiality of identifying youth as mobile attendants within their surroundings	Single Scaled Measurement	
Lerner et, al. (2011)	Concepts of Development ( $\alpha =$ not presented) Human Development ( $\alpha =$ not presented)	Belief, standards, and interaction were described as vital social supplies	Two Scaled Measurement	
Case (2015)	Youth and Justice System ( $\alpha =$ not presented)		Single Scaled Measurement	
Hollenbeck et, al. (2015)	Social Network Analysis ( $\alpha =$ not presented) Human resource management ( $\alpha =$ not presented)		Two Scaled Measurement	

## 2.8. Overview of Social Control Theory

Social Control Theory founded by Hirschi (1969) has been supplementing significant intuitiveness, in particular for the reasons behind delinquent behavior. In this regard grading rules and regional background could be considered together with students' interaction with societal affairs as two significant variables that could be implemented in surveys or research to conceptualize high school students' school life experiences and their SA levels. Studies conducted on society or its organizations like schools brought up the eventual question of how order can be achieved on social interactions. This

question begged for the question of how we can eliminate delinquent behavior, through which Hirschi (1969) proposed SCT and he suggested that the societal control has impact in redeeming or diminishing misconducted behavior. SCT is basically built on four variables; Attachment, Commitment, Involvement, and Belief; however these variables were used in different studies with different measurement scales and with additions or extractions. The present study also derived its variables from SCT with some differences, yet implementing the same logic of the theory in conceptualizing high school students` interactions with schools as a societal organization that have control over them in eliminating delinquent behavior.

Social Control as a phrase has long been used in academic studies, even years before Hirschi wrote his book "Causes of Delinquency" in 1969 which later on became a model for further research: "Early research in social control focused on the development of inventories of societal means of social control" (Wiatrowski, Griswold, & Roberts, 1981, p. 2), nevertheless this approach was left behind due to new approaches developed by scholars. The new model developed by Hirschi is more focused on delinquent behavior and its relation with social lives of different groups or organizations like schools. He suggested that since early ages of childhood, individuals either develop healthy bonds to society they live in and avoid delinquent behavior or fail to form a healthy bond\attachment with the society he\she lives in and happen to be delinquent: "Hirschi's theory was strongly supported by the research he conducted which showed that delinquency involvement was inversely related to the strength of an individual's relationship to society" (Wiatrowski et al., 1981, pp. 2-3). According to SCT, adolescents achieve levels of socializing with variant experiences that help them change and adapt that also occur through school life which are related

with their backgrounds as well. The changes or skills gained have impact on individuals' involvement or non-involvement into delinquent behaviors.

### **2.8.1. Conceptual Framework: School Bonding Model**

SAS as a developmental framework needs to be defined together with SCT (Social Control Theory) which was first established by Hirschi (1969) to measure student's school attachments. SAS model aimed at presenting a better understanding of the framework and establish particular variables in measuring SA in regard with social bonding. Within the following headings an overview of the SCT is presented, then its relation with SAS is established to conceptualize its significance and assistance in building the SA measurement scales, and finally SAS is studied with its intrinsic and extrinsic structures and its relations with other variables of theoretical frameworks.

### **2.8.2. Social Control Theory**

Hirschi (1969) investigated the roots of misconducted behaviors and tried to understand the causes behind such behaviors. The triggering question he asked himself was why most of the people were adhering to rules and not getting involved with misconducts, and why the other small scale of individuals was getting involved with delinquency. He thus established his concept of social bonding by explaining the elements of bonding like family, peers, community, school etc. as causes for preventing or limiting misconducts. The theory suggests that people with strong social bonds are more likely to avoid misconducts as they would obey and accept social rules more easily, however the ones with weak bonds would show more tendency in breaking the rules (Booth et al., 2008; Hirschi, 1969).

### *2.8.2.1. Theoretical Constructs: Social Bonding Factors*

According to Social Control Theory there are four aspects of bonding; Attachment, Commitment, Involvement and Belief.

#### *Attachment*

According to SCT attachment is based on the bond between the person and societal group within which the individual lives in and also involves person's private relations with immediate surroundings of close people like; peers, instructors, parents etc. The quality of interactions between teachers, students and peers are the main focus areas of attachment. For peers, the relationship built between friends and its level of quality, if the student is able to adapt with peers, if the student has delinquency issues etc. are concern areas; for teachers attachment involves student's perception of the teacher, closeness, the impacts of reinforcements on the student etc. are concern areas.

Divergence from socially shared norms causes delinquencies or misconducted behavior. He defined delinquency as; "to act contrary to the wishes and expectations of other people" (Hirschi, 1969, p. 18). A person's positive senses and caring for people around is the source for responding their expectations and wishes, thus he suggested that close relations with other people make the individual obey their rules, values, expectations, norms etc. The theory basically hypothesizes that a person that builds stronger bonds with people around is more likely to care and show loyalty to their values, norms etc. and consequently would be more bonded to customary ways of behaviors (Booth et al., 2008; Hirschi, 2002).

### *Commitment*

The interception of school services with students' needs in achieving targeted goals which also ordains students' perception of school, homework, extracurricular activities etc. indicate the quality of students' commitment. The students' perception is based on the quality of the facilities, services and activities which would eventually help them to achieve success, contentment, and satisfaction, if the school environment is well suited for such goals then the student would develop healthy relations with school and feel more committed with school activities. The logical assumptions of consequences when delinquent behavior is conducted and their impact on the person are also what reflect commitment. When the individual holds on the side of "stakes in conformity" (Hirschi, 1969, p. 152), the person would have made a choice between consent and deviation from the customary ways of acting thus would spend energy in getting better education, staying away from substances, hardworking etc. The commitment is expected for the rules and values of communal group the person lives within. However, if the commitment scales to conformity are low, the individual is more likely to indicate misconducted behavior and show deviation from customary rules or values of social group (Booth et al., 2008; Hirschi, 2002).

Commitment in regard with school overall evaluates student's individual endowment to school which is consequently seen through his/her behaviors and beliefs. When student makes such an endowment he/she also puts forth the trust in the importance and value of grading system as he/she also believes that engaging with school activities and displaying some particular behaviors are needed for achieving better performance as in doing homework, bringing school materials from home etc. (Libbey, 2004). Studies of

school commitment indicate that students that are with high scales of engagement with school activities due to commitment investments and do their tasks with commitment senses are reported to be with overall higher performances and lower delinquency behaviors (Sciarra & Seirup, 2008; Stewart, 2007).

### *Involvement*

The contentment feelings from school life and overall experiences with conventional and non-conventional school activities are indicators to show the level of student`s involvement. In this regard, student-school interactions are based on customary or non-customary experiences of extracurricular activities which are defined by SCT to reflect students` outcome as well. The effort and time used in customary actions and its scale defines its strength and weakness. The idea is basically based on individual`s engagement with expected behaviors so that there wouldn`t be time for any other misconducted behavior. If a person is left alone without any engagement he or she would end up with a deviant activity, thus the theory hypothesizes that the person should be preoccupied with expected, desired activities like educative activities, trainings etc. so as to stop ways of delinquency (Booth et al., 2008; Hirschi, 2002).

Involvement in regard with school overall is described through students` participations to school activities, in particular to after school activities which includes diverse types of extracurricular activities that make students display some certain behavioral patterns (Maddox & Prinz, 2003) through which favorable outcomes and interactions occur that create relations between displayed behaviors of students` participations to activities and school performance as well as performance related consequences (Dumais, 2008, 2009; J. A. Fredricks & Eccles, 2008; Zaff, Moore, Papillo, & Williams, 2003). The relation

between extracurricular activities and school involvement shows that such engagements as well as doing homework etc. has positive impact on school attachment.

### *Belief*

The rules, values shared within communal group are measured with members' belief in them and their validness, reliance etc. are what determines an individual's belief. The theory suggests that if an individual has strong senses of belief, the scales of delinquent behavior would be low accordingly as they have strong correlation with each other (Booth et al., 2008; Hirschi, 2002). The students basically accept and internalize school regulations and their applications by admin staff and teachers as fair and rightful.

#### *2.8.2.2. Relationship between Bonding Factors*

SCT suggests that all four bonding components are correlated with one another in a positive way, moreover it was mentioned that there wasn't characteristic of a ranked order as one component could not be superior or inferior to the other: "the more closely a person is tied to conventional society in any of these ways, the more closely he [she] is likely to be tied in the other ways" (Hirschi, 1969, p. 27).

#### *2.8.2.3. Validity of the Social Control Theory*

Researchers mostly had been concentrated on youth delinquency in regard with occurrence and prediction of misconducted behavior in measuring SCT's validity. Previously conducted researches majorly established that delinquency of social bonds occurred at the same time with adolescent's eluding of misconducted behavior as well as reported delinquent behavior (Huebner & Betts, 2002), occurring at the same time with relinquishing from crime and development (Bushway, Piquero, Broidy, Cauffman,



& Mazerolle, 2001), and its impact on school performance due to delinquency in bonds. Some other researchers criticized methodology of previous studies as they were based on cross sectional data driven from the relation of delinquency and bonds. Consequently, studies approve the validity and usefulness of SCT as it had given a conceptualized framework by establishing the relation between a person and socially developed organizations and the impact of this relation on person`s manners (Booth et al., 2008).

#### *2.8.2.4. Social Control Theory as a Framework for Conceptualizing School Attachment*

Previously implemented studies were mostly attempted on conceptualization and measurement of SA through SCT (Battistich & Hom, 1997; Brown & Evans, 2002; Cho, Hallfors, & Sánchez, 2005; Loukas, Roalson, & Herrera, 2010; O'Farrell & Morrison, 2003; Resnick et al., 1997). Previous studies were compared to the innovative work of Hirschi (2002) by O'Farrell and Morrison (2003) through a meta-review and components of SA found to be similar with Hirschi`s (2002) social bonding components.

The SCT plays a significant role in understanding and scaling the relation between a person and the social group the person lives in. The usefulness of the social norms and values, individual`s comprehension of them, the effort and time spent with the them, reliability and validity of them, individuals interactions within the social groups are what the SCT involves as a theory. This approach with variant aspects and variables also help studies to analyze and investigate student`s interrelations with schools as social organizations.

SCT together with SDT (Social Development Theory) has been regarded as one of the key foundations in conceptualization of SA, in particular when it's held with Attachment Theory (Catalano & Hawkins, 1996). The three founded theories are interconnected: Attachment theory plays the core role and helps with the infrastructure SCT. SDT on the other hand is very much related with adolescent development within social organizations and it's a derivation of SCT to measure youth learning skills.

Attachment Theory is basically about individual's feelings of reliance on important other people that provide conform, belief, norms, values etc. depending on how secure was the attachment developed. This concept also helped foundation of SCT as Hirschi (1969) used "prolonged separation" to define "deprivation" and to explain socially weakened bonds (Hirschi, 1969, p. 86).

Nonetheless the relationship between the individual and organizations, person's comprehension of facilities, reliance on admin staff, contentment with services etc. are not directly addressed by Attachment Theory. In this regard, SCT plays a core role in focusing on interpersonal and intrapersonal relations, especially between the individual and organization, in particular conceptualizing SA and social organizations. Likewise, SDT and SLT (Social Learning Theory) are sub-structures of SCT. Development of social bonds through which adjustment of behaviors occur is considered by Catalano and Hawkins et al. (2001) as transformation of behaviors, gaining of socially adaptive attitudes and child's social development, because the individual goes through communal settings like schools. Moreover, the expected behaviors and delinquent behaviors are considered separately by these theories.

SDT different than SCT is more focused on positive and negative reinforcement of the behavior in order to obtain expected, conventional behavior and avoid delinquent behaviors. In this regard, having desired and unwanted behavior separately studied would contribute to accurate predictions of students` future and present delinquencies. Since SCT is mostly focused on measurement of SA and its conceptualization, SDT could be a good contributor to SCT in obtaining better measurement instruments and variables. The theories, however, both give importance to student-teacher relations, peer attitudes, engagement, contentment with school services, time spent for extracurricular activities etc. (Hawkins et al., 2001; Williams, Ayers, Abbott, Hawkins, & Catalano, 1999).

SCT`s model build on four variables; attachment, commitment, involvement, and belief so far has been the best approach in conceptualizing students` interactions with school as it gives a direct insight to the reciprocal relationship between student and school as whole. The framework constructed by this model not only provided a measurement instrument but also helped researchers to empirically comprehend and conceptualize this relationship. This model based on four variables can be applied to SA studies with some additions or extractions as well. The characteristics of individuals and the environment they live in can be studied by application of SCT model as it provides an interaction based framework for social organizations like schools, peer units, family, student-teacher interactions etc.

## **2.9. Attachment and Developmental Studies Implemented in Albania**

In this section the revision of studies conducted in Albania together with present study and the general context of attachment, school attachment, adolescent development etc.

are introduced. According to statistics published by INSTAT the population in Albania is one of the youngest among European countries including Balkan regions (Bruijn, Filipi, Nesturi & Galanxhi, 2015) which makes studies, including the present study, conducted on youth quite significant in conceptualizing, supporting, configuring youth development and problems through diverse variables. In this regard attachment studies are vital in providing psychological support to help adolescents' development and school psychology which is thus far a barren field of study in Albania.

On the other hand, it is worth to mention that Albania had gone through many challenges as a country, 1991 was a defining date of transitional change in Albanian history as society brought an end to 50 years of communism regime and initiated the tendency towards a more democratic country. Although it's been more than 20 years there is still an ongoing fluctuating change that influences Albanian youth in all aspects. The new concept of openness to modern world brought challenges as well. Individuals were no longer following a preordained path designed by an authority and no more protection whatsoever was provided for general public, instead people were given the chance to make their own paths by enterprising their own risks and/or targeted objectives in their lives. In a study implemented on Albanian adolescents' development and psychological challenges with risk factors De Lucia (2008) mentions the reason for the inevitable change as follows: "Mentalities, norms and values that had characterized and regulated social, economic, political and cultural realities during the regime of Enver Hoxha were shown to be inadequate and out-of-date." (De Lucia, 2008, p. 33) Although scientific papers presented on adolescents are on the rise, only a few of them are focused on their mental, psychological development and/or well-being. Among them De Lucia (2008) emphasizes the significance of studies on mental well-being by

relating it to economic prosperity as it would enhance population's economy by providing mentally healthy individuals: "Among many required actions that would address economic and social problems the study particularly stresses the need for a comprehensive reform of the Albanian mental health system" (De Lucia, 2008, p. 33). Although the study was focused on adolescents in Albania, the targeted population was sampled with only 320 adolescents of which were consisted with 201 females and 119 males and the primary aim was to collect data for the European Project on immigration. The research area was ordained over following scales; "psychological well-being, general health, psychological distress, academic performance, and resilience" (De Lucia, 2008, p. 34). (1) Psychological well-being of adolescents were measured with two subscales; a) satisfaction with life which indicated low levels with only 18% of the total samples, and b) self-esteem which indicated high levels with 45% of total participants (De Lucia, 2008). (2) Health as a scale was measured through five subscales; a) health perception with 60.9 % good and 20.6% excellent levels, b) usage of medicines with 26.3% moderate and 51.3% high indicating high risk levels, c) services on medications with a median of 33% utilization that occurred either once or twice and more indicating another risk factor for adolescents in Albania, d) absenteeism due to illnesses with 34.1% of 0 absenteeism and 58.4% of 1-4 days absenteeism indicating low levels of risk factors, and e) overweightness with 10.9% of total participants indicating low levels of risk factors (De Lucia, 2008). Although absenteeism was one of the few variables related with educational issues of adolescents, the other variables used in the research brought up valuable data on conceptualization of adolescent development and the risk factors that should be estimated while conducting supportive interferences. Many other studies implemented together with school

attachment may not always bring up generalized results as most of the researches are conducted either locally or to a limited number of samples. Nevertheless, there are many other studies that have reached generalized results in regard with school attachment; when students feel safe at school they show better performances in terms of academic achievement (Milam, Furr-Holden, & Leaf, 2010). One of the significant contributions of the present study is to have widened the number of participants to 1506 samples and to have reached 6 out of 12 prefectures in Albania by which it was possible to obtain more generalized data with the primary aim of conceptualizing attachment variables among adolescents. De Lucia (2008) measured the scale of (3) psychological stressors on adolescents by anxiety and behaviors indicating depression with 52.5% level of anxiety on total participants which indicated quite high risk factors, depression as the second variable was also given with high percentages of 76.9% moderate and 14.4% high showing quite high risk factors for the youth in Albania. De Lucia (2008) related the high levels of anxiety and depression to three factors which show significant similarity with the present study: “The Albanian adolescents have had to face an extremely difficult situation because they have had to experience three crises simultaneously; that of the Albanian state, that of the cultural and educational model and that of adolescence” (De Lucia, 2008, p. 40). Although attachment studies relate academic performance or school performance to variables like interest, attitudes towards peers, attitudes towards teachers, perception of school, commitment, engagement, belief, involvement etc. De Lucia (2008) related (4) school performance to students` grades mostly: “The boys interviewed, on the other hand, do not appear to show a strong attachment to school and the results are rather poor (75.0% refer and an average grade in the current year of between 2 and 6)” (De Lucia, 2008, p. 41).

However, it is worth to mention that the results presented were quite significant with very low satisfactory levels of 62.0% indicating high levels of risk factors for students' exam results. De Lucia (2008) provided data on (6) "Resilience" through five subscales; a) "social competence" indicated high levels with 71.2% reflecting how the youth in Albania is capable of building good relations with other, b) "empathy" with 71.7% presenting high levels understanding one another by which the author infers as follows: "This result therefore confirms the desire and the will of young Albanians to play a role in society and to be able to represent an added value in it" (De Lucia, 2008, p. 43), c) "problem solving" again presented high levels with 59.4% as participants saw themselves capable of overcoming difficulties faced in their lives, d) "goals and aspirations" indicating highest levels with 93.8% on which the author brings up following inference: "This makes it possible to affirm that despite the difficulty experienced in their lives, the young Albanians, are able to foresee a future full of opportunities and dreams in which the improvement of their existing conditions of life will be possible" (De Lucia, 2008, p. 44), and e) "positive value" with 70.3% indicating once again high levels as the subscale of "Resilience" (De Lucia, 2008).

One of the major and most internationally recognized studies related with youth in Albania was without doubt "The Handbook of International School Psychology" as it provided insight to school psychology services and its current situation in Albania. The observations, surveys and analysis conducted by Musabelliu, indicated serious risk factors for the field of school psychology. The field itself was established in 1996 with many difficulties and challenges since when it has only been 20 years (Jimerson et al., 2006). After implementing a survey to all psychologists (N=11) in Albania, following problems were emphasized: (1) the number of school psychologists was not enough as

one psychologist could be matched with 580 students, (2) they weren't recognized like other personnel of school, they had lower status compared to teachers, (3) they had to work with low incomes and they had no support for betterment of the services, (4) lack of training or progress in reaching professionalism, (5) they had very low contentment levels with their occupations, (6) the schools that had psychologists could not provide them offices for work, moreover one psychologist had to work with two or more schools at the same time (Jimerson et al., 2006).

Although there have been lots of improvements in the field (like the number of psychologists that are now 79) there are still issues to be handled. The biggest issue of the field has been the lack of psychologists, however the new project named "new psycho-social service" initiated in 2013 together with Ministry of Education & Sport (MoES) and Terre des hommes, Mission in Albania, aimed at training new personnel and reached 219 psychologists in five central regions of Albania (Tirana, Durrës, Elbasan, Fier, Korça) (Terre des homes, 2013).

As one of the main issues with studies conducted on youth in Albania, most of the research was done on the system and the emphasis has been the rephrasing of the problems within system or criticism of governmental or non-governmental initiations as they could not provide enough support for the youth in Albania. On the other hand, youth studies have long been neglected to be studied with their own participants, in other words they were not studied as the recipients of the services and their feedback was left blank as they weren't prioritized by the researchers. The present study aims at providing data and knowledge on this blank left area by studying the attachment variables on youth in Albania with their own perceptions of following interrelated



measurement scales: 1) SFS: Students` Feelings for School 2) SIL: Students` Interest in Learning 3) ATP: Attitudes towards Peers 4) ATT: Attitudes towards Teachers, and 5) SPS: Students` Perception of School as summarized in the following table:

**Table 2.4 - Outcome Dimensions of Survey Questions**

<b>Outcome Dimensions</b>	<b>Survey Questions (question numbers)</b>
Feelings about being in school	1-5
Interest in learning	6-11
Attitudes towards other students	12-16
Attitudes towards teachers	17-22
Questions not matching an identified outcome dimension	23-29

#### **2.10. Students` Feelings for School**

School liking in regard with senses felt for school has been one of the first measurement variables used in many researches to conceptualize students` relations with schools for not only organizations but also societal surroundings within where they have reciprocal interactions as they socialize with other people. Attachment studies in this regard primarily aim at measuring students` general level of liking the school together with their feelings of contentment, security, fair treatment etc. (Maddox & Prinz, 2003). School liking is not only an ample measurement variable for attachment, it is also an indicator for school performance. Studies implemented with this variable show that school liking and school contentment are vital elements in increasing class participation and enhancement of the overall school performance (Gest, Welsh, & Domitrovich, 2005; Hallinan, 2008; Ladd, Buhs, & Seid, 2000). School liking is more likely increased when it`s observed together with fair treatment as well as clearance of disciplinary rules through which students feel safer and they indicate better academic performances,

moreover the safer students feel the higher academic performances they tend to display (Gregory & Cornell, 2009; Milam et al., 2010; Ripski & Gregory, 2009; Skiba & Knesting, 2001). In the present study this variable is studied together with five components of SA measurement; (1) level of school liking, (2) level of liking about going to school in the mornings, (3) how proud is the student for studying at that specific school, (4) senses of safety at school, and (5) the level of identity feelings at school.

### **2.11. Summary of Theoretical Structure and Analytical Model**

Attachment as a definition complies with concepts such as connectedness, bonding, engagement, belonging etc. as a theory it derives its root from John Bowlby, the founder of the theory and Mary Ainsworth, the developer of the theory who also brought up a new face to it. They both have deep understandings of attachment as a similarity seen on both thinkers; they considered attachment as a profound lifelong emotional connection that bonds one individual to another which is beyond space and time (M. Ainsworth, 1973; Bowlby, 1969).

Nevertheless, John Bowlby renovated our understandings of the relationship between a child and its mother, the primary caregiver, via separation, deprivation, and loss. He had a special method of establishing the concept as he began to structure his philosophy of the theory; he thought that attachment was not necessarily reciprocal, an individual could possibly have attachment senses to another one that was not felt the same way by the other individual, attachment was also something that was seen through some specific patterns of behavior in children, like looking for closeness with the caregiver or attached person especially when the child was stressed, threatened, bored or upset

(Bowlby, 1969). Mary Ainsworth expanded the theory and made it conceivable for the theory to find new pathways of advancement and fields of academic study. She also accomplished in testing Bowlby's ideas by empirical ways of her new methodologies. She formulated some particular patterns through real experimentations on infant-mother relations.

Bowlby and Ainsworth were, to some extent, two different thinkers in various ways; however their approaches displayed in some ways influences and controversies of Freud and other psychoanalytic thinkers. Bowlby established his thoughts through his research majorly via following works; "The Nature of the Child's Tie to His Mother" (1958), "Separation Anxiety" (1960b) and "Grief and Mourning in Infancy and Early Childhood" (1960a). Ainsworth's majorly innovative and more empiric patterns that signified mother-child interrelations were; "Secure attachment, Avoidant insecure attachment, Resistant insecure attachment and Disorganized/disoriented attachment" (M. Ainsworth, 1973; Main & Solomon, 1986).

As mentioned above the theory found new directions of development some of which together with school attachment are; Attachment and Representation, Attachment across the Life Span, Attachment and Developmental Psychopathology, The Ecology of Attachment, Cross-Cultural Studies, and Attachment and Public Policy. The theory is still evolving through psychoanalytic thinkers. There is a long evolving history of ideas that find their roots in attachment theory. Each of the development has become in a sense a corner stone or a vital step for one another.

Since the concept itself is used with diverse meanings, the literature written on school attachment is also quite diverse due to which John Bowlby and Mary Ainsworth as the

pioneers who brought up the attachment theory that inspired numerous works. However, the literature suggests that school attachment together with the theory itself has many common issues as well most of which emphasize the importance. Kennedy and Kennedy (2004) to state the significance of school attachment on mental development with physical development of individuals and societies he suggested that most of the literature focuses on “social emotional development” in regard with “cognitive-affective structures” that are used by children in order to construct his\her perception of the surrounding world, self, and other people from which the perspective of attachment theory as agreed by many others as they also mentioned in their studies (Bryant et al., 2003; C. McNeely & Falci, 2004; C. A. McNeely et al., 2002). The literature also has been using different terminology to present the topic; “some researchers study school engagement while others examine school attachment, and still others analyze school bonding” (Libbey, 2004, p. 274).

Mentioning the importance of school attachment, we should also see the other side of the same topic as isolation can be the other reflector since significant number of students may be experiencing alienation from school setting (Milsom et al., 2011) stating a different perspective without underestimating both sides of the issue.

One of the most common issues handled in the literature is that schools shouldn't be limited to students only and they may feel safe at school; “The schools-as-communities perspective provides a popular explanation for school-disruptive behavior, stating that interpersonal bonding at school and feelings of school belonging prevent misconduct.” (Demanet & Van Houtte, 2012, p. 499) another similar approach was suggested by Bryan and her friends as follows: When students feel connected to or have strong bonds

to their schools, they are more likely to experience academic success (Bryan et al., 2012, p. 467). This statement also complies with other researchers' findings in regard with safety issues and a predictor for future well-being of students; "Research widely affirms that school bonding is a protective factor for adolescent substance use. That is, when youths have positive experiences and ties to school, they are less likely to participate in illegal behaviors, such as drug and alcohol use as well as safety at school is quite vital as "...findings suggest that students' sense of safety may be positively linked to academic achievement through their prior academic achievement" (Bryan et al., 2012, p. 474). Academic achievement together with outcomes are correlated with students' interactions with extracurricular activities in building strong relationships (Dumais, 2009; J. A. Fredricks & Eccles, 2008) stating the significance of extracurricular activities in building positive bonds between school and students.

Technological improvements with facilities of the schools are also given value in dealing with challenges of today's schools; "For schools to succeed, they must use the best teaching technology to improve academic competence, as well as reduce the barriers to learning represented in delinquency and drug use..." (Catalano et al., 2004, p. 260). Comparison of traditional design in terms of instruction settings with modern settings are worth to mention as one of the common issues in the literature;

"Traditionally designed methods are not so effective in developing conceptual understanding of the subject matter. Because traditionally designed instruction were dependent on teacher exploration without consideration of students' preconceptions..." (Pabuçcu & Geban, 2012, p. 572). Family involvement in support with peers, teachers and school is one of the vital factors in strengthening students'

bonding with school (Sciarra & Seirup, 2008; Stewart, 2007; Zaff et al., 2003). One of the common survey questions used by the literature was “How much I like school,” indicates an outcome of academic achievement as a predictor; “...a measure of students’ attachment to school had the strongest effect on academic achievement” (Bryan et al., 2012, p. 474) which is once again strongly related with predicting effect of attachment patterns on students. The five types of questions on student’s feelings about school in the present study are to measure student’s self-perception in school attachment both in manners and beliefs as also used in another study (Maddox & Prinz, 2003). “Students in caring school communities feel that they make important contributions: hence, they are given a certain amount of influence in the school’s activities and decision-making process” (Demanet & Van Houtte, 2012, p. 500) states the significance of decision making as a process that is influenced by attachment levels of individuals. One of the worth to mention quotations in regard with positive social behavior and school attachment is as follows; “A vision of schools in which the purpose is promoting positive social behaviors and engaging students requires warm, caring school and classroom environments within which students can flourish” (Penner & Wallin, 2012, p. 7). Group work is also emphasized in relation with bonding; “...bonding, or identification, occurs as a result of meaningful contributions or service to the group...” (McNamara, 1996, p. 34). School culture together with its all features are also held by other studies indicating that attachment studies on students should be held together with environment, in other words school settings; “When examining the attitudes and beliefs of students, it is important to examine those concepts within the con-text of the school environment while also seeking to understand how these concepts reflect student investment in education and connection to the school environment” (Howard &

Ziomek-Daigle, 2009, p. 39) as in this particular study we encounter one of them; “the preventive effect of school bonding on deviancy has been replicated by many studies” (Demanet & Van Houtte, 2012, p. 500). Delinquency studies that were surveyed together with attachment patterns were given importance due to their preventive effect when individuals had strong attachment levels;

“The preventive effect of establishing strong social and emotional connections at school on student deviancy is thus well-established in research...” (Demanet & Van Houtte, 2012, p. 501). Some of the topics in scope of school attachment handled different issues as well; “Jessor and colleagues' used the phrase "positive orientation to school" to measure student attitudes and motivation toward school and learning” (Libbey, 2004, p. 274). Studies implemented by school psychologists shed valuable data on conceptualizing students attachment figures and their relations with academic performance; “School psychologists have traditionally focused on assessment, prevention, and intervention strategies for a myriad of factors that influence school performance” (Kennedy & Kennedy, 2004, p. 247). Enhancement of performance based on skills such as assessment, prevention, and intervention require profound adaptive and maladaptive knowledge (Kennedy & Kennedy, 2004) suggesting one of the prerequisites.

