THE IMPACT OF GROWTH MINDSET AND RESILIENCE ON SCHOOL ENGAGEMENT AND PSYCHOLOGICAL WELLBEING AMONG ADOLESCENTS

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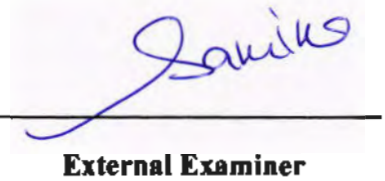

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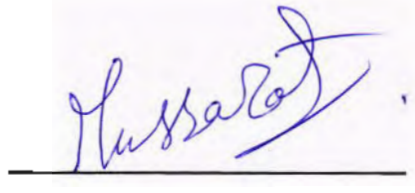

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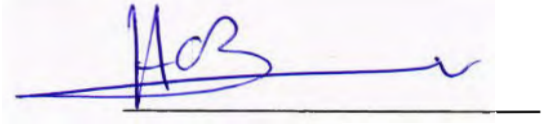

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ABSTRACT

The present study was conducted to investigate the impact of growth mindset and resilience on school engagement and psychological well being among adolescents. The main objective of the current study was to find out the relationship between growth mindset and resilience. It also aimed at finding out the effect of growth mindset on school engagement and psychological well being. It also finds out the mediating role of resilience among the study variables. The study was conducted with the sample of 300 adolescent students (male - 150) (females=150) on the basis of age, gender, education, and family income. The results of the study were that growth mindset predicted both school engagement and psychological wellbeing. The mediating role of resilience was investigated through PROCESS Macro of Hayes (2013). Two models were drawn to check the path analysis of mediator on the study variables which were consistent with the hypothesis. The results showed that resilience acted as a significant mediator between growth mindset, school engagement and psychological wellbeing among adolescents. Gender difference was also studied among school engagement and psychological wellbeing of adolescents. The results showed significant difference among male and female adolescents on school engagement and psychological wellbeing. Females showed greater school engagement and psychological wellbeing than males. The relationship between socioeconomic status and growth mindset was also studied. Socioeconomic status was studies through family income. The results revealed a non significant effect of family income on growth mindset of adolescents.

Chapter I

INTRODUCTION

Schools serve as one of the most important source of development in people's lives and they can lead to successful adaptation through the utilization of people's competencies and abilities (Hamilton & Hamilton, 2009). Schools also provide relatively stable and accessible sites which locate the interventions that promote wellbeing (Bond, Butler, Thomas, Carlin, Glover, Bowes, & Patton, 2007). Therefore, schools provide a medium to promote the wellbeing of young people (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009).

Schools provide a place in which students academic and behavioral aspects are reinforced along with an increase in cognitive engagement. This is carried out with the help of classroom management of individual behavior and other curricular activities. Nonetheless, student's psychological engagement also needs to be enhanced in schools, which includes their involvement in activities, building relationships, increasing school spirit, and safety in order to gain more positive outcomes. As schools provide a place that has a restricted access to family environment and one's activities, alternative factors can be included in the school environment that can help increase engagement of students (Christenson, Sinclair, Lehr, & Hurley, 2000).

Theories of social learning emphasize that most of the influence on children is in the environment provided at home. That may include different skills related to family management, regarding discipline and other strategies that have a crucial role in development of youth (Patterson, Reid, & Dishion, 1992). Transactional-ecological theory illustrates a different view from the social learning theorists. They enhance that from birth the environmental influences interact with the genetic predisposition of a child that results in the desired behaviors and these behaviors are also reinforced through these interactions (Sameroff, 2000). Environmental

influences have a major role in the child's development. Such influences may include a child interaction with parents, peers and teachers, these environmental interactions enhance the developmental pathways (Patterson, Reid, & Dishion, 1992), but these pathways have no strict rules and can be changed through the turning points in a child's developmental process. These turning points provide a means for a child through which one can alter the negative path of development to a positive one (Sampson & Laub, 1993). These theories provide us an understanding, that although family environment and individual factors have a powerful influence on the development of youth, it is important to recognize that other environmental factors such as schools may also provide a turning point in a child's life, they may be able to achieve positive outcomes despite other threats and risks in the environment.

In schools the promotive factors or buffers for development of youth are their relationship with teachers and peers, along with the opportunities for children to take part in different activities that help them recognize and enhance their abilities. Two types of factors illustrate a youth's life; risk and protective factor. A risk factor in youth's life results in an increase of any harmful effect. On the contrary, a protecting factor has an effect on decreasing the harmful outcome (Kirby & Fraser, 1997). A "buffer" is a factor that is present during a risk and is linked to an outcome that is positive (Gore & Eckenrode, 1994), whereas positive outcomes are developed through different benefits and resources and result in diminishing the developmental outcomes that are negative in spite of risks (Sameroff & Fiese, 2000).

Positive Education. Positive Education is a paradigm that is developed recently, consists of the application of Positive Psychology in reference to contexts of education (Green, Oades, & Robinson, 2011). Seligman (2011) defines Positive Education as an education that is traditional and that focuses on skill development in academics, illustrated by an approach that enhance

wellbeing and may lead to positive mental health. Positive Education can be illustrated as a discipline of positive psychology that provides finest teaching that supports and motivate individuals so that they may flourish within their communities.

Within the school community the main purpose of Positive Education is to enhance good mental health. Peterson (2006) illustrated the idea that schools could become positive institutions, not only by placing great emphasis on the educational performance but also on their wellbeing and character. Positive education enhances student's skills and encourages them to build their character strength, resilience, forming relations that are positive, optimism, and other aspects that add to endorse flourishing or positive mental health through the practice of these skills.

School Engagement. School engagement is defined as "a positive, fulfilling and study-related state of mind characterized by vigor, dedication, and absorption" (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002). Whereas, vigor is described as "a high level of energy and mental resilience when studying; dedication refers to a sense of significance, enthusiasm, inspiration, pride and challenge; absorption means concentration and happiness when performing one's studying tasks" (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002). School engagement illustrate students' thoughts, behaviors, and feelings about what they experience in school and is important as it relates to academic outcomes such as high school completion and achievement.

In order for students to gain educational success it is important for them to actively engage in school (Finn & Rock, 1997). For the youth to acquire knowledge and skills they must be actively engaged in school for the purpose of successful transition from primary level to post

secondary career and programs (Wang and Eccles, 2012). School engagement can also be considered as a state that a school context can shape accordingly. Particularly at the secondary level, in which the engagement of students is aimed at understanding the student boredom problems, high dropout rates and achievement levels (Marks, 2000).

Adolescents is a crucial period in an individual's life in which they have to pass through the storms and stress as they make the difficult transition of both physical and psychological development. The experience the emotional changes and challenges in order to adapt to the new roles and challenges in life referred to as psycho-social development. According to Erickson (1968), there are eight stages of human psycho- social development. According to him social interaction and many other important factors have an ability to overcome challenges and perform effectively in life. There are two important stages of development during the school period that are: industry versus inferiority and identity versus role- confusion. In industry versus inferiority the students learn from their success and value that success while they also encounter the bitterness of failure. Identity versus role confusion is also understood as the individuals try to recognize themselves and portray themselves according to their idols or role models. It is during these stages that the adolescent students need the most support and understanding from their surroundings. At this period the crucial role is of teachers to provide desired support and guidance. Teachers should be able to make the students feel welcomed and engage them in school activities (Reyes, Brackett, Rivers, &White 2012). According to Fletcher (2005) this engagement is enhanced by motivating the students to be actively involved in activities, in planning, decision making and evaluation. For students to get occupied in daily activities in the educational setting their decisions and opinions are appreciated and welcomed. Studies have also shown that independent school environment will make students more engaged in school and

classroom works (Kadha, 2009). In schools the relationship between students, peers and adults also serve as a critical factor.

Many researchers have found that adolescent's is a critical period of development. During the late childhood, there are fewer problems that they face. They feel good about themselves, are well behaved and perform well at school. While in contrast to early adolescents are in a state that results in a major increase in disruptive behaviors and a reduced grades, self esteem along with school engagement (Eccles, 2004; Harter, 1998). According to Eccles, Midgley, Wigfield, & Reuman (1993), the junior high school consists of the environment that is challenging for adolescents, it is more competitive, and assesses their abilities. It is the stage when children need more support but they have a lack of control on their social environment, reduced decision making, and social comparison is at its peak which results in school disengagement (Eccles, Wigfield, Midgley, & Reuman, 1993). For many students, these challenges result in the declining grades and becomes difficult for them to recover from the setbacks.

Social Support. Social support is defined as "an individual's perceptions of general support or specific supportive behaviors from people in their social network which enhances functioning and/or may buffer them from adverse outcomes" (Demaray & Malecki, 2002). Researchers have analyzed to understand what makes children's social support system and came to a conclusion that parents, teachers and age group provide as a network of social support for young children and adolescents (Demaray & Malecki, 2002). Social support system has been identified as an important factor for child's academic achievement (Malecki, & Demaray, 2006). Researchers have identified that students whose parents, teachers and peers provide a higher social support system are academically better than those who are less supported (Malecki &

Demaray, 2006). The association of academic achievement and social support varies, depending on relationship type and the age of the child receiving the support (Rueger, Malecki, & Demaray, 2010). However, no matter the age or type of relationship, students who perceive higher levels of social support are better academically than those who are less supported (Wentzel, 2010).

Another important factor is peer emotional support for engagement of students in school. Adolescent's emotional support plays a crucial part, at that stage adolescents have a greater need of being related to other peers. Several studies have demonstrated that adolescents are both behaviorally and emotionally engaged in schools only if they have developed positive interactions with other peers (Wentzel, 2003). Adolescents become engaged in such situation as their need for relatedness is fulfilled by feeling supported by their peer groups due to which a sense of satisfaction is developed at school.

As the students move towards middle level, schools are perceived as being more inclined to be in charge of teachers and a comparison based on social level in evaluating ability of students (Urdan & Midgley, 2003). While the characteristics of schools that hinder the motivation and school engagement of both genders, other studies further relate that girls do not act in response of teaching practices which lead towards competition (Eccles, 2007). Other studies have also shown that teachers and peers in school provide different level of support to both boys and girls and this support may have different level of influence on both gender related to academic achievement and adjustment in school (Rueger, Malecki, & Demaray, 2010).

A study conducted by Patrick, Ryan, & Kaplan in (2007) in which they examined the relationships amongst social environment of classroom, school engagement, and accomplishment of early adolescent's students in 5th grade. Results showed that support of teachers in included in social environment of classroom, support of students, and communication was positively

associated with behavioral and cognitive engagement of students at school. They also revealed that greater school engagement of the 5th grade students resulted in greater achievement among early adolescents.

School Engagement and Teacher-Child Relationship. It is indicated by researchers that those children who had an unconstructive relationships with their teachers were more expected to have more problems related to academic achievement and school engagement (Baker 2006; Birch and Ladd 1997; Hamre and Pianta 2001; Stipek and Miles 2008). In a study by Ladd and Burgess (2001), they found that if conflicts existed in the teacher-child relationship then those students were less likely to be engaged in classroom environment, didn't enjoy school, and had a greater risk of poor academic performance.

Another study conducted by Baker (2006) in which he found that if the teacher-child conflicts were greater than they were associated with lower grades and test scores. There is evidence that if children face early relationship problems then that has a lasting effect throughout their life. in a study by Hamre and Pianta (2001) showed that those students in kindergarten who had more conflicts with their teachers resulted in lesser academic success and greater behavioral problems, that include discipline problems and poor habits of work through eighth grade.

The quality of interaction among student and teacher influence external to the child contributes to engagement (Rimm-Kaufman, Curby, Grimm, Nathanson, & Brock, 2009). The relationship quality of student and teacher is viewed in different ways such as teacher can give effective, organizational and teaching support (Pianta & Hamre, 2009). Teachers offer emotional support by showing sensitivity and warmth to the needs and likes of the students, managerial support by creating productive classroom environments with clear prospect and teaching support by providing feedback, chances of logical thinking and enhancing vocabulary. Some studies on

student and teacher relations differentiate among the importance of emotional, organizational, and instructional supports for student engagement. The students who reported to be more engaged in school and had reported greater test results and attendance were those who viewed the environment of their classrooms as more organized and concerned (Klem & Connell, 2004). However, the presence of positive student- teacher interactions may also be influenced by student qualities and previous experiences. Due to the influence of student attributes and experiences the student- teacher interaction may be of more importance for some students but not for others (Malecki & Demaray, 2006).

Research has investigated that engagement of students and academic success is influenced by the social, instructional, and managerial environment of schools (Ryan and Patrick 2001). Self-systems and motivational theories (Connell 1990) have argued that the children's achievement and learning behavior is influenced partially by the need of the child to be socially connected. It is also indicated in research that the children who participate in school and are more engaged are those who have a sense of belongingness and social support (Wentzel 1997). Children may not feel connected or take part in activities in class if they encounter a relationship with teachers, that is negative (Connell 1990). Prior research has also indicated that children who have a relationship with teachers i.e. negative are more probable to have problems related to engagement in school and academic achievement than students who have positive relations with teachers. (Stipek and Miles, 2008). Hamre and Pianta (2001) investigated that those students who had lesser academic achievement and greater discipline and behavioral problems were those who had more disagreement with their teachers in kindergarten. Furrer and Skinner (2003) have found that the student- teacher relatedness was an important factor in the maintenance of academic engagement of student from 3rd to 6th grade. Furthermore, researchers have found that both

student- teacher report of engagement mediated the relatedness relationship and academic achievement greater than the student's apparent academic control.