The interrelation between teacher and student as in teacher attachment provides valuable approaches in students' achievements; “items that ask whether students can design independent projects and teachers listen to student suggestions” (Libbey, 2004, p. 280).

The level of the students should be considered as well as individual learning styles` as to avoid deviant peer influence, thus ``it is noteworthy that influence occurs especially when friendship bonds with deviant peers are quite cohesive`` (Demanet & Van Houtte, 2012, p. 501). Solidarity among counselors is emphasized as; ``School counselors should collaborate with other educational stakeholders (i.e., teachers, administrators, school staff, parents/guardians, and community members) to proactively build school commitment beliefs early in high school as well as tackle early signs of a lack of student commitment.`` (Bryan et al., 2012, p. 476). To eliminate deficits in learning there should be orientation programs for incoming freshmen, freshmen, sophomore students that indicate below levels in subjects they reflect deficits as to make sure students have school bonding in avoiding misconducts such as truancy, drug usage, drop outs, etc. (Bryan et al., 2012). Certain parental factors are predictive of attachment security throughout development (Kennedy & Kennedy, 2004, p. 249) suggesting parent involvement in increasing school attachment among students.

As to achieve beneficial outcomes in order to buffer misconducts, the schools as communities should provide “...a broad line of inquiry advocating that schools should be organized as caring school communities” (Demanet & Van Houtte, 2012, p. 499).

This case study is rather to study on the individual level of school attachment as “...few studies have tested specifically whether the effects of school belonging act at the individual or the school level” (Demanet & Van Houtte, 2012, p. 499). As in the case study of the research we made an agreement on helping the student by some restrictions, such as less time on the internet, no more going out without parents` permission, and most importantly he would stay in dormitory until the end of the year as to increase



cooperative learning (Salvin, 1991; Slavin, 1980) as to make sure that “students from differing abilities and backgrounds are provided the opportunity to work together in teams...” (Catalano et al., 2004, p. 255). Change in behavior is one of the components of school attachment theories: “...involvement of students in classroom activities provides positive reinforcement for pro-social behavior, and setting clear guidelines for appropriate behavior” (Catalano et al., 2004, p. 258).

As observed throughout the reviewed literature there hasn't been a significant research on school attachment at public high schools which is one of the main objectives of this study as to provide data and results in understanding the level of attachment at public high schools in Albania.

The present revision of theoretical structure and analytical model is composed of 174 studies that are related with SAS and its components, particularly the relationship between school and student. The studies were gathered through electronic databases like EBSCOhost, JSTOR, PsycInfo, Google Scholar, Academic Search Premier, and world e-book library. Studies that were focused on following search terms were selected; school attachment, bonding, connectedness, engagement, commitment, involvement, culture, environment, organizational psychology, school psychology etc.

## **CHAPTER III**

### **3. METHODOLOGY**

This chapter presents the method and its way of testing hypotheses together with research questions and objectives. The main goal was to see the conceptualization and measurement of School Attachment Scale (SAS) in Albanian context in regard with

students from public high schools as a nationwide study on youth. The measurement scale was determined through previous studies modeled on SA studies that were majorly derivations of two types of components: (1) Tagiuri et al. (1968) Ecology, Milieu, Social System, and Culture; and (2) Hirschi (1969) Attachment, Commitment, Involvement, and Belief. SAS with five components and 29 sub-items was developed accordingly and hypothesis testing as part of SAS development was conducted. The conceptualization and measurement of SAS was done through research hypotheses and statistical data obtained via implementation of SAS survey to the accessible population of high school students.

This chapter basically presents information about the target population, generalization of the results through accessible population, the sampling procedure, variables used in the study, measurement instruments, research methodology, followed procedure for the research, research design, research implementation, followed procedure for the analysis of statistical data, power analysis in order to estimate the required sampling size, unit of analysis, translation procedures and the assumptions together with limitations in regard with the study.

### **3.1. Population and Sampling**

The overall target population of the present study was all public high school students in Albania. A consent/permission paper was obtained from Ministry of Education and Sports in Albania. High school students were selected as the target population for the following three main reasons. First and foremost, School Attachment has a key role in socialization of adolescents. Students have different needs that require support as in; autonomy development, community affiliation, self-regulation, self-conception etc.

which tend to increase and form during adolescent period (Eccles et al., 1997; Richman, Rosenfeld, & Bowen, 1998; Ryan & Patrick, 2001; Shavelson et al., 2002). However, school performance issue, emotional and social problems may occur at this period as well especially when needs are not met and sufficient support is not provided (Ryan & Patrick, 2001; Shavelson et al., 2002). The needs of adolescents and the opportunities or affords offered through means of schools are assumed to be corresponding with one another; however Eccles et al. (1993) asserted that negative occurrences at youth times are results of disparities between the needs and opportunities offered by schools. Youth tend to have higher needs for peer interactions, independence, self-awareness, abstract cognition required activities, self-regulation etc. which make it crucial to have an idea about adolescents' attachment levels in order to help them get the required support through necessary means.

Second reason of having the youth as the target population is that they are capable of cognitive thinking and have sufficient comprehension to complete the questions of a survey. Questionnaire sub-items involved content areas that were related with student's interactions with teachers, peers, school life that required the respondent to be capable of comprehension of such measurement items and relate his/her school experiences with relevant choices. To gain capability of dealing with abstract activities, a person needs to have reached to a certain biological and cognitive age as well that can help for the formal operation stage as suggested by Piaget (1971). High school students (with the age range of 14-18) are considered to have reached this developmental stage.

The third main reason for selecting the target population from Adolescents was due to the significance of attachment studies conducted on youth as psychologists, counselors,

curriculum designers, pedagogues, governmental and non-governmental policy making entities started to show increased interest in full conceptualization of attachment measurements and thus formation of safe settings that can foster adolescents' attachments to their schools (Bryan et al., 2012; Catalano et al., 2004; Eccles & Roeser, 2009; Libbey, 2004; Smith & Sandhu, 2004). In this regard, the objectives and aims of the research are explained in previous chapters (See Chapter I, page: 9 and Chapter II, pages: 23-30).

### **3.1.1. The Accessible Population**

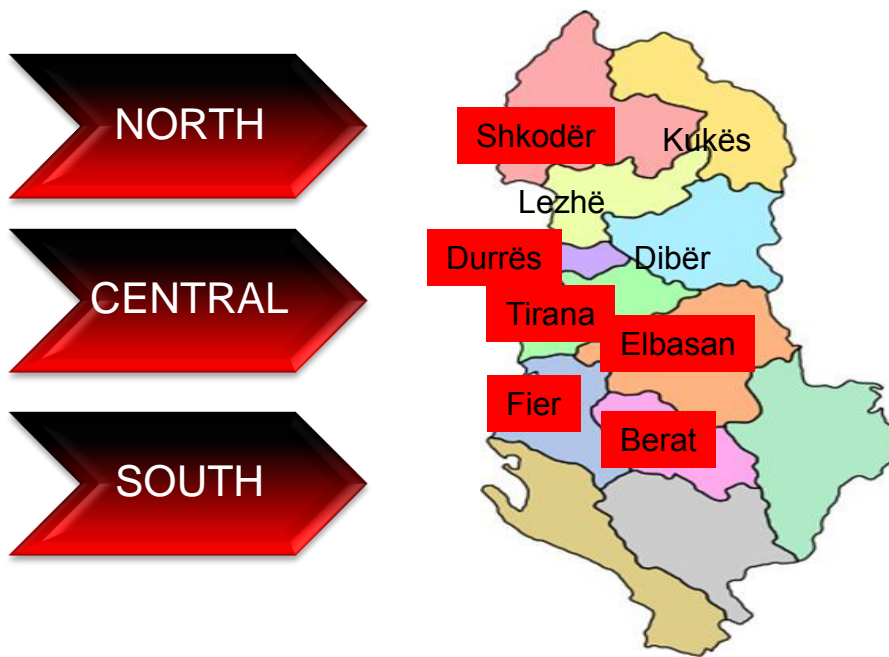
The target population was consisted of all 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade students from public high schools in Albania. According to statistics given by INSTAT, the total number of pupils enrolled on upper secondary schools was 124.619 with 61.163 male and 63.456 female students. The accessible population was adolescents in grades 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> (N=1506; n=676 male and n= 830 female) with adequate distribution of demographics in Albania (N=6 prefectures out of 12) of which schools from respective regions (Tirana, Durres, Elbasan, Fier, Berat and Shkodra) were surveyed in late December 2015 and early January 2016 at a time when students were free from exam stress and other such external factors. The accessible population was more than 1% of the total target population; accordingly the findings could be generalized for all public high schools in Albania. The accessible population and the determined sample size were reached through permission of "Ministry of Education and Sport" in Albania (See Consent Paper, Appendix C). Detailed information for sample size is given in Table...

### **3.1.2. Sampling Size**

The scale was utilized from Regional Educational Laboratories model (See Consent mail) which was also used to assess School Attachment in American high schools in 2012. The reliability of the entire scale was  $\alpha = 0.737$  with no mean difference between participant school regions however with a slight mean difference (1.55) in gender as high schools had more female students according to INSTAT (Total N=124.619 of which was 61.163 male and 63.456 female students).

### **3.1.3. Sampling Frame**

Since the target population was all public high school students in Albania, the sampling frame was created to obtain generalized data. Through approval of the “Ministry of Education and Sport” in Albania the sampling frame was created and accordingly the regions and schools were chosen in regard with the demographic map of Albania as shown in the figure:



**Figure 3.1: Sampling Frame Showing Equal Distribution of Cities/Prefectures**

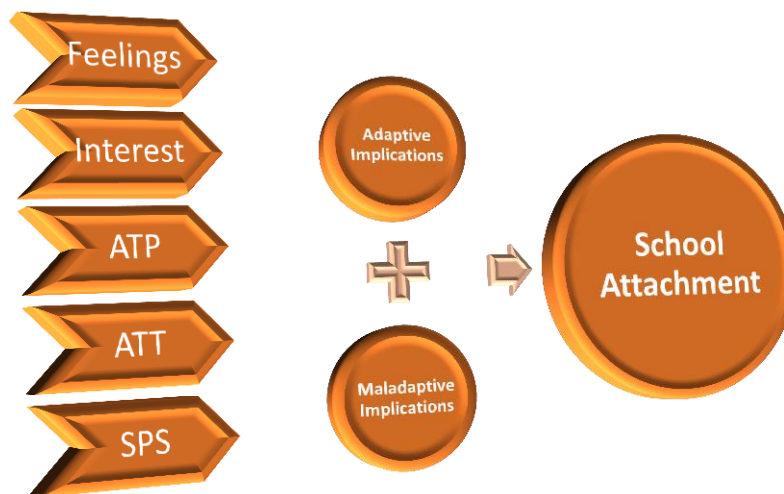
#### **3.1.4. Sampling Method**

As mentioned in the sampling frame the method of choosing samples was based on the groups that had similar characteristics, in other words same groups of samples were selected due to their similarities with other groups which apply to stratified sampling method. According to stratified sampling the whole population is divided into subgroups which are called strata or subgroups, and the final selection between these subgroups are done randomly as they share the same characteristics, thus the sampling method increase the reliability and validity scales of the research. In this regard, the public high school students were grouped according to three divisions and the twelve prefectures within these divisions in Albania: Central Albania; Elbasan, Tirana, North Albania; Dibër, Durrës, Kukës, Lezhë, Shkodër, South Albania; Berat, Fier, Gjirokastër, Korçë, Vlorë. Since the prefectures that are within the same division share the same characteristics the researcher can randomly select one of the prefectures within the

division and have it as the strata for the sampling of the research. In this regard the six prefectures selected were as follows: Central Albania; Elbasan, Tirana, North Albania; Durrës and Shkodër, South Albania; Berat and Fier.

### 3.2. Variables

The present study is based on five variables that are also components of School Attachment Scale (SFS, SIL, ATP, ATT, and SPS). These are independent variables that shape the intermediate variables (adaptive and maladaptive implications) and eventually SAS as the dependent variable of this research. The research hypotheses also are created to measure the inter-relations between these variables as structural equation model of variables. Following figure shows the equation model of variables:



**Figure 3.2: Structural Equation Model of Variables**

### 3.3. Instruments

The data collected from high school students was analyzed via SPSS 23.0 for Windows. The SAQ (See the original Questionnaire in the Appendix) was consisted of 29 items

based on five point Likert Scale. The responding section was categorized as; “Strongly Agree”, “Agree”, “Neutral”, “Disagree” and “Strongly Disagree”. The survey implemented in the study as measurement strategy is suited to the type of student outcome to be measured as the intervention serves students in grades 10th, 11th, and 12th who demonstrated various levels of attachment to school; including various outcomes depending on the types of survey questions as shown in the table 3.1:

**Table 3.1: School Attachment Questionnaire with Outcome Dimensions**

<b>Sampling Outcome Dimensions</b>	<b>Questionnaire Items (item numbers)</b>
Students` Feelings for school	1-5
Students` Interest in learning	6-11
Attitudes Towards Peers	12-16
Attitudes Towards Teachers	17-22
Students` Perception of School	23-25
Items identified as demographic dimensions of student outcome	26-29

The survey contained various statements about students` school life, and was conducted to 1506 samples from public high schools in Albania. Some of the items were reverse coded in order to obtain more reliable data. Reverse coded items were 4, 9, 12, and 17 (e.g. if a student`s response was 1, it was tallied as 5). Items 25 to 29 were used to obtain data on demographics of students, however 25<sup>th</sup> question was specifically asked for students` perception of school`s mentoring program.



### **3.4. Scale Development of School Attachment Questionnaire**

Scale development was processed through four stages: 1) identification of the five components for SAS (SFS, SIL, ATP, ATT, and SPS), 2) identification of the measurement items derived from the five components, 3) testing of measurement items, and 4) final selection of measurement items for each component. A component was meant for a specific, applicable content area to assess SAS scores of public high school students in Albania. A measurement item was meant for relevant and detailed content unit to assess a specific component of SAS (Appleton, Christenson, & Furlong, 2008; Appleton, Christenson, Kim, & Reschly, 2006).

#### **3.4.1. Development of Components**

The five components of SAS were adapted from Regional Educational Laboratories (J. Fredricks et al., 2011) together with the extraction of 300 measurement items from previously implemented 21 instruments that were designed to measure students' engagements with their schools. 60 extractions were with two components: 1) having each item into categorization of one of the five components of the SAS as primary categorization (Appleton et al., 2006) 2) categorization of items by their similarities to create categorization of similar items as secondary categorization (Appleton et al., 2008). The author and an associate implemented these categorizations. Categorization was done independently first, and then inconsistencies were diagnosed thoroughly by the two judges to achieve a final categorization of components (Appleton et al., 2008; Appleton et al., 2006).

### **3.4.2. Primary Categorization**

From 300 items 80 were examined not to be applicable for the components of the SAS. 30 from 80 items were related with academic achievement (10 items), attendance (5 items), behavior issues (9 items), self-perception (13 items) and family issues (2 items) (Appleton et al., 2006). 49 items were also examined not to be applicable for School Attachment components. The items were about questions related with students' observations rather than their own school experiences. Some examples were; "At the school I go to now, all the kids are expected to do well in their work (Eccles et al., 1997), "My teacher allows us to discuss our work with classmates" (Patrick et al., 2007), and "A lot of students in my class like to put others down" (Battistich et al., 2004). Thus, the 88 items were excluded from the categorization of the components.

From 300 items, 211 were considered to be applicable for the components of the SAS. 200 out of 210 items were designated into one of the five components; the left 11 items could not be categorized due to disagreements of the judges as they seemed to be fitting in more than one component and due to the ambiguity on their meanings (Appleton et al., 2006). For instance, the item, "My school is like a family" (Battistich & Hom, 1997) was categorized into SFS by one judge, while it was seen in SPS by the other judge. Thus, the items (n=11) were excluded from categorizations as they were examined to be applicable for areas beyond the research focus of this study.

Consequently, 200 items were selected to construct a more developed categorization and a framework before the final version of the SAS. From these 200 items, 25 items were appointed to SFS, 55 items to SIL, 55 items to ATP, 45 items to ATT, and 45 items to SPS (Appleton et al., 2006).

### **3.4.3. Secondary Categorization**

Based on the similarities and content of the 200 items they were matched with one of the SAS components. The categorizations of 200 items to their assigned components were first done independently and then inconsistencies were diagnosed together for a better categorization (Appleton et al., 2008). Each and every category was titled depending on their contents and these titles were used as the headings of the five components of the SAS after which the finalization of the items pool and eventually five scales and their 29 items were realized (Appleton et al., 2008).

#### *3.4.3.1. Sub-items of Students Feelings for School (SFS)*

In research designs, in particular studies on school and its services, one of the most significant elements is the one that tries to receive feedback from the recipient of the service. In this regard this component was meant to construct measurement items to assess students' own feelings about school, thus to obtain reliable data to interpret and analyze the data accordingly. The following items were developed to measure SFS component:

One collaborator enlisted nine classifications for SFS and the other eleven classifications. Nine classifications were 1) school liking, 2) going to school, 3) school safety, 4) identity preservation, 5) feelings for others, 6) feelings received from others, 7) Having friends, 8) proud of school, and 9) positive relations with others. Eleven categories by the other included 1) Caring for school, 2) Cared by school, 3) Senses for/from others, 4) Teacher liking, 5) Relationships, 6) Support from school personnel, 8) Peer Support, 9) Peer affiliation, 10) Support from teachers, and 11) Desire for going to school.

When the two colleagues discussed on inconsistencies, three main questions were noted as significant: 1) which terms best describe SFS (liking, proud, safe, support, care, respect etc.) 2) What are the elements that make SFS a component of SAS; and 3) what is the context of SFS. The first question was argued to have two distinctions; one would be the terms that are directly related with school (like, proud, safe etc.) and the other would be terms that indicate indirect relation with school (support, care, respect etc.). The second question was a broader issue and should have been dealt with accordingly; the five measurement items were formed by this question. The third question helped in making the distinction between the school context and non-school context as the items were accepted to be related with school context to obtain optimum data in assessing the first component of SAS(Appleton et al., 2006).

After further discussions and evaluations, following measurement items were accepted for SFS: 1) I like school, 2) Most mornings I look forward to going to school, 3) I am proud to be at this school 4) I don't feel safe in my school, and 5) I can be myself at school.

**Table 3.2: Item-pool for Students Feelings for School (SFS)**

Basic Feelings Students have for Going to School	Going to school would contribute to my future career. Going to school is needed for me. I like school.* I have satisfying and pleasing options unique to my school. I take part in extracurricular activities at school against my desire.
Normative Feelings Students have for Going to School	I must complete school education in the best way. I am proud to be at this school. * I think I don't need to go to school, when I don't feel like going to. I think that being absent, late coming, or early leaving without solid reasons like being sick is not right. I think that school rules are needed for students.
Feelings of Contentment and	I don't feel safe in my school.* I have options to provide me a sense of fulfillment in addition

Pleasure for being at School	to school tasks. I have options at school which provide me a sense of contentment other than school tasks. I enjoy my school life in general. I am pleased with my presence at this school.
Feelings in Action for being at School and Feelings for Extracurricular Activities	I actively take part in extracurricular activities at school. I am pleased with my extracurricular activities at school. I like my extracurricular activities at school. I am adapted to my extracurricular activities at school. Most mornings I look forward to going to school.*
Normative Feelings for School Identity and Rules	I am able to go with my school rules. My school rules contain unfair rules. I can be myself at school.* I believe that obeying school rules is important. I believe that my school rules are too strict.
* the items selected for the Students Feelings for School (SFS) scale	

#### 3.4.3.2. *Sub-items of Students Interest in Learning (SIL)*

One collaborator enlisted six classifications of items of SIL, the other suggested seven classifications. Six classifications were consisted of 1) interest in homework, 2) grade matters, 3) school utilities, 4) earnestness, 5) desire to do given tasks, and 6) educational ambitions. The other seven classifications were 1) significance of school, 2) significance of instruction, 3) significance of homework, 4) school boredom, 5) significance of teaching, 6) engagement in schoolwork, 7) significance of grades(Appleton et al., 2006).

The two collaborators majorly agreed on most of the measurement items; however they carried out a deliberate independent categorization after which they emphasized the differences about the students' interest in learning with followings: school-tasks, significance of all educational elements that increase interest in learning, hardworking, and grading matters. To classify the measurement items under the SIL component and to reach data on different issues emphasized above, following items were agreed to be used as sub-items of SIL: 1) Doing well in school is important to me, 2) I care if my

homework is done correctly, 3) Most of my classes are important, 4) Don't you agree that school is boring, 5) My grades matter to me a lot, and 6) Don't you believe it is important to work hard at school(Appleton et al., 2006).

**Table 3.3: Item-pool for Students Interest in Learning (SIL)**

Interest in Diligent Works Done for School	Doing well in school is important to me.* I work hard to better comprehend difficult subjects. I am able to concentrate on the subject while in the class. I work hard to get good grades in my exams. I regularly prepare and review my classes.
Giving Importance to School Related Tasks	School tasks help me in other things that I do after school. I care if my homework is done correctly.* School tasks help me think rationally and logically. Having good marks is important for me. School tasks empower my knowledge for other things.
Giving Importance Educational Side of the School	The school education I receive contributes to my future life. Things I learn at school are valuable for me. Most of my classes are important.* I like to have as much as education possible while at school. Things I learn at school contribute to my growth.
Giving Importance to School Classes or Lessons	Some classes at my school are not needed. I believe that all classes at my school are needed. Don't you agree that school is boring.* I like all of my classes. Classes at my school answer my interests.
Giving Importance to Grades and Their Relations with Teachers in this Regard	My grades matter to me a lot.* I believe that my teachers support me properly, when I need academic help. My teachers are good at teaching. Don't you believe it is important to work hard at school.* If I have issues, my teachers would know about it.
* the items selected for Students Interest in Learning (SIL) scale	

#### 3.4.3.3. Sub-items of Attitudes towards Peers (ATP)

Considering the immediate relations between students and closeness of friends together with peer influence and its impact on adolescent development as well as school attachment, it's quite vital to involve items of attitudes towards peers in SAS as to accurately measure the attachment scales of students(Appleton et al., 2006). In this

regard following items were selected; 1) My classmates often annoy me, 2) I get along well with the other students in school, 3) I am liked by my classmates, 4) I rarely feel lonely at school, and 5) I have many friends at school.

**Table 3.4: Item-pool for Attitudes towards Peers (ATP)**

Getting Emotional	My classmates often annoy me.*
Help from Peers	I have good friends at school who help me, when I have personal issues. I have good friends at school that I can rely on, when I need their support. I have good friends at school that can empathize. Friends at school don't really care what I think or feel.
Getting Academic Help and Having close Relations with Peers	I get along well with the other students in school.* I have good friends at school that give me needed advices, when I have issues with school tasks. I have good friends at school that support me to do my homework or extra tasks. I have good friends at school that I exchange notebooks and school materials with.
Being Accepted by Peers and Being Part of Something They Value About	Some of my friends at school think of me as a good friend. I am liked by my classmates.* I think peers at school are interested in being friend with me. I believe that I have popularity in my class. I believe that peers at school put their trust on me.
Respecting Peers and Feelings of Loneliness or Togetherness	I rarely feel lonely at school.* I have friends at school who I take model for myself. I try to understand with my friends` thoughts and feelings. I listen to my friends when they want me to.
Being Respected from Peers and Senses of Inclusion	I have many friends at school.* I have friends who believe that I am a valuable friend. Peers at school listen to what I say. Peers at school show respect to me. Peers at school often tease me for different reasons.
Senses of Closeness to and by Peers	I feel proximity to my friends at school. I feel alone at school. I feel that I am left out from other friends at school. I feel pleasure and happiness if I am with friends at school. I don't have any friends at my school.
* the items selected Attitudes towards Peers (ATP) scale	

#### 3.4.3.4. *Sub-items of Attitudes towards Teachers (ATT)*

It's worth to mention that high schools as socially active organizations are important to be held with their social and communal perspectives which includes adults cooperating together, share purposes and values as well as a common schedule to perform better and to have the school function in the best possible way. Among these adults (administrative staff etc.) teachers are the ones carrying out the major burden of having the school function well and are also the ones that share most of the daily life with students which require a positive relationship from both students and teachers to run a healthy social organization. In this regard, it's quite essential that students obtain maximum support and show sufficient respect in return. The SAS together with this measurement scale meant to measure students' relations with teachers with above mentioned criteria as well as to obtain feedback from recipients of the school service, thus the measurement items of this construct provided core data for both empirical and descriptive analysis of SAS in Albania. The items in this construct also aimed at measuring students' expectations, teacher behavior and communal school life of both adults and students which indicated consequences of social school organizations on high school students in Albania. Following items were selected from the item pool of Regional Educational Laboratory (J. Fredricks et al., 2011): 1) I don't care what my teachers think of me, 2) I get along with most of my teachers, 3) I want to be respected by my teachers, 4) I usually like my teachers, 5) My teachers care a lot about me, 6) I have lots of respect for my teachers.

**Table 3.5: Item-pool for Attitudes towards Teachers (ATT)**

Getting Help From	I have good teachers who care for me.
Teachers and Caring	I don't care what my teachers think of me.*



for What They Think of Them	I believe that my teachers support me whenever I have personal issues. I believe that my teachers have knowledge for my real thoughts and feelings. When I am angry or sad my teachers want to support me,
Being Accepted by Teachers	I believe that my teachers at school like me. I want to be respected by my teachers.* My teachers praise me a lot.
Having Respect for Teachers and Getting Along with them	I have respect for some of my teachers. I get along with most of my teachers.* I give importance to what my teachers think of me. I give importance to following instructions of my teachers.
Being Respected by Teachers and Senses for Gaining Respect	I usually like my teachers.* My teachers show respect for my ideas and thoughts. I believe that my teachers try on their best efforts to help me. I believe that my teachers don't show interest in anything I do or say.
Senses of Closeness to and by Teachers	I feel proximity to my teachers. I feel good when I am with my teachers. I have trust on my teachers. I believe that my teachers take my side when I need. My teachers care a lot about me.*
Normative Directness and Fairness of Teachers Towards Students	I believe that my teachers have appreciation for me. Guidance and teaching supplied by my school is sufficient. I have lots of respect for my teachers.* Students' issues are held effectively by teachers. I trust my school as an organization.
* the items selected for Attitudes towards Teachers (ATT) scale	

#### 3.4.3.5. Sub-items of Students' Perception of School (SPS)

Together with this construct of SAS, it was aimed to obtain data on overall perception of students towards their schools. This construct was also meant to provide the possible missing points left in the other constructs of SAS as they were built on items to measure specific and detailed elements of SA in order to gain a profound insight to each and every factors that have influence on high school student's relations with their schools, however, the items in this measurement scale of SAS tried to reach more general data on students' relationships with their schools (Appleton et al., 2008). In this regard following items were selected: 1) School rules and the grading system are fair, 2) The

rules at my school are applied fairly, and 3) Do you enjoy the mentoring program of your school? With given options of “Yes” or “No”.

**Table 3.6: Item-pool for Students` Perception of School (SPS)**

Senses for Safety and Basic School Perception	I feel secure at my school.
	I feel that I am safe against any types of attacks at school.
	My school does not provide safe havens for me.
	School rules and the grading system are fair.*
Senses of Contentment with School Rules Related Comfort Feelings	I believe that I would receive help if I am bullied or threatened at my school.
	The rules at my school are applied fairly.*
	I feel frustrated at school.
	I usually feel discomfort at school.
Mentoring and Programming of School and Applied Schedules of Student Oriented Activities	I feel stressed or anxious at my school.
	I act contently at school.
	I can make my own decisions for things at my school.
	Do you enjoy the mentoring program of your school?*
	Teachers take decisions without considering my opinions or thoughts.
	I have the chance to choose my goals in learning and extracurricular activities as well as ways to take part in them according to my interests.
	I have the chance to make plans of learning and extracurricular activities and do them for the way I want.
* the items selected for Students` Perception of School (SPS) scale	

#### 3.4.3.6. Sub-items of Demographics

Demographics of students were considered to be used in obtaining various data on students` backgrounds. Since the characteristics of society lies in its demographics as in; race, ethnicity, age, gender, profession, the level of income, status of marriage etc. it is important to have solid data in understanding not only the target population as well as population as a whole. In this regard, as mentioned earlier on objectives of this research and target population the items selected for this measurement scale of SAS were as follows: 1) What grade are you in? With given options of 10th grade, 11th grade and 12th grade; 2) what is your gender? With given options of “Male” or “Female”; 3) what

was your total household income before taxes during the past 12 months? With given options of a) Less than \$5,000, b) \$10,000 to \$14,999, c) \$15,000 to \$19,999, d) \$20,000 to \$24,999, e) \$25,000 to \$29,999, f) \$30,000 to \$39,999, g) \$40,000 to \$45,000, h) More than \$45,000; 4) Which city\prefecture are you from? With given options of a) Berat , b) Fier, c) Durres, d) Shkoder, e) Tirana, f) Elbasan.

## **CHAPTER IV**

### **4. PILOT STUDY AS STAGE (1) PRELIMINARY PROCEDURES**

In this study, the elements that foster school attachment, like modern facilities, friendly atmosphere, teacher friendly orientations, family support etc. are to be dredged up in one of the high schools in Albania, thus results may reflect surmises for other schools of the same kind but overall generalizing would need more data from other schools in Albania as well.

However, there are other studies that have reached generalized results in terms of school attachment; if students feel safe at school they indicate higher performances in terms of academic achievement (Milam et al., 2010).

However, this study is quite essential in its subject area as educational success is correlated with school attachment and it's the first research implemented through `Attachment Theory` in one of the boarding schools in Albania in which elements affecting students` achievements are also to be investigated as to have the findings reflected through the results of the research.

Studies implemented on the issue have been using different terminologies to present the topic; attachment, connectedness, bonding, engagement, and belonging. Attachment and bonding are more commonly used, thus in our study these two will be used in general to refer the topic.

*“Some researchers study school engagement while others examine school attachment, and still others analyze school bonding”*(Libbey, 2004). Students coming from different regions of Albania that have to study in an educational institution, not only for school time but also for after school times as they have to live in dormitories, experience different problems and face numerous of elements that sketch their social and psychological well beings which are absolutely subject to study as to investigate factors influencing student`s relation with school in terms of school bonding or attachment in this specific high school as to capture an individual case of Albania.

Stating the significance of school attachment, one should also see the other side of the coin as isolation can be the other indicator since significant number of students may be experiencing alienation from school (Milsom et al., 2011).

The literature reflects a consensus on the fact that student`s strong relation with school are more likely to achieve success. *“The schools-as-communities perspective provides a popular explanation for school-disruptive behavior, stating that interpersonal bonding at school and feelings of school belonging prevent misconduct.”* (Demanet & Van Houtte, 2012) as well as *“When students feel connected to or have strong bonds to their schools, they are more likely to experience academic success”* (Bryan et al., 2012). The literature also stresses the reason behind the usage of substance as the lack of attachment.

#### **4.1. Research Problem of the Pilot Study**

School attachment is an essential issue in providing required settings for students as to have a safe and orderly environment that would foster their learning and help them reach academic achievement. However this concept together with its measurement strategies is neglected by governmental and non-governmental institutions in Albania. Moreover, the concept is restricted to its origin of John Bowlby and Mary Ainsworth as in the relation of child-mother in terms of child attachment. On the other hand, if we can measure attachment among students with their relations to school would help us overcome most of the problems encountered at schools such as; truancy, dropouts, expels, drug addictions etc. However, if we can measure their attachments we may reach to the origins of the above mentioned problems and find more effective solutions.

#### **4.2. Scope of the Pilot Study**

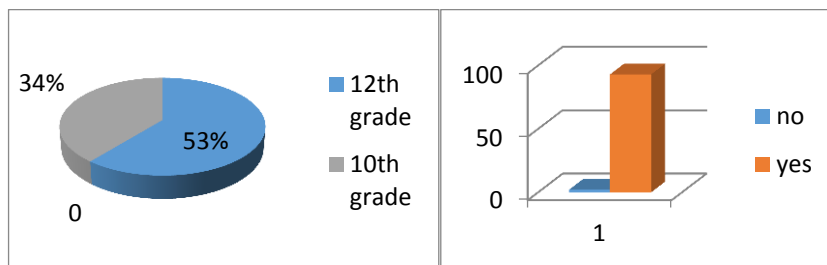
The main reason behind the research is to investigate some specific schools particularly vocational schools in Albania as they are with dormitories and have different students from different regions of Albania. Thus, it is aimed to obtain valuable data on the subject and reflect the contribution of these schools involved in the subjected area of the study field.

Student`s relation with school have great effect on their success. If they can bond with school, peers, and staff they seem to be more motivated and determined in their studies otherwise they encounter different psychological or social problems that turn into barriers in front of their success. On the other hand, in today`s modern world truancy, dropouts, expelled students are becoming more in number as they can`t find a peaceful atmosphere at school. To avoid such problems, some certain steps are to be taken.

### 4.3. Significance of the Pilot Study

School Attachment is quite a unique field of study in Albania as during my research I couldn't find any articles or studies on the subject, although it's quite a common topic among other researchers in the world the topic is mostly school limited as dormitories are either secluded or not involved at all. This study, on the other hand, aims to investigate school attachment of a boarding school in Albania.

The results generally indicate a gradually evolving sense of attachment among students as 10<sup>th</sup> grades reflect less attachment compared to 12<sup>th</sup> graders. Positive responses among 12<sup>th</sup> graders are up to 53% whereas among 10<sup>th</sup> graders it is 34%. Below is the figure that shows positive responses of the 10<sup>th</sup> and 12<sup>th</sup> graders, 11<sup>th</sup> graders are not estimated as they weren't used for overall calculation, only 2 students were included:



**Figure 4.1: School attachment percentages and the significant difference in favor of `yes` as positive response**

The question regarding the mentoring program of the school received highly positive responses indicating strong attachment of the students as the 26<sup>th</sup> survey question reflects:

The highest indicator- among other obtained data- reflected in *figure 2* as ``yes`` and ``no`` also demonstrates strong correlation between SEN, facilities, peers, school setting, staff and other influential elements of school attachment as it is also reflecting

student`s sense of safety, *findings suggest that students` sense of safety may be positively linked to academic achievement through their prior academic achievement* (Bryan et al., 2012) as student`s sense of safety is linked to school connectedness; *“How much I like school,”* indicates an outcome of academic achievement; *a measure of students` attachment to school, had the strongest effect on academic achievement* (Bryan et al., 2012).

#### 4.4. Findings and Discussion

Questions in the survey were mainly parted into 4 groups of different outcomes as mentioned in the following table. Following measurements are based on one of these four dimensions.

The five types of questions on student`s feelings about school are to measure student`s self-perception in school attachment both in manners and beliefs (Maddox & Prinz, 2003). The results obtained from the survey questions related with the feelings about school are of aforementioned five question types reflecting following numeric values:

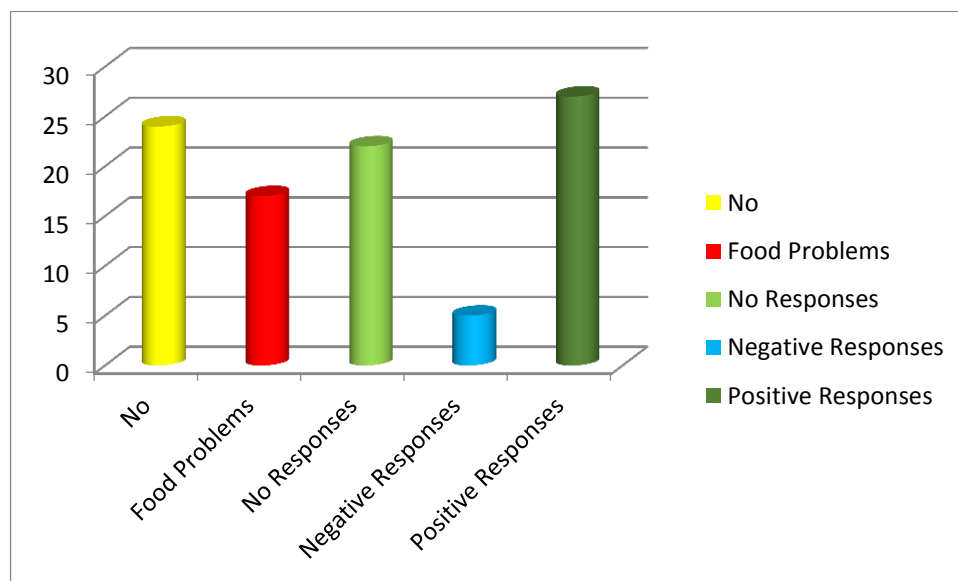
**Table 4.1: Question types of feelings about being at School**

	OUTCOME DIMENSIONS				
	1	2	3	4	5
Strongly Disagree	0%	6%	4%	4%	9%
Disagree	20%	13%	7%	9%	10%
Neutral	11%	28%	20%	12%	18%
Agree	51%	39%	38%	32%	33%

The indicators at this table are quite significant as they are reflecting students feelings about being at school, in other words the results are quite important in understanding students` personal perceptions of their connectedness to school. Internalizing such

perceptions of attachment also brings up the idea of *“students in caring school communities feel that they make important contributions: hence, they are given a certain amount of influence in the school’s activities and decision-making process”* (Demanet & Van Houtte, 2012).

Before getting into deep analysis of the data obtained from the boarding high school the following table is worth to observe in understanding the major problem raised by students at this specific school. The overall results indicate significant high rates in favor of connectedness to school, whereas the following table shows that there is a high rate of complaint in the quality of the meals as food problems bar is quite high.



**Figure 4.2: Responses given to food problems**

#### **4.4.1. Counseling System of the Boarding High School**

Hafiz Ali Korca has been actively open since 1998 and is one of the five schools of ‘Sema Foundation’ that is located in Kavaja. Education is for 3 years, mainly based on



three languages; Albanian, English, and Turkish. The science subjects are taught in English; social subjects are in Albanian and Turkish.

#### **4.4.2. Curriculum and Counseling Oriented Activities**

Counseling system and curriculums that help students improve their educational skills and achieve academic success in Hafiz Ali Korca High School are sub-headed under three groups according to students' grades of 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> divided into nine classes. Academic achievement and related outcomes are correlated with students' interactions with extracurricular activities in building positive relationships (Dumais, 2009{Fredricks, 2008 #58}). The plans for academic success and psychological motivational activities that aim to provide a helpful atmosphere for students, together with other materials and facilities such as internet, labs, and sports center are all used throughout the year with planned weekly, monthly, and finally yearly workshops.

In other words, a student's improvement is observed through different perspectives as it starts with his arrival at grade 10 and finishes with his departure at grade 12. *For schools to succeed, they must use the best teaching technology to improve academic competence, as well as reduce the barriers to learning represented in delinquency and drug use* (Catalano et al., 2004).

Teachers meetings are held twice a week, one of which is for education; the other is for his psychological improvement and motivation. Department meetings are held once a month, and a final meeting is held once a year as to close the year. Apart from written plans and curriculums, each teacher has his/her own flexible plans, as in ways of approaching the student.

Annually revised and developed curriculums and yearly plans are prepared respectively for each grade, subject and department. The counseling related plans are also prepared according to before mentioned criteria with a difference by inversion of students with special skills or extra care needed students if there are any.

Two essential elements; education and counseling are the basics of the schooling system which are designed to adapt facilities of the school in order to match students` needs. Curriculum and yearly plans are developed by department chairmen via consultation of professionals. *Traditionally designed methods are not so effective in developing conceptual understanding of the subject matter. Because traditionally designed instruction were dependent on teacher exploration without consideration of students' preconceptions (Pabuçcu & Geban, 2012).*

Extracurricular activities and organizations, like periodical parents meetings of each class, picnics, summer trips to abroad and visits to historical places in certain times are mentioned in the academic calendars of the annual plans.

One of the major effective as well as flexible activities organized by the teachers is having visits to student`s home so as to make contact with parents and family members, thus providing a more practical approach to the student`s characteristic development. Family involvement in support with peers, teachers and school is one of the vital factors in strengthening students` bonding with school (Sciarra & Seirup, 2008; Stewart, 2007; Zaff et al., 2003). Such a visit is not only for telling parents about their child`s marks or exam results; it`s also a mutual exchange of ideas in achieving student`s academic success through parents involvement in terms of motivation and a second control mechanism.

#### **4.4.3. Educational Meetings**

These meetings are held once a week to check the general ongoing of the students' improvements and to organize the coming week. Register, daily plans, extra lessons for weak students are some of the major points that are to be checked weekly. Competitions, conference speeches and presentations, morning ceremonies are organized at these meetings, and designated to the responsible teachers.

#### **4.4.4. Counseling Meetings**

These meetings are also held once a week. The objectives of these meetings are to check teachers' interactions with students. Each teacher is supposed to express his opinions on the improvement of students and they may sometimes present class activities through PowerPoint presentations. One of the major benefits of these meetings is to exchange ideas on overcoming with different problems.

#### **4.4.5. A Day at School**

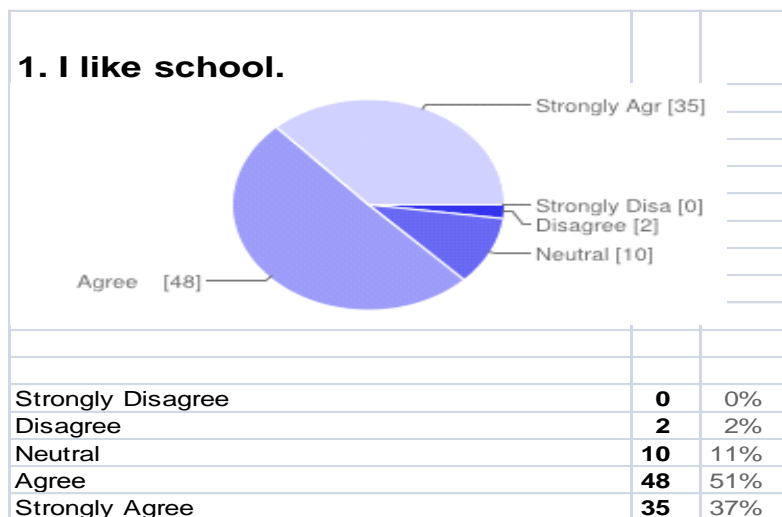
As it is a boarding school, students wake up with music in their ears, and together with calls of the dorm prefects they gather around in front of the school for morning ceremony.

Each class has its turn to organize the ceremony; the main aim is to have the students ready for the coming lessons and burden of eight hours of learning. Then, they have 20 minutes of reading time which is directed by class teachers. They have five classes before the lunch break, and then they go on with three other classes to finish school time.

Counseling oriented activities mainly start after school hours, as they are considered to be tired, that's why they are given opportunities of leisure activities, such as football, basketball, volleyball, table tennis etc. At six o'clock they are served with dinner after which they start two hours of study time. The time after the study that ends with sleeping time is flexible and serves class teachers as they use this time for having meetings in students' rooms, having coffees, or having little fun time, like watching a movie.

## 4.5. Results and Discussion on Pilot Study

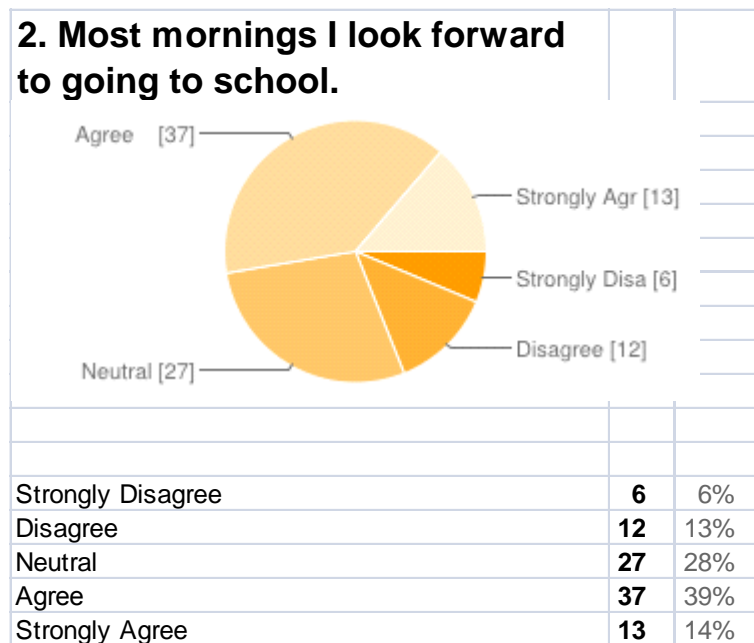
### 4.5.1. Feelings about being in school



**Figure 4.3: I like school**

The students of this boarding high school are indicating high results of attachment as the numbers reflect 83% (a combined result of 48+35 considering ``strongly agree and agree``) of being fond of school as the positive responses for the first question are mostly positive. *A vision of schools in which the purpose is promoting positive social behaviors and engaging students requires warm, caring school and classroom*

*environments within which students can flourish (Penner & Wallin, 2012).* It is quite a straightforward question in obtaining accurate results. 10% being neutral makes negative responses even reduced to 2% as strongly disagree has no response.



**Figure 4.4: Most mornings I look forward to going to school.**

This is the second type of survey question that refers to ``Feelings about being in school`` outcome dimensions as the first five questions are related with an outcome of understanding students` feelings during the time they spend at school which is quite vital in relating their feelings with school attachment.  $13\% + 37\% = 50\%$  of the responses are positive, the essential response is for neutrals indicating 27% which is quite high as the question infers students being reluctant in getting up early. *Bonding, or identification, occurs as a result of meaningful contributions or service to the group* (McNamara, 1996). On the other hand,  $12\% + 6\% = 18\%$  of negative responses keep it on a low scale as most students are interested in getting started with school.

#### **4.6. Case Study I**

Proposed Measurement Method focuses on “**Change in Behavior**” as the student was from the northern region of Albania whose arrival to school was a big step in terms of getting involved to a very new setting of the central Albania. *The preventive effect of school bonding on deviancy has been replicated by many studies (Demanet & Van Houtte, 2012)* as in this particular study we encounter one of them.

He had problems of feeling connected to his peers, teachers, and personnel of the school in general as everything was new to him. His major problem was that he was also weak in English and had problems in communicating with his teachers. *The preventive effect of establishing strong social and emotional connections at school on student deviancy is thus well-established in research (Demanet & Van Houtte, 2012).* Thus a change in behavior through the methodologies elaborated in the case study was expected at the end of the school year.

##### **4.6.1. Identification of the Problem**

The student I wanted to contact with was a 10<sup>th</sup> grade student who came from Peshkopia - a far region of Albania. He had French in his previous school, and had no English private courses.

When first arrived to his school in Kavaje, let alone learning a new language, he had problems in adapting to a new atmosphere where everything was new for him; school, friends, teachers, and most difficult thing for him, reported himself, was living in the dormitory as it was first time he had to stay away from his family. ``*Jessor and*

*colleagues' used the phrase "positive orientation to school" to measure student attitudes and motivation toward school and learning` (Libbey, 2004).*

My first contact with the student, regarding my research, was by the allowance of the school principle as I explained my reasons for asking some questions about his problems of learning English. Apart from above mentioned problems the most difficult thing for him was that he couldn't understand the teacher as he was speaking only English during the lessons.

At such a point one must follow professional approaches. *`School psychologists have traditionally focused on assessment, prevention, and intervention strategies for a myriad of factors that influence school performance` (Kennedy & Kennedy, 2004).* He also mentioned about his enthusiasm for learning English at the very beginning, but seeing the other fellow students more active and better than him caused pessimist thoughts in him which turned into lack of confidence by the time reported by his teacher regarding on his test results. Enhancement of performance based on skills such as assessment, prevention, and intervention require profound adaptive and maladaptive knowledge (Kennedy & Kennedy, 2004).

The student after implementation of the survey questions and interventions in regard to his problem indicated significant changes in behavior as in reflecting more senses of connectedness to school, his teachers, and peers. Especially his enthusiasm on studying English reflected significant improvement.

#### **4.6.2. Intervention Outcomes**

First and foremost, a student in a case like this, should know that it is not his fault that he fell behind the others, and he wasn't to blame for not knowing something he hadn't studied before.

Student voice is an important element in enhancing teacher attachment, thus there should be *``items that ask whether students can design independent projects and teachers listen to student suggestions``* (Libbey, 2004). On the other hand, he should be well aware of the fact that he has to double study compared to the others, but he should take this as a motivation not a burden on his shoulders.

He should also have constant contact with his teacher and be open to extra material which is for his own benefit. He should be determined in reaching the goals set by the teacher, and eager to receive more assignments, because the more he learns the better he would feel in terms of self-confidence, and he would feel pleasure from his life.

The level of the students should be considered as well as individual learning styles` as to avoid deviant peer influence, thus *``it is noteworthy that influence occurs especially when friendship bonds with deviant peers are quite cohesive``* (Demanet & Van Houtte, 2012) but a teacher should put more emphasis on teaching the general level of the class. If the general average is intermediate, then the teacher should use a course book addressing to that level in general.

#### **4.6.3. Teacher and Peer Involvement**

A well prepared teacher in terms of lesson plans, objectives, and practices that are to be conducted in the lesson is quite essential but requires more preparation time. *``School*



*counselors should collaborate with other educational stakeholders (i.e., teachers, administrators, school staff, parents/guardians, and community members) to proactively build school commitment beliefs early in high school as well as tackle early signs of a lack of student commitment.*`` (Bryan et al., 2012). A good lesson should have at least three objectives in order to reach all levels of the class. The first one is to address the weak learners, another one for the average learners, and the final one for the strong learners.

In other words, if you are teaching colors, main colors should be learned even by the weakest ones, some of the mixed colors should be taught to the average ones, and abstract colors could be taught to the strong learners.

To eliminate deficits in learning there should be orientation programs for incoming freshmen, freshmen, sophomore students that indicate below levels in subjects they reflect deficits as to make sure students have school bonding in avoiding misconducts such as truancy, drug usage, drop outs, etc. (Bryan et al., 2012).

Assignments should also be given according to their levels and objectives set for their learning. Evaluating their homework should also be done through objectives. A teacher may feel like dividing the class into groups related their levels, but this may not be a good idea as it may cause differences to get deeper and deeper and it is against the unity of the class. Pairing the students would bring more satisfactory results in terms of learning.

#### **4.6.4. Extracurricular Activities**

An extra lesson with weaker ones is the most essential method in getting the weaker ones to reach the upper levels. Paying a visit to the family would also bring better results as parents' involvement would bring more motivation and determination. *Certain parental factors are predictive of attachment security throughout development (Kennedy & Kennedy, 2004).* A success scheme could be drawn together with family and the student. On the other hand, ups and downs are inevitable as it is a long course of study that may require even years.

As mentioned earlier, the school setting for extracurricular activities was allowing students to perform several of activities including; basketball, volleyball, football, table tennis and such. Although the Library did exist, it could not be of significant use due to its location on the third floor of the school a secluded area where students found it difficult to reach over, but once they get used to it, it actually could provide a cozy atmosphere where they could find many different types of books for all grades.

Most preferred activity was volleyball as teachers were also involving in the games together with students as to make bonds with them which turned out into positive behavior changes for newcomers.

#### **4.6.5. Discussion on Case Study I**

The chosen student for the case study is of those who have been suffering from aforementioned problems, but the methods elaborated in the case study could help him and his likes to overcome the problems. Moreover, involving school staff and parents would make it more practical in realizing attachment for the target students.

Extra study hours after school time was quite helpful in helping weak students to catch up with stronger ones. More importantly, it allowed teachers to have more direct one to one contact with students as they were could explain things in details to students grasp of the subject.

In this particular student however, there have been essential breakpoints in his improvement as he experienced a lot within year. The study on intervention as to reach changes in his behaviors took a year which is not less but it could be more useful if the student was observed in his last year with school as to see the differences from first year to third year in a more concrete way.

#### **4.7. Case Study II**

The case studies implemented at this school are aimed to reach individual level of school attachment as reviewed literature emphasizes the importance of reaching individuals in order to obtain valuable qualitative data from students. Thus the students chosen for case studies are observed with interventions throughout the whole academic year of 2012-2013 at this boarding school.

##### **4.7.1. Identifying the problem**

The student I have had contact with is a 12th grade who is supposedly getting ready for the final exam that will designate his future. His father is a businessman who is running a restaurant and has lots of fields full of grapes from where they produce wine, and have their cellar filled with different quality and type of wine.

The surprising fact is that he is quite skillful in doing what his father has been doing, and very eager in going on with the same job which may sound quite normal, but as a

12<sup>th</sup> grade, and based on his ambitions, and father`s expectations for future his motivation in studying is almost zero.

His father has elevated expectations from him in terms of studying in technology of nutrition, and `` *him stating same thing with his father is putting me as a teacher in quite a difficult situation as I have to motivate him for the coming exam that will decide on his wanted career which requires quite hard work.* `` reported his Chemistry and class teacher. As to achieve beneficial outcomes in order to buffer misconducts the schools as communities should provide `` *a broad line of inquiry advocating that schools should be organized as caring school com-munities.* `` (Demanet & Van Houtte, 2012)

#### **4.7.2. Dealing with the Problem**

I asked him for a kind of interview, or let`s say an invitation for a coffee to talk about his motivation and his current status in his studies. My first goal was to make him understand the vitality of the situation as he had lots of absences from class, and had very low points in exams.

This case study is rather to study on the individual level of school attachment as `` *few studies have tested specifically whether the effects of school belonging act at the individual or the school level.* `` (Demanet & Van Houtte, 2012)

I told him about the need for studying and that he had to make some sacrifices to achieve success in his life. He agreed with me and said that he was well aware of the situation, but couldn`t give up on some of his habits, like hanging out with friends, spending too much time on internet, mobile phone, and such other habits that young students at his age suffer from.

He also added that he didn't need to study as he had enough money to get wherever he wanted. I told him that money is just a tool which might be shaped and used into a way of reaching our goals.

#### **4.7.3. Family involvement**

In such a case like mine, I would suggest what I did, as I wanted to have a meeting with the family to share the burden of the responsibility with the closest people in his life. The meeting went better than with what I had expected. His father was very pleased with the topics I brought up in terms of motivating him for the exam, and his future.

We made an agreement on helping him by some restrictions, such as less time on the internet, no more going out without parents' permission, and most importantly he would stay in dormitory until the end of the year as to increase cooperative learning (Salvin, 1991) and make sure that *“students from differing abilities and backgrounds are provided the opportunity to work together in teams”* (Catalano et al., 2004).

#### **4.7.4. Intervention Outcomes**

As stated above, he had some disciplinary problems at school which were at a risky level. He had absence, low marks, and some behavioral problems against his friends and some teachers.

Classroom observations and study time observations were used to enhance teacher and peer attachment in order to avoid misconducts. *Involvement of students in classroom activities provides positive reinforcement for prosocial behavior, and setting clear guidelines for appropriate behavior* (Catalano et al., 2004). I had a talk with the principles, his math's, and literature teachers as they are key subjects for the final exam.

To have things under control, we decided to send reports of his exams to the family, and have the father visit him at school to check on the improvement.

#### **4.7.5. Limitation on Case Study II**

To sum up, we are still in the process of getting results as the exam will be held after two months, meanwhile I will be in constant contact with the student and the family. As of now he seems to be motivated, indicating better implications of coming to the class on time, and getting slightly better results than before. In order to achieve success, a more professional help could bring better results at the end of the year.

#### **4.8. Results of Pilot Study**

Each individual has his/her own traits, especially when it comes to teaching where differences are to be lessened or at least blurred in order to emphasize unity and reach every person in the class.

On the other hand, differences are to be reflected as variety of values. Apart from above mentioned ones, some students may have had private courses and some may fall behind compared to the strong learners; some may have come from different regions of the country where teaching conditions weren't very well; different backgrounds, gender and age differences are some of the other elements that effect students personal perceptions and their attachment to the new school. *For schools to succeed, they must use the best teaching technology to improve academic competence, as well as reduce the barriers to learning represented in delinquency* (Catalano et al., 2004).

The overall results obtained through analysis of survey data, observations, and case studies indicate a high rate of school attachment at this specific boarding high school in

Albania. On the other hand, the significant difference between 10<sup>th</sup> grades and 12<sup>th</sup> grades (53% to 34%) is quite essential in understanding the gradual evolving of the attachment.

The majority of negative responses were given on food as the 27<sup>th</sup> survey question (27. Is there anything else you would like to tell us about your school life?) got 17 negative responses on food out of 95 samples. The school administration may give more importance to these results in order to decrease such beliefs and foster positive responses.