Academic performance and engagement has also been linked to the socio-emotional environment of classroom quality of teacher. These high-quality classrooms provide an environment that is warm, centered around children, and promote support for independence, alongside this the teachers also present positive and helpful feedback, by asking open-ended questions, and offer different activities in differing learning styles and maintain interest of student's (Pianta, La Paro, Payne, Cox, & Bradley, 2002). Therefore, the student's achievement and engagement in school is enhanced by the affective and social environment of classroom. When classroom context meets the relatedness need of students it results for them to become highly engaged in school, and this occurs in those classrooms where peers and teachers create an environment that is supportive and caring (Fredricks, Blumenfeld, & Paris, 2004).

Student motivation and engagement are affected by school characteristics and they may vary according to academic abilities of students (Pintrich, 2000). For instance, an autonomous learning environment can benefit students who perform highly more than students who do not perform as well as those students, a sense of competence, self-sufficiency, and academic self-confidence can be reinforced by provision of thus autonomous learning environment amongst high performing students whereas it may increase helplessness and anxiety amongst students who do not perform well (Patrick, Skinner, & Connell, 1993). For better academic achievement, greater structure and support may be required by students to perform effectively. Whereas this support can be provided by clarification of teacher's expectations, consist of responses and using of teaching strategies that are less complex (Skinner & Belmont, 1993).

For students school engagement is most effective when the school environment fulfill the student's need of relatedness, competency, and autonomy (Connell & Wellborn, 1991). Relatedness is a need in which students feel connected to other people. And this need is fulfilled by a caring and a supportive environment provided both by teachers and peers (Connell & Wellborn, 1991). Competency need refers to one's effectiveness in interacting with the societal environment (Elliot & Dweck, 2005), and this need is achieved when the students know how to fulfill the desired outcomes (Skinner & Belmont, 1993). Autonomy consists of the individuals experiences to one's sources of action. Autonomy of the student is fulfilled when the student perceives the schoolwork according to his interests and goals (Assor, Kaplan, & Roth, 2002).

Support of Autonomy. Autonomy support is a way provided to students through which they can enhance their need for autonomy. Support of autonomy refers to the students' perceptions regarding their teachers that opportunities are provided to them by their teachers to participate in making decisions regarding the academic tasks and school governance. Alongside, they also allow students to participate in class discussions and learn their point of views regarding any matter at hand (Roeser, Eccles, & Sameroff, 1998). School engagement can be promoted by such factors that provide students with opportunities to make decisions, experience personal satisfaction, modify their behavior, and influence their learning environment (Reeve, Bolt, & Cai, 1999). Forming groups and participating in group decisions is one aspect that the students recognize in schools. They understand how to work within group norms and being a member of a specific group (Brand, Felner, Shim, Seitsinger, & Dumas, 2003).

Student Engagement regarded as a Multi-dimensional Component. Student engagement is regarded as a construct that consists of multi dimensional components that are essential for learning such as psychological and behavioral components (Fredericks, Blumenfeld,

& Paris, 2004). As stated by (Reschly & Christenson, 2012), "student engagement is the glue, or mediator, that links important contexts – home, school, peers, and community – to students and, in turn, to outcomes of interest." Skinner and Belmont (1993) define engagement as "positive learning behaviors and emotions during learning", while Chapman (2003) describes students' engagement as "students' willingness to take part in school activities such as attending classes, doing homework and obeying teacher's instruction in class". It consists of social and emotional engagements. Emotional engagement refers to the emotions (i.e., delight, interest, and happiness) that a student experience while performing a task related to school or subject (Mahatmya, Lohman,Matjasko, & Farb, 2012). Students who are engaged emotionally while solving problems take pleasure in their work and gain interest in the task that they are performing. Emotional engagement and achievement are indirectly related to each other (Finn & Zimmer, 2012); i.e. students who are emotionally engaged and participate in the classroom activities are related to greater academic achievement (Voelkl, 1997). Furthermore, emotional engagement has a continuous effect on students over time; higher emotional engagements of students during early years have been shown to have better academic performance during higher grades (Ladd & Dinella, 2009). Further, Social interaction of students is referred to as social engagement during their academic activities (Rimm- Kaufman, Curby, Grimm, Nathanson, & Brock 2015). This engagement is demonstrated by students through their interaction and positive participation with peers i.e., a social engagement of student's can be illustrated by students work in a group in which they help each other solve a problem or by sharing their work materials with other students.

According to Jimerson, Campos, & Greif (2003) there are three aspects of school engagement: "affective, behavioral, and cognitive". Therefore, school engagement is a phenomenon that is complex. The emotional dimension described as students' belongingness to school. It refers as the attachment at school (Johnson, Crosnoe, & Elder, 2001) and shows the degree to which students feel close to people in their school. The behavioral dimension refers to actions and performance of students in school. Behavioral component may comprise of: homework completion (Connell, Spencer, & Aber, 1994; Finn and Rock 1997), being attentive (Connell, Spencer, & Aber, 1994; Johnson, Crosnoe, & Elder, 2001), attendance in school, and grades obtained (Jordan 2000; Manlove 1998). Lastly, the cognitive dimension consists of perceptions and thinking of students related to self, teachers, peers and school.

Students also consist of a sense of educational self-concept. Sense of educational self concept consists of student's ability or capacity to participate and succeed in various academic tasks (Eccles, 2009). Evidence has been provided related to the school environment that a positive perception of students environment have a greater impact on the student's educational self concept (Vollmeyer & Rheinberg, 2000; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006). Self concept also depends on the teachers who provide the desired environment to students. Sense of educational self concept is emphasized when the teachers provide desired structure and positive behaviors at school. In contrast, those who offer improper and meaningless guidelines for students along with uninteresting activities have a greater risk in positive developmental outcomes (Assor, Kaplan, & Roth, 2002). Similarly, students develop more confidence in their academic abilities when they feel that they are treated with respect and cared for by their peers and teachers (Murdock & Miller, 2003). Furthermore, student's confidence is enhanced about mastering the material when they perceive their study material as related to

personal goals and interests. Finally, sense of academic self-concept has an influence on their actions, feelings, and thinking, which comprise the three dimensions of engagement (Eccles, 2009). Furthermore, school engagement and task involvement is predicted by student's confidence in their personal academic ability (Eccles & Wigfield, 2002).

Findings among ethical and socioeconomic groups have demonstrated that student engagement is strongly related to family relationships and parenting behaviors (Wentzel, 1998). The parenting style that is authoritative has been related positively to different dimensions of student engagement (Glasgow, Dornbusch, Troyer, Steinberg, & Ritter, 1997). Longitudinal research has illustrated that school engagements have been improved by authoritative parenting styles that leads to student engagement (Steinberg, Lamborn, Dornbusch, & Darling, 1992). Parents who exhibit parenting behaviors such as high levels of approval, management, obedience, and social equality promote student engagement. Poor student engagements are as a result of negative family relationships, whereas positive family relationships lead to healthier engagement. Social support provided by family results in higher student engagement (academic and behavioral), as compared to everyday barriers—consisting of family and social barriers—that result in less student engagement and career development (Kenny, Blustein, Chaves, Grossman, & Gallagher, 2003).

Research has suggested student engagement is related to numerous external factors. Connell and colleagues (1994) have studied a model of academic outcomes, which anticipated that individuals' beliefs about themselves are shaped by perceived parental support and that beliefs consist of school engagement. The factors that were examined were effectiveness in school, self-esteem, and perceived relationship quality with others. Affective and behavioral engagement in school was positively correlated with self-factors. Although self-factors and

parental support were directly related to school engagement but the influence of self- factors was greater beyond parental support. The importance of both external characteristics, such as support of family, and inner influence, such as self-worth and sense of control were highlighted in these results. Enhanced educational outcomes and various school assets have been found to be in direct relation with each other. For example, better educational outcomes are associated with taking part in organized activities after school (Cooper, Valentine, Nye, & Lindsay, 1999) and lower school drop rates (Mahoney & Cairns, 1997). Tucker and colleagues (2002) have studied that even for controlling perceived competency and autonomy; teacher contribution had a direct effect on student engagement. Another study found that in order to facilitate academic engagement a healthy classroom relationship should be enhanced that consists of teacher and peer support as well as mutual respect in order to increase one's feelings of mastery and self-efficacy (Patrick, Ryan, & Kaplan, 2007). Studies have found that in order to lessen the negative influence of risk factors on engagement of students, students positive relationship with adults from school, home, or other environments should be highlighted (Woolley & Bowen, 2007).

Researchers have revealed a connection between school engagement and adolescent characteristics, such as use of substance (Bond, Butler, Thomas, Carlin, Glover, Bowes, & Patton, 2007), academic success (Marks, 2000; Wang and Holcombe, 2010), drop-out from school (Finn and Rock, 1997), and mental health (Bond, Butler, Thomas, Carlin, Glover, Bowes, & Patton, 2007). Vasalampi conducted a research in 2009 in which they studied the relationship between academic achievement and school engagement. The found the result that during the upper secondary school a high engagement predicts success in students' academic achievement.

Ruslin, Anisa, Zalizan, Abdul, and Hutkemri in 2014 conducted a research in which they explored student's engagement level at school based on their gender and age in Malaysia. Findings revealed that engagement level in school differs by age and gender. Younger students recorded higher school engagement level as compared to elder ones. Female students reported to have higher level of engagement when compared to boys. Which in turn results in the conclusion that school environment is perceived differently by different gender and age group.

Several studies have shown that the value that is attached by students to school is predicted by their perceptions of the school environment. Students whose learning abilities are enhanced in school are those who have experienced emotional support and respect from teachers and peers (Roeser, Eccles, & Sameroff, 1998). Similarly, students experience positive feelings if they understand that their teachers express clear expectations, they consist of the appropriate help, and support their independence (Assor, Kaplan, & Roth, 2002). Furthermore, evidence is there that the student's selection and taking part in a task is influenced by the value hat a student places on a task (Deci & Ryan, 2000). Research shows that different types of school engagement, including active behavioral participation, curiosity, and learning that is self-regulated are associated with the student's motivation to do school work according to their own interests or values (Connell, 1990; Katz & Assor, 2006).

Students positively engaged in school are more successful by many measures. Those students who perform well and have greater grades on standardized tests attend school regularly, concentrate better on learning, work according to the school rules, and avoid disruptive behaviors (Caraway, Tucker, Reinke, & Hall, 2003). In contrast, those students who perform poorly and are engaged in disruptive behavioral problems tend to disengage from school and learning (Finn & Rock, 1997). Unfortunately, however, one of the most consistent problem faced

by students is their disengagement from school. However, this problem is not much dangerous during the middle and high school years (Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006).

Factors that Influence Student Engagement. Some school environments promote engagement more effectively and fulfill students' needs. Student's levels of engagement in classroom are influenced by many factors. The person environment fit theory proposes that the interaction of student and his/her environment reflect their academic constructs, such as engagement and learning process (Eccles, Lord, &Midgley, 1991). In order for students to succeed, the demands of classroom environment should fit the student's individual resources. An academic decline becomes susceptible without this fit. A student is well trained to face hardships and become more engaged in learning only if they enter the environment of class with strong internal resources, such as efficacy. When these internal resources are missing the student relies on external resources to compensate their engagement. Therefore, the student's internal and external resources to promote engagement are due to their sense of efficacy and stronger teacher-student relationship.

School engagement can be promoted only by understanding the factors that contribute in student engagement. Many theorists have given their views related to school engagement. The self determinist theorists have proposed that people encounter only those experiences that they believe are involved in fulfilling their needs and identities. According to these theorists, students are engaged in school to the extent that their psychological needs are fulfilled (Connell &Wellborn, 1991). There is a notion that humans seek out and enthusiastically engage in activities so that their need can be fulfilled and if not then they feel dejected, helpless, and frustrated. This suggests that the origins of a deep source of energy, invigoration, and emotion

are within these intrinsic motives. Students feel a sense of excitement, joy, interest, and curiosity about performing the academic tasks when they are provided with the opportunities to fulfill their needs in school and are eager to participate in activities. However, when their needs are unfulfilled, students experience various negative emotions such as anger and anxiety; they become passive and bored when their needs are actively obstructed. According to self determinist theorists, students are not socialized to these reactions.

In schools the student's experiences that include their communications with family, teachers, and peer groups enhance their needs, their identities in academic are shaped, or their thoughts about relatedness in school, consist of what it takes to succeed (competence), and genuinely carryout the goals and values of schooling (autonomy).

Learning in school is hard work. Effort, determination, and persistence is required in the face of challenges and setbacks. In order to learn, students must focus their attention to academic tasks, listen to their teachers, and expend mental energy participating in different tasks. In fact, in academic work this kind of wholehearted participation is considered. As a result, researchers in education and psychology have focused on the question of how to promote and sustain students' engagement in academic work (Christenson, Reschly, & Wylie, 2012). Motivational resilience, is considered as constructive energy focused on the hard work of learning, such as effort, enthusiasm, interest, and commitment, even in the face of obstacles and setbacks. The process of motivational resilience includes the intensity and quality of students' engagement as well as what happens to their engagement when they fall into trouble: how they react and cope, and how they can maintain or recover from it, so they can re-engage with challenging academic tasks. Motivational vulnerability includes the way that students become disaffected, and how this disaffection can trigger emotional reactivity and students become unable to cope with the

situations. These reactions can affect students' capacity to recover from setbacks, and so lead them to give up in the face of demanding academic work.

The predictors of student's motivational resilience that include the student's engagement, their coping strategies and student's re-engagement are the students self-system processes and the type of the work presented to students to perform at school. .