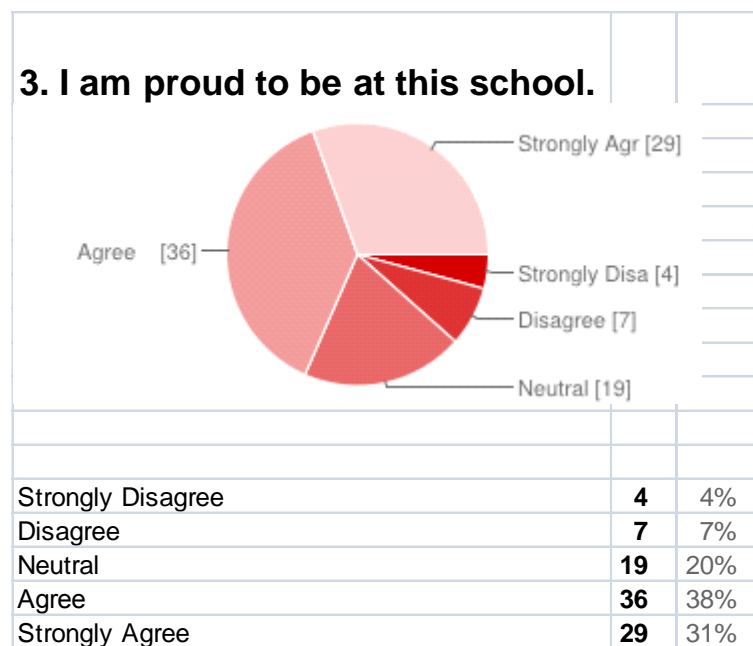
To sum it up, one may understand that a system that is humanely student oriented and has all its facilities and staff ready to overcome with difficulties and make students achieve academic success would have a better chance of achieving success. We are living at an age of modern technologies which are making our lives quite easy and help us to reach information much faster. However, if technology is not led by guides who are willing to live to make the others live, then it can be unleashed to unknown areas of dangers for students.

#### **4.8.1. Limitations of the Study**

Although the study conducted in the thesis is aimed to be pilot study that brings up some valuable data on school attachment for a specific boarding school in Albania, the number of students being restricted to one school made it difficult to obtain generalized quantitative data. On the other hand, as a pilot study it presents in depth analysis of school attachment among students.

The literature written on attachment theory and school attachment mostly emphasizes the importance of individual level of understanding about school attachment. *“few studies have tested specifically whether the effects of school belonging act at the individual or the school level.”* (Demanet & Van Houtte, 2012). Thus, the case studies are aimed to reach individual level of school attachment; however data collected from individuals makes it yet again difficult to reach more generalized data as well as possibility of making comparisons between individuals and other school of Albania.

This pilot study provides in depth analysis of school attachment among this specific boarding high schools as its purpose in obtaining data requires for such an analysis.

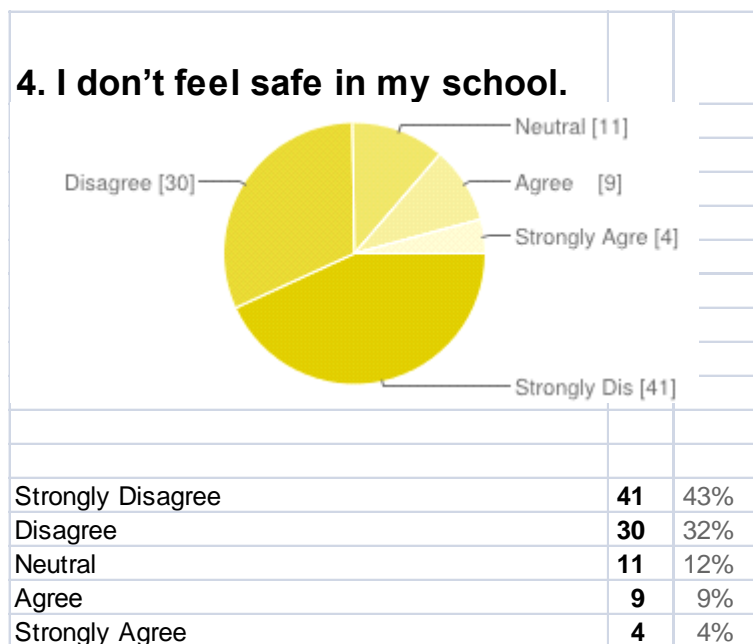


**Figure 4.5: I am proud to be at this school**

The sense of belonging together with students internalizing the idea of liking the school as a livable, enjoyable, fruitful place with regard of creating an identity with school and students is reflected through the responses of this question.  $31+38=69\%$  of the students responded positively, 20% neutral and  $7+4=11\%$  responded negatively reflecting the



scale of identifying yourself with school environment which is high again in favor of positive responses indicating school setting being successfully designed as well. *When examining the attitudes and beliefs of students, it is important to examine those concepts within the con-text of the school environment while also seeking to understand how these concepts reflect student investment in education and connection to the school environment* (Howard & Ziomek-Daigle, 2009).

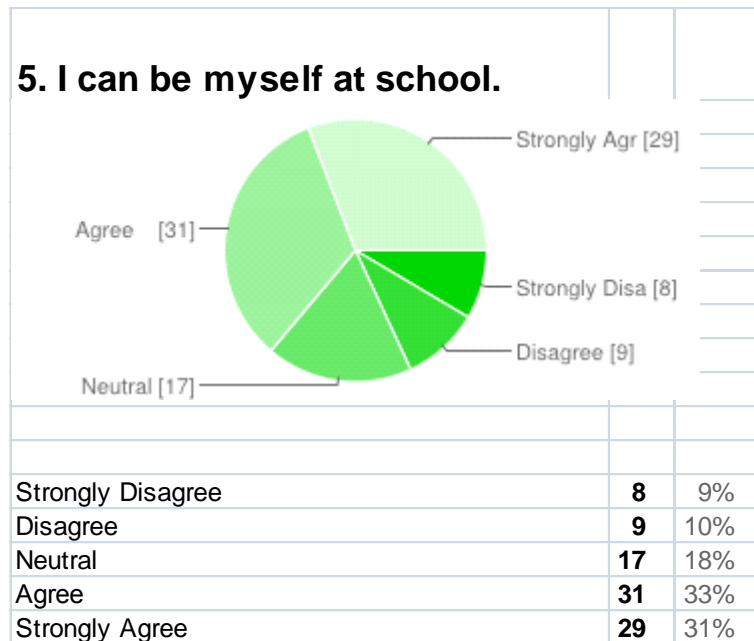


**Figure 4.6: I don't feel safe in my school**

School safety is one of the essential issues in regard with students' feelings of attachment to school as in having a safe setting of being sure of any sort of threat that may affect their performances.

This vital survey question reflects high scale of safety among students as the question is negatively asked the results indicate negative responses with positive meaning.  $43+32=75\%$  of students don't feel insecure at school. 12% being neutral leaves only

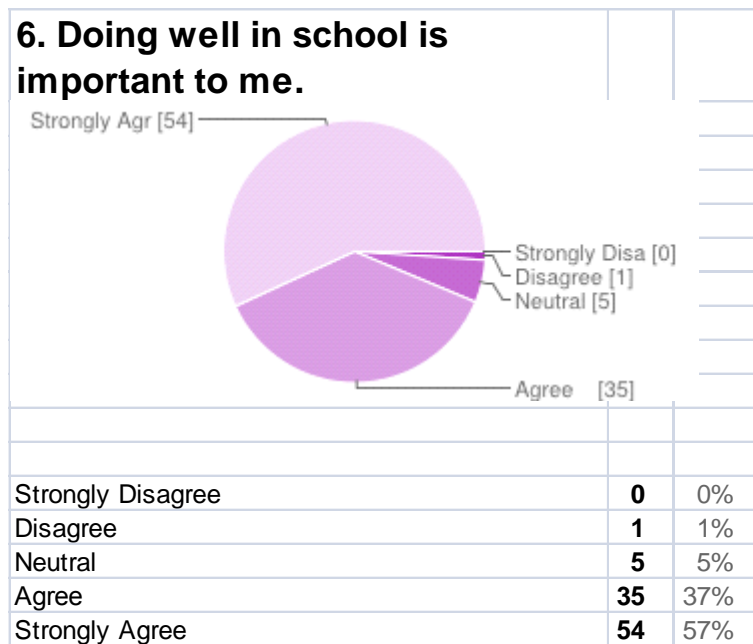
13% of positive responses with negative meaning. However, 13% is also worth to mention as even lower scales of insecurity should be considered seriously.



**Figure 4.7: I can be myself at school**

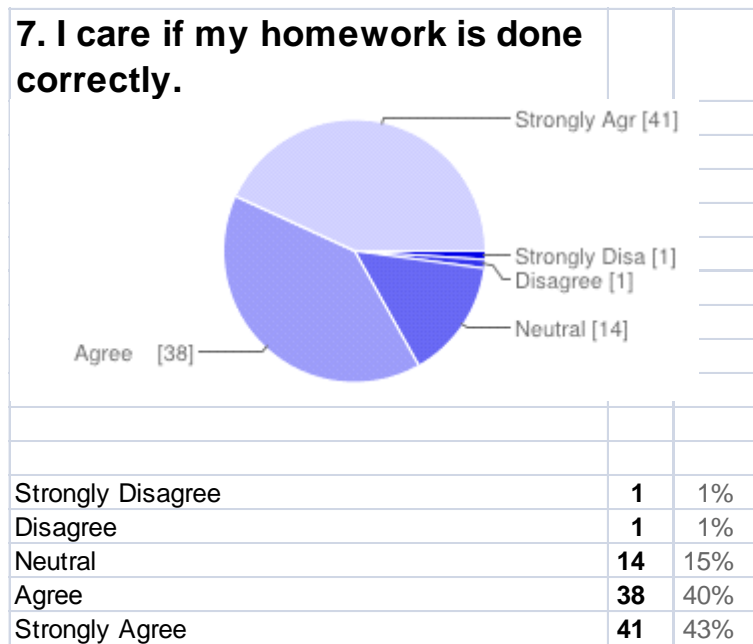
A school setting with its all facilities should provide each of students a sense of identity together with belonging of the school. It is also essential in not under estimating the individual identities as there is always a threat against differences and diversity in social mediums.  $31+33=64\%$  is positive response,  $18\%$  is neutral  $10+9= 19\%$  is negative responses. This survey question is the last question in regard with feelings about school.

#### 4.8.2. Interest in learning



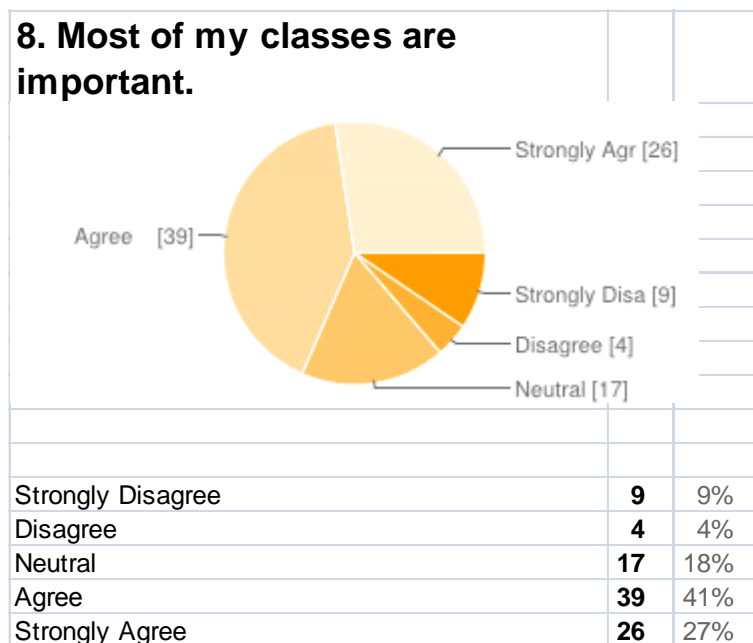
**Figure 4.8: Doing well in school is important to me**

This is the first type of the survey question that measures students' interest in learning. The scales are quite high in favor of positive responses as  $57+37=94\%$  of the students indicates a significant number of students' giving importance to being successful at school. Only 6% responded negatively which means students at this school are also quite interested in learning as to achieve success.



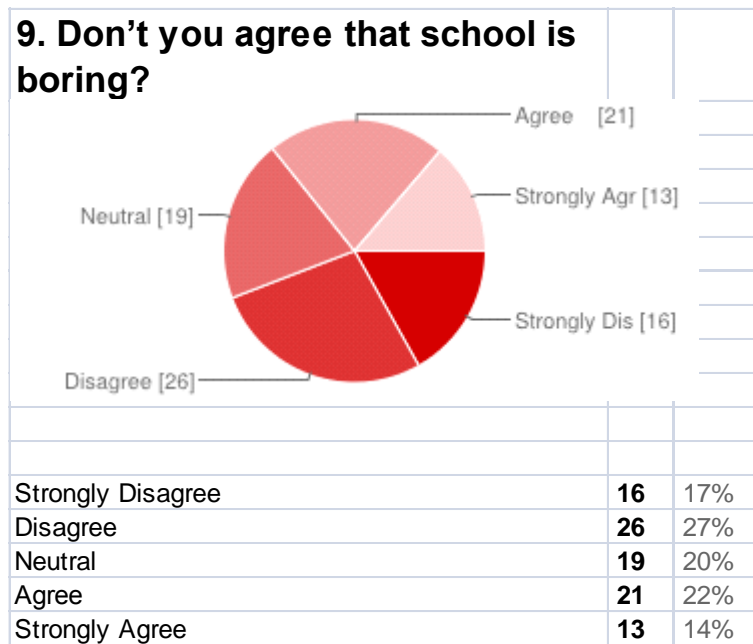
**Figure 4.9: I care if my homework is done correctly**

The word `correctly` plays an essential role in understanding students responses as doing homework is considered to be an essential element in learning, but having it done correctly is more vital in measuring students interest in giving importance to do the homework with its requirements. 43+40% of the students agree that doing the homework correctly is important, on the other hand 17% being out of positive responses raises a warning in reconsidering students` perception.



**Figure 4.10: Most of my classes are important**

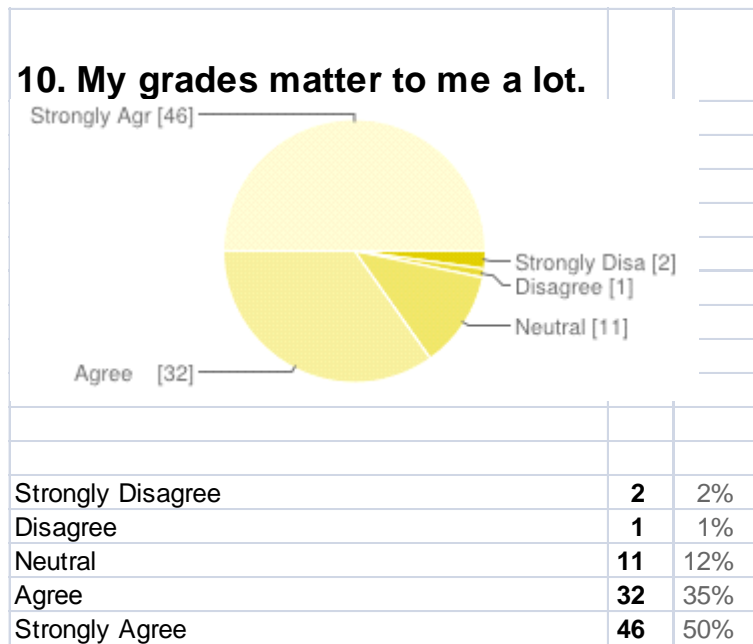
One of the lowest positive response scales are seen in this survey question as only  $27+41=68\%$  of the students are considering that most of their classes are important.  $18+4+9=31\%$  of the students are indicating an essential percentage in not giving enough importance to the classes which may trigger misconducts like truancy and dropouts. The administrative staff of the school should consider some preventive steps.



**Figure 4.11: Don't you agree that school is boring**

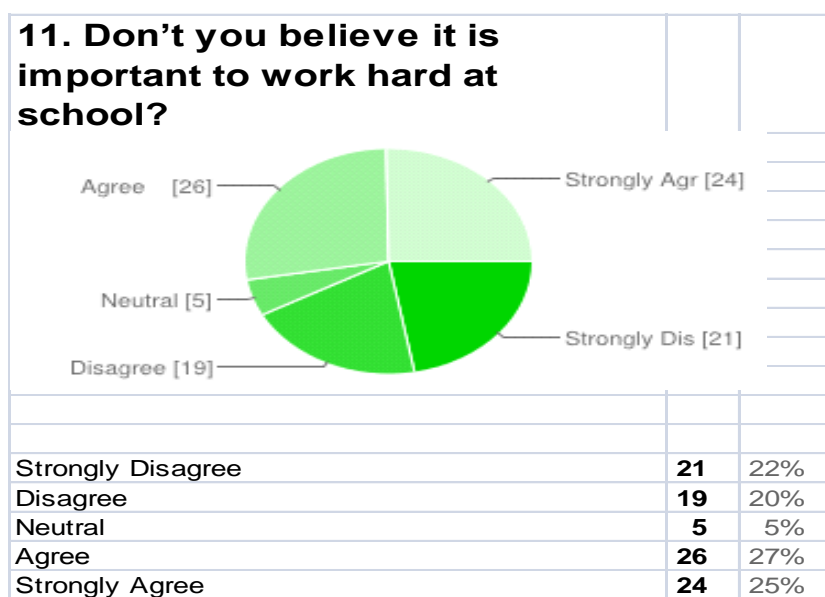
This type of the question is using reverse style in understanding students' perception of boredom in relation with school. It is also essential in understanding if extracurricular activities are successful in regard with creating a nice atmosphere at school to avoid negativities such as boredom and loneliness.

The scales are reflecting negative responses higher than positive responses indicating low levels of boredom at this school. 34% of the students responded that they feel bored at school,  $27+17=44\%$  of the students responded that they don't feel bored at school. On the other hand, with 20% a significant number of students are neutral as it is yet again a warning for administrative staff of the school.



**Figure 4.12: My grades matter to me a lot**

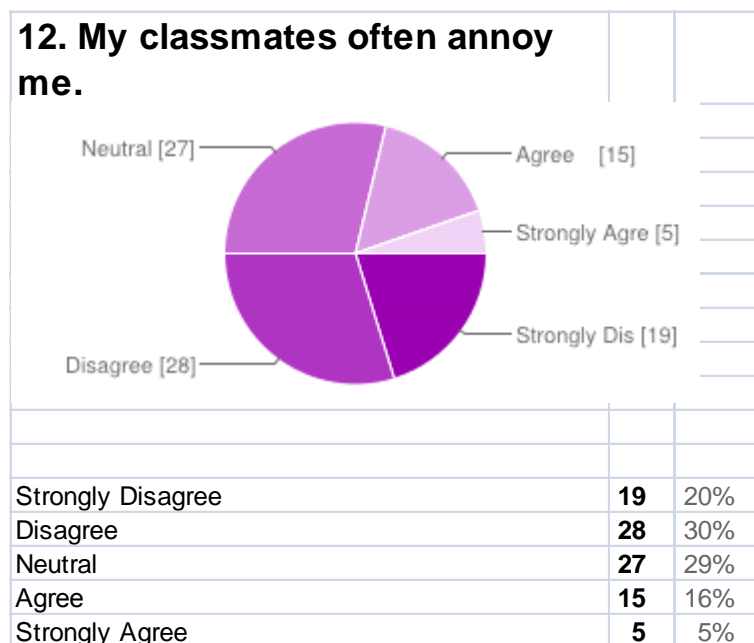
This pie chart with its scales reflects one of the highest positive responses as  $50+35=85\%$  of the students seems to be giving importance to their grades. 12% being neutral leaves only 3% of negative responses which is quite low. As students at this school are giving too much importance to their grades, it means that their interest in learning is also very high. It is also vital in understanding students bonding with school.



**Figure 4.13: Don't you believe it is important to work hard at school**

This is the last type of the survey question in measuring students' interest of learning. Hardworking is also related with many factors such as peer and teacher support as well as school setting and extracurricular activities that increase motivation for studying. As perceived from the pie chart  $22+20+5=47\%$  of the students are in need of support in terms of motivation and teacher support as they either responded negatively or neutral.  $25+27=52\%$  of the students is giving importance to hardworking which is again a warning for the administrative staff and teachers of the school.

#### 4.8.3. Attitudes towards other students

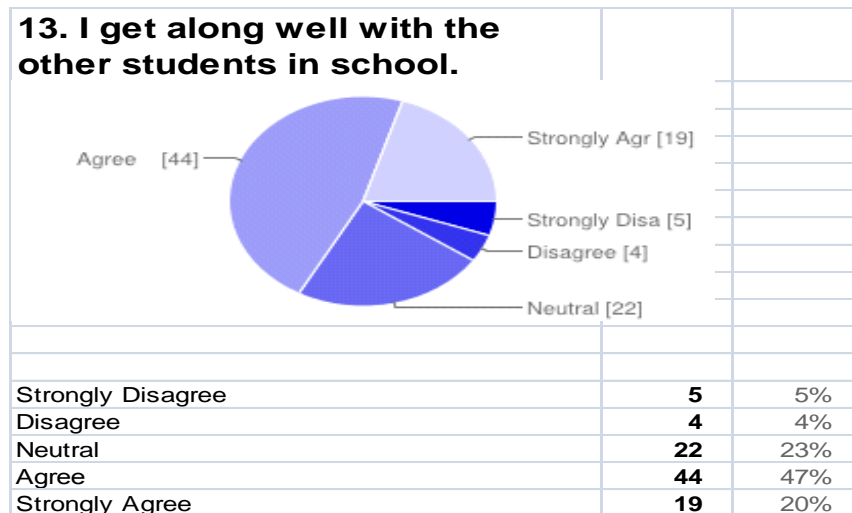


**Figure 4.14: My classmates often annoy me**

This is the first type of the survey question that is to measure peer attachment in regard with attitudes towards other students. It is again one of the reverse survey questions as negative responses indicate positive measurement scales.  $20+30=50\%$  of the students are not complaining about being annoyed by other students, on the other hand 29%

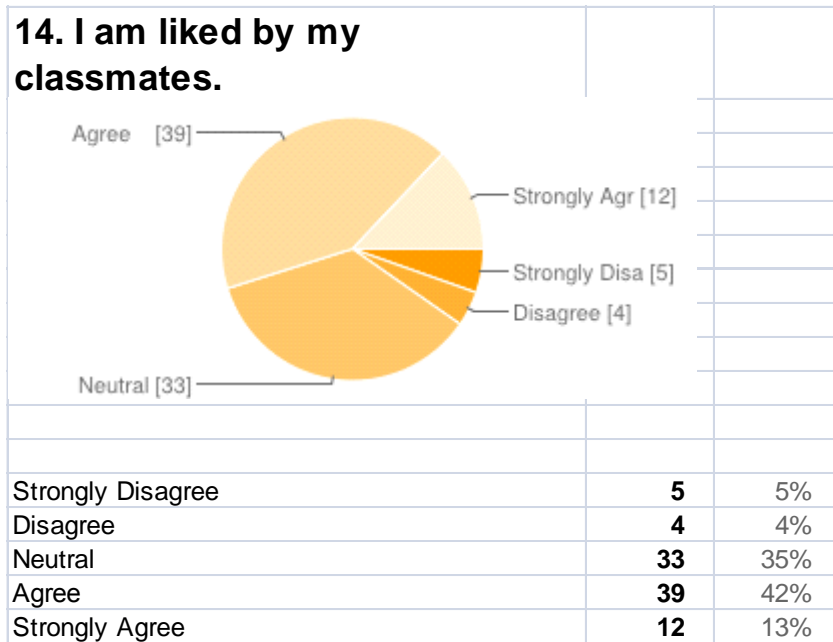


being neutral and  $16+5=21\%$  being negative on the fact that they are being annoyed by their peers is a vital indicator in taking some preventative steps by administrative staff.



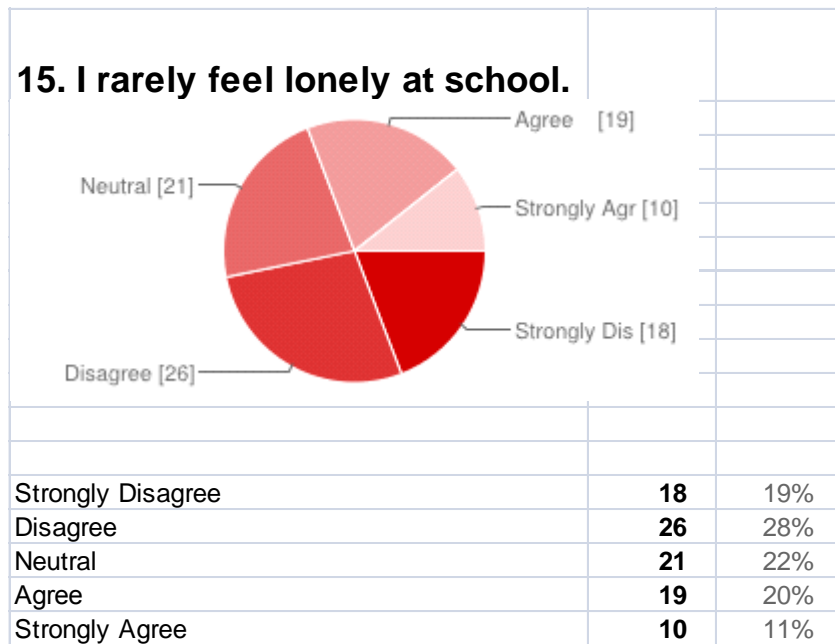
**Figure 4.15: I get along well with the other students in school**

This pie chart is like the other side of the coin in regard with the previous survey question as the responses in this indicator are to measure if the students are having good relations with each other.  $20+47=67\%$  of the students responded positively meaning they are in good relation with their peers. 23% being neutral is leaving only  $4+5=9\%$  with negative responses. This indicator is also reflecting the overall high scales of school attachment at this boarding school.



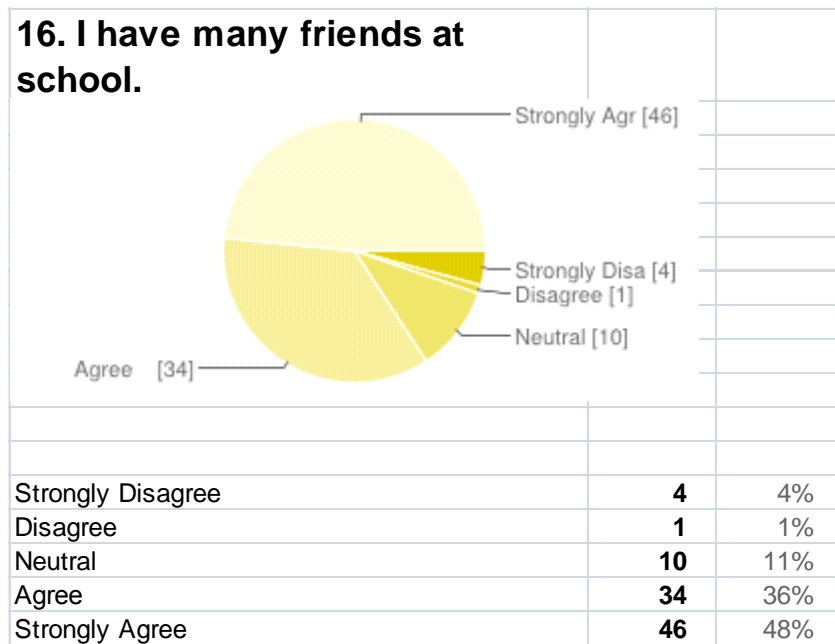
**Figure 4.16: I am liked by my classmates**

As the first two indicators in this type of the survey results are mainly emphasizing the perception of the students toward their peers, this pie chart is reflecting measurement scales of the students` perception through the glasses of their peers.  $13+42=55\%$  of the students thinks that they are liked by their peers, whereas 35% of the students are neutral which means that they are not sure if they are liked or not. As to increase peer attachment this indicator should be considered and studied thoroughly.



**Figure 4.17: I rarely feel lonely at school**

This pie chart reflects one of the most direct results in understanding students' internalized feelings of school attachment as the survey question is indicating results about students' feelings of being lonely at school. The question could also have raised an uncertainty with the word 'rarely' as it gives a reverse meaning.  $19+28=47\%$  of the students responded negatively, 22% neutral and  $20+11=31\%$  responded positively. As the reverse style indicates 47% of the students are not feeling lonely at school which leaves a big scale that refers to the students that are feeling lonely.

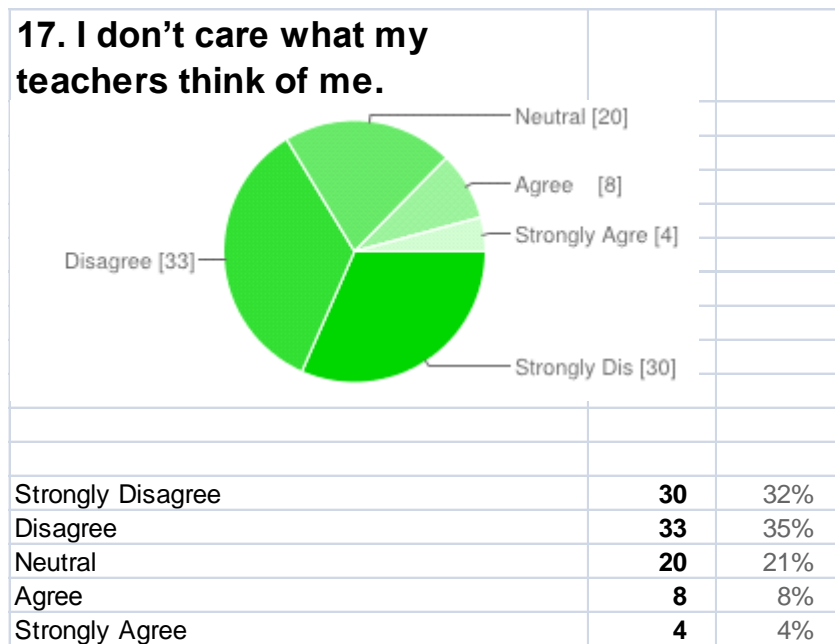


**Figure 4.18: I have many friends at school**

This is the last type of measurement scale reflecting attitudes towards other students.

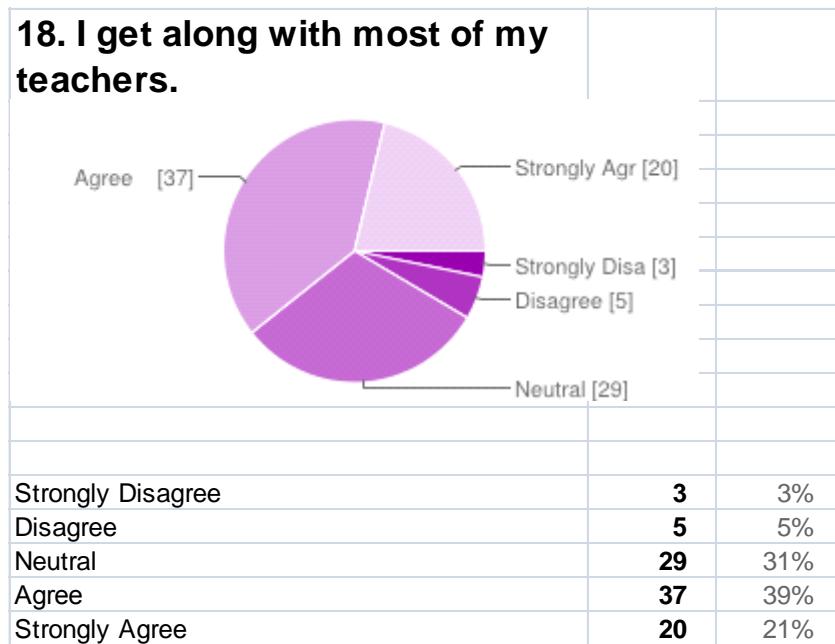
This pie chart reflects the measurement scales of peer attachment through the idea of having many friends at school.  $48+36=84\%$  of the students has responded positively as they are pleased with the number of friends they have at school. 11% being neutral leaves only 5% of negative responses. The results here show that there is a strong peer attachment at this school.

#### 4.8.4. Attitudes towards teachers



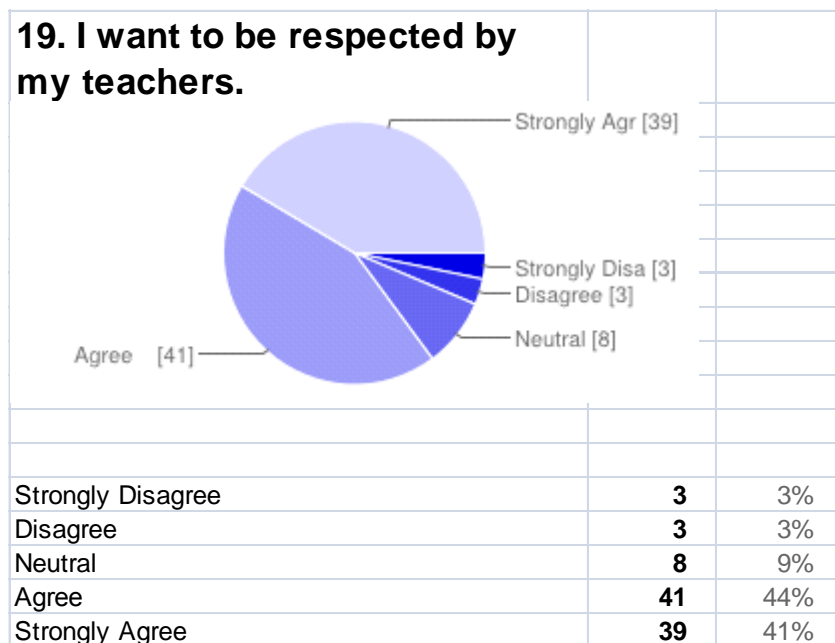
**Figure 4.19: I don't care what my teachers think of me**

This is the first measurement scale that shows results of the attitudes towards teachers in other words teacher attachment. As the reverse style indicates,  $32+35=67\%$  of the students is showing positive feelings towards their teachers and they care what their teachers think of them. 21% being neutral leaves  $8+4=12\%$  of students with negative feelings or at least not caring of what their teachers think of them.



**Figure 4.20: I get along with most of my teachers**

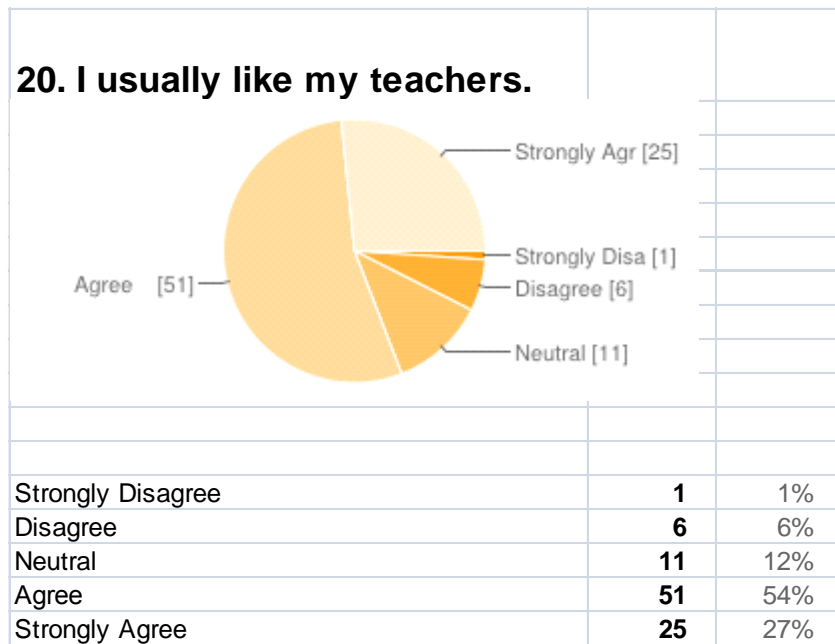
The indicators here are reflecting results of students' perception in regard with having good relations with their teachers.  $21+39=60\%$  of the students is claiming that they get along well with their teachers. On the other hand, with 31% of the neutral responses we perceive that there are many students that are neutral about their feelings towards their teachers.



**Figure 4.21: I want to be respected by my teachers**

The results in this pie chart are essential in understanding the relation between student and teacher at this school. If students are attached to their teachers and have good relations with them they are more likely to be successful and achieve academic success.

As observed, the indicators are showing quite high scales of teacher attachment.  $41+44=85\%$  of the students responded positively as they wanted to be respected by their teachers. Only 6% responded negatively. The results are also important in regard with students having self-esteem.

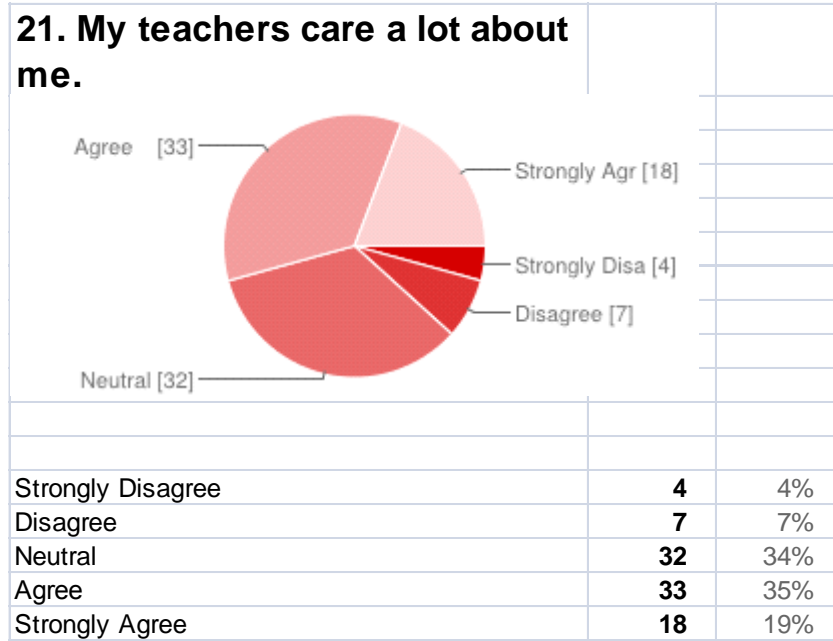


**Figure 4.22: I usually like my teachers**

This is the most direct survey question in relation with teacher attachment as students are asked if they like their teachers. It shows essential results in understanding the numeric amount of the attachment at this school.  $27+54=81\%$  responded that they liked their teachers. 12% responded neutral, 7% responded negatively.

The results here when considered with the overall results that indicate very high scales of school attachment are quite corresponding with the other indicators as well.

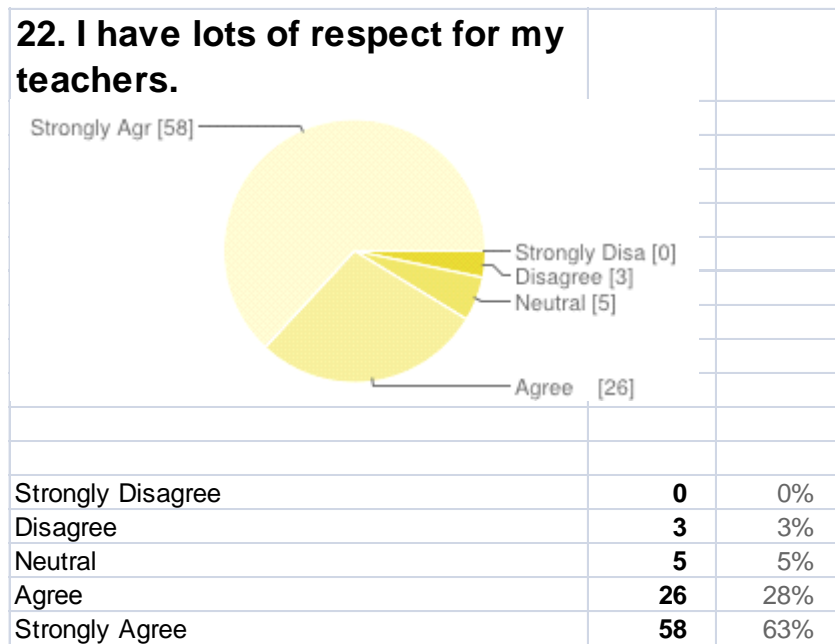




**Figure 4.23: My teachers care a lot about me**

When students feel connected to school and have positive feelings like being cared and considered by their teachers they would indicate higher scales of peer, teacher, family and school attachment.

Thus it is important to measure students' feelings towards their teachers.  $19+35=54\%$  of the students thinks that their teachers care about them. 34% is neutral. 11% has negative feelings about being cared by their teachers.

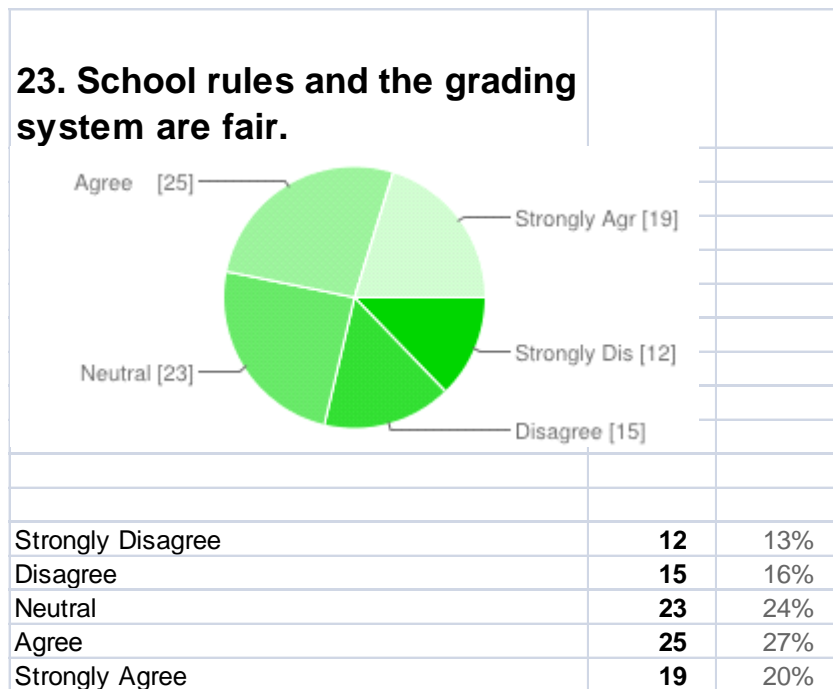


**Figure 4.24: I have lots of respect for my teachers**

This is the last outcome indicator that shows results of attitudes towards teachers. As the feelings for respect, caring, and being liked by others are applied to mutual understandings, the survey question here asked if the students have respect for their teachers.

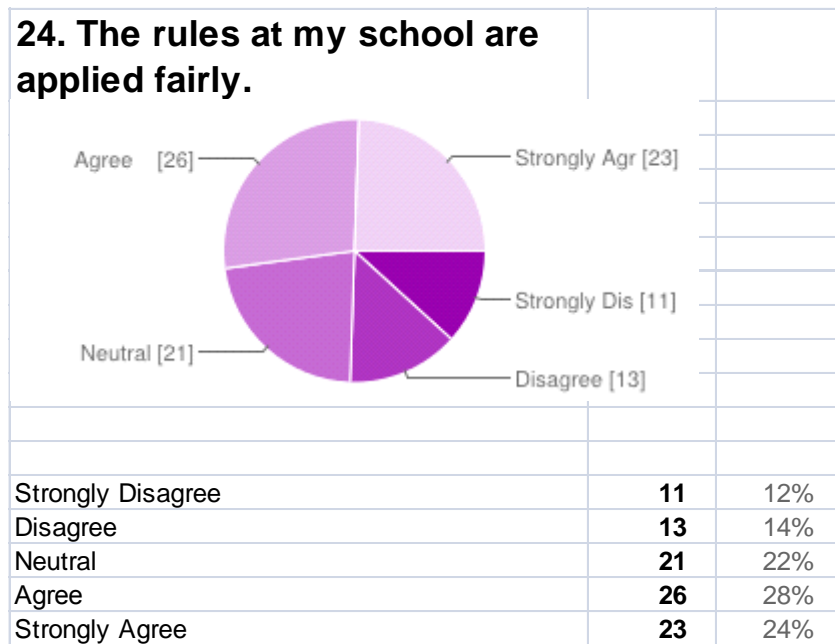
The majority of the students responded positively;  $63+28=91\%$  of the students gave positive responses. Only 3% responded negatively and 5% gave neutral responses.

#### 4.8.5. Questions not matching an identified outcome dimension



**Figure 4.25: School rules and the grading system are fair**

This is the first survey measurement indicator of an unidentified outcome dimension that reflects a general survey question and its results seeking students' perception of school rules and grading system. Rules and grading system are two essential pillars that effect students' attachment.  $20+27=47\%$  of the students responded positively, 24% responded in a neutral way,  $16+13=29\%$  of the students responded negatively which means that there is a significant number of students that are not pleased with school rules and grading system that gives a warning signal to school administrative.



**Figure 4.26: The rules at my school are applied fairly**

Rules at a school may not be perfect, but the way they are applied is quite essential as it affect the whole process of schooling system, thus the indicators here are playing vital roles in not being conceived by other positive high scales of attachment.

On the other hand, the results observed in this pie chart are not of that severe in favor of negative responses.  $24+28=52\%$  responded that the rules at this school are applied fairly,  $22\%$  responded neutral,  $14+12=26\%$  responded that the rules are applied fairly.

## CHAPTER V

### 5. EMPIRICAL ANALYSIS OF DATA

This chapter is dedicated to empirical analysis of data collected from 1506 students with adequate delivery of 251 students per school of each 6 prefectures/cities in Albania as well as statistical procedures applied to hypotheses, testing of hypotheses, participant

schools, and samplings are presented within this chapter. In this regard, statistical analysis of hypotheses are presented within this chapter, however descriptive analysis and interpretations of the detailed results are given in chapter 5. In order to see the internal consistency of the data, Cronbach's alpha was conducted and the reliability coefficient of the whole School Attachment Scale used in this research was obtained  $\alpha = 0.737$  with no mean difference between participant schools but with a mean difference of 1.55 in gender, since high schools had more female students according to INSTAT (Institution of Statistics). The proposed alpha value is minimum .70 or higher (Fraenkel & Wallen, 2003, p. 168) which was achieved by  $\alpha = 0.737$  in this research. Although it may look a low acceptable value that is close to the least alpha value; considering the vastness of sampling size ( $n=1506$ ) it actually presented a high value of reliability which can be assumed as %73 of the total samples.

**Table 5.1: Reliability Statistics**

Cronbach's Alpha	N of Items
.737	29

**Table 5.2: Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
104.08	129.489	11.379	29

## 5.1. Statistical Procedures

### 5.1.1. Statistical Procedures of Hypotheses

At the very beginning of statistical analysis, the five components of SAS (SFS, SIL, ATP, ATT, and SPS) were checked to see if they correlated with survey sub-items. In this regard, the reliability of the SAS was assessed via internal consistency analysis of Cronbach's alpha in order to see the validity of survey components and their sub-items. The split half reliability was found to be acceptable (George & Mallery, 2003, p. 231) (24 items; Spearman-Brown Coefficient = .757) as George and Mallery (2003) provide

the following rules of thumb: “ $\alpha > .9$  – Excellent,  $\alpha > .8$  – Good,  $\alpha > .7$  – Acceptable,  $\alpha > .6$  – Questionable,  $\alpha > .5$  – Poor, and  $\alpha < .5$  – Unacceptable”. Then, each hypothesis was respectively tested through following statistical procedures:

**Hypothesis (1)** “the five hypothesized components (Students` Feelings for School (SFS), Students` Interest in Learning (SIL), Attitudes towards Peers (ATP), Attitudes towards Teachers (ATT), and Students` Perception of School (SPS) of the School Attachment Scale (SAS) are measured by the respective test items” was statistically measured via factor analysis, KMO and Bartlett's Test, principal component analysis was done to see commonalities and variances, component matrix, rotated component matrix as well as correlation analysis for descriptive results.

**Hypothesis (2)** “School Attachment Scale as the preliminary scale is composed of five internal sub-scales that consistently measure the five hypothesized components (SFS, SIL, ATP, ATT, and SPS) which make the School Attachment Scale reliable to be used in Albanian context to measure students’ school attachment in public high schools” was statistically measured via case processing, reliability statistics, item statistics, inter-item correlation matrix, item total statistics, and scale statistics. Each and every component was implemented through the same procedure of factor analysis as well, in order to obtain comparable data and to test the validity of the hypothesis.

**Hypothesis (3)** “All five components (sub-scales) are correlated positively with one another indicating that the SAS components are consistent with one another.” was statistically measured via two tailed correlation analysis of five SAS components.

**Hypothesis (4)** “There is no statistically significant difference between girls and boys with respect to their overall school attachment scores” was statistically measured via T-

Test of group statistics in regard with gender analysis and independent samples test through Levene's Test for Equality of Variances and T-Test for Equality of Means.

**Hypothesis (5)** “Girls are attached to school more than boys based on the outcome dimensions of five components of SAS.” was statistically measured via T-Test of group statistics in regard with gender analysis and independent samples test through Levene's Test for Equality of Variances and T-Test for Equality of Means which indicated 95% Confidence Interval of the Difference.

### 5.1.2. Statistical Procedures of Participant Schools

The data collected from public high schools in Albania was obtained from 6 cities\prefectures in Albania. As mentioned in methodology stratified sampling producers were applied in deciding the distribution of participant schools and the number of samplings. Due to ethical reasons school names, students' names and any other personal information were not included in data analysis; however their cities were respectively mentioned to represent them and their characteristics as stratified sampling requires. The survey papers collected were 1536 in total, however the ones that were not completed to the one third of the all 29 items were excluded as well as the ones that were completed with invalid information in regard with survey items were not included in order to obtain maximum validity and requirement of stratified sampling as shown in the table 4-3:

**Table 5.3: Which city\prefecture are you from?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Berat	251	16.7	16.7	16.7

Fier	251	16.7	16.7	33.3
Durres	251	16.7	16.7	50.0
Shkoder	251	16.7	16.7	66.7
Tirana	251	16.7	16.7	83.3
Elbasan	251	16.7	16.7	100.0
Total	1506	100.0	100.0	

### 5.1.3. Statistical Procedures of Participant Students

The total number of students enrolled on public high schools in Albania (N= 124619) was given by INSTAT in a detailed table which also determined the sampling number and gender differences. According to INSTAT from the total number female students (N= 63456) were more than male students (N=61 163). In this regard, participant students were determined through stratified sampling procedures as mentioned earlier in methodology. Students were analyzed by their grades, genders, total household income and cities/prefectures they came from. Following table involves detailed information on characteristics of participant students:

**Table 5.4: What grade are you in?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	517	34.3	34.3	34.3
	11	469	31.1	31.1	65.5
	12	520	34.5	34.5	100.0
	Total	1506	100.0	100.0	

On the other hand, gender distribution was not done adequately as INSTAT statistics indicated that female students were more than male students at public high schools in



Albania. In this regard, female students that successfully completed survey were N=830 and male students were N= 676 representing proportional distribution of total number of public high school students:

**Table 5.5: What is your gender?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	676	44.9	44.9	44.9
Female	830	55.1	55.1	100.0
Total	1506	100.0	100.0	

Demographics of students were based on their regional backgrounds as well as students' annul total household incomes which were obtained through items 28 and 29. Students' Socio-Economic Statuses were asked in order to figure out any correlations between their SES (Socio-Economic Statuses) and school attachment levels. Table 4-6 is consisted of details on students' SES:

**Table 5.6: Total household income before taxes during the past 12 months**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 5,000 €	662	44.0	44.0	44.0
10,000 € to 14,999 €	302	20.1	20.1	64.0
15,000 € to 19,999 €	106	7.0	7.0	71.0
20,000 € to 24,999 €	74	4.9	4.9	76.0
25,000 € to 29,999 €	64	4.2	4.2	80.2
30,000 € to 39,999 €	42	2.8	2.8	83.0
40,000 € to 45,000 €	38	2.5	2.5	85.5
More than 45,000 €	218	14.5	14.5	100.0
Total	1506	100.0	100.0	

## **5.2. Tests of Hypotheses**

Research hypotheses were tested based on samples that were considered valid, including the ones that completed the surveys without more than one third of survey's missing values. The number of Survey papers through which all students successfully completed all items of the survey was N=1506.

In the coming sections, hypotheses tests and their results are reported. The results of Hypothesis (1), “the five hypothesized components - Students` Feelings for School (SFS), Students` Interest in Learning (SIL), Attitudes towards Peers (ATP), Attitudes towards Teachers (ATT), and Students` Perception of School (SPS) - (J. Fredricks et al., 2011) of the School Attachment Scale (SAS) are sufficiently measured by the respective test items” were partially reported in methodology and in statistical procedures, however more details are provided within this section which was also process of development of scales. In the coming sections each hypothesis is reported with their tests through empirical data obtained from SPSS 23.0 for Windows.

### **5.2.1. Tests of Hypothesis (1)**

Apart from above mentioned methodologies used for tests of hypotheses, three main types of tests were implemented for hypothesis (1); a) tests of internal reliability of each hypothesized sub-items, b) tests of item correlations, and c) tests of the whole scale via factor analysis/ Principal Component Analysis.

Hypothesis (1), “The five hypothesized components {Students` Feelings for School (SFS), Students` Interest in Learning (SIL), Attitudes towards Peers (ATP), Attitudes towards Teachers (ATT), and Students` Perception of School (SPS)} of the School

Attachment Scale (SAS) are measured by the respective test items as suggested by the SAS. ” was measured for their consistencies with each other and their sub-items in order to obtain data on validity of School Attachment Scale used for the measurement of attachment at public high schools in Albania. At first, Bartlett's Test was applied to measure Sphericity as well as principal component analysis to determine KMO measure of sampling adequacy through detailed data analysis.

**Table 5.7: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,885
Bartlett's Test of	Approx. Chi-Square	6479,424
Sphericity	df	153
	Sig.	,000

KMO results (0,885) indicated valid numeric data for principal component analysis as well as factor analysis. In this regard, internal consistencies of components and their correlations with sub-items were analyzed. The commonalities of component sub-items were measured to see consistencies among components and their items. The demographics sub-items were excluded as they were not part of five scales of SAS.

**Table 5.8: Commonalities Among Sub-items of Components of SAS**

	Initial	Extraction
1. I Like School	1,000	,652
2. Most mornings I look forward to going to school	1,000	,672
3. I am proud to be at this school	1,000	,455
5. I can be myself at school	1,000	,320
6. Doing well in school is important to me	1,000	,553
7. I care if my homework is done correctly	1,000	,601
8. Most of my classes are important	1,000	,480
10. My grades matter to me a lot	1,000	,599
11. Don't you believe it is important to work hard at school?	1,000	,334
12. My classmates often annoy me	1,000	,317
13. I get along well with the other students in school	1,000	,470
14. I am liked by my classmates	1,000	,466

16. I have many friends at school	1,000	,392
18. I get along with most of my teachers	1,000	,472
19. I want to be respected by my teachers	1,000	,536
20. I usually like my teachers	1,000	,666
21. My teachers care a lot about me	1,000	,567
22. I have lots of respect for my teachers	1,000	,588

Extraction Method: Principal Component Analysis.

Total variance of commonalities were explained through Initial Eigenvalues, Extraction Sums of Squared Loadings, and Rotation Sums of Squared Loadings which indicated results for 18 sub-items as the rest of the items were calculated in other principal component analysis of the data and were either meant for demographics or they were not primarily involved within the extraction of the components of SAS. Component sub-items were matched with their totals and percentages of variance and cumulative data as shown in table 4-8.

**Table 5.9: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	% of Variance			% of Variance			% of Variance		
	Total	Cumulative	%	Total	Cumulative	%	Total	Cumulative	%
1	5,015	27,860	27,860	5,015	27,860	27,860	2,696	14,978	14,978
2	1,634	9,076	36,936	1,634	9,076	36,936	2,587	14,371	29,349
3	1,396	7,758	44,694	1,396	7,758	44,694	2,010	11,167	40,517
4	1,097	6,093	50,787	1,097	6,093	50,787	1,849	10,270	50,787
5	,932	5,180	55,967						
6	,841	4,671	60,638						
7	,774	4,300	64,938						
8	,746	4,145	69,084						
9	,737	4,092	73,176						
10	,679	3,773	76,949						
11	,675	3,748	80,697						
12	,601	3,337	84,034						
13	,589	3,275	87,309						
14	,516	2,866	90,175						

15	,495	2,751	92,926
16	,451	2,508	95,433
17	,429	2,386	97,819
18	,393	2,181	100,000

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Extraction Method: Principal Component Analysis.