Theorists who proposed stage-environment fit and expectancy-value theories argue that as the adolescents make a difficult transition to the middle school, schools failure to meet their wellbeing needs may contribute to the decline in their academic performance and interest. This can further contribute to decreased school engagement and academic achievement (Roeser, Eccles, & Sameroff, 1998).

Self Determination Theory and Stage-Environment Fit Theory. Self determination theory and stage-environment fit theory both argue that the school engagement is determined by the students quality of dedication with activities of learning and tasks performed at school (Deci & Ryan, 2000; Eccles, 2004). Therefore, engagement consists of the following distinguishable features: behavioral, emotional and cognitive (Fredricks, Blumenfeld, & Paris, 2004; Jimmerson, Campos, & Greif, 2003). Behavioral engagement consists of the practices and actions that students pose towards learning in schools. This may involve active participation in learning and academic tasks through the absence of disruptive behavior and having a positive conduct (Connell, 1990; Finn, 1989). Emotional engagement refers to the positive affective element of student's reaction to, and their interest in school, along with valuing the activities at school (Voelkl, 1997). Cognitive engagement consists of the student's mental aspect in learning, including their cognitive processes, strategies of learning, mastering new concepts and skills,

along with dealing with ideas that are complex (Corno & Mansinach, 1983). All these components characterize how the students thinks, feels and act (Wang & Peck, 2013).

Expectancy Value Theory. The expectancy value theory also provides a foundation of the link between school engagement and school characteristics as well as performance through the motivational beliefs of students. According to this theory school engagement is influenced by expectation of student's for gaining success and valuing of their work in academic activities (Eccles, 2007). The student's who are highly engaged in the learning process in school have higher confidence in their educational abilities than others. Expectancy value theory also illustrates the motivational beliefs regarding the individual that they experience in the school context. Teachers create opportunities for students so that they can engage in different school activities (Eccles & Wigfield, 2002) which develop the student's competency, relatedness and autonomy as learners, so that they can have an understanding of their individual and social identities (Connell & Wellborn, 1991). These motivational beliefs further influence the individual's school engagement in various academic activities (Simpkins, Davis-Kean, & Eccles, 2006).

When the experiences in school are highly structured then the competency need of student's is met (Skinner & Belmont, 1993). This structure is promoted in school when the experiences are highly organized to make the student's understand that how and through which steps they can be successful (Skinner & Belmont, 1993). It depends on teachers to provide the required structure for student's participation in educational activities and to enhance connectedness among student's, this is done when teachers become clear regarding their expectations and providing the required strategies according to the student's level (Connell, 1990; Urdan & Midgley, 2003). Skinner and Belmont (1993) have concluded that those students

whose teachers provide a clear idea of expectations are more engaged both emotionally and behaviorally. Self-sufficiency is supported by teachers by allowing students to access their educational activities and make connections between personal needs and interests of students with their activities at school (Skinner & Belmont, 1993; Skinner, Furrer, Marchand, & Kindermann, 2008).

In order to support student's autonomy there are two aspects that are provision of choice and relevance of teaching. Provision of choice includes the perception of students' about their teachers that they provide such opportunities through which students can take part in making decisions regarding their tasks at school and encourage the student's ideas in classroom discussions. Higher behavioral engagement in tasks and greater identification of students in school is enhanced through these characteristics (Katz & Assor, 2006; Reeve, Bolt, & Cai, 1999). Eccles, Wigfield, Midgley, and Reuman (1993) concluded that during the student's transition to middle school, their interests in school tend to decline due to less decision making opportunities. So, school engagement can be promoted by provision of choice. When the students are provided with a chance to promote their skills of decision making, behavioral regulation, and enhance their individual responsibilities along with pleasurable activities can have a great influence on their environment of learning (Assor, Kaplan, & Roth, 2002). Students feel independence when doing work that is related to their concern and has personal significance rather than simply fulfilling requirements at school (Roeser, Eccles, & Samerolf, 1998). Students feel a sense of autonomy because they believe that different activities they perform are useful, suitable and belong to their liking and that content of the syllabus and methods of teaching give chances for self awareness (Finn & Voelkl, 1993). Moreover, cognitive strategies such as decision making, comprehension and correlation are enhanced by meaningful

curriculum and teaching which give suitable level of challenge (Helmc & Clarke, 2001; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006).

The indicators of behavioral engagement i.e. greater participation in activities at school have been correlated positively with the emotional support of teachers (Battistich, Soloman, Watson, & Schaps, 1997) and limited behaviors that are disruptive (Patrick, Ryan, & Kaplan, 2007, Wang, Brinkworth, & Eccles, 2013). Likewise, students are more likely to gain help and support from teachers when they are presented with a caring and supportive environment in which they can express themselves freely, take part in discussions, show an attitude that is positive in studies, and enjoy in the activities (e.g., Furrer & Skinner, 2003; Shim, Cho, & Wang, 2013).

Children move through the stages in which they face a variety of barriers alter their school performance and also contribute to their psychological and physical health in such a way that may pursue them through their transition into adulthood (Mallin, Walker, & Levin, 2013). For centuries, resilience is understood as being a way for children's positive development in spite of the hardship and the factors that children use to avoid self destructive, harmful, or antisocial behaviors, even the different disorders, and threats to their physical wellbeing (Richman & Fraser, 2001). Resilience is the participation of the individual in the processes that results in developmental outcomes that are positive. Children who face a significant hardship, engagement serves as a protecting and promotive process that enhances wellbeing and it can be influenced by the undergoing prescribed interventions. Resilience is not only considered as the individual qualities of the child, but it depends on how well the child's social and physical environment facilitates the external and internal resources such as a relationship that is healthy,

social integrity, needs of material like food and education, and a sense of belonging, purposeful life and spirituality (Ungar, Brown, Liebenberg, Othman, Wong, Armstrong, & Gilgun, 2007).

Resilience. Resilience is defined as "good outcomes in spite of serious threats to adaptation or development" (Masten, 2001). Block and Kremen (1996) refer resilience as "an ability to bounce back from negative emotional experiences and flexibly adapt to the changing environment". Ryff, Singer, Dienberg Love, and Essex (1998) define resilience as "the capacity to maintain or recover high well-being in the face of life adversity". Studies have showed that individuals who are resilient could maintain both their psychological and physical health through effectively encountering the negative events (Connor & Davidson, 2003), and by improving their psychological well-being (Ryff & Singer, 2000).

Resilience also refers to resourceful and novel responses to hardship, risks or challenge. Therefore, resilience is considered an asset, advantageous quality, and a characteristic that positively impact on aspects of performance of individual, accomplishment, wellbeing, and health (Bartley, Schoon, and Blanc, 2010). Gilligan (2001) refers to a resilient child as someone who performs better than they are expected to do, regardless of what has happened to them. Friedland (2005) refers to resilience as toughness, hardiness, and struggle, considered along with flexibility and elasticity. Therefore, resilience is considered as both multi-faceted and multi-levelled.

A child's successful adaptation in the face of adversities can include the absence of the behaviours that are undesirable, the presence of positive internal and external adaptation, along with positive social behaviours and academic skills through the normal functioning (Masten, 2001). Resilience is a quality of a child that nurtures and develops from a very young age. It has an impact on the child's family and peers and schools. It results in leading the development of

children to a healthy life the children's development towards a healthy life in response to diversities (Benard, 2004; Dent & Cameron, 2003).

Abiola and Udofia (2011) refer to resilience as the inner potency, proficiency, hopefulness, and the ability to cope efficiently with life challenges, thus impact of risk factors and enhance the protective factors, such as social support, and the person's ability to cope actively in life. Therefore, resilience is referred to as a benefit or strength that positively impacts the achievement, health, performance and well being of an individual (Bartley, Schoon, and Blane, 2010).

Well Being and Psychological Resilience. He, Cao, Feng, and Peng (2013) conducted a research in which they studied the relationship between well-being and psychological resilience. The study revealed the results that individuals who had high resilience level reported significantly lower level of psychological distress and they were able to recover quickly from the stressful situations as compared to individuals who had lower level of resilience.

Researchers have conducted many longitudinal studies in which they have indicated that personality is a predictor of resilience. According to Campbell-Sills, Cohan, & Stein, 2006: Riolli, Savicki, & Cepani, 2002, they have represented how personality characteristics are related to resilience. For example, extraversion is related positively to resilience, and neuroticism is negatively related with resilience. A study conducted by Werner and Smith (1992) in which they studied the relation of personality and resilience. The results revealed that the children who had a positive temperament were more resilient as they grow up. According to Burnette (2013) growth-mind-set interventions are better able to help students understand difficult challenges in school and daily life in a way that enhances learning and resilience; this may be most benefitted by students who are not able to perform better in school.

In order to build the social and emotional skills for the students, schools play a most important role in determining their resilience abilities especially for the vulnerable children (Goleman, 1995). As the children understand their and others emotions they become more empathetic and are better able to manage their negative emotions such as stress and anger. These are the competencies that are needed to be taught by school curriculum (Elbertson, Brackett, & Weissberg, 2009). A resilience curriculum focuses on promoting education that includes internal fostering of optimism, problem solving, positive attitudes, self awareness, self efficacy, empathy and collaboration (Benard, 2004; Cefai, 2008).

Resilience is most important factor correlated with school engagement rather than academic achievements in students who face much pressure from family, school and community stress. A passageway to potentially more supportive experiences is established when a child engages at school experiences (Hobfoll, 2011). Moreover children can get access to resources at house and only if they are less stressed. Therefore, when a child display an optimistic thoughts towards school, and positive attitude than life can be changed by schooling, shows a greater level of engagement through attendance and result in better wellbeing in spite of the educational success of the child (Dotterer, McHale, & Crouter, 2009).

Academic Resilience. Wang et al. (1994) refer that despite environmental adversities a child's academic success increases due to this academic resilience. Many concepts and constructs had emerged related to the work on academic resilience. Many theorists have drawn the observable differences among their scales and resilience (Perkins-Gough, 2013). Dweck and Duckworth both have worked on grit and state of mind and through this work play an important role in the field of to the field of educational resilience. Duckworth view grit as "an individual's tendency to sustain interest, passion, effort and persistence toward achieving long-term future

goals" and explain that grit academic success or talent better than IQ (Duckworth, 2013) or talent (Duckworth and Quinn, 2009).

Two kind of mindsets; permanent and developmental mindsets, have been identified through the work of Dweck (2010). Individuals with fixed state of mind have permanent attitude about their intellectual level and abilities that they sure will not be changed. Individuals with growth mind set believe that intelligence and abilities can be changed through life experiences and that these experiences provide chances for success by Growth mindset individuals their intelligence and ability as a basis for development and believe that challenges and failures are both an opportunities to develop their capacity for success through hard work and practice. Snipes, Fancsali, and Stoker, (2012) further more have an impact on mind set and said that grit is developed through growth mindset. Regardless, Duckworth has view resilience to be the main factor contributing to grit (Perkins-Gough, 2013). The constructs proposed by Duckworth and Dweck have greater similarity with educational resilience and this similarity is further explained by Farrington, Roderick, Allensworth, Nagaoka, Johnson, Keyes, (2012) have further illustrated this relevance and reporter that both growth mindset and grit are associated with higher academic grades among students.

Resilience and Mindsets. Claudia and Carol conducted a research in 1998 in which they conducted six experimental studies. The sample was of 5th grade students who had a diverse background i.e. Ethically, racially, and economically. In this research, the first step was finishing a somewhat complicated set of problems from an IQ test that was non-verbal in which the students were praised for their excellent performance. The praise was also divided into three ways either it was focused on their intellect/ ability ("That's a really high score. You must be smart at these problems.") or on their attempt/ strategies ("That's a really high score. You must

have worked hard at these problems."), or it did not have any specific cause of their achievement ("That's a really high score."). The study objectives were to see how the comments affected students' resilience to challenging tasks. At the second stage all the groups complete a second task consisted of very tricky set of problems, on this task all the students performed very badly. The third step was administered in which the same complex levels of tasks were presented as the first set. The results of the study revealed that those who were praised for their ability taught them the fixed mindset while those who were praised for their effort enhanced their growth mindset which in turn made them more resilient as compared to the fixed mindset students.

Evidence exists that supports the relevance of academic resilience. Waxman (2003) propose that by doing research with resilient students, the implementation for educational improvement of the students who are at risk of failure would increase. McLafferty (2012) reported that coping at university was predicted by both resilience and emotional intelligence, where resilience acted as an exclusive variable which can affect grades, study and presence in class.

Waxman, Gray, and Padron, (2003) proposes that in order to promote protective mechanisms resilience indicators need to be examined through academic resilience research. For this to work more sentimental and motivational instruction should be assessed to assess their influence on student,s results. With the aim to give a more "Expansive" analysis of the factors associated to academic resilience, Martin and Marsh (2006) provided different factors related to academic resilience such as, planning, persistence, self-efficacy, anxiety and uncertain control. Martin and Marsh proposed that the resulting constructs such as enjoyment at school and class participation (behavioural) as academic outcome construct, and universal self view as psychological result construct were substantial to recognize individual' ability to successfully

solve the challenges and hardships a student faced in school. As proposed that educational resilience was the main predictor of all of the outcome measures. Student's analysis shown that academic resilient students score high on self efficiency, planning, persistent, and low in anxiety. Self efficacy was reported as a significant attribute by Hamill (2003) that differentiate among resilient and non-resilient 16–19 year old students. But there is adequate support demonstrating that self- sufficiency is one worthy cause of resilience.