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In order to see the relations between the primarily determined 4 components of SAS and their sub-items; Component Matrix table was extracted through Principal Component Analysis. As seen on the table 4-9, the sub-items were gathered around their respective components indicating the consistency of components and their items which also proved that hypothesis (1) as SAS was a measurable scale that can be applied to obtain data on public high school students in Albania in regard with their attachment levels to their schools as well as the other respective results of other hypotheses as the primary hypothesis that also led to the other four hypotheses of SAS.

**Table 5.10: Component Matrix**

	Component			
	1	2	3	4
20. I usually like my teachers	,656	,300	-,251	-,288
22. I have lots of respect for my teachers	,620	,206		-,391
3. I am proud to be at this school	,616			
1. I Like School	,609		-,395	,354
7. I care if my homework is done correctly	,590	-,484		
8. Most of my classes are important	,590	-,328		
21. My teachers care a lot about me	,583	,359	-,282	
10. My grades matter to me a lot	,563	-,500		
18. I get along with most of my teachers	,562	,287		-,271
6. Doing well in school is important to me	,555	-,440	,226	
19. I want to be respected by my teachers	,524		,276	-,429
2. Most mornings I look forward to going to school	,516		-,462	,438
5. I can be myself at school	,508			
13. I get along well with the other students in school	,453	,337	,367	
11. Don't you believe it is important to work hard at school?	,404	-,395		
16. I have many friends at school	,378	,276	,350	,225

14. I am liked by my classmates	,394	,226	,453	,234
12. My classmates often annoy me		,276	,414	,245

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Extraction Method: Principal Component Analysis.

a. 4 components extracted.

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After extraction of 4 main components of SAS, rotated component matrix method was also applied through Varimax with Kaiser Normalization in order to analyze data to via convergence of 6 iterations.

**Table 5.11: Rotated Component Matrix**

	Component			
	1	2	3	4
10. My grades matter to me a lot	,757			
7. I care if my homework is done correctly	,738		,201	
6. Doing well in school is important to me	,714			
11. Don't you believe it is important to work hard at school?	,564			
8. Most of my classes are important	,544		,397	
20. I usually like my teachers		,758	,275	
22. I have lots of respect for my teachers	,211	,726		
21. My teachers care a lot about me		,653	,360	
18. I get along with most of my teachers		,641		
19. I want to be respected by my teachers	,445	,509	-,211	
2. Most mornings I look forward to going to school			,800	
1. I Like School	,214	,208	,746	
3. I am proud to be at this school		,353	,495	,229
14. I am liked by my classmates				,659
13. I get along well with the other students in school		,261		,626
16. I have many friends at school				,599
12. My classmates often annoy me				,553
5. I can be myself at school	,231	,210	,242	,405

---

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

---

Rotation converged in 6 iterations.

---

Component transformation matrix was also obtained in order to see the overall empirical data on hypothesis (1) which provided a numeric summary of component matrix, rotated component matrix and commonalities.

**Table 5.12: Component Transformation Matrix**

Component	1	2	3	4
1	,567	,591	,451	,356
2	-,772	,454	,025	,444
3	,265	-,206	-,622	,708
4	-,112	-,634	,640	,419

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser  
Normalization.

#### 5.2.1.1. Sub-Item

*Correlations Tests of Hypothesis (1)*

If the hypothesized construct of the SAS model was founded, the

sub-item correlations between measurement items and its respective component would also indicate high levels. In this regard, tests of hypothesis (1) on a scale of sub-item correlations would supply the research with evidence that hypothesized scale is in harmony with empirically analyzed of data.

#### 5.2.1.2. Students` Feelings for School (SFS)

The five sub-items of SFS component were assessed via their mean and standard deviation values through descriptive statistics, and then they were analyzed with their significant values through two tailed correlation analysis.

**Table 5.13: Descriptive Statistics for SFS**

	Mean	Std. Deviation	N
1. I Like School	4,02	,986	1506

2. Most mornings I look forward to going to school	3,57	1,147	1506
3. I am proud to be at this school	4,03	1,018	1505
5. I can be myself at school	4,00	,997	1506

Table 4-12 reports the correlations between sub-items that were hypothesized to give a substantial measurement for Students` Feelings for School (SFS) as the first component of SAS. The correlation indicated significant at the 0.01 level (2-tailed) which means that the sub-items of SFS component of SAS correlated with each other in support with hypothesis (1). These values also provided a strong basis for coming tests of other sub-items and their components.

**Table 5.14: Correlations Between Sub-Items of SFS**

		1	2	3	4
1. I Like School	Pearson				
	Correlation	1	,538**	,422**	,253**
	Sig. (2-tailed)		,000	,000	,000
	N	1506	1506	1505	1506
2. Most mornings I look forward to going to school	Pearson				
	Correlation	,538**	1	,329**	,203**
	Sig. (2-tailed)	,000		,000	,000
	N	1506	1506	1505	1506
3. I am proud to be at this school	Pearson				
	Correlation	,422**	,329**	1	,299**
	Sig. (2-tailed)	,000	,000		,000
	N	1505	1505	1505	1505
5. I can be myself at school	Pearson				
	Correlation	,253**	,203**	,299**	1
	Sig. (2-tailed)	,000	,000	,000	
	N	1506	1506	1505	1506

\*\*, Correlation is significant at the 0.01 level (2-tailed).



### 5.2.1.3. Students` Interest in Learning (SIL)

Students` interest in learning as a measurement component of SAS was statistically measured with mean and standard deviation with no missing values as reported in table 4-15. The five sub-items of SIL component were assessed via their mean and standard deviation values through descriptive statistics, and then they were analyzed with their significant values through two tailed correlation analysis.

**Table 5.15: Descriptive Statistics for SIL**

	Mean	Std. Deviation	N
6. Doing well in school is important to me	4,41	,797	1506
7. I care if my homework is done correctly	4,19	,970	1506
8. Most of my classes are important	4,09	1,020	1506
10. My grades matter to me a lot	4,39	,890	1506
11. Don't you believe it is important to work hard at school?	4,02	1,139	1506

The sub-items of SIL indicated high scales of correlation when analyzed through Pearson`s 2-tailed correlation analysis. Since these items were hypothesized to measure the correlations between the items of SIL, statistically significance of coefficients indicated that the correlations between these items existed and it was significant enough as hypothesized.

**Table 5.16: Correlations Between Sub-Items of SIL**

		6.	7.	8.	10.	11.
6. Doing well in school is important to me	Pearson	1	,489**	,313**	,463**	,265**
	Correlation					
	Sig. (2-tailed)		,000	,000	,000	,000
	N	1506	1506	1506	1506	1506
7. I care if my homework is done correctly	Pearson	,489**	1	,461**	,497**	,286**
	Correlation					
	Sig. (2-tailed)	,000		,000	,000	,000
	N	1506	1506	1506	1506	1506

8. Most of my classes are important	Pearson					
	Correlation	,313**	,461**	1	,378**	,286**
	Sig. (2-tailed)	,000	,000		,000	,000
	N	1506	1506	1506	1506	1506
10. My grades matter to me a lot	Pearson					
	Correlation	,463**	,497**	,378**	1	,331**
	Sig. (2-tailed)	,000	,000	,000		,000
	N	1506	1506	1506	1506	1506
11. Don't you believe it is important to work hard at school?	Pearson					
	Correlation	,265**	,286**	,286**	,331**	1
	Sig. (2-tailed)	,000	,000	,000	,000	
	N	1506	1506	1506	1506	1506

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 5.2.1.4. Attitudes towards Peers (ATP)

Students` attitudes towards peers as a measurement component of SAS was statistically measured with mean and standard deviation with no missing values as reported in table 4-17. The four sub-items of ATP component were assessed via their mean and standard deviation values through descriptive statistics, and then they were analyzed with their significant values through two tailed correlation analysis.

**Table 5.17: Descriptive Statistics for ATP**

	Mean	Std. Deviation	N
12. My classmates often annoy me	3,62	1,199	1506
13. I get along well with the other students in school	3,97	,950	1506
14. I am liked by my classmates	3,70	,940	1506
16. I have many friends at school	3,92	1,099	1506

Table 4-18 reports the correlations between sub-items that were hypothesized to give a substantial measurement for Attitudes towards Peers (ATP) as the third component of SAS. The correlation indicated significant at the 0.01 level (2-tailed) which means that the sub-items of ATP component of SAS correlated with each other in support with

hypothesis (1). These values also provided a strong basis for coming tests of other sub-items and their components.

**Table 5.18: Correlations Between Sub-Items of ATP**

		12.	13.	14.	16.
12. My classmates often annoy me	Pearson Correlation	1	,177**	,129**	,088**
	Sig. (2-tailed)		,000	,000	,001
	N	1506	1506	1506	1506
13. I get along well with the other students in school	Pearson Correlation	,177**	1	,314**	,298**
	Sig. (2-tailed)	,000		,000	,000
	N	1506	1506	1506	1506
14. I am liked by my classmates	Pearson Correlation	,129**	,314**	1	,274**
	Sig. (2-tailed)	,000	,000		,000
	N	1506	1506	1506	1506
16. I have many friends at school	Pearson Correlation	,088**	,298**	,274**	1
	Sig. (2-tailed)	,001	,000	,000	
	N	1506	1506	1506	1506

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 5.2.1.5. Attitudes towards Teachers (ATT)

The five sub-items of ATT component were assessed via their mean and standard deviation values through descriptive statistics, and then they were analyzed with their significant values through two tailed correlation analysis. Students` attitudes towards teachers as a measurement component of SAS was statistically measured with mean and standard deviation with no missing values as reported in table 4-19.

**Table 5.19: Descriptive Statistics for ATT**

	Mean	Std. Deviation	N
18. I get along with most of my teachers	4,05	,955	1506
19. I want to be respected by my teachers	4,50	,753	1506
20. I usually like my teachers	3,95	,970	1506
21. My teachers care a lot about me	3,44	1,080	1506
22. I have lots of respect for my teachers	4,26	,923	1506

Table 4-20 reports the correlations between sub-items that were hypothesized to give a substantial measurement for Attitudes towards Teachers (ATT) as the fourth component of SAS. The correlation indicated significant at the 0.01 level (2-tailed) which means that the sub-items of ATT component of SAS correlated with each other in support with hypothesis (1). These values also provided a strong basis for coming tests of other sub-items and their components.

**Table 5.20: Correlations Between Sub-Items of ATT**

		18.	19.	20.	21.	22.
18. I get along with most of my teachers	Pearson					
	Correlation	1	,338**	,425**	,344**	,341**
	Sig. (2-tailed)		,000	,000	,000	,000
	N	1506	1506	1506	1506	1506
19. I want to be respected by my teachers	Pearson					
	Correlation	,338**	1	,292**	,176**	,375**
	Sig. (2-tailed)	,000		,000	,000	,000
	N	1506	1506	1506	1506	1506
20. I usually like my teachers	Pearson					
	Correlation	,425**	,292**	1	,566**	,503**
	Sig. (2-tailed)	,000	,000		,000	,000
	N	1506	1506	1506	1506	1506
21. My teachers care a lot about me	Pearson					
	Correlation	,344**	,176**	,566**	1	,417**
	Sig. (2-tailed)	,000	,000	,000		,000
	N	1506	1506	1506	1506	1506
22. I have lots of respect for my teachers	Pearson					
	Correlation	,341**	,375**	,503**	,417**	1
	Sig. (2-tailed)	,000	,000	,000	,000	
	N	1506	1506	1506	1506	1506

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 5.2.2. Tests of Hypothesis (2)

Hypothesis (2), which was “School Attachment Scale as the preliminary scale is composed of five internal sub-scales that consistently measure the five hypothesized

components (SFS, SIL, ATP, ATT, and SPS) which make the School Attachment Scale reliable to be used in Albanian context to measure students' school attachment in public high schools" was majorly meant for internal constructs of the preliminary scale of the School Attachment Scale. In order to test this hypothesis following analyses were implemented; internal reliability of each component with respect to their sub-items as well as Case Processing, Reliability Statistics, Item Statistics, Inter-Item Correlation Matrix, Item-Total Statistics, and Scale Statistics were implemented for each component of School Attachment Scale.

#### 5.2.2.1. *Inter-item Correlations of Hypothesis (2)*

If the hypothesized components of the SAS were supported, the inter-item correlations between measurement items and their respective component would also indicate high scales. Concerning this, tests of hypothesis (2) on a level of inter-item correlations would provide the research hypothesis with evidence that hypothesized scale was in unity with empirically analyzed data.

#### 5.2.2.2. *Students' Feelings for School (SFS)*

At the beginning, list-wise deletion based on all variables in the procedure was reported through case processing summary which indicated a missing value and then Reliability statistics of all four components were reported with Cronbach's Alpha which indicated lower values.

**Table 5.21: Case Processing Summary**

		N	%
Cases	Valid	1505	99,9
	Excluded <sup>a</sup>	1	,1

**Table 5.22: Reliability Statistics**

			Cronbach's Alpha Based on		
			Cronbach's Alpha	Standardized Items	N of Items
Total	1506	100,0	,673	,674	4

The five sub-items of this component were empirically measured through item statistics which indicated a missing value for the data out of 1506 with a mean of over 4.00 except item 2 (Most mornings I look forward to going to school) which indicated 3.57. Std. Deviation for item 2 and 3 were over 1.00, however for item 1 and 5 it was below 1.00 as shown in table 4.23.

**Table 5.23: Item Statistics**

	Mean	Std. Deviation	N
1. I Like School	4,02	,986	1505
2. Most mornings I look forward to going to school	3,57	1,147	1505
3. I am proud to be at this school	4,03	1,018	1505
5. I can be myself at school	4,00	,997	1505

Inter-item correlation matrix high scores of correlations and supported hypotheses that School Attachment Scale was showing internal consistency both on sub-item level and component level.

**Table 5.24: Inter-Item Correlation Matrix**

	1.	2.	3.	5.
1. I Like School	1,000	,538	,422	,254
2. Most mornings I look forward to going to school	,538	1,000	,329	,203
3. I am proud to be at this school	,422	,329	1,000	,299
5. I can be myself at school	,254	,203	,299	1,000

The item total statistics were important in understanding inter-item correlations and sub-item correlations in order to see if they were related with each other, consistent with one another and if they showed overall correlation with components of SAS. In this regard

table 4.25 reflected scale mean if item was deleted, scale variance, corrected item-total correlation, squared multiple correlations, and Cronbach's Alpha. Empirical data indicated that item deletion would cause inconsistency of the component in support with hypotheses.

**Table 5.25: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlati on	Squared Multiple Correlati on	Cronbac h's Alpha if Item Deleted
1. I Like School	11,60	5,184	,571	,364	,532
2. Most mornings I look forward to going to school	12,05	4,956	,479	,304	,591
3. I am proud to be at this school	11,59	5,462	,467	,228	,599
5. I can be myself at school	11,62	6,156	,317	,112	,690

Scale statistics for SFS were done through mean, variance, and std. deviation with respect to all four items.

**Table 5.26: Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
15,62	8,720	2,953	4

#### 5.2.2.3. *Students` Interest in Learning (SIL)*

Students` interest in learning was measured with five items; 1) Doing well in school is important to me, 2) I care if my homework is done correctly, 3) Most of my classes are important, 4) My grades matter to me a lot, and 5) Don't you believe it is important to work hard at school? Following tables are conducted in order obtain empirical data on

internal consistency of these items, their correlations with one another, and the correlation in regard with constructing the component of SIL.

**Table 5.27: Case Processing Summary**

		N	%
Cases	Valid	1506	100,0
	Excluded <sup>a</sup>	0	,0
	Total	1506	100,0

a. Listwise deletion based on all variables in the procedure.

After case processing summary reliability statistics were reported in table 4.28 which showed that the alpha value of this component was  $\alpha=.740$  with five sub-items indicating similar results with the overall Cronbach's Alpha of SAS model and supporting the hypotheses on internal and external consistency of School Attachment Scale. Cronbach's Alpha Based on Standardized Items showed  $\alpha=.752$  indicating similar value with Cronbach's Alpha. The number of items used in this component of SAS model was five.

**Table 5.28: Reliability Statistics**

Cronbach's Alpha Based on Cronbach's Standardized Items		
Alpha	Items	N of Items
,740	,752	5

Item statistics also indicated internal consistency of the SAS model and its validity at sub-items level. All of the items of SIL component indicated a mean value over 4.00 which were very high in supporting the hypotheses as well as the validity of SAS in Albanian context of public high schools. The five sub-items of this component were



empirically measured through item statistics which indicated no missing value for the data out of 1506 with a mean of over 4.00 for all items.

**Table 5.29: Item Statistics**

	Mean	Std. Deviation	N
6. Doing well in school is important to me	4,41	,797	1506
7. I care if my homework is done correctly	4,19	,970	1506
8. Most of my classes are important	4,09	1,020	1506
10. My grades matter to me a lot	4,39	,890	1506
11. Don't you believe it is important to work hard at school?	4,02	1,139	1506

Inter-item correlation matrix was conducted to see again internal consistency of the sub-items of SIL as well as its overall validity within SAS model.

**Table 5.30: Inter-Item Correlation Matrix**

	6.	7.	8.	10.	11.
6. Doing well in school is important to me	1,000	,489	,313	,463	,265
7. I care if my homework is done correctly	,489	1,000	,461	,497	,286
8. Most of my classes are important	,313	,461	1,000	,378	,286
10. My grades matter to me a lot	,463	,497	,378	1,000	,331
11. Don't you believe it is important to work hard at school?	,265	,286	,286	,331	1,000

The total item statistics were implemented through Scale Mean if Item Deleted, Scale Variance if Item Deleted, Corrected Item-Total Correlation, Squared Multiple Correlation, and Cronbach's Alpha if Item Deleted. Item deletion values indicated that sub-items were correlated and were necessary for one another in constructing the SIL component of SAS.

**Table 5.31: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
6. Doing well in school is important to me	16,69	8,493	,517	,311	,694
7. I care if my homework is done correctly	16,92	7,434	,597	,397	,658
8. Most of my classes are important	17,01	7,720	,489	,259	,700
10. My grades matter to me a lot	16,72	7,868	,575	,350	,670
11. Don't you believe it is important to work hard at school?	17,08	7,782	,385	,153	,750

Following table shows scale statistics of mean, variance, std. deviation of all five items of SIL.

**Table 5.32: Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
21,11	11,531	3,396	5

#### 5.2.2.4. Attitudes towards Peers (ATP)

Attitudes towards peers was measured with four items; 1) My classmates often annoy me, 2) I get along well with the other students in school, 3) I am liked by my classmates, 4) I have many friends at school. Following tables are conducted in order obtain empirical data on internal consistency of these items, their correlations with one another, and the correlation in regard with constructing the component of ATP.

**Table 5.33: Case Processing  
Summary**

		N	%
Cases	Valid	1506	100,0
	Excluded <sup>a</sup>	0	,0
	Total	1506	100,0

a. Listwise deletion based on all variables in the procedure.

After case processing summary reliability statistics were reported in table 4.34 which reflected that the alpha value of this component was  $\alpha=.502$  with four sub-items indicating lower results with the overall Cronbach's Alpha of SAS model and could not support the hypotheses on internal and external consistency of School Attachment Scale as much as other sub-items of other components. Cronbach's Alpha Based on Standardized Items showed  $\alpha=.520$  indicating similar value with Cronbach's Alpha. The number of items used in this component of SAS model was four. This was the only level of sub-items that could not indicate as high values as other components of School Attachment Scale which means that the empirical data on this component could not pivot the SAS model in the best possible way, however the values are not too low to be interpreted as inconsistency among sub-items or components.

**Table 5.34: Reliability Statistics**

	Cronbach's Alpha		
Cronbach's Alpha	Based on Standardized Items	N of Items	
,502	,520	4	

Item statistics however, indicated internal consistency of the SAS model and its validity at sub-items level. All of the items of ATP component indicated a mean value over 3.00 which were high enough in supporting the hypotheses as well as the validity of SAS in Albanian context of public high schools. Item statistics also indicated internal consistency of the SAS model and its validity at sub-items level. All of the items of ATP component indicated a mean value over 3.00 which were very high in supporting the hypotheses as well as the validity of SAS in Albanian context of public high schools. The four sub-items of this component were empirically measured through item statistics which indicated no missing value for the data out of 1506 with a mean of over 3.00 for all items.

**Table 5.35: Item Statistics**

	Mean	Std. Deviation	N
12. My classmates often annoy me	3,62	1,199	1506
13. I get along well with the other students in school	3,97	,950	1506
14. I am liked by my classmates	3,70	,940	1506
16. I have many friends at school	3,92	1,099	1506

Inter-item correlation matrix high scores of correlations and supported hypotheses that School Attachment Scale was showing internal consistency both on sub-item level and component level.

**Table 5.36: Inter-Item Correlation Matrix**

	12.	13.	14.	16.
12. My classmates often annoy me	1,000	,177	,129	,088

13. I get along well with the other students in school	,177	1,000	,314	,298
14. I am liked by my classmates	,129	,314	1,000	,274
16. I have many friends at school	,088	,298	,274	1,000

The total item statistics were implemented through Scale Mean if Item Deleted, Scale Variance if Item Deleted, Corrected Item-Total Correlation, Squared Multiple Correlation, and Cronbach's Alpha if Item Deleted. Item deletion values indicated that sub-items were correlated and were necessary for one another in constructing the SIL component of SAS.

**Table 5.37: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
12. My classmates often annoy me	11,59	4,746	,177	,038	,553
13. I get along well with the other students in school	11,24	4,617	,389	,163	,353
14. I am liked by my classmates	11,51	4,807	,344	,139	,393
16. I have many friends at school	11,30	4,482	,305	,125	,421

Scale statistics for ATP were done through mean, variance, and std. deviation with respect to all four items.

**Table 5.38: Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
15,21	7,110	2,666	4

#### 5.2.2.5. Attitudes towards Teachers (ATT)

Students' attitudes towards teachers was measured with five items; 1) I get along with most of my teachers, 2) I want to be respected by my teachers, 3) I usually like my teachers, 4) My teachers care a lot about me, and 5) I have lots of respect for my teachers. Following tables are conducted in order obtain empirical data on internal consistency of these items, their correlations with one another, and the correlation in regard with constructing the component of ATT.

**Table 5.39: Case Processing Summary**

		N	%
Cases	Valid	1506	100,0
	Excluded <sup>a</sup>	0	,0
	Total	1506	100,0

a. Listwise deletion based on all variables in the procedure.

After case processing summary reliability statistics were reported in table 4.40 which reflected that the alpha value of this component was  $\alpha=.754$  with five sub-items indicating high results with the overall Cronbach's Alpha of SAS model and could support the hypotheses on internal and external consistency of School Attachment Scale similar to other sub-items of other components. Cronbach's Alpha Based on Standardized Items showed  $\alpha=.752$  indicating similar value with Cronbach's Alpha. The number of items used in this component of SAS model was five. This was one of the three levels of sub-items that could indicate as high values as other components of School Attachment Scale which means that the empirical data on this component could support the SAS model in the best possible way. The values are high enough to be interpreted as inconsistency among sub-items or components.

**Table 5.40: Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,754	,752	5

Item statistics indicated internal consistency of the SAS model and its validity at sub-items level. All of the items of ATT component indicated a mean value over 4.00 which were high enough in supporting the hypotheses as well as the validity of SAS in Albanian context of public high schools. Item statistics also indicated internal consistency of the SAS model and its validity at sub-items level. All of the items of ATT component indicated a mean value over 4.00 which were very high in supporting the hypotheses as well as the validity of SAS in Albanian context of public high schools. The five sub-items of this component were empirically measured through item statistics which indicated no missing value for the data out of 1506 with a mean value over 4.00 for all items.

**Table 5.41: Item Statistics**

	Mean	Std. Deviation	N
18. I get along with most of my teachers	4,05	,955	1506
19. I want to be respected by my teachers	4,50	,753	1506
20. I usually like my teachers	3,95	,970	1506
21. My teachers care a lot about me	3,44	1,080	1506
22. I have lots of respect for my teachers	4,26	,923	1506

Inter-item correlation matrix indicated high scores of correlations and supported hypotheses that School Attachment Scale was showing internal consistency both on sub-item level and component level.

**Table 5.42: Inter-Item Correlation Matrix**

	18.	19.	20.	21.	22.
18. I get along with most of my teachers	1,000	,338	,425	,344	,341
19. I want to be respected by my teachers	,338	1,000	,292	,176	,375
20. I usually like my teachers	,425	,292	1,000	,566	,503
21. My teachers care a lot about me	,344	,176	,566	1,000	,417
22. I have lots of respect for my teachers	,341	,375	,503	,417	1,000

The item total statistics were significant in understanding inter-item correlations and sub-item correlations in order to see if they were related with each other, consistent with one another and if they showed overall correlation with components of SAS. In this regard table 4.43 reflected scale mean if item was deleted, scale variance, corrected item-total correlation, squared multiple correlations, and Cronbach's Alpha. Empirical data indicated that item deletion would cause inconsistency of the component in support with hypotheses.

**Table 5.43: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
18. I get along with most of my teachers	16,16	7,677	,488	,250	,721
19. I want to be respected by my teachers	15,71	8,889	,383	,197	,753
20. I usually like my teachers	16,26	6,932	,646	,444	,661
21. My teachers care a lot about me	16,76	6,996	,527	,355	,710
22. I have lots of respect for my teachers	15,95	7,465	,566	,339	,693



Scale statistics for ATT were done through mean, variance, and std. deviation with respect to all four items.

**Table 5.44: Scale Statistics**

	Mean	Variance	Std. Deviation	N of Items
	20,21	11,174	3,343	5

Table 4-45 reports the correlations between all components that were hypothesized to give a substantial measurement for School Attachment Scale (SAS) as the entire scale of SAS. The correlation indicated significant at the 0.01 level (2-tailed) which means that the sub-items of all SAS components were correlated with each other in support with hypotheses. These values also provided a strong basis for other tests of other sub-items and their components.

**Table 5.45: Correlations Between all Components of SAS**

		F1	F2	F3	F4	VAR0000 1
F1	Pearson Correlation	1	,464**	,299**	,536**	,252**
	Sig. (2-tailed)		,000	,000	,000	,000
	N	1506	1506	1506	1506	1506
F2	Pearson Correlation	,464**	1	,215**	,419**	,291**
	Sig. (2-tailed)	,000		,000	,000	,000
	N	1506	1506	1506	1506	1506
F3	Pearson Correlation	,299**	,215**	1	,348**	,216**
	Sig. (2-tailed)	,000	,000		,000	,000
	N	1506	1506	1506	1506	1506
F4	Pearson Correlation	,536**	,419**	,348**	1	,306**
	Sig. (2-tailed)	,000	,000	,000		,000
	N	1506	1506	1506	1506	1506
VAR	Pearson Correlation	,252**	,291**	,216**	,306**	1
0000	Sig. (2-tailed)	,000	,000	,000	,000	
1	N	1506	1506	1506	1506	1506

\*\*. Correlation is significant at the 0.01 level (2-tailed).

### 5.2.3. Tests of Hypothesis (3)

Hypothesis (3), which was “All five components (sub-scales) are correlated positively with one another indicating that the SAS components are consistent with one another.”

It was majorly meant for external constructs of the preliminary scale of the School Attachment Scale. In order to test this hypothesis following analyses were implemented; external reliability of each component was implemented for each component of School Attachment Scale.

Pearson Correlation Sig. (2-tailed) measured the components for their consistencies with each other and their sub-items in order to obtain data on validity of School Attachment Scale used for the measurement of attachment at public high schools in Albania. The Correlation is significant at the 0.01 level (2-tailed).

The overall empirical data obtained from table 4.46 for this hypothesis indicated that this measurement scale was valid and reliable to be used for measurement of school attachment scores among public high school students in Albania.

**Table 5.46: Correlations of SAS Components for Hypothesis (3)**

		F1	F2	F3	F4	VAR00001
F1	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	1506				
F2	Pearson Correlation	,464**	1			
	Sig. (2-tailed)	,000				
	N	1506	1506			
F3	Pearson Correlation	,299**	,215**	1		
	Sig. (2-tailed)	,000	,000			
	N	1506	1506	1506		
F4	Pearson Correlation	,536**	,419**	,348**	1	
	Sig. (2-tailed)	,000	,000	,000		

N	1506	1506	1506	1506	
VAR0 Pearson Correlation	,252**	,291**	,216**	,306**	1
0001 Sig. (2-tailed)	,000	,000	,000	,000	
N	1506	1506	1506	1506	1506

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 5.2.4. Tests of Hypothesis (4)

Hypothesis (4) which was “There is no statistically significant difference between girls and boys with respect their overall school attachment scores.” It was empirically tested through group statistics on genders of participants in regard with components of School Attachment Scale. The overall mean value for males was 101, 96 and for females it was 106, 99 indicating higher than males. In regard with component (F1) both male and female students showed similar mean values of (M=15, 45 and F=15, 75); with component (F2) they showed different mean values (M=20, 04 and F=21, 98); for component (F3) they again showed similar mean values which was actually the only component that males indicated higher than girls (M=15, 37 and F=15, 08) and with component (F4) once again girls showed higher mean values than boys (M=19, 84 and F=20, 51). The overall std. deviation for boys indicated as 11, 982 and for females as 36, 086. The overall Std. error mean for males was 0, 461 and for females it was 1, 253. After empirical analysis with group statistics of male and female participants, it was observed that hypothesis (4) was proven to be wrong as statistics indicated clear differences between males and females.

**Table 5.47: Group Statistics**

27. What is your gender?		N	Mean	Std. Deviation	Std. Error Mean
VAR00001	Male	676	101,96	11,982	,461
	Female	830	106,99	36,086	1,253

F1	Male	676	15,45	3,126	,120
	Female	830	15,75	2,801	,097
F2	Male	676	20,04	3,716	,143
	Female	830	21,98	2,830	,098
F3	Male	676	15,37	2,753	,106
	Female	830	15,08	2,588	,090
F4	Male	676	19,84	3,430	,132
	Female	830	20,51	3,241	,113

Independent Samples Test was implemented through t-test for equality of means. The null hypothesis in regard with hypothesis (4) was that there was no statistical differences between males and females attachment scores, however as observed on table 4.48 the p value was  $p \leq 0,001$  which rejected null hypothesis and thus hypothesis (4). 95% Confidence Interval of the Difference, mean differences and std. error differences all supported the fact that statistically there is a difference between male and female students' attachment scores that are studying at public high schools in Albania and that female students' attachment scores are higher than male students according to SAS model implemented six cities/prefectures in Albania which can be generalized for the whole target population of Albanian adolescents.

**Table 5.48: Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Equal variances assumed	,001	,982	-3,469	1504	,001	-5,027	1,449	7,869	-2,185	

Equal variances not assumed			-3,767	1045,125	,000	-5,027	1,33 5	- 7,64 6	-2,408
Equal variances assumed	7,38 3	,007	-2,011	1504	,045	-,307	,153	- ,607	-,008
Equal variances not assumed			-1,988	1369,501	,047	-,307	,155	- ,611	-,004
Equal variances assumed	40,3 63	,000	- 11,47 2	1504	,000	-1,936	,169	- 2,26 7	-1,605
Equal variances not assumed			- 11,16 4	1238,263	,000	-1,936	,173	- 2,27 6	-1,596
Equal variances assumed	2,24 5	,134	2,134	1504	,033	,294	,138	,024	,565
Equal variances not assumed			2,121	1404,299	,034	,294	,139	,022	,567
Equal variances assumed	2,91 0	,088	-3,892	1504	,000	-,671	,172	- 1,00 9	-,333
Equal variances not assumed			-3,870	1407,717	,000	-,671	,173	- 1,01 1	-,331

#### 5.2.5. Tests of Hypothesis (5)

Hypothesis (5) which was “Girls are attached to school more than boys based on the outcome dimensions five components of SAS.” This hypothesis was created in contrast with hypothesis (4) to explain the expectation on gender differences as prior studies on the same issue indicated that there were differences between genders in regard with their attachment scores. The reason for having hypothesis 4 and 5 in the same research was for two major reasons; 1) to better understand and conceptualize gender differences and 2) the fourth hypothesis was meant for the statistical differences on gender,

however the fifth one was meant for testing the prior expectations on genders differences in favor of females.

At first, it was empirically tested through group statistics on genders of participants in regard with components of School Attachment Scale. The overall mean value for male students was 101, 96 and for female students was 106, 99 which showed higher values than males. In regard with component 1, (SFL=students feelings for school) both male and female students showed similar mean values of (M=15, 45 and F=15, 75); with component 2, (SIL= students interest in learning) they indicated different mean values (M=20, 04 and F=21, 98); for component 3, (ATP= attitudes towards peers) they again showed similar mean values which was actually the only component that males indicated higher than girls (M=15, 37 and F=15, 08) and with component 4, (ATT= attitudes towards teachers) once again girls showed higher mean values than boys (M=19, 84 and F=20, 51). The overall std. deviation for boys indicated as 11, 982 and for females as 36, 086. The overall Std. error mean for males was 0, 461 and for females it was 1, 253. After empirical analysis with group statistics of male and female participants, it was observed that hypothesis (5) was supported as statistics indicated clear differences between males and females in favor of females for their school attachment scores.

**Table 5.49: Group Statistics**

27. What is your gender?		N	Mean	Std. Deviation	Std. Error Mean
VAR00001	Male	676	101,96	11,982	,461
	Female	830	106,99	36,086	1,253
F1	Male	676	15,45	3,126	,120
	Female	830	15,75	2,801	,097
F2	Male	676	20,04	3,716	,143
	Female	830	21,98	2,830	,098

F3	Male	676	15,37	2,753	,106
	Female	830	15,08	2,588	,090
F4	Male	676	19,84	3,430	,132
	Female	830	20,51	3,241	,113

In order to test equality of means two tailed t-test and Levene's Test for Equality of Variances was conducted with Equal variances assumed and Equal variances not assumed as well as other statistical procedures derived from the two ( p value, mean difference, std. error difference, and 95% Confidence Interval of the Difference with lower and upper values). In regard with hypothesis (5) the null hypothesis explained for hypothesis (4) was that there was no statistical differences between males and females attachment scores, however as observed on table 4.50 the p value was  $p \leq 0,001$  which rejected null hypothesis and thus hypothesis (4) about statistics. 95% Confidence Interval of the Difference, mean differences and std. error differences all supported the fact that statistically there is a difference between male and female students' attachment scores that are studying at public high schools in Albania and that female students' attachment scores are higher than male students according to SAS model implemented to six cities/prefectures in Albania. This fact brought up an interesting finding for Albanian high school students as adolescents of the country. School psychologists, practitioners and other governmental and non-governmental entities should take into consideration that female students at public high schools have higher school attachment scores than male students and they should determine their policies accordingly.

**Table 5.50: Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
1 Equal variances assumed	,001	,982	-3,469	1504	,001	-5,027	1,449	-7,869	- 2,185
Equal variances not assumed			-3,767	1045,125	,000	-5,027	1,335	-7,646	- 2,408
F1 Equal variances assumed	7,383	,007	-2,011	1504	,045	-,307	,153	-,607	-,008
Equal variances not assumed			-1,988	1369,501	,047	-,307	,155	-,611	-,004
F2 Equal variances assumed	40,36 3	,000	-11,472	1504	,000	-1,936	,169	-2,267	- 1,605
Equal variances not assumed			-11,164	1238,263	,000	-1,936	,173	-2,276	- 1,596
F3 Equal variances assumed	2,245	,134	2,134	1504	,033	,294	,138	,024	,565
Equal variances not assumed			2,121	1404,299	,034	,294	,139	,022	,567
F4 Equal variances assumed	2,910	,088	-3,892	1504	,000	-,671	,172	-1,009	-,333
Equal variances not assumed			-3,870	1407,717	,000	-,671	,173	-1,011	-,331



## **CHAPTER VI**

### **6. RESULTS**

One of the major objectives of this study was to test hypotheses in order to measure the validity of School Attachment Scale and thus to measure if the scale was valid to be used in Albanian context, culture in particular if it was applicable for public high school students in Albania. The hypotheses were related with the SAS model and its evaluation measurement including 1) focus areas, 2) internal consistencies, 3) unity and adequacy of SAS, 4) demographic influences on SAS, and 5) attachment scores in regard with gender and grade. The first hypothesis was also conceptualized through methodology and statistically tested in empirical analysis of hypotheses in chapter four. The results for tested hypotheses and overall objectives that were designed in relation with hypotheses of this research are reported in coming sections of this chapter.

#### **6.1. Results on Hypotheses**

**Hypothesis (1)** “The five hypothesized components {Students` Feelings for School (SFS), Students` Interest in Learning (SIL), Attitudes towards Peers (ATP), Attitudes towards Teachers (ATT), and Students` Perception of School (SPS)} of the School Attachment Scale (SAS) are measured by the respective test items as suggested by the SAS”.

This hypothesis was related with focus areas of primary objectives of the School Attachment Scale which was tested whether as a model it could refer and measure

adequately the components and their sub-items. The process of methodology, tests of components and their sub-items reflected that Hypothesis (1) was positively supported.

**Hypothesis (2)** “School Attachment Scale as the preliminary scale is composed of five internal sub-scales that consistently measure the five hypothesized components (SFS, SIL, ATP, ATT, and SPS) which make the School Attachment Scale reliable to be used in Albanian context to measure students’ school attachment in public high schools”.

This hypothesis referred to factorial construct of the preliminary scale of SAS which was about the internal consistency of sub-items and it was meant to measure if the sub-items corresponded with five components of the SAS model (i.e., SFS, SIL, ATP, ATT, and SPS). The reliability tests and internal consistency measurements in testing of this hypothesis reflected that this hypothesis was supported with the first four components and their sub-items, the internal consistency of the fifth one (SPS) was not supported as the sub-items were seen together with the first component (SFS) and thus it could not be proven through empirical data analysis, in particular with factor analysis.

**Hypothesis (3)** “All five components (sub-scales) are correlated positively with one another indicating that the SAS components are consistent with one another”. This hypothesis was in relation with internal constructs of School Attachment Scale and it was meant for inner correlations of factors among sub-items in support with preliminary scale that was proposed by first and second hypotheses. The examination of the correlations between the four components proposed by the empirically tested data was done for this hypothesis. Inter-factor correlations indicated high rates of correlations between the components of SAS which supported hypothesis (3).

**Hypothesis (4)** “There is no statistically significant difference between girls and boys with respect their overall school attachment scores”. This hypothesis was about statistical differences between girl and boy students and it was proven to be wrong as there was a mean difference between boys and girls as shown in table 4.47 for group statistics. This hypothesis was the only hypothesis that was statistically proven to be wrong as girls statistically showed higher scores of school attachment than boys. As explained in the empirical analysis, t-test and group statistics were major findings in conceptualizing this hypothesis.

**Hypothesis (5)**, “Girls are attached to school more than boys based on the outcome dimensions five components of SAS”. This Hypothesis was supported by the empirical analysis as the opposing alternative of hypothesis (4) and indicated higher scores of attachment in favor of girls.

## **6.2. Results on Objectives**

Objectives of this research were majorly reported through hypotheses, however in the coming sections objectives are explained in details in regard with hypotheses and findings obtained through empirical analysis of data collected in Albanian context with samples of public high school students. Following objectives were tried to reach through results/interpretations of empirical analysis of data and tests of hypotheses:

Present findings on Albanian adolescents` experiences and school life to better comprehend adaptive and maladaptive behaviors using SAS model, furthermore to obtain data for school psychology.

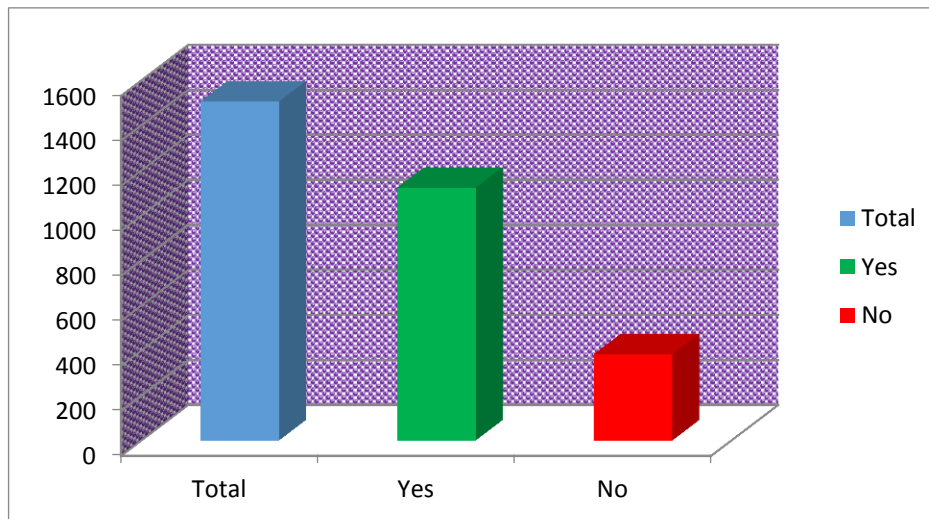
- Conducting a research on the student, the recipient of the school psychology services, thus providing invaluable feedback for enhancement of these services.
- Understanding attachment levels of students by conducting the School Attachment Scale through SFS, SIL, ATT, ATP and SPS as the measurement components.
- Outline a general viewpoint on demographics of youth in Albania in regard with gender, grade, region, and socio-economic status (SES).

The results indicating findings on objectives and internal construct of School Attachment Model and its relations to outcomes of students' attachment scores to school are reported in coming sections. First of all, one of the primary objectives of this research, conceptualization and measurement of school attachment in regard with five hypotheses in relation with objectives of obtaining data that can help school psychology to better understand students' school experiences, their adaptive and maladaptive behaviors were presented through findings and interpretations of the empirically analyzed data. Secondly, since each sub-item of SAS components represent a particular aspect of school attachment, it was possible to obtain data on the recipient of the school (psychology) services, enabling this research to provide feedback on students' outcomes associated with different sub-items of school attachment.

### **6.3. Results on Complementary Factors of School Attachment Scale**

The findings obtained from this research provide several further implications for studies that might be conducted on the same topic in the future. One of the major achievements of this research is due to vastness of sampling size (N=1506; more than 1% of the target

population) that was equally distributed in regions of Albania which enables the findings to be generalized to the whole target population in regard with hypotheses and objectives of the research. In this regard, it was observed that school attachment scores of high schools were over moderate and relatively high indicating positive feedback received from students, however as the fourth and fifth hypotheses suggest; the attachment scores of girls were showing higher scores than boys at public high schools in Albania. As frequency tables in appendices indicate survey items that were intended for students' perception of school, like; 1) "school rules at my school are applied fairly", received moderately scored responses as in; 382+491 responded strongly agree and agree indicating 58% of positive responses, 2) "school rules and grading system are fair" received fairly high scores (425+516) of strongly agree and agree, indicating 62.5% of the whole population responses, and 3) "do you enjoy mentoring program of your school" received quite high scores with (n=1123=yes and n=383=no) reflecting that the overall attachment scores of students in Albanian public high schools are over moderate to high levels. On the other hand, some other specific sub-items showed low scores of attachment factors in relation with specific topics, for example; the sub-item of Attitudes towards Peers, "I rarely feel lonely at school" received lower than moderate scores of attachment (n=11.3+20% of students responded with strongly agree and agree) showing that (n=25.8+26+16.9=68.7% of students responded negatively with strongly disagree, disagree and neutral) most of the students had problems in adapting themselves with their social surroundings.



**Figure 6.1 Do you enjoy mentoring program of your school (Survey item: 25)?**

As for the validation of SAS model through self-reported survey data following findings could be summarized: First, school attachment could be conceptualized and measured with sub-items of four components (i.e., SFS, SIL, ATP, and ATT excluding SPS; the component of Students` Perception of School as its items were recognized with students` feelings with school). Second, further elaboration of associations among the sub-items of five components could be done by researchers conducting attachment studies. A research like this, may obtain findings on predictive effects of school attachment in preventing future maladaptive behaviors and in fostering or enhancing adaptive behaviors for students which can help practitioners and school psychologists in determining the right diagnosis on future implications of attachment levels as well as preventing students from maladaptive behaviors like bad habits. Third and finally, further studies on Students` Perceptions of School in regard with Students` Feelings for School can provide other types of sub-items in regard with students` future interests that indicated relatively low internal consistency and not enough significant relations with students` outcomes. A further development of these sub-items under SPS and SFS

components in relation with external variables could find better associations with student outcomes.

## **CHAPTER VII**

### **7. CONCLUSION**

Empirical Tests of hypotheses (1, 2, and 3) resulted in positive evidences in validating the School Attachment Scale as model for applying to the context of public high schools in Albania as well as in obtaining data on their attachment scores. Empirical tests on Hypotheses 4 and 5 brought up findings opposing one another, in other words, while hypothesis 4 was not supported by empirical tests, the fifth one was supported as there was a significant difference between attachment scores of female and male students in favor of female students. If there is a strong correlation between the preliminary scale of the School Bonding Model and the School Attachment Scale, then that can be taken as evidence in accepting the scale commonly considered as school attachment indicating convergence between the two (Resnick et al., 1997). Furthermore, the significant correlations between the components and their sub-items of the preliminary scale with outcomes of students reflect the needed criterion for validity of the SAS model.

On the other hand, some of the findings and results were not hypothesized in the School Attachment Scale; however they were partially explained at the end of Chapter Five as “Results on Complementary Factors of School Attachment Scale”. According to these results; owing to the vastness of sample size (more than 1% of the whole), the results could be generalized for the whole target population (Public High School Students in Albania). In this regard, it was observed that school attachment scores of high schools

were over moderate and could even be considered as high indicating positive feedback received from students. Since frequency tables (Appendix D) demonstrate, the survey items that were meant for students' perception of school, like; 1) "school rules at my school are applied fairly", received moderately scored responses as in; 382+491 of students responded strongly agree and agree indicating 58% of positive responses, 2) "school rules and grading system are fair" received fairly high scores (425+516 of students) of strongly agree and agree, indicating 62.5% of the whole population responses, and 3) "do you enjoy mentoring program of your school" received quite high scores with (n=1123=yes and n=383=no) reflecting that the overall attachment scores of students in Albanian public high schools were over moderate to high levels. However, some other specific sub-items reflected low scores of attachment factors in relation with specific topics, for instance; the sub-item of Attitudes towards Peers, "I rarely feel lonely at school" received lower than moderate scores of attachment (n=11.3+20% of students responded with strongly agree and agree) showing that most of the students had problems in adapting themselves with their social surroundings. (n=25.8+26+16.9=68.7% of students responded negatively with strongly disagree, disagree and neutral respectively).

Validity and reliability of School Attachment Scale via stage 1 and stage 2 (See Appendix A and B) via self-reported questionnaires were optimized in accordance with following summarized findings: First of all, conceptualization and measurement of student life with various aspects of school environment in regard with four components of SAS was realized (i.e., SFS, SIL, ATP, and ATT) which also helped in reporting findings on Albanian adolescents' experiences and school life to better comprehend adaptive and maladaptive indications by using SAS model, furthermore chances for



obtaining data for school psychology and school attachment were realized; Second, correlations between SAS components and their sub-items were measured and reported in accordance with hypotheses and objectives of the present study; Third, as mentioned earlier in Chapter 2, students as recipients of the school and school psychology services were prioritized in the present research to supply valuable data and feedback for betterment of such services, moreover, governmental and non-governmental organizations in Albania may make their policies on education of youth accordingly; Fourth, a general viewpoint was outlined in comprehension of demographics of adolescents in regard with gender, grade, region, and socio-economic status was realized.

In addition, following further future implications can be reported through findings of the present study; first, further investigation of inter-relations between the sub-items of SAS components could be done by researchers conducting attachment studies in the future; second, in order to avoid maladaptive behaviors and enhance adaptive behaviors, prediction of student outcome may help in enhancement of interventions as well which can help practitioners, instructors, psychologists etc. in finding the right intervention procedures for students; and third, further research on Students` Perceptions of School in relation with Students` Feelings for School can supply other types of sub-items in regard with students` future implications that showed relatively low internal consistency and not sufficient significant relations with students` outcomes. In other words, the SAS scale used for the present study can be optimized through findings of this research.

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## APPENDICES

### 7.1. APPENDIX A (Stage 1 Survey Procedures)

#### Collecting High Quality Outcome Data, Part 1

#### Reviewing an Instrument: School Attachment Questionnaire

#### Special Note

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This skill building activity can be used to apply the concepts and principles covered in this module to real world situations.

#### Introduction

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This exercise allows learners to review a questionnaire designed to measure “school attachment” to identify questions that measure specific dimensions of school attachment and to critique instrument shortcomings. (An improved version of the school attachment questionnaire and a checklist for reviewing instruments is included on pages 9-10 for distribution to learners after they complete the exercise.)

Trainers can choose to handle the material as two separate exercises, one on identifying outcome dimensions and one on identifying issues/problems with the design, layout, and wording of the questionnaire. In that case, they may want to reformat the worksheet on page 4 as two separate worksheets.

Some learners may find fault with particular questions or other features of the School Attachment Questionnaire. The intent is to present learners with an instrument that, when used appropriately, can generate high-quality data. Learners should be reminded that even the best instruments have their limitations and are not going to be a perfect fit for all programs and circumstances.

#### Key Points – Definitions

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A **data source** is any person, group, or organization that has information on whether the intended outcome occurred.

A **method** is a process or set of steps one follows to systematically collect performance measurement data.

An **instrument** is a paper or electronic form used to record information from a data source.

#### Sticking Points and Common Issues

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Below are some issues that may come up as learners consider the material, along with notes on how to respond to these issues.

*How do I know if it is more appropriate to measure attitude, knowledge, behavior, or condition for my intervention?*

Review your theory of change (for more on theory of change, see module 2, “Designing Effective Action for Change”). Your theory of change drives the selection of appropriate outcomes to measure. The outcome you choose to measure should address the need/problem identified in your theory of change in a substantial and meaningful way. Your theory of change should also demonstrate a logical connection between the intervention and the outcome you choose to measure. If you find that you have more than one reasonable choice for outcome measurement, consider what would be the most important change that you can measure. As a general rule, changes in behavior or conditions are more important to measure than changes in attitudes or knowledge. It also helps to be mindful of your program’s resources, capacities, and limitations.

*What do I do if I cannot collect data from the preferred data source?*

If you cannot get data from your preferred data source, then consider all the alternatives. Start by making a list of anyone else who might have information relevant to the outcome. Consider what each alternative data source is likely to know (and not know), their strengths and weaknesses as a data source, and how they come to possess whatever information they have. For example, if you are not able to survey students to find out how they feel about school, you may be able to survey others who interact regularly with students to see what they know that’s relevant to your measurement question. For example, teachers may have information about how students feel about working in class and doing homework, as well as how they feel towards their classmates and the teacher. Parents know how students feel about going to school and doing homework. Finally, if you are using a national performance measure that stipulates reliance on a particular data source, then you should rely on that data source.

*When should the program administer the School Attachment Questionnaire?*

Some learners may have questions about the most appropriate timing to administer the School Attachment Questionnaire. In particular, it may not be entirely clear to some learners how early in the school year students should be given the pretest if there are concerns that students might not have formed opinions about their school experience. As a general rule, pretests should always be administered before program participation begins. Otherwise, pretest results may become contaminated from exposure to the intervention. In the scenario presented here, it is reasonable to assume that students are targeted for participation in the program because they are known to have a history of weak school attachment as demonstrated by a combination of absenteeism, disciplinary reports, and poor academic performance. The posttest would be administered at the end of the school year.

*Am I required to use the instruments that the Corporation has provided for national performance measures?*

If you are using national performance measures, then you are required to abide by the

Corporation’s performance measures instructions. You are not obligated to use the sample instruments available at <http://www.nationalserviceresources.org/npm/home>, but you are strongly encouraged to familiarize yourself with the sample instruments that are available for any national performance measure you select. These sample instruments can be modified as needed to fit your context, or you can use your own instruments. In either case, the instrument you use must capture the same key data elements as the sample instrument. The sample instruments are based on the requirements identified in the performance measurement instructions.

### **Exercise**

Instructions: Read the scenario below and follow the instructions for reviewing the instrument on pages 5-6. A blank copy of the exercise tables is also available on page 7 for learners to use with their own instruments.

### **Program Scenario and Background Information**

This intervention serves students in grades 6-8 who demonstrate weak attachment to school, including:

- Feelings about being in school
- Interest in learning
- Attitudes towards teachers
- Attitudes towards other students

Students participate in mentoring three times per week with sessions lasting at least one hour. Students participate in the program for 15 weeks. Each student is matched with a young adult mentor who helps them with homework and helps to mediate relationships between the student and others in the school through one-on-one meetings and group activities emphasizing cooperation. Mentors employ strategies to promote open and positive communication between mentored students, teachers, and other students.

For outcome measurement, the program administers a questionnaire to student participants at the beginning and end of the program (pre-post) to assess changes in students’ attitudes towards being in school and engaging in learning, in changes in their relationships with teachers and other students.

The *School Attachment Survey* uses measurement scales that have been tested and reported on in research publications focusing on school attachment and related topics. The survey includes questions addressing students’ feelings about being in school and engaging in the learning process, students’ feelings towards teachers and peers, and their feelings about how rules and discipline are implemented in their school.

### **Exercise**

Using the School Attachment Survey on pages 5-6 and the tables on the next page, identify which questions appear to address specific dimensions of the intervention. Match questions with outcome dimensions by writing the number of each question in one of the spaces in the right-hand column of the table. If a question does not appear to

fit into any of the identified dimensions then put the number for that question in the row for “questions not matching an identified outcome dimension.”

<b>Outcome Dimensions</b>	<b>Survey Questions (question numbers)</b>
Feelings about being in school	
Interest in learning	
Attitudes towards other students	
Attitudes towards teachers	
<i>Questions not matching an identified outcome dimension</i>	

**Identify any additional issues or problems with the design, layout, and wording of the questionnaire.**

<b>Issue or Problem</b>	<b>Question number(s) that exhibit the issue or problem; explanation</b>
Positioning of text or graphics	
Crowding of questions or response options	
Response scales	
Biased or “leading” questions	
Double-barreled questions	
Abstract questions (that can be made more concrete)	
Using fill-ins where checkboxes or a scale could be used	

Inappropriate question for pretest/posttest	
---	--

### School Attachment Questionnaire

The questionnaire contains various statements about your school life. Please put an “X” in the box that best reflects how you feel about each statement most of the time. Your responses are strictly confidential. Please answer all the questions as completely and honestly as you can. Thank you for your participation!

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I like school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Most mornings I look forward to going to school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am proud to be at this school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't feel safe in my school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can be myself at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doing well in school is important to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I care if my homework is done correctly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Most of my classes are important.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don't you agree that school is boring?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My grades matter to me a lot.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don't you believe it is important to work hard at school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My classmates often annoy me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get along well with the other students in school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am liked by my classmates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I rarely feel lonely at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have many friends at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't care what my teachers think of me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get along with most of my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Please continue to next page.

	Strongly Agree	Agree	Undecided	Slightly Disagree	Strongly Disagree
I want to be respected by my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I usually like my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My teachers care a lot about me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have lots of respect for my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School rules and the grading system are fair.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The rules at my school are applied fairly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What grade are you in?

☐ 6<sup>th</sup> grade ☐ 7<sup>th</sup> grade ☐ 8<sup>th</sup> grade

Do you enjoy the mentoring program?

Is there anything else you would like to tell us about your school life?

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Questionnaire Type: ☐ Pre ☐ Post

ID:

Reverse coded questions: 4, 10, 13, 18

**Use the tables below to review your own instrument. Add rows as needed.**

Name of instrument:

Outcome Dimensions (list)	Question ID Number(s)
<i>Questions not matching an identified outcome dimension</i>	

**Additional issues or problems with the design, layout, and wording of the instrument**

<b>Issue or Problem</b>	<b>Question number(s) that exhibit the issue or problem; explanation</b>
Positioning of text or graphics	
Crowding of questions or response options	
Response scales	
Biased or “leading” questions	
Double-barreled questions	
Abstract questions (that can be made more concrete)	
Using fill-ins where checkboxes or a scale could be used	
Inappropriate question for pretest/posttest	
Other Issues (specify)	

**Answer Key and Points to Consider**

Here are the answers to the exercise.

<b>Outcome Dimensions</b>	<b>Survey Questions (question numbers)</b>
Feelings about being in school	1-5
Interest in learning	6-11
Attitudes towards other students	12-16

Attitudes towards teachers	17-22
<i>Questions not matching an identified outcome dimension</i>	23-24

**Identify any additional issues or problems with the design, layout, and wording of the questionnaire.**

<b>Issue or Problem</b>	<b>Question number(s) that exhibit the issue or problem; explanation</b>
Positioning of text or graphics	Positioning the pencil graphic directly over the “strongly agree” column may inadvertently encourage students to mark this response more than others.
Crowding of questions or response options	Question 25: Response options are crowded. Questions 26 and 27: Not enough space for written response.
Response scales	The scale changes on the second page, where the label for the middle category changes from “neutral” to “undecided”.  The scale on the second page is also unbalanced. The lack of balance occurs by changing the response category from “disagree” to “slightly disagree.”
Biased or “leading” questions	Questions 9 and 11
Double-barreled questions	Question 23
Abstract questions (that can be made more concrete)	Question 26: Can be made more concrete, e.g., “Would you recommend the mentoring program to other students?”
Using fill-ins where checkboxes or a scale could be used	Question 26: Can use scaled response options, such as “yes,” “no,” and “no opinion.”
Inappropriate question for pretest/posttest	Question 26: Not well-designed for a pre-post questionnaire. The question posed by this question is premature for a pretest, and should be posed only on the posttest (and phrased in the past tense).