In educational studies, the better predictors of performance were the individual differences in self efficacy rather than success or capacity (Cassidy, 2012). Self-efficacy is also important just like resilience when students bear difficulties and these optimistic self-sufficiency attitude are connected with high enthusiasm and determination (Bandura, 1997) and result in rejection of negative thoughts related to their own capabilities (Ozer and Bandura, 1990). The foundation of human agency is dependent on self-efficacy (Bandura, 1999) and is known as a significant shielding factor that regulates individual performance and affective wellbeing by motivational, emotional, cognitive, and discriminatory processes (Hamill, 2003).

Sagone and Caroli (2013) had conducted a co-relational research in which they examined the relationship between self efficacy and resilience, resilience and thinking styles, and thinking styles and self-efficacy. For this purpose they examined 130 Italian middle adolescents. The study results showed that the adolescents who experienced higher levels of resilience were better able to deal with novel experiences in different aspects of life and they also tend to use all thinking styles.

Brooks and Goldstein (2001) refer to resilience as "the capacity to cope effectively with past and present adversity". Connor and Davidson (2003) had illustrated in the study that resilience is considered as a protective factor while facing the consequences that are negative. It

further maintains the individual's physical and psychological well-being. In their study it is demonstrate that the individuals who were resilient were better able to retain their physical and psychological health through effectively facing the negative consequences from their lives (Connor & Davidson, 2003), and which in turn improves their psychological well-being (Ryff & Singer, 2000).

Waxman, Gray, and Padron, (2003) reported that resiliency is known as processes and factors that reduce the unconstructive behaviours which are related with anxiety. Furthermore, they give adaptive outcome in response to hardships. Studies also identify the resilient and non resilient students which focus on the factors that design new efficient learning interventions. In order to understand the gap among successful students and at a risk of failure leads to the focus on academic resilience and values that may contribute to enhance further resilience among students. Wagnild (2009) and Waxman, Gray, and Padron, (2003) suggested that educational resilience can be increased by stresses on factors that may include social skill, autonomy, challenge facing, a sense of purpose (Bernard, 1993), career orientated and motivation, family life, learning environment, and a positive use of time (McMillan and Reed, 1994).

Academic performance is just one of the challenges that the adolescents encounter on daily basis. Social competence is one of the factors that the student's are highly concerned about, that whether their peer group accepts and respects them (Crosnoe, 2011). Therefore, student's need to respond resiliently, when their social relations are challenged by factors such as peer exclusion or victimization. Research has shows that the implicit theories of personality or the personality fixed or malleable traits (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011) have an effect on can affect resilience. For several reasons this may be true for high school adolescents.

During the high school early years, substantial adversities could be caused by increased concern regarding the social labels and could threaten them with negative labels (Brown, Mory, & Kinney, 1994). Usually every level of high school students are victimized by their peers (Faris & Felmlee, 2011). Students might fear peer exclusions in their transition towards high school due to their instability of social networks, even though they might not be directly excluded but they may fear peer exclusion (Cairns & Cairns, 1994) and the recurrent use of peer segregation to gain a better social status (Cohen & Prinstein, 2006). Adolescents consider social labels as unchanging entities that cannot be altered (Killen, Kelly, Richardson, & Jampol, 2010). In sum, adolescents have a fear related to negative labels and are more attentive to social labels and believe that social labels have fixed traits. Negative outcomes can be developed through peer victimization and exclusion including aggressive retaliation (Ostrov, 2010), tension (Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007), and even educational losses (Crosnoe, 2011).

Resilience curriculum consists of a need for increasing a growth mindset that not only deal with hardships but also provide effective processes for further development and growth (Peterson, Ruch, Beerman, Park, & Seligman, 2007). This results in positive subjective experiences that are effective for dealing with mental problems (Seligman & Csikszentmihalyi, 2000). It relies on the cognitive/mental processes that result in positive self talk and optimistic thinking. For children the positive and optimistic thinking is developed during setbacks, during which the children are engaged in challenging negative thoughts and overcome them by using a positive approach (Noble & McGrath, 2008; Seligman, 2002). Children can get a chance to understand and use the emotions positively during such challenges in order to build their social and personal resources by overcoming the psychological problems.

Alva (1991) has described that resilient students are those who uphold high performance and motivational attainment even when they face demanding life events and situations that may put them at a risk of poor presentation. Resilient students are described by Waxman, Gray, and Padron, (2003) as those who face adversities at educational institutions but still they succeed due to their potentials. School engagement is a protective factor for children's well being who face adversities. Therefore resilience is not only the quality of a person but also how effectively the child's collective and individual environment provides facility to their internal and external need. A child who is provided with help in establishing a healthy relationship, life's purposes, sense of belongingness and spirituality is perform more better in life (Ungar, Brown, Liebenberg, Othman, Kwong, Armstrong, & Gilgun, 2007).

Children who have more social advantages attend school on regular basis that promotes the academic achievement which in turn leads to the prediction of resilience rather than engagement at school. For example, Martin and Marsh (2008; 2009) have reported in their studies that students who do not score greater on the social threat factors i.e. their home environment and communities are financially stable and well operating; such children still experience hardships that are related to being in educational institutions during stressful times of mental and social development. According to them all students undergo with constant worry related to written and oral tests, making and ending relationships with other peers, and facing the differences between grades. Therefore according to academic success, resilience in school is considered as the result between both frequent and extraordinary risk factors, as well as contextual risk factors, the quality of academic environment, and the personal strength of the child.

Psychological Wellbeing. Ryff (1989) defined psychological wellbeing as positive psychological functioning. It is associated with overall life satisfaction and is often discussed as happiness and positive effect. Previous research indicates that an individual's thoughts, behavior, and emotions, along with external experiences may influence one's state of well-being (Diener, Lucas, & Oishi, 2005). Many factors have been associated with well-being, such as greater physical health, satisfaction with interpersonal relationships, and higher education levels (Dolan, Peasgood, & White, 2008). Well-being is considered as an important factor that helps individuals in finding meaning and develops positive outcomes on life (Diener, Lucas, & Oishi, 2005). A high correlation is considered between well-being and the detection of pleasure in a lively and healthy way. For example, persons who experience greater levels of well-being often end in engaging in positive behaviors such as socialization, volunteering, and self-motivation (Diener, Lucas, & Oishi, 2005).

Psychological Well being as a Multi-Modeled Construct. Psychological well-being according to Ryff (1989) consists of multimodeled construct that is consists of six different index: "self-acceptance, environmental mastery, personal growth, positive relations with others, autonomy, and purpose in life". It is defined as a person's subjective level of pleasure (Andrews & Withey, 1976). A more encircling and precise description of an individual's positive performance may be considered by deconstructing well-being into multiple dimensions.

Six channels are provided by Ryff's (1989) in the model of psychological well-being through which well-being and positive performance may be achieved. This also gives an insight into the areas of cognitive and interpersonal operations to the clinicians and researchers that influence mental health directly. Largely, this model enhances area specific pathways by which clinicians can encourage well-being. For example, when wellbeing is identified through the area

of functioning, then the individual interventions may be ensued for more effective treatment according to individuals needs. Moreover, this model of well-being provides opportunities for clinicians to put into practice development regarding exceptional positive emotions and behaviors that suit a person's peripheral environment, worldview, and values of cultures (Ryff &Singer, 2008).

According to Ryff (1989) psychological well being involves a set of mental features that result in encouraging human functioning (Ryff, Keyes & Schmotkin, 2002) and also include aspects related to resilience such as maturity (Allport, 1961), self-efficacy (Schwarzer & Warner, 2013), and life purpose (Crumbaugh & Maholick, 1969). According to another criterion psychological well being can be referred as an "positive relations with other individuals", that involves empathy, affection, and capability of greater love for other individuals (Ryff & Singer, 1996). According to the "eudemonic perspective" (Ryan & Deci, 2001), psychological well being is linked to an individual's "self-acceptance", which is defined as a innermost characteristic and quality of self actualization, optimal functioning and mental health. The principle of "autonomy" is considered as independence, strength of mind and guideline of behavior through interior focus of control, in order to assure a condition of well-being for all persons. The person's ability to form environments appropriate to his or her mental conditions is known as environmental mastery (Ryff & Singer, 1996). The "purpose in life" is another measure of psychological wellbeing and understood as a sense of intentionality and directedness in altering purposes or life goals, such as being creative and imaginative or achieving emotional incorporation in later life (Ryff & Singer, 1996). The final aspect of psychological wellbeing is given by the "personal growth": "an optimal psychological functioning requires not only to actualize oneself and realize one's potentialities, but also to continue to develop and expand

oneself as a person, underlining the importance of new challenges or tasks at different periods of life" (Ryff & Singer, 1996).

According to (Amato, 1994; Flouri & Buchanan, 2003; Knoester, 2003; Roberts & Bengtson, 1993; Wilkinson, 2004), "Psychological well-being refers to how individuals self-evaluate and their ability to fulfill certain aspects of their lives, such as relationships, support, and work." Diener, Wirtz, Biswas- Diener, Tov, Kim- Prieto, Choi, (2009) have reported a novel form of well-being, i.e. psychological well-being that represents most favourable positive human functioning. Psychological well-being can be measured by the "Psychological Well-Being Scale (PWB)", which consists of all the important components of well-being such as purpose and meaning, supportive and satisfying relationships; acceptance of self, hopefulness, and being appreciated, engagement and interest; contributing to the well-being of others, competency (Diener, Wirtz, Biswas- Diener, Tov, Kim- Prieto, Choi, 2009).

Elisabetta and Maria conducted a study in 2014 in which their objective was to study the relationship among resilience and the categories of psychological well being. For this purpose a sample of 224 middle and lade teenagers were selected. The study results were that there was a relationship that was positive between the dimensions of psychological well being (environmental mastery, individual growth and approval) and resilience. The adolescents who were able to fulfill their personal needs, who were able to grow and expand in their lives, and were self satisfied, had a higher resilience level. The results also showed the gender difference which revealed that boys had greater wellbeing than girls and late adolescents revealed a higher level of happiness (individual growth and life purpose) than middle ones.

A growing area of study is examining rural residents for positive psychological outcomes. Rural residents are recognized to be affected by unique circumstances not experienced by individuals in non-rural areas (Slama, 2004). For instance, significantly higher rates of stressors are experienced by rural residents when compared to individuals residing in non-rural areas (Smith, Humphreys, & Wilson, 2008). Alternatively, previous research indicates that limited level of social, educational, and medical opportunities are available to individuals living in rural locations as compared to individuals living in urban/suburban locations (Smith, Humphreys, & Wilson, 2008).

According to Kelly, Lewin, Stain, Coleman, Fitzgerald, Perkins, Beard, (2011), individuals living in rural locations are reported to have lower overall education and socioeconomic statuses. Specifically, their study revealed evidence that rural residents result in lower levels of psychological well being because of their lower perceived support available when faced with adversity (Kelly, Lewin, Stain, Coleman, Fitzgerald, Perkins, Beard, 2011). Research concerning psychological well-being has been paying attention on identifying the factors that decrease the probability that a person will follow or convey well-being (Augusto-Landa, Pulido-Martos, & Lopez-Zafra, 2011). A broad range of studies identify the styles that are interpersonal, regulation of mood, personal dispositions, and family problems that reduce well-being growth. For instance, decreased level of wellbeing is commonly associated with pessimism (Augusto-Landa, Pulido-Martos, & Lopez-Zafra, 2011). Ones state of wellbeing is also found to be influenced by interpersonal conflicts. Specifically, reactive behaviors and attitudes have been connected to decrease in positive psychological performance through their apparent unsettled conflict such as avoidance, anger, or rumination (Wai & Yip, 2009). Factors that affect wellbeing growth are bodily illness, job unsteadiness, financial insecurity, marital discord, and a loved

one's death that comprises few traumatic life events (Lyons, 1991). Moreover the change from teenage years to maturity may result in detachment and suffering within social relations In general, it is significant to recognize ways through which upcoming adults generate and preserve a sense of happiness to better purify service-oriented approaches that ease developmental stressors linked with transitions from teenage years into adult life.

Individuals are inclined to understand the limitations and potentials of their abilities through one of two frameworks: personality or character those are either, inborn and unchallengeable, or learned and changeable (Dweck, 1999; Nicholls, 1984). The first agenda consists of entity theory of aptitude. Persons of this idea think that personality and characteristics are pre-programmed through genetic codes and are hardwired, and intractable. These fixed mindsets or entity theorists are in contrast with those who have a growth mindset or "incremental theory of ability" (Dweck, 2006). "Incremental" theorists suppose that personality and attributes are developed and can be improved anytime through guidance and effort (Dweck & Molden, 2005).

Impact of Stressful Life Events on Individual's Psychological Functioning. The stressful life events and daily hurdles highlight the everyday experiences of an individual on their psychological functioning. For instance, a temporary change in an individual's mood may occur due to the encounter of life stressors (Monroe & Simons, 1991). Numerous theories have resulted in the connection between stressful life events and lower levels of well-being. Selye's (1936) have outlined the significant impact of stress that has on the overall functioning of an individual through the early conceptualization of the physiological "stress response," which occurs in reaction to both positive and negative stressful events. Selye's model suggests that the stress

response consists of multiple stages each eliciting a change in neuro-endocrine, cardiovascular, pulmonary, and renal functioning.

According to Taylor (1983), stressful life events can result in challenging individuals sense of meaning, mastery, and self-esteem and also can affect an individual's psychological well-being. For example, a stressful event such as the development of a major disease or illness can results in the affected individual feeling powerless: lacking control of self and circumstances.

Janoff-Bulman's (1989) assumptive world theory, and (Park, 2010) meaning making models, suggest that the psychological reactions that often diminish well-being outcomes correlate with the presence of stressful life events. Specifically, the feelings of distress are increased when the adverse life events challenge pre-existing schemas that result in diminished well-being (Park, 2010). Aldwin and colleagues' (1996) deviation and amplification model have presented additional support for the relation between stressful life events and diminished wellbeing. This model posits that in reaction to an adverse experience a negative feedback cycle of thoughts and emotions is often established. Such thoughts and emotions increase the chronic feelings of negativity, and eventually straining psychological resources for well-being.

Evidence to support the association between harmful life events and diminished mental well-being is extensive. Negative life events have been associated with poor psychological functioning across all ages and exist in a variety of forms (Shonkoff, Garner, Siegel, Dobbins, Earls, McGuinn, Wood, 2012). Some stressful experiences are common to individuals of all ages and developmental stages, such as interpersonal loss. However, each developmental stage possesses unique adversity that may be related to diminished well-being. For instance, a common negative experience for a child is to be bullied by a peer, while common stressful experiences for an older adult include experiencing physical health difficulties or death of a spouse. However, far

less is known about unique stressors that contribute to decrements in well-being for emerging adults.

Grych, Hamby, and Banyard (2015) describe resilience as a means to enhance psychological well-being followed by an adverse experience. In essence, resilience is considered a process through which an individual moves successfully and grows in a positive direction from stressful life events, whereas recovery relates that an individual just rebounds from a negative experience without having to grow in any direction. Research suggests that the presence or absence of resilience greatly affects an individual's response to adverse life events. Individuals with low resilience have been found to be more likely to experience psychological distress following an adverse life event than those individuals who report high resilience.

Implicit Theories of Intelligence. Dweck in (1988) developed the implicit theories of intelligence. This theory further consisted of two mindsets that are fixed or entity theory of intelligence and growth or incremental theory. Fixed mindset is in which intelligence cannot be seen as growing or is static and growth mindset is in which intelligence can be developed. Fixed mindset individuals have a longing to look smart and therefore have a predisposition to keep away from challenges, give up without doubt, pay no attention to useful advice and be endangered by others achievement. Whereas growth mindset individuals have an aspiration to learn and a predisposition to accept challenges, make effort to remove the obstacles, learn from criticism and become inspired from others success. The entity theory leads individuals more toward judgment goals that include the performance goals and the incremental theory inclines individuals more toward development goals in which the learning goals are included.

Growth Mindset and Fixed Mindset. Growth mindsets refer to as "core assumptions about the malleability of personal qualities" (Dweck and Leggett, 1988; Dweck, 1995; Molden

and Dweck, 2006; Yeager and Dweck, 2012). Students hold diverse theories of intelligence i.e. from a more fixed mindset to a greater growth mindset theory. Students with fixed mindset "see intellectual ability as something of which people have a fixed, unchangeable amount," while students with growth mindset "see intellectual ability as something that can be grown or developed" (Yeager and Dweck, 2012). Growth mindsets have been recognized as having a positive effect on academic achievement. Due to these mindsets students view the educational world in a different way. Growth mindset effectively enhances resilience while the fixed mindset does not (Dweck, 1995; Dweck, 2006). Students with growth mindset are inclined to think that their academic lives are a process of gaining knowledge, developing, and growing. Students who possess a growth mindset understand challenges, hardships, and attempt as approaches to effectively improve their intelligence, capability and practice. Dweck also point out that it would be oversimplified to assume that there are only two types of intelligence.

According to Dweck (2002) it is possible that if a person has a growth mindset in one aspect may also have a fixed mindset in another aspect. Dweck (2002) has emphasized that student mindsets are developed through their interaction with their teachers. The forms of feedback and encouragements of teachers suggest the different mindsets. In order to develop the growth mindsets the teachers have to focus on student's effort, process of learning and their hard work to develop their abilities. A student's fixed mindset belief is developed through their social comparison with others. The teachers should not practice social comparison but instead encourage students in setting goals for personal growth (Ommundsen, 2001).

Self-theory research literature has gained focus on student's interpretation about the nature of intelligence. Mindsets gain an understanding into whether persons consider intelligence as a fixed or flexible trait. Student's achievement and motivation in school have a greater and

more striking effect of mindsets on them. People consider that certain character traits and social qualities are flexible and others are steadier. For instance some student's can be more accepting about their developmental potential of their qualities in doing math ("I'm just no good with numbers"), while extremely hopeful about the developmental prospective of their foreign language skills ("You just have to immerse yourself and study hard"). Many students might believe that being a leader is an inborn and unchallengeable characteristic, while cooperation skills can be learned by anyone.

It is documented in many studies that mindsets have an effect on behaviors and influence them that in turn impact academic achievement of students. Students having a fixed mindset tend to believe that if they fail in any experience, than that experience will determine their intelligence due to which they avoid the situations in which they think that they might struggle lead to failure. In contrast, growth mindset students feel that if they tend to face the difficult tasks, then it will only increase their abilities (Blackwell, Trzesniewski, Dweck, 2007), due to which they search for demanding knowledge experiences that allow them to increase their learning process (Mueller, Dweck 1998, Romero, 2014).

A study conducted by Finn 1989 in which they discovered that the participants "craved one-on-one attention from their teachers, and when they received it, they remembered it making a difference." In the study the focus group participants stated that their best days in school were those when their teachers recognized them and got them to participate in class due to which they felt encouraged to participate. The results revealed that students' feeling of belongingness in school was a strong predictor of academic tenacity as well as the quality of their relationship with their teachers and other students. It was also reported that those students who had a growth

mindset and learning goals were the once who had more sense of belongingness in school than others.

Another study conducted by Aronson, Fried, & Good, (2002) on African American students in which they were motivated to view intellect as changeable were reported to have greater pleasure in the educational process, higher engagement in school, and also obtained better "grade point averages" (GPA) than the students in the two control groups. The results of the study also revealed that enhancing the growth mindset of students help to increase their grades in maths, especially of African American students where as control group showed no achievement in grades. Along with this White and African American student's differences also disappeared regarding achievement and the African students valuing and enjoyment of classes also increased.

Good, Aronson, and Inzlicht also conducted a research in (2003) in which their purpose was to create intervention of growth mindset for the students of 7^{th} grade. For comparing this, control group was also formed. For this study mentors were assigned to both the groups. These mentors met the students for 90 minutes in mid November of their first semester and for more 90 minutes in January at the start of the next semester. Apart from this the mentors were in touch through emails for the rest of the time. The results of the study showed that the growth mindset intervention led to an increase in the mathematics grades up to 4.5 point gain where as 4 point increase in scores of reading achievement. Results also revealed that there was a noteworthy gender difference in results of mathematics among the control group. In contrast, the gender difference in the growth mindset group was eliminated.

Researches indicate that mindsets have a powerful effect on students' motivation, their eagerness to embrace challenge, and their responsibility for learning and academic performance. According to Stanford psychologist Dweck (2006), when students adopt a development mindset i.e. they understand that they can grow and improve with full effort and good strategies, then they move towards greater learning and respond to difficulties and challenges as more resiliently. In contrast, when students are more orient to a fixed mindset i.e. they believe their intelligence to be unchangeable; they avoid challenges and are less likely to seek help when facing a difficult situation, and as a result may withdraw from that task because of the fear of failure. Furthermore, due to this individual growth and academic performance may suffer.

Several ways have been recognized in which mindsets have an influence on behaviours that further effect academic success and school engagement. According to Blackwell, Trzesniewski, and Dweck (2007) situations are avoided by fixed mindset students in which they have a need to produce effort or not succeed because these experiences state their sense of intellect. Whereas, growth mindset students tend to seek out challenging learning experiences and see complex tasks as a way to boost their abilities. A study conducted by Eccles, Wigfield, & Schiefele, (1998) in which the students from New York City were selected from different minority public schools as they were making the complex change into 7th grade. Numerous students were presenting decline in their grades, especially in math. In this research two groups were made of these students in which both groups received a workshop of six-session. The workshop of controlled group gave more attention to studying skills, but the students who were in the intervention workshop were educated about both the growth mindset and study skills i.e. how the brain gets to make new connections and how students get smarter when they experience challenging tasks. Furthermore, they learn how to apply these lessons to their educational work.

The study results showed that the math grades of control group students continued to decline. Whereas the students who were taught growth mindset illustrated greater performance in math grades.

Growth Mindset, Socioeconomic Status and Academic Achievement. Claro, Paunesku, and Dweck also conducted a study in 2016 in which public school students in Chile were selected from 10^{th} grade. The objectives of the study were to determine whether socioeconomic background and students beliefs on their abilities could influence academic accomplishment. The study results showed that the growth mindset was a strong predictor of educational achievement. The results also revealed that the students from family with low income were less probable to have a growth mindset than their richer peers.

Brainology Programme. Dweck (2000) has also created a computer programme known as brainology that encourages growth mindset. Through this programme the user develops the assumption that intelligence can be changed and improved through effort. Dweck uses the mastery approach of learning and this is the approach that is the key aspect of resiliency, especially in the educational and learning field i.e. how the students can cope with setbacks in their lives (Masten, 1994; White, 1959). Growth mindset and resiliency depends on the learner's ability to enhance their knowledge and intellect along with their locus of control (Dweck, 2000; White, 1959). The growth mindsets can be taught successfully by teachers who also hold an 'incremental mindset' and use it in their approach of studying (Dweck & Leggett, 1988; Gollwitzer & Schaal, 2001). The setting of performance or learning goals can also influence the student's mastery responses. The students who set the performance goals are helpless when they encounter with any difficulty. Whereas, students who set the learning goals embrace the problem solving strategies and do not fear difficulties (Elliot and Dweck 1988).

Incremental Theory and Higher Grades. Aronson, Fried, and Good (2002) conducted a research in which they taught the college students with an incremental theory. They contrasted this group with further two control groups i.e. a non-treatment group and the ones who were educated with a model of "multiple intelligences" (Gardner, 1983). The results of the study showed that those students earned higher grades who were in the incremental theory training group. than did the students in both the control groups.

Institute of Educational Science has evaluated many large scale interventions in the recent rears hut was unsuccessful to create considerable results in accomplishment further than the time of treatment (Garet, Wayne, Stancavage, Taylor, Walters, Song, Doolittle, 2010). Similarly, anti bullying interventions implemented through whole school has consistently reduced aggression through elementary school students but still has no effect among adolescents (Karna, Voeten, Little, Poskiparta, Alanen, & Salmivalli, 2011). Important skills and key resources have heen provided through these programs. Still, attention must be paid to resilient responses to academic and social challenges among adolescents.

Student's implicit theories are prominent in this underlying psychology (Dweck, 2006). For example, research shows that students interpret academic challenges as a sign of lack of their intelligence through this theory that intelligence is fixed or unchangeable. Even among high achieving students this way of judgment compromises resilience in educational settings (Blackwell, Trzesniewski, & Dweck, 2007). In the same way, adolescents can interpret peer victimization or exclusion as unchangeable due to this implicit theory of personality (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011). It is clearly understood how this can decrease resilience. Therefore, when the youth are taught that they need social skills or intellect to be flexible, they may not effectively use their abilities unless their mindsets encourage the idea that

their educational and social challenges have the ability to get better (Blackwell, Trzesniewski, and Dweck, 2007). Research has evidence that mindsets of student's can be altered and in turn can encourage resilience. The science of changing both academically and socially can be taught to students, and they can be taught how to apply these in their own lives (Blackwell, Trzesniewski, and Dweck, 2007). Resilience can have a remarkable effect due to this change in students.

Students' academic performance is predicted by these implicit theories of intelligence predominantly when they encounter with a demanding work (Blackwell, Trzesniewski, and Dweck, 2007). Students goals are shaped by an incremental versus entity theory, to recognize whether they are interested in learning new things or just trying to stay smart, their beliefs in efforts that it is the key to success, their attributions for their setbacks whether they need to work harder and overcome setback or just believe that they are of no use, and their learning abilities in the face of hardships. Blackwell, Trzesniewski, and Dweck, (2007) showed that when the students confronted with more challenging school transitions and earned high grades were recognized as more resilient and explained why these individuals were more with incremental theory. According to Dweck & Leggett, (1988) the implicit theories of intelligence can affect both high and low achieving students as their academic standards rise and when they do, it can affect whether they respond resiliently.

People with entity theory of personality view the negative behaviors of themselves and others as a result of fixed, personal deficiencies (Chiu, Dweck, Tong, & Fu, 1997). As the end result, their main attention is on punishing others and spending less time on educating or rehabilitating others (Erdley & Dweck, 1993). For adolescents, discrimination or elimination

may be done by and to individuals, whose characteristics cannot change, for instance, by a "bully" to a person who is underestimated as a "loser."

Alternatively, from the viewpoint of an incremental theory, discrimination may be considered as being done by and to people who can adjust over time. Thus, the desire for aggressive retaliation may be reduced by learning an incremental theory by allowing young people to notice their future as more optimistic and creative with a greater yearning to understand the intensions of transgressors and to control them (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011). Inherent theories of personality have their effects by developing patterns of attributions and emotions about both the self and transgressor. For example, those with a more entity theory the person who bullied is considered as a bad person by the victim of bullying (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011). In relation to this, if a conflict among peers was experienced without knowing the intention of the peer, the person with entity theory would conclude the other peer "did it on purpose in order to be mean" (Yeager, Miu, Powers, & Dweck, in press). The effects of implicit theories on the desire of vengeance can be mediated by each of these attributions about the peer, and each can be reduced when adolescents adopt an incremental theory (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011).

The differences in acknowledgment of self can be produced by incremental and entity theories. A person of an entity theory experience social segregation to their own qualities might believe that they are not a likeable person (Erdley, Cain, Loomis, Dumas-Hines, & Dweck 1997). A feeling of shame can be produced by these self blaming attributions (Tangney, Stuewig, & Mashek, 2007). Whereas, following a peer conflict can reduce shame through incremental theory and this reduction is due to decrease in longing for vengeance (Yeager, Trzesniewski,

Tirri, Nokelainen, & Dweck, 2011). All in all, those adolescents are taught to hold an incremental theory who are facing with social adversities, they are less likely to criticize universal, stable individual qualities; they state as feeling lesser negative emotions such as humiliation or hatred; as an end result, they are less expected to long for vengeance.

One of the best predictors of academic achievement is the socioeconomic background of children (Coleman 1966; Reardon 2011). Therefore when students are deprived of the economic resources then their academic achievement is reduced due to different factors, such as higher level of stress, reduced health care, poor nutrition, and a limited access to educational resources (Evans & Schamberg 2009; Thompson 2014). Apart from this students from the same economic background may vary in their beliefs, focus of control and may economic disadvantages on academic achievement (Finn & Rock 1997; Butterfield 1964). The beliefs of these students are identified as the student's growth mindsets which are changeable (Aronson, Fried, & Good 2002; Paunesku 2015).

Risk is another psychosocial adversity that poses a threat to behavioral and mental health outcome through encountering the negative events in life (Arrington & Wilson, 2000). These risk factors are the behavioral problems, parent-child relationship, and psychological distress (Gutman, McLoyd, & Tokoyama, 2005; Kim & Brody, 2005). Risk level is also enhanced due to socioeconomic status, which includes the income and education of the family (Arrington & Wilson, 2000). The economic conditions may e.g. Low family income may negatively cause psychological distress and affect the family environment (Taylor, 2010). Adolescents who live in poverty face many stressors related to their school pressure, racial discrimination and risky interpersonal relationships (Arrington & Wilson, 2000). The limited resources can result in limited learning opportunities and academic growth. These risks also threaten the mindsets and

academic behaviors which in turn lead to lower level of academic achievement (Arrington & Wilson, 2000). Despite the exposure to low socioeconomic status and stress, some people manage to overcome adversities through the process of resilience (Fergus & Zimmerman, 2005).

Recently, researchers have examined how achievement, motivation, and performance are related to discrimination among adolescents (Wong, Eccles, & Sameroff, 2003; Neblett, Philip, Cogburn, & Sellers, 2006). In contrast to discrimination experiences, among minority group resilience may be promoted through racial socialization and ethnic identity (Miller, 1999). The adolescent's ability to cope with racial stressful events such as prejudice is through racial socialization which serves as a protective factor (Stevenson, Reed, Bodison, & Bishop, 1997).

Studies done previously have found that discrimination experiences of adolescence are associated to parents' practice of cultural socialization (Stevenson, McNeil, Herrero-Taylor, & Davis, 2005), considering that parents can help teach young people to learn to manage with such unhelpful experiences. In studies it is proposed that resilience among minority youth can also be promoted by ethnic identity (Miller, 1999). Efficient coping and psychological potency are thought to be promoted by both racial socialization and ethnic identity (Scott, 2003), which are essential for reducing the negative effects of inequity.

Spencer and Dornbusch (1990) also indicate that prejudice experiences persist in all social classes. The adolescence from beneficial backgrounds are able to defend themselves from the effects of biasness, are likely to diverge from the socio-economically disadvantageous youth. For instance, those parents are probable to take part in racial socialization practices with their children's who have more income and education (McHale et al., 2006), and adolescents' apparent control over biased experiences has been positively linked to racial socialization (Scott, 2004). The individual's who encounter the psychological effects of prejudice, are referred to

stereotype threat. Aronson, Quinn, and Spencer (1998) referred to stereotype threat as "the discomfort targets feel when they are at risk of fulfilling a negative stereotype about their group; the apprehension that they could behave in a way as to confirm the stereotype". They consider that stereotype threat can influence the presentation on mental works and promote students in order to guard their self esteem by coping in the endangered domain, which in turn can undermine academic achievement.

Female Mindsets and Negative Stereotypes. Good, Rattan, and Dweck conducted a research in 2007 in which they studied the females in Elite University who had taken calculus courses in order to understand whether their mindsets had any influence on their sense of belongingness in maths and also their desire to choose the maths courses further in their future. They also studied whether the mindsets influenced their maths grades. The results were that the female mindsets played an important role. It revealed that the negative effects of stereotypes did not affect those females who held a growth mindset. In contrast, those female who held a fixed mindset were affected more by negative stereotypes and when this happened they had a lesser desire to take math in the future and as a result a major decline in their maths grades.

Researchers have identified social support as a protective factor in the connection between risk and educational outcomes (Gutman & Midgley, 2000). Supportive relationships with people in one's social support network may be especially important for students of low SES backgrounds (Rutter, 1979). In the context of risk and resilience, social support serves as a protective factor. Yet, some researchers suggest that social support serves as a promotive factor.

Recently a National Survey of Student Engagement (NSSE) was conducted on the High Point University campus that stressed upon the implementation of growth mindset strategies which could enhance the different aspects of student engagement. Furthermore, for the success

of individual students i.e. their better academic achievement and the health of the institution that requires higher student retention both involve a high level of student engagement. Growth mindset strategies have proven that it enhances student engagement, growth mindset students are inclined to seek out challenges for the sake of learning and further improving, rather than pulling away from challenges with the fear that it will highlight their intellectual ability.

Rationale

The aim of this research is to figure out whether growth mindset has an impact on school engagement and psychological well being of Pakistani adolescent's students. There has been limited research on this area in Pakistan, especially the implicit theories of intelligence and its contribution towards adolescent's engagement in school and psychological well being.

This research attempts to find the results of growth mindset on school engagement and psychological well being but it extends previous studies to understand the mechanism among Pakistani adolescent's students. As adolescents is the crucial period of development whether physical, psychological or mental. It is the stage where students learn to adapt to their environment more effectively and respond positively towards challenges. Adolescents need to adequately understand their mindsets and gain the idea that their educational and social setbacks have the potential to get better. Once they understand this mechanism then they can be taught the social skills and intellect which they need to be resilient.

Such study can be quite effective for our society in which people can gain an idea related to their mindsets and apply them in their life. This study can be used in schools and family environment to gain a better understanding of the problems that the students face. It can be used

to enhance the knowledge of teachers regarding the study environment and how it can foster student's mindsets which in turn can have an effect on their daily life activities.

Chapter II

METHOD

Objectives

The main objectives of the study are:

- To investigate whether growth mindset has an impact on psychological wellbeing and school engagement among adolescents.
- To study whether resilience plays a mediating role between growth mindset on psychological well being and school engagement among adolescents.
- To investigate the gender difference on school engagement and psychological well being among adolescents.
- To study the relationship between socioeconomic status and growth mindset among adolescents.

Hypothesis

- There is a positive relationship between growth mindset and resilience.
- Growth mindset has a positive impact on school engagement among adolescents
- Growth mindset has a positive impact on psychological well being among adolescents.
- Resilience plays a mediating role between growth mindset on psychological well being and school engagement.
- Female students tend to have a higher level of school engagement then male students.
- Male adolescents tend to have greater psychological wellbeing as compared to females.

- Students with low socioeconomic status tend to have low level of growth mindset as compared to students with high socioeconomic status.

Sample

Sample of the present study comprised of 300 adolescent students in which female and male adolescent students were equally distributed. 150 female and 150 male adolescent students were selected. Purposive sampling technique was used to collect the information from participants. A diverse sample was employed in order to enhance the generalizability of the study. Participants were selected from Abbottabad, Islamabad and Rawalpindi equally, that comprised of 150 adolescents students including 75 males and 75 females from both the cities.

The average age range of participants was 14-19 years. All the participants were selected from English Medium schools. They were recruited from City School, Modernage Public school, Burnhall School and college, Beaconhouse, The Educators, The Smart School and the Frontier School. The education level of participants was 8th class, along with matric and intermediate level. The sample was randomly selected from these classes in order to have wide range of responses regarding the socioeconomic status that was measured through family income.

Operational Definition

Growth Mindset

Growth mindsets are defined as "core assumptions about the malleability of personal qualities" (Dweck and Leggett, 1988; Dweck, 1995; Molden and Dweck, 2006; Yeager and Dweck, 2012). Growth mindset students "see intellectual ability as something that can be grown or developed over time" (Yeager and Dweck, 2012).

It is operationally defined as the scores on the growth mindset inventory. Low score on the scale will indicate high growth mindset orientation while high score will indicate high fixed mindset orientation among adolescents.

School Engagement

School engagement is "a positive, fulfilling and study-related state of mind characterized by vigor, dedication, and absorption" (Schaufeli, Martinez, Pinto, Salanova, and Bakker 2002).

School engagement is operationally defined as the scores obtained on the emotional, behavioural and cognitive engagement of the school engagement scale. High score indicates higher level of school engagement among adolescents.

Psychological Wellbeing

According to Amato, Loomis, and Booth (1985) "Psychological well-being refers to how individuals self-evaluate and their ability to fulfill certain aspects of their lives, such as relationships, support, and work."

It is operationally defined as the scores on the psychological well being scale. High score on the scale indicates higher level of psychological well being with many psychological resources and strength.

Resilience

Resilience is defined as "good outcomes in spite of serious threats to adaptation or development" (Masten, 2001). Block and Kremen (1996) refer resilience as "an ability to bounce back from negative emotional experiences and flexibly adapt to the changing environment".

It is operationally defined as the scores on the brief resilience scale. High score indicates high resilience among adolescents.

Instrument

Demographic Sheet

The demographic variables included were age, gender, city, education, income of family, no of siblings, father education and occupation along with mother education and occupation.

Growth Mindset Inventory

Growth mindset inventory is provided by Robert Greenleaf, (2014). It attempts to measure both growth and fixed mindsets. It captures current student's level of understanding and depth of knowledge of key concepts. It is a five item inventory (e.g. I am comfortable with making many mistakes along the way to figuring things out). Responses are made on a likert scale of 7 points. The scale has 0.70 reliability.

School Engagement Scale

This scale was developed by Frederieks, Blumenfeld, Friedel, & Paris in (2005). It includes items which were drawn from variety of measures such as behavioural. cognitive and emotional engagement. It consists of 15 items that include 4 behavioural engagement items (e.g.

"I pay attention in class"), 6 emotional engagement items (e.g. "I feel excited by the work in school") and 5 cognitive engagement items (e.g. "I study at home even when I don't have a test"). The items 2, 4 and 6 are reversed scored. Respondents had to score on a 5 point likert scale (1- Never and 5- Very true). It has a good reliability of .74-.86.

Psychological Wellbeing Scale

Psychological Well Being scale was developed by Diener, Wirtz, Tov, Kim-Prieto, Choi, (2010). It is a brief scale used to measure participants' PWB. The scale includes eight items to access: meaning, positive social relationships (including helping others and ones community), self esteem, competency, and mastery. For example: "I lead a purposeful and meaningful life". Each item is answered on a likert scale of 1-7 points that has a range from strong disagreement to strong agreement. All items are phrased positively. Scores can range from "8 (Strong Disagreement with all items) to 56 (strong agreement with all items)". The reliability of the scale is 0.86.

Brief Resilience Scale

The Brief Resilience Scale (BRS) was developed by Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, (2008). It was created to access the ability to bounce back or recover from stressful life events (e.g., "I tend to bounce back quickly after hard times"). It was used to measure participants' resilience. It is a six item scale; three items that are negative and three that are positive. Items 1, 3 and 5 are worded positively and items 2, 4 and 6 are worded negatively. The participants are asked to answer each question by representing their agreement with each statement by using the 5-point Likert type scale ("1: strongly disagree and 5: strongly agree"). The Alpha Cronbach's reliability ranges from .80-.90.

Procedure

For this research a sample had been selected from English Medium schools of Abbottabad, Islamabad and Rawalpindi. Firstly the permission was obtained from school administration to conduct the survey in their area. Most of the school were helpful in this process but many rejected and didn't approve to work in their school. The data was collected in the time of regular school hours. The survey was conducted in different class rooms from the specific age group that was required. Before the application of the questionnaires, the participants were informed about the objectives of the study, and confirmed that all data would be kept confidential. Then the informed consent was taken from participants of the study. Only those participants were selected who were willing to take park in the survey.

Once the participants were provided with the questionnaires they were illustrated with verbal instructions and were motivated to complete their questionnaires. They were also informed that if they had any difficulty while completing the questions they were free to ask from the researcher. Students completed the questionnaires with least difficulty. The same process was applied to all the schools and data was gathered from different classes and different age groups. The responses of students also revealed their socioeconomic status that was illustrated through family income in the demographics.

Ethical Consideration

Ethical consideration is fundamental in every phase of a good study process. So in order to meet its demands permission from the authors of Growth Mindset Inventory (Greenleaf, 2014), School Engagement Scale (Fredericks, Blumenfeld, Friedel, & Paris in 2005), Psychological Well-being (Diener, Wirtz, Tov, Kim-Prieto, Choi, 2010) and Resilience (Smith,

Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008) was obtained. In order to fulfill the ethical demands the confidentiality of participants shall be maintained by making their identity anonymous. All the information collected will be securely stored and carefully managed.

Chapter III

RESULTS

Table 1

Psychometric Properties of Scales (N=300)

Scales	M	SD	A	Range Minimum	Range Maximum	Skewness	Kurtosis
Growth Mindset	19.8	2.2	.65	14	24	-.054	-.516
Resilience	21.5	2.4	.73	16	27	.174	-1.06
School Engagement	46.1	7.3	.74	23	62	-.125	-.599
Psychological Wellbeing	46.8	5.5	.64	30	56	-.727	-.352

Table 1 show that the Cronbach alpha reliability of growth mindset scale is .65, for brief resilience scale is .73, for school engagement scale is .74, and for psychological wellbeing scale is .64. The reliability analysis indicates that the reliability coefficients of all scales are significant and positively related. The results also show the good skewness distribution <1.

Table 2

Mean Standard Deviation and t-Value for School Engagement Scale and Psychological Well Being (N=300)

	Males n=(150)		*Females n=(150)*				95 % CI		
Scale	*M*	*SD*	*M*	*SD*	*t(298)*	*P*	LL	UL	Cohen's d
School Engagement	44.69	7.63	47.69	6.75	3.60	.00	-4.63	-1.36	0.41
Psychological Wellbeing	46.13	5.90	47.61	5.02	2.33	.02	-2.72	-.23	0.27

*Note: **P < .01 **P<.05*

Table 2 shows that there is a significant difference between school engagement among males (M=44.6, SD=7.63) and females (M=47.6, SD=6.75) with t (298)= 3.60, p=0.00 and 95% CI [LL= -4.63, UL= -1.36]. Results indicate significant gender difference on school engagement, as females show greater school engagement than males. The results also revealed significant gender difference among males and females on psychological wellbeing.

Table 3

Pearson Product Moment Correlations among the Study Variables (N=300)

Variables	Growth Mindset	Resilience	Psychological Wellbeing	School Engagement
Growth Mindset	-			
Resilience	.55**	-		
Psychological Wellbeing	.70**	.55**	-	
School Engagement	.66**	.59**	.69**	-

Note. ***p*<.01*

Results given in table 3 showed that growth mindset, resilience, psychological wellbeing and school engagement were positively and significantly associated with each other. Correlations of all the variables are significant at 0.01 level.

Table 4

Linear regression analysis of Growth Mindset and psychological well being (N=300)

	Model Psychological Wellbeing	95% Confidence Interval	
Variable	B	UL	LL
Constant	12.0	8.03	16.0
Growth Mindset	1.75	1.55	1.95
R^2	.500		
F	297.9		

Note. UL=Upper Limit, LL=Lower Limit, ***p<.001

Results in table 4 indicated the simple linear regression among growth mindset and psychological wellbeing. A significant regression model was found between growth mindset and psychological well being among adolescents (β=.707, p<0.01) (F (1,298)= 297.9, p< .000), with an R^2 of .500. Therefore the results show that growth mindset positively predicted psychological wellbeing with 50% variance.

Table 5

Linear regression analysis of Growth Mindset and School Engagement (N=300)

	Model	95%
	School Engagement	Confidence
		Interval
Variable	B	UL LL
Constant	2.66	-2.97 8.29
Growth Mindset	2.19	1.91 2.47
R^2	.440	
F	233.8	

Note. UL=Upper Limit, LL=Lower Limit, ***p<.001

Table 5 indicates the results of simple linear regression among growth mindset and school engagement. A significant regression model was found between growth mindset and school engagement among adolescents (β=.663, p<.01) (F (1,298) = 233.8, p< .000), with an R^2 of .440. Therefore these results showed that growth mindset positively predicated school engagement with 44% variance.

Table 6

One- Way Analysis of Variance of Growth Mindset by family income (N=300)

	Low Income Group	Middle Income Group	Upper Income Group	F	i-j	Mean D(i-j)	SE
	4000-25000	26000-65000	66000-250000				
	n = (52)	n = (165)	n = (83)				
Variable	*M(SD)*	*M(SD)*	*M(SD)*				
Growth Mindset	19.58(2.07)	19.92(2.20)	19.83(2.35)	.45	Ns	Ns	Ns

Note. ***$p<.001$, *$p<.05$

Results in table 6 indicated an analysis of variance that showed the effect of family income on growth mindset and school engagement. The results showed a non-significant effect of family income on growth mindset among adolescents, F (2, 297) = .457, p = .634.

Simple Mediation Analysis of School Engagement

Direct and Indirect Effect of Growth Mindset on School Engagement through Resilience (N=300).

Figure 1

The conceptual model of school engagement is represented through path diagram of simple mediation analysis.

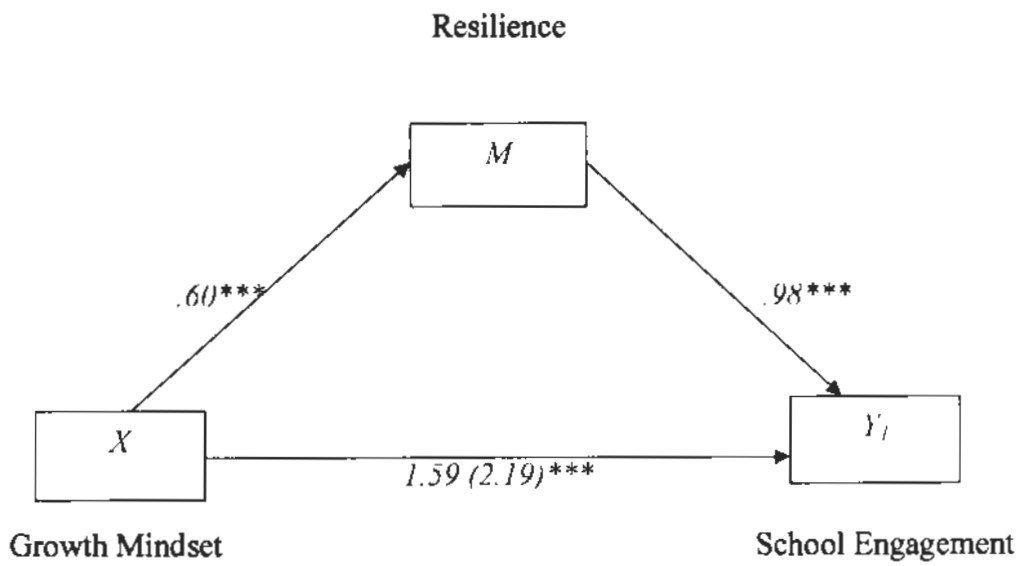

Table 7

Total Effect Model of Growth Mindset and School Engagement (N=300).

		School Engagement	
Antecedent	B	SE	t
Constant	2.66	2.86	.929 ***
Growth Mindset (c path)	2.19	.14	15.29 ***
		$R^2 = .43$	
		$F(1,298) = 233.8, p = .00$	

Note: *p <.05, ** p <.01, ***p <.001

Table 8

Mediation Analysis: School Engagement Model (N=300).

		School Engagement	
Antecedent	B	SE	t
Constant	-6.76	3.01	2.24***
Growth Mindset (c′ path)	1.59	.16	9.96***
Resilience	.98	.14	6.71***
		$R^2 = .51$	
		$F(2,297) = 156.7, p = .00$	

Note: *p <.05, ** p <.01, ***p <.001

Table 9

Mediation Analysis: Mediator Variable Model – Resilience (N=300).

		Resilience	
Antecedent	B	SE	t
Constant	9.55	1.05	9.06***
Growth Mindset	.60	.052	11.41***
		$R^2 = .30$	
		$F(1,298) = 130.24, p = .00$	

Note: *p <.05, ** p <.01, ***p <.001

The results of mediation analysis are presented in table 7, table 8, and table 9. The results consist of the association between growth mindset and school engagement (c path), the effect of growth mindset on resilience (a path), and the association between growth mindset and school engagement through resilience (c′ path). Firstly table 7 shows that growth mindset was positively associated with school engagement (β = 2.19, t (298) = 15.29, p = .00). By this analysis it is concluded that the results of this path are significant. It was also found in table 9 that growth mindset was positively related to resilience (β = .602, t (298) = 11.41, p = .00), which also represented significant results. Lastly the results in table 8 showed that resilience was positively associated with school engagement (β = .986, t (297) = 6.71, p = .00) which revealed significant results as well. Mediation analysis was tested using the Hayes (2013) method. In the present study, 95% confidence interval of the indirect effect was obtained with 5000 bootstrap samples (Hayes, 2013). Bootstrapping is a method for deriving robust estimates of standard errors and confidence intervals for estimates such as the mean, median, proportion, correlation coefficient

or regression coefficient. It can also be used for constructing hypothesis tests. Bootstrapping is most useful as an alternative to parametric estimates when the assumptions of those methods are in doubt, or where parametric inference is impossible or requires very complicated formulas for the calculation of standard errors. To illustrate, table 8 indicates that the c´ path of the association between growth mindset and school engagement was highly significant ($\beta = 1.59$, $t\ (297) = 9.96$, $p = .00$), thus suggesting mediation. Sobel's test (1990) was carried out to see the significance of indirect effect of growth mindset on school engagement through the mediation of resilience. The result shows significance at alpha = .01 ($z = 5.772$, $p = .00$). This means that the results of mediation analysis of resilience in the relation between growth mindset and school engagement are significant. This shows that resilience acts as a mediator between growth mindset and school engagement.

Simple Mediation Analysis of Psychological Wellbeing

Direct and Indirect Effect of Growth Mindset on Psychological Wellbeing through Resilience (N=300).

Figure 2

The conceptual model of psychological wellbeing is represented through path diagram of simple mediation analysis.

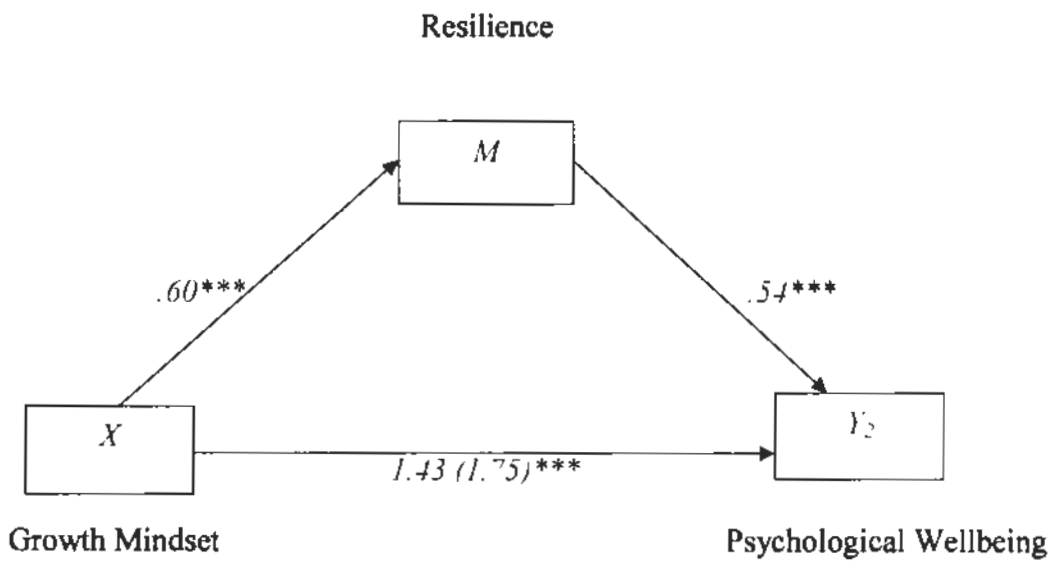

Table 10

Total Effect Model of Growth Mindset and Psychological Wellbeing (N=300).

		Psychological Wellbeing	
Antecedent	B	SE	t
Constant	12.02	2.03	5.92***
Growth Mindset (c path)	1.75	.10	17.2***
		$R^2 = .50$	
		$F(1,298) = 297.9, p = .00$	

Note: *p <.05, ** p <.01, ***p <.001

Table 11

Mediation Analysis: Psychological Wellbeing Model (N=300).

		Psychological Wellbeing	
Antecedent	B	SE	t
Constant	6.86	2.20	3.11***
Growth Mindset (c′ path)	1.43	.11	12.20***
Resilience	.54	.10	5.03***
		$R^2 = .53$	
		$F(2,297) = 173.7, p = .00$	

Note: *p <.05, ** p <.01, ***p <.001

Table 12

Mediation Analysis: Mediator Variable Model-Resilience (N=300).

		Resilience	
Antecedent	B	SE	t
Constant	9.55	1.05	9.06***
Growth Mindset	.60	.052	11.41***
		$R^2 = .30$	
		$F(1,298) = 130.24, p = .00$	

Note: *p <.05, ** p <.01, ***p <.001

The results of mediation analysis of resilience between growth mindset and psychological wellbeing are presented in table 10, table 11, and table 12. The results consist of the association between growth mindset and psychological wellbeing (c path), the effect of growth mindset on resilience (a path), and the association between growth mindset and psychological wellbeing through resilience (c′ path). Firstly table 10 shows that growth mindset was positively associated with psychological wellbeing (β =1.75, t (298) = 17.26, p = .00). By this analysis it is concluded that the results of this path are significant. It was also found in table 12 that growth mindset was positively related to resilience (β = .602, t (298) = 11.41, p = .00), which also represented significant results. Lastly the results in table 11 showed that resilience was positively associated with psychological wellbeing (β = .540, t (297) = 5.031, p = .00) which revealed significant results as well. Mediation analysis was tested using the Hayes (2013) method. In the present study, 95% confidence interval of the indirect effect was obtained with 5000 bootstrap samples (Hayes, 2013). To illustrate, table 11 indicates that the c′ path of the association between growth mindset and psychological wellbeing was highly significant (β = 1.43, t (297) = 12.20, p = .00),

thus suggesting mediation. Sobel's test (1990) was carried out to see the significance of indirect effect of growth mindset on psychological wellbeing through the mediation of resilience. The result shows significance at alpha = .01 (z= 4.589, p = .00).This means that the results of mediation analysis of resilience in the relation between growth mindset and psychological wellbeing are significant. This shows that resilience acts as a mediator between growth mindset and psychological wellbeing.

Chapter IV

DISCUSSION

The purpose of this study was to investigate the impact of growth mindset on school engagement and psychological wellbeing among adolescents in Pakistan. Along with this, the study also showed whether resilience acted as a mediator among the variables. Both male and female adolescents have been examined along these variables. The results of the study also revealed whether family income had an effect on growth mindset of adolescent in Pakistan.

The results showed a positive relationship between growth mindset and resilience. Several possible explanations contribute to this relationship which include that implicit theories develop students personal characteristics during educational and social adversities which affect resilience (Yeager and Dweck, 2012). Thus, the results are related to previous studies that are showed in different contexts. Resilience is defined as "successful adaptation in the face of adversity and environmental stressors, such as poverty, unemployment, homelessness, and family instability and breakdown" (Masten, 1994). In order to manage such challenges growth mindset is of utmost importance. (Peterson, Ruch, Beerman, Park, & Seligman, 2007). The subjective experiences are valued by positive psychology towards the past, present and future and it also helps enhance the positive qualities that could be used to prevent and effectively deal with everyday problems (Seligman & Csikszentmihalyi, 2000). As it focuses on cognitive processes such as, thinking optimistically, positive self talk, awareness and regulating the emotions positively. The development of positive thinking during setbacks provides children with an opportunity to engage in optimistic thinking, to challenge the unhelpful thoughts and dealing with the challenges with a positive attitude (Noble & McGrath, 2008). The children may be taught the skills referring to their thoughts, such as helping them to attribute bad or stressful

events in the lives as external or unstable causes that can result in developing a more positive mindset (Buchanan & Seligman, 1995). This can illustrate that both growth mindset and resilience have a positive relationship.

Regression analysis was done to measure the impact of growth mindset on school engagement. The results of the linear regression analysis showed that growth mindset predicted school engagement. According to the past investigations it is noted that students with a growth mindset tend to earn higher grades and are involved more in school engagement because it provides as a platform for them to learn from the challenges and mistakes rather than just looking smart (Blackwell, Trzesniewski, and Dweck, 2007). Blackwell, Trzesniewski, and Dweck (2007) conducted a research in which they studied growth mindset and achievement grades among minority students in USA. Participants were those who were making a difficult transition from 7th grade and were already showing declining grades and educational activities. To study this, two groups were assigned, control and intervention group. The control group received eight sessions of study skills where as the intervention group received eight sessions of study skills along with particular training in growth mindset. The training that was provided in growth mindset involvement was that student's brain forms new connections due to effort and they were the ones who could control it. The study showed that the growth mindset intervention group resulted in greater achievement due to higher grades and to new pathway of improvement.

Student's belief about their ability and effort in work (self-efficacy) can enhance their academic learning resulting in better learning and performance at school. This ability is studied by Dweck and colleagues (2007) in their research in which both ethically and economically diverse children were featured, in which the main factor for students was their mindset about intelligence. Students may view intelligence as fixed quantity that is possessed or a growth

quantity that could be changed due to effort and learning. Fixed mindset students tend to focus on "proving it" rather than "improving it", they may have destructive thoughts and behaviours. Whereas students with growth mindset perceive challenges and setbacks as opportunity to improve their abilities, resulting in constructive thoughts and behaviours. These mindsets do contribute to student's achievement goals. These goals can be either performance or learning goals. Performance goals are related to the way of proving one's ability which results in a way to perform effectively and avoid poor performance. Whereas learning goals result in improving one's ability, in order to enhance learning and master the challenges in academic learning. Therefore the students who develop the learning goals try to seek out challenges and perform on difficult tasks without fear of failure, and develop their abilities which enhance their academic and school engagement. Thus, the studies reveal that growth mindset effectively improves student's school engagement.

Further the results of growth mindset and psychological wellbeing were found. The results were examined using linear regression analysis in our study that revealed that growth mindset predicted psychological wellbeing. According to Ryff (1989) psychological wellbeing involves a set of psychological features that result in positive human functioning (Ryff, Keyes & Schmotkin, 2002). These positive human functioning involve both happiness and wellbeing. A study conducted by Finn (1989) in which they discovered that the participants "craved one-on-one attention from their teachers, and when they received it, they remembered it making a difference." In the study the participants in the focus groups reported that their best days in school were those when their teachers noticed them and got them involved in class due to which they felt encouraged to participate. The results revealed that students' feeling of belongingness in school was a strong predictor of academic tenacity as well as the quality of their relationship

with their teachers and other students. It was also reported that those students who had a growth mindset and learning goals were the once who had more sense of belongingness in school than others. Children with fixed mindsets could not face challenges and if they encounter any challenge or failure in life their negative self cognitions started to develop. These children recognized their failures as a result of inadequacy, limited intelligence and limited problem solving skills. Along with this they also express a negative affect aversion and boredom of tasks, and anxiety over incompletion of task and their performance. Further they view themselves as those who have low abilities and could never perform well. Thus, these findings do reveal that growth mindset does contribute to student's happiness which in turn promotes wellbeing.

Furthermore the t-test analysis of the difference of mean among male and female adolescents revealed a significant difference in school engagement. The female adolescent students tend to have higher school engagement than male students. The results of the study were according to the previous literature. According to Ruslin, Anisa, Zalizan, Abdul, and Hutkemri in (2014) conducted a research in which they explored student's engagement level at school based on their gender and age in Malaysia. Findings revealed that engagement level in school differs by age and gender. Younger students recorded higher school engagement level as compared to elder ones. Female students reported to have higher level of engagement when compared to boys. Which in turn results in the conclusion that school environment is perceived differently by different gender and age group. As school engagement consists of three aspects i.e. affective, behavioral and cognitive functioning. School engagement has been widely examined related to gender difference. Voelkl (1997) have found in their research that girls showed greater level of identification and participation in school as compared to boys. Johnson, Crosnoe, and Elder (2001) had conducted a research to uncover the behavioural aspect of engagement and found that

girls in middle and high school were more behaviourally engaged than boys. Studies have also focused on affective aspect and found the in middle school girls were reported to he more attached as compared to high school where boys showed more attachment than girls. Thus, the results of study were consistent with past literature.

T-test analysis of mean was conducted to find gender difference among adolescents in psychological wellbeing. The results showed a significant difference which revealed that female adolescents tend to have greater level of psychological wellbeing as compared to males. The results are in contradiction with the study of Sagone and Caroli (2013) conducted a study on the relationship of resilience and psychological wellbeing. For this purpose a sample of 224 middle and late adolescents were used. The results of the study found a positive relationship among resilience and psychological wellbeing. This study also found that boys expressed high level of psychological wellbeing.

Compared analysis was used to investigate whether different family income groups could affect growth mindset. Results of the study rejected the hypothesis and revealed that growth mindset was not affected by different income groups. These results are in contradiction with the results of Claro, Paunesku, and Dweck who conducted a study in (2016) on 10^{th} grade public school students in Chile. The objectives of the study were to determine whether socioeconomic background and students beliefs on their abilities could influence academic achievement. The results of the study showed that the growth mindset was a strong predictor of academic achievement. The results also revealed that the students from low income family were less likely to have a growth mindset than their wealthier peers. This finding could be explained with the help that the low income students were more likely to have fixed mindsets because of limited resources and economic disadvantages which may lead to poor academic performance, these

factors could in turn lead the low income students to believe that their mental capacity or intellectual ability could not be enhanced. These income inequalities could increase the psychological inequalities which could impact academic achievements and future performing opportunities. In this study, the results could be possibly contradictory due to unequal distribution of sample size among the three income groups, as the sample was collected randomly. Another reason could be because a diversified sample wasn't used as only the English medium school were selected. The results would have been different if the sample was also selected from government schools as well.

Simple mediation analysis was used to test the hypothesis that resilience acts as a mediator between growth mindset, school engagement and psychological wellbeing. In order to calculate the direct and indirect effect of this simple mediation, Model 4 in the PROCESS macro of Hayes (2013) was used.

This assumption that resilience acts as a mediator between growth mindset, school engagement and psychological wellbeing was sustained According to WHO (2011), for effective learning health is important and there is evidence that the students who perform well in studies are those who are both physically and psychologically healthy. In order to have a positive health, resilience is the main focus. As resilience is the ability to bounce back from challenges and setbacks (Masten, 2001), this resilience is enhanced in order to prevent depression to help young people by teaching them social and problem solving skills along with behavioural and cognitive skills as well (Gillham, Reivich, Freres, Chaplin, Samuels, and Gallop, 2007). The individuals who are more resilient have a greater ability to recover from stressful events and be more physically and psychologically healthy. Positive developmental outcomes are made possible through resilience. As resilience help the children to understand positive attitude through facing

adversities, and factors such as: avoiding self harm and destructive methods along with antisocial behaviours, other mental disorders and physical wellbeing (Richman & Fraser, 2001). Schools serve as a place in which social and emotional factors are taught to build resilience skills in children. Resilience not only provides help to a child to deal with social and physical environment but also helps to facilitate the internal and external resources in their lives (Ungar, Brown, Liebenberg, Othman, Kwong, Armstrong, and Gilgun, 2007).

According to Wesson and Boniwell (2007) who proposed that the strengths approach can lead to greater awareness of strength and enhance further skills by increasing the likelihood of challenges, helping students to explore and apply their strengths and skills in a way through which they create pathways to the activities that are according to their interests and values. Which in turn develops the student self efficacy when faced with challenges in life. For this the development of individual potential is highly important, it is achieved by striving for meaningful outcomes, involves the capacity to work for goal, the motivation to carry on even when faced with challenges, and achievement of success and competency in every domain of life. Thus the mindset approach according to Dweck (2006) can be developed in students through which they develop skills, are devoted to important goals, and are able to face challenges without the fear of failure and with a motivation to learning.

The results of the study are that resilience does act as a mediator between growth mindset, school engagement and psychological wellbeing. These findings are in line with the study of Zeng, Hou, and Peng (2016) that support the relationship between growth mindset, school engagement and psychological wellbeing, as well as the mediating role of resilience. In their study they have proposed that resilience acts as a partial mediator between growth mindset,

school engagement and psychological wellbeing. Thus the results are in notion with the study presented in past literature.

Conclusion

The aim of this study was to investigate the mediating role of resilience among growth mindset, school engagement and psychological wellbeing. This study also investigated whether growth mindset predicted school engagement and psychological wellbeing among Pakistani adolescents. Along with this the gender difference was also studies among the variables. The effect of family income on growth mindset also provided some knowledge able results. The analysis of results showed that all the variables were correlated among each other. Results revealed that growth mindset predicted both psychological wellbeing and school engagement among adolescents.

A significant gender difference was also found among school engagement, which showed that girl's engagement in schools was greater as compared to boys. Psychological wellbeing also showed a significant gender difference in which girls scored high as compared than boys. The analysis of ANOVA showed that there wasn't any significant difference among family income and growth mindset, as it revealed that socio-economic status did not affect growth mindset of adolescents. The mediation analysis of resilience was also considered in the study. Mediation was carried out through PROCESS Macro developed by Hayes (2013) in which the results were that resilience acted as a mediator between the relationship of growth mindset, school engagement and psychological wellbeing.

Implications

The findings of this research have many implications on the academic and social tasks of students. In Pakistan, there is a greater need of students to adequately understand their mindsets and gain the idea that their educational and social setbacks have the potential to get better. Once students have this understanding that their mindsets can be changed than this change can alternatively have an impact on their resilience level which can have an effect on their social skills and intellect to get better in life. This study can be applied to schools in order for teachers to understand that the mindset can be improved by their motivation and effort. Once they have this recognition than they can help students to change their mindsets which in turn enhance their level of resilience. Further, resilience can enhance higher level of engagement in schools when they successfully face challenges. Once students become more resilient than they have a greater ability to deal with problems related to their daily life, have an effect on their psychological wellbeing. It can be used as a protective mechanism for the promotion of a better psychological health.

Limitations

The limitations of the study were:

- The study was only conducted on students of English Medium Schools of Abbottabad, Islamabad and Rawalpindi.
- Only adolescents were selected so the sample wasn't very broad.
- Limited ranges of participants were chosen from these specific places.
- Sample size of the study was also relatively small.

- The view of teachers could have been considered related to the school engagement and growth mindset of student's, in order to gain better understanding.

Suggestions

Following suggestions must be kept in consideration for future research:

- The sample size should be increased.
- It is recommended that a broad spectrum of age should be taken.
- Vast area could be used to collect sample participants.
- Schools other than English medium could also be taken into consideration.
- In future studies, data can also be taken from teachers in order to get a better understanding of the students.

Chapter V

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Appendix-A

CONSENT FORM

Dear Participants,

I am MS Scholar of the Department of Psychology at International Islamic University, Islamabad. I am conducting a research study to investigate the impact of growth mindset and resilience on school engagement and psychological well-being among adolescents. I am requesting you to participate in this study. Your participation is voluntary. The results of the research study may be published, but your name will not be used. Return of the questionnaire will be considered as your consent to participate.

If you are willing to participate then please sign here.

Signature: _____

Date: _____

Thank you.

Sundus Jadoon

Email: sundusjadoon@yahoo.com

Appendix-B

Demographic Information Sheet

1. Age: _____
2. Gender: _____
3. No of Siblings: _____
4. Education: _____
5. Education Type: _____
6. Residence: _____
7. Family's Monthly Income: _____
   a. Rs. 4000- 25000
   b. Rs. 25000-65000
   c. Rs. 65000-250000
8. Father

   Education: _____

   Occupation