The questionnaire on the following two pages shows how the instrument looks when all these problems are cleaned up. Trainers can distribute this document to learners after they complete the exercise.

## 7.2. APPENDIX B (Stage 2 Survey Procedures)

### School Attachment Questionnaire

The questionnaire contains various statements about your school life. Please put an “X” in the box that best reflects how you feel about each statement most of the time. Your responses are strictly confidential. Please answer all the questions as completely and honestly as you can. Thank you for your participation!

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I like school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Most mornings I look forward to going to school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am proud to be at this school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't feel safe in my school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can be myself at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doing well in school is important to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I care if my homework is done correctly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Most of my classes are important.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School is boring.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My grades matter to me a lot.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I work hard at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My classmates often annoy me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get along well with the other students in school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am liked by my classmates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I rarely feel lonely at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have many friends at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't care what my teachers think of me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get along with most of my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to be respected by my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please continue to next page.

	Strongly	Agree	Neutral	Disagree	Strongly
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	Agree				Disagree
I usually like my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My teachers care a lot about me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have lots of respect for my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What grade are you in?

☐ 6<sup>th</sup> grade      ☐ 7<sup>th</sup> grade      ☐ 8<sup>th</sup> grade

Is there anything else you would like to tell us about your school life?

For official use only.

Questionnaire Type: ☐ Pre      ☐ Post

ID:

Reverse coded questions: 4, 10, 13, 18

### 7.3. APPENDIX C (21 Instruments and Item Pools)

Below are given 21 Instruments with their tables and detailed descriptions that were used for the scale development and item pools in designing of the methodology based on Regional Educational Laboratories (REL) as mentioned in Chapter III.

## Measuring Student Engagement in upper Elementary through High School: 21 Instruments

**Table 1**

### Developer and availability of instruments

instrument	developer	availability/website
<b>Student self-reports</b>		
4-h Study for positive youth development: School engagement Scale (4-h)	richard lerner, institute for applied research in youth development, Tufts university	available by contacting developer, at richard.lerner@tufts.edu; <a href="http://ase.tufts.edu/iaryd">http://ase.tufts.edu/iaryd</a>
attitudes Towards mathematics Survey (aTm)	raymond miller, university of oklahoma	available in miller et al. (1996)
consortium on chicago School research/academic engagement Scale (ccSr/aeS)	consortium on chicago School research (ccSr)	<a href="http://ccsr.uchicago.edu/surveymeasures2007">http://ccsr.uchicago.edu/surveymeasures2007</a>
engagement versus disaffection with learning (evsd), student report	ellen Skinner, portland State university	<a href="http://www.pdx.edu/psy/ellen-skinner-1">www.pdx.edu/psy/ellen-skinner-1</a>
high School Survey of Student engagement (hSSe)	center for evaluation and education policy, indiana university	<a href="http://www.indiana.edu/~ceep/hssse/">www.indiana.edu/~ceep/hssse/</a>
identification with School Questionnaire (iSQ)	Kristin (voelkl) finn, canisius college	available in voelkl (1996)
motivated Strategies for learning Questionnaire (mSIQ)	paul pintrich and elisabeth degroot, national center for research to improve postsecondary Teaching and learning, university of michigan	middle school version available in pintrich and degroot (1990)
motivation and engagement Scale (meS)	andrew martin, lifelong achievement group	<a href="http://www.lifelongachievement.com">www.lifelongachievement.com</a>
research assessment package for Schools (rapS), student report	institute for research and reform in education (irre)	available in rapS manual ( <a href="http://www.irre.org/publications/">www.irre.org/publications/</a> )
School engagement measure (Sem)-macarthur	phyllis blumenfeld and Jennifer fredricks, macarthur network for Successful pathways through middle childhood	available in fredricks et al. (2005) or by contacting co-developer, at <a href="mailto:jfred@conncoll.edu">jfred@conncoll.edu</a>
School engagement Scale/Questionnaire (SeQ)	Sanford dornbusch, Stanford university, and laurence Steinberg, Temple university	available by contacting co-developer, at <a href="mailto:lds@temple.edu">lds@temple.edu</a>
School Success profile (SSp)	gary bowen and Jackrickman, Jordan institute for families, university of north carolina at chapel hill	<a href="http://www.schoolsuccessprofile.org">www.schoolsuccessprofile.org</a>
Student engagement instrument (Sei)	James appleton, gwinnett county Schools, georgia, and Sandy christenson, university of minnesota	available in appleton et al. (2006) or by contacting developer, at <a href="mailto:Jim_appleton@gwinnett.k12.ga.us">Jim_appleton@gwinnett.k12.ga.us</a>
Student School engagement Survey (SSeS)	national center for School engagement (ncSe)	<a href="http://www.schoolengagement.org">www.schoolengagement.org</a>
<b>Teacher reports</b>		
engagement versus disaffection with learning (evsd), teacher report	ellen Skinner, portland State university	<a href="http://www.pdx.edu/psy/ellen-skinner-1">www.pdx.edu/psy/ellen-skinner-1</a>
reading engagement index (rei)	allan Wigfield and John guthrie, university of maryland	available in Wigfield et al. (2008) or by contacting developers, at <a href="mailto:aw44@umail.umd.edu">aw44@umail.umd.edu</a> or <a href="mailto:jg76@umail.umd.edu">jg76@umail.umd.edu</a>
research assessment package for Schools (rapS), teacher report	institute for research and reform in education (irre)	available in rapS manual ( <a href="http://www.irre.org/publications/">www.irre.org/publications/</a> )

## observational measures

behavioral observation of Students in Schools (boSS)

edward Shapiro, lehigh university

manual can be ordered through guilford press (Shapiro 2004)

## What are the Characteristics of Each Identified Measure?

**Table 2**

### Dimensions of engagement assessed by instruments

instrument	behavioral	emotional	cognitive
<b>Student self-reports</b>			
<b>multidimensional</b>			
4-h Study for positive youth development: School engagement Scale (4-h)	✓	✓	✓
high School Survey of Student engagement (hSSSe)	✓	✓	✓
motivation and engagement Scale (meS)	✓	✓	✓
School engagement measure (Sem)-macarthur	✓	✓	✓
Student School engagement Survey (SSeS)	✓	✓	✓
<b>bidimensional</b>			
attitudes Towards mathematics Survey (aTm)	✓		✓
education versus disaffection with learning (evsd), student report	✓	✓	
research assessment package for Schools (rapS), student report	✓	✓	
School Success profile (SSp)	✓	✓	
Student engagement instrument (Sei)		✓	✓
<b>unidimensional</b>			
consortium on chicago School research/academic engagement Scale (ccSr/aeS)	✓		
identification with School Questionnaire (iSQ)		✓	
motivated Strategies for learning Questionnaire (mSIQ)			✓
School engagement Scale/Questionnaire (SeQ)	✓		
<b>Teacher reports</b>			
engagement versus disaffection with learning (evsd), teacher report	✓	✓	
research assessment package for Schools (rapS), teacher report	✓	✓	
reading engagement index (rei)	✓	✓	✓
<b>observational measures</b>			
behavioral observation of Students in Schools (boSS)	✓		
classroom aims	✓	✓	
code for instructional Structure and Student academic response (mS-ciSSar)	✓		
instructional practices inventory (ipi)			✓

Source: Authors' analysis of instrument documentation.

(Students' beliefs and self-appraisals of their learning goals). (Table C1 in appendix C provides additional information on the student self-report measures, including the subscale names used and sample item wording. Table C2 shows the subscales, categorized by the three dimensions of engagement, used across student self-reports.)

*Teacher report measures.* The three teacher report measures involve teacher ratings of individual student engagement. The EvsD (a 20-item instrument) comprises four subscale scores reflecting both

positive and negative aspects of behavioral and emotional engagement. The RAPS teacher report includes three items that assess both behavioral and emotional engagement, which are summed to yield a general measure of student engagement. The REI produces one total score from eight items intended to cover behavioral, emotional (motivational), and cognitive aspects of reading engagement.

## What are the Characteristics of Each Identified Measure?

**Table 3**

### Instruments with sample items by school or class focus

		Setting	
		in school	in class
Student self-reports			
4-h Study for positive youth development: School engagement Scale (4-h)	i want to learn as much as i can in school.		
academic engagement Scale (ccSr/aeS) (administered in language arts classes in chicago)	i work hard to do my best in this class.		✓
attitudes Towards mathematics Survey (aTm)	if i have trouble understanding a problem, i go over it again until i understand it.		✓
engagement versus disaffection with learning (evsd), student report <sup>a</sup>	When i'm in class, i listen very carefully.		✓
high School Survey of Student engagement (hSSSe)	how do you feel about the following statements related to your high school?	✓	
identification with School Questionnaire (iSQ)	School is one of my favorite places to be.	✓	
motivated Strategies for learning Questionnaire (mSIQ)	i outline the chapters in my book to help me study.		✓
motivation and engagement Scale (meS)	i've given up being interested in school.	✓	
research assessment package for Schools (rapS), student report <sup>a</sup>	i work hard on my schoolwork.	✓	
School engagement measure (Sem)-macarthur	i am interested in the work at school.	✓	
School engagement Scale/Questionnaire (SeQ)	how often does your mind wander in each of these classes?		✓
School Success profile (SSp)	i find school fun and exciting.	✓	
Student engagement instrument (Sei)	learning is fun because i get better at something.	✓	
Student School engagement Survey (SSeS)	i feel excited by the work in school.	✓	
Teacher reports			
engagement versus disaffection with learning (evsd), teacher report <sup>a</sup>	in my class, this student does more than required.		✓
reading engagement index (rei)	This student works hard in reading.		✓
research assessment package for Schools (rapS), teacher report <sup>a</sup>	in my class, this student seems tuned in.		✓
observational measures			
behavioral observation of Students in Schools (boSS)	observations are coded using five categories (active engagement, passive engagement, off-task motor, off-task verbal, and off-task passive).		✓ (focus on individual student)
classroom aimS	observers respond to four items about engagement levels in the class (for example, at least 80 percent of students are consistently on task and highly engaged in class activities).		✓ (classroom focus)



code for instructional Structure and Student academic response-mainstream version (mS-ciSSar)	observations of student behavior are coded using three categories (positive engagement behaviors, neutral engagement behaviors, and inappropriate behaviors).	✓ (focus on individual student)
instructional practices inventory (ipi)	observations of classrooms are coded using a six-level rubric of extent of engaged student learning.	✓ (classroom focus)

a. Includes separate student self-report and teacher report instruments.

Source: Authors' analysis of instrument documentation.

## Measuring Student Engagement in upper Elementary through High School: 21 Instruments

**Table 4**  
**Purposes and uses of instruments**

instrument	research on motivation and cognition	research on dropping out	evaluation of interventions	monitoring at the teacher, school, or district level	diagnosis and monitoring at the student level	needs assessment
Student self-reports						
4-h Study for positive youth development: School engagement (4-h)			✓ (4-h participation)			✓
academic engagement Scale (ccSr/aeS)				✓		
attitudes Towards mathematics Survey (aTm)	✓					
engagement versus disaffection with learning (evsd), student report <sup>a</sup>	✓					
high School Survey of Student engagement (hSSSe)				✓		
identification with School Questionnaire (ISQ)		✓	✓ (class size; magnet schools)			
motivated Strategies for learning Questionnaire (mSIQ)	✓		✓ (instructional strategies)			
motivation and engagement Scale (meS)	✓		✓ (youth enrichment program)	✓	✓	
researchassessmentpackage for Schools (rapS), student report <sup>a</sup>	✓		✓ (school reform)	✓	✓	
School engagement measure (Sem)-macarthur	✓					
School engagement Scale/ Questionnaire (SeQ)	✓		✓ (instructional strategies)			

School Success profile (SSp)		✓ (social supports)	✓		✓
Student engagement instrument (Sei)	✓	✓ (dropout prevention)	✓	✓	
Student School engagement Survey (SSeS)		✓ (truancy reduction)			
Teacher reports					
engagement versus disaffection with learning (evsd), teacher report <sup>a</sup>	✓				

## What are the Characteristics of Each Identified Measure?

**Table 5**

### Reliability and validity information reported

	internal consistency (cronbach's alpha)	reliability	validity
Student self-reports and teacher reports			
4-h Study for positive youth development: School engagement Scale (4-h)	.63–.90	—	— ✓
consortium on chicago School research/academic engagement Scale (ccSr/aeS)	.65–.68	—	— ✓ ✓
attitudes Towards mathematics Survey (aTm)	.63–.81	—	— ✓ ✓
engagement versus disaffection with learning (evsd), student and teacher reports	.61–.85 student report, .81–.87 teacher	.53–.68 student report, .65–.82 teacher	
high School Survey of Student engagement (hSSSe)	—	—	—
identification with School Questionnaire (iSQ)	.54–.84	—	— ✓ ✓
motivated Strategies for learning Questionnaire (mSIQ)	.63–.88	—	— ✓ ✓
motivation and engagement Scale (meS)	.70–.87	.61–.81	— ✓ ✓
reading engagement index (rei)	.89–.93	—	— ✓ ✓
research assessment package for Schools (rapS), student and teacher reports	.68–.77 student report, .87 teacher		
School engagement measure (Sem)-macarthur	.55–.86	—	— ✓ ✓
School engagement Scale/Questionnaire (SeQ)	.74–.86	—	— ✓ ✓
School Success profile (SSp)	.66–.82	—	— ✓ ✓
Student engagement instrument (Sei)	.72–.92	—	— ✓ ✓

Student School engagement Survey (SSES)	.49–.92	—	—	✓	✓
observational measures					
behavioral observation of Students in Schools (boSS)	—	—	.90–1.00	✓	✓
classroom aimS	.62–.79	—	.58–.65	✓	—
code for instructional Structure and Student academic response—mainstream version (mS–ciSSar)	—	—	.80–.97	—	✓
instructional practices inventory (ipi)	—	—	.80–.90	✓	✓

*Note:* Ranges within cells indicate results for different subscales, age groups, or results by different researchers. Checkmarks indicate that information on validity is available, not that measures are necessarily valid.

*Source:* Authors' analysis of instrument documentation.

## 7.4. APPENDIX D (Statistics of Reliability Test)

### Reliability Statistics

Cronbach's Alpha	N of Items
.737	29

### Case Processing Summary

	N	%
Cases Valid	1504	99.9
Excluded <sup>a</sup>	2	.1
Total	1506	100.0

a. Listwise deletion based on all variables in the procedure.

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
104.08	129.489	11.379	29

### Item Statistics

	Mean	Std. Deviation	N
I Like School	4.02	.986	1504
Most mornings I look forward to going to school	3.57	1.147	1504
I am proud to be at this school	4.03	1.018	1504
I don't feel safe in my school	3.83	1.121	1504
I can be myself at school	4.00	.997	1504

Doing well in school is important to me	4.41	.797	1504
I care if my homework is done correctly	4.19	.970	1504
Most of my classes are important	4.09	1.020	1504
Don't you agree that school is boring?	3.34	1.157	1504
My grades matter to me a lot	4.39	.890	1504
Don't you believe it is important to work hard at school?	4.02	1.140	1504
My classmates often annoy me	3.63	1.199	1504
I get along well with the other students in school	3.97	.951	1504
I am liked by my classmates	3.70	.941	1504
I rarely feel lonely at school	2.65	1.350	1504
I have many friends at school	3.92	1.099	1504
I don't care what my teachers think of me	3.54	1.352	1504
I get along with most of my teachers	4.05	.954	1504
I want to be respected by my teachers	4.50	.753	1504
I usually like my teachers	3.95	.970	1504
My teachers care a lot about me	3.44	1.080	1504
I have lots of respect for my teachers	4.26	.924	1504
School rules and the grading system are fair	3.69	1.161	1504
The rules at my school are applied fairly	3.61	1.156	1504
Do you enjoy the mentoring program of your school?	1.25	.436	1504
What grade are you in?	2.00	.830	1504
What is your gender?	1.55	.498	1504

What was your total household income before taxes during the past 12 months?	2.96	2.538	1504
Which city\prefecture are you from?	3.50	1.708	1504

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I Like School	100.06	118.274	.477	.718
Most mornings I look forward to going to school	100.51	118.930	.370	.723
I am proud to be at this school	100.05	117.205	.510	.716
I don't feel safe in my school	100.24	122.309	.239	.731
I can be myself at school	100.07	119.865	.395	.723
Doing well in school is important to me	99.66	121.301	.430	.723
I care if my homework is done correctly	99.89	119.098	.446	.720
Most of my classes are important	99.98	118.231	.461	.719
Don't you agree that school is boring?	100.74	120.695	.293	.728
My grades matter to me a lot	99.69	120.250	.433	.722
Don't you believe it is important to work hard at school?	100.05	121.492	.267	.730
My classmates often annoy me	100.45	125.081	.111	.740
I get along well with the other students in school	100.11	120.588	.383	.724
I am liked by my classmates	100.37	121.803	.327	.727
I rarely feel lonely at school	101.42	128.575	-.030	.751
I have many friends at school	100.16	120.972	.302	.727
I don't care what my teachers think of me	100.53	121.673	.201	.735

I get along with most of my teachers	100.02	119.542	.433	.721
I want to be respected by my teachers	99.57	122.261	.400	.725
I usually like my teachers	100.13	117.224	.539	.715
My teachers care a lot about me	100.63	116.710	.498	.716
I have lots of respect for my teachers	99.81	118.370	.511	.718
School rules and the grading system are fair	100.39	116.092	.482	.716
The rules at my school are applied fairly	100.47	116.743	.457	.717
Do you enjoy the mentoring program of your school?	102.82	133.373	-.405	.748
What grade are you in?	102.07	130.290	-.079	.745
What is your gender?	102.52	127.841	.124	.736
What was your total household income before taxes during the past 12 months?	101.12	129.063	-.104	.789
Which city/prefecture are you from?	100.58	129.661	-.079	.762

## 7.5. APPENDIX E (Frequency Tables)

### Frequency Tables for each item of School Attachment Scale

#### I Like School

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	59	3.9	3.9	3.9
Disagree	45	3.0	3.0	6.9
Neutral	229	15.2	15.2	22.1
Agree	649	43.1	43.1	65.2
Strongly Agree	524	34.8	34.8	100.0
Total	1506	100.0	100.0	

**Most mornings I look forward to going to school**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	95	6.3	6.3	6.3
Disagree	187	12.4	12.4	18.7
Neutral	323	21.4	21.4	40.2
Agree	568	37.7	37.7	77.9
Strongly Agree	333	22.1	22.1	100.0
Total	1506	100.0	100.0	

**I am proud to be at this school**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	51	3.4	3.4	3.4
Disagree	71	4.7	4.7	8.1
Neutral	240	15.9	15.9	24.1
Agree	567	37.6	37.7	61.7
Strongly Agree	576	38.2	38.3	100.0
Total	1505	99.9	100.0	
Missing 999	1	.1		
Total	1506	100.0		

**I don't feel safe in my school**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	83	5.5	5.5	5.5
Agree	120	8.0	8.0	13.5
Neutral	234	15.5	15.5	29.0
Disagree	597	39.6	39.6	68.7
Strongly Disagree	472	31.3	31.3	100.0
Total	1506	100.0	100.0	

**I can be myself at school**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	44	2.9	2.9	2.9
Disagree	85	5.6	5.6	8.6
Neutral	226	15.0	15.0	23.6
Agree	617	41.0	41.0	64.5
Strongly Agree	534	35.5	35.5	100.0
Total	1506	100.0	100.0	

**Doing well in school is important to me**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	14	.9	.9	.9
Disagree	34	2.3	2.3	3.2
Neutral	109	7.2	7.2	10.4
Agree	507	33.7	33.7	44.1
Strongly Agree	842	55.9	55.9	100.0
Total	1506	100.0	100.0	

**I care if my homework is done correctly**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	42	2.8	2.8	2.8
Disagree	59	3.9	3.9	6.7
Neutral	163	10.8	10.8	17.5
Agree	550	36.5	36.5	54.1
Strongly Agree	692	45.9	45.9	100.0
Total	1506	100.0	100.0	



**Most of my classes are important**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	50	3.3	3.3	3.3
Disagree	88	5.8	5.8	9.2
Neutral	155	10.3	10.3	19.5
Agree	592	39.3	39.3	58.8
Strongly Agree	621	41.2	41.2	100.0
Total	1506	100.0	100.0	

**Don't you agree that school is boring?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	139	9.2	9.2	9.2
Agree	185	12.3	12.3	21.5
Neutral	445	29.5	29.5	51.1
Disagree	500	33.2	33.2	84.3
Strongly Disagree	237	15.7	15.7	100.0
Total	1506	100.0	100.0	

**My grades matter to me a lot**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	31	2.1	2.1	2.1
Disagree	38	2.5	2.5	4.6
Neutral	117	7.8	7.8	12.4
Agree	452	30.0	30.0	42.4
Strongly Agree	868	57.6	57.6	100.0
Total	1506	100.0	100.0	

**Don't you believe it is important to work hard at school?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	84	5.6	5.6	5.6
Disagree	97	6.4	6.4	12.0
Neutral	164	10.9	10.9	22.9
Agree	514	34.1	34.1	57.0
Strongly Agree	647	43.0	43.0	100.0
Total	1506	100.0	100.0	

**My classmates often annoy me**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	101	6.7	6.7	6.7
Agree	190	12.6	12.6	19.3
Neutral	296	19.7	19.7	39.0
Disagree	507	33.7	33.7	72.6
Strongly Disagree	412	27.4	27.4	100.0
Total	1506	100.0	100.0	

**I get along well with the other students in school**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	42	2.8	2.8	2.8
Disagree	71	4.7	4.7	7.5
Neutral	238	15.8	15.8	23.3
Agree	694	46.1	46.1	69.4
Strongly Agree	461	30.6	30.6	100.0
Total	1506	100.0	100.0	

**I am liked by my classmates**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	50	3.3	3.3	3.3
Disagree	67	4.4	4.4	7.8
Neutral	456	30.3	30.3	38.0
Agree	642	42.6	42.6	80.7
Strongly Agree	291	19.3	19.3	100.0
Total	1506	100.0	100.0	

**I rarely feel lonely at school**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	388	25.8	25.8	25.8
Disagree	391	26.0	26.0	51.8
Neutral	255	16.9	16.9	68.7
Agree	301	20.0	20.0	88.7
Strongly Agree	170	11.3	11.3	100.0
Total	1505	99.9	100.0	
Missing System	1	.1		
Total	1506	100.0		

**I have many friends at school**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	77	5.1	5.1	5.1
Disagree	91	6.0	6.0	11.2
Neutral	243	16.1	16.1	27.3
Agree	567	37.6	37.6	64.9
Strongly Agree	528	35.1	35.1	100.0
Total	1506	100.0	100.0	

**I don't care what my teachers think of me**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Agree	200	13.3	13.3	13.3
Agree	141	9.4	9.4	22.6
Neutral	255	16.9	16.9	39.6
Disagree	462	30.7	30.7	70.3
Strongly Disagree	448	29.7	29.7	100.0
Total	1506	100.0	100.0	

**I get along with most of my teachers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	42	2.8	2.8	2.8
Disagree	70	4.6	4.6	7.4
Neutral	187	12.4	12.4	19.9
Agree	675	44.8	44.8	64.7
Strongly Agree	532	35.3	35.3	100.0
Total	1506	100.0	100.0	

**I want to be respected by my teachers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	16	1.1	1.1	1.1
Disagree	18	1.2	1.2	2.3
Neutral	88	5.8	5.8	8.1
Agree	457	30.3	30.3	38.4
Strongly Agree	927	61.6	61.6	100.0
Total	1506	100.0	100.0	

**I usually like my teachers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	40	2.7	2.7	2.7
Disagree	75	5.0	5.0	7.6
Neutral	284	18.9	18.9	26.5
Agree	631	41.9	41.9	68.4
Strongly Agree	476	31.6	31.6	100.0
Total	1506	100.0	100.0	

**My teachers care a lot about me**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	89	5.9	5.9	5.9
Disagree	159	10.6	10.6	16.5
Neutral	517	34.3	34.3	50.8
Agree	476	31.6	31.6	82.4
Strongly Agree	265	17.6	17.6	100.0
Total	1506	100.0	100.0	

**I have lots of respect for my teachers**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	40	2.7	2.7	2.7
Disagree	34	2.3	2.3	4.9
Neutral	154	10.2	10.2	15.1
Agree	541	35.9	35.9	51.1
Strongly Agree	737	48.9	48.9	100.0
Total	1506	100.0	100.0	

**School rules and the grading system are fair**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	98	6.5	6.5	6.5
Disagree	132	8.8	8.8	15.3
Neutral	335	22.2	22.2	37.5
Agree	516	34.3	34.3	71.8
Strongly Agree	425	28.2	28.2	100.0
Total	1506	100.0	100.0	

**The rules at my school are applied fairly**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	101	6.7	6.7	6.7
Disagree	140	9.3	9.3	16.0
Neutral	392	26.0	26.0	42.0
Agree	491	32.6	32.6	74.6
Strongly Agree	382	25.4	25.4	100.0
Total	1506	100.0	100.0	

**Do you enjoy the mentoring program of your school?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	1123	74.6	74.6	74.6
No	383	25.4	25.4	100.0
Total	1506	100.0	100.0	

**What grade are you in?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 10	517	34.3	34.3	34.3
11	469	31.1	31.1	65.5
12	520	34.5	34.5	100.0

Total	1506	100.0	100.0
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**What is your gender?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	676	44.9	44.9	44.9
Female	830	55.1	55.1	100.0
Total	1506	100.0	100.0	

**What was your total household income before taxes during the past 12 months?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 5,000 €	662	44.0	44.0	44.0
10,000 € to 14,999 €	302	20.1	20.1	64.0
15,000 € to 19,999 €	106	7.0	7.0	71.0
20,000 € to 24,999 €	74	4.9	4.9	76.0
25,000 € to 29,999 €	64	4.2	4.2	80.2
30,000 € to 39,999 €	42	2.8	2.8	83.0
40,000 € to 45,000 €	38	2.5	2.5	85.5
More than 45,000 €	218	14.5	14.5	100.0
Total	1506	100.0	100.0	

**Which city\prefecture are you from?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Berat	251	16.7	16.7	16.7
Fier	251	16.7	16.7	33.3

Durres	251	16.7	16.7	50.0
Shkoder	251	16.7	16.7	66.7
Tirana	251	16.7	16.7	83.3
Elbasan	251	16.7	16.7	100.0
Total	1506	100.0	100.0	

## **7.6. APPENDIX F (Consent Papers From Ministry of Education and Sports)**

### **7.6.1. Consent Paper (English)**

**14.10.2015**

**TO THE MINISTRY OF EDUCATION AND SPORTS**

**TIRANA**

I, the undersigned, am currently an ongoing PhD student at **European University of Tirana** in the faculty of **Social Sciences**. As part of my scientific research and thesis dissertation I would like to conduct a field work. Thus, I am writing to ask your approval in implementing a questionnaire to the high schools in following cities; Tirana, Fier, Berat, Durres, Shkoder, and Elbasan.

Attached to my request you may find a sample of the questionnaire and the certification from European University of Tirana as supplementary documents.

**Address:**

**Mehmet Aslan**

Rruga Jordan Misja, Kompleksi Usluga,

Shkolla e Larte Hena e Plote Beder,

Tirana, Albania.



### **7.6.2. Consent Paper (Albanian)**

**14.10.2015**

#### **MINISTRISË SË EDUKIMIT DHE SPORTEVE**

**TIRANË**

Unë, i nënshkruari i kësaj kërkesë, jam aktualisht duke ndjekur studimet e doktoratës pranë **Universitetit Europian të Tiranës**, në fakultetin e **Shkencave Sociale**. Si pjesë e studimit tim shkencor dhe tezës së disertacionit, unë do të doja të bëja një kërkim në fushën time të studimit. Prandaj, po ju shkruaj për të kërkuar aprovimin tuaj për të zhvilluar një pyetësor në shkollat e mesme në qytetet si: Tiranë, Fier, Berat, Durrës, Shkodër dhe Elbasan.

Bashkëngjitur me kërkesën time, ju do të gjeni edhe një model të pyetësorit dhe miratimit nga Universiteti Europian i Tiranës si edhe dokumente plotësuese.

**Adresa:**

**Mehmet Aslan**

Rruga Jordan Misja, Kompleksi Usluga,

Shkolla e Lartë Hëna e Plote Bedër,

Tirana, Albania.

**Mobile:** 067 302 59 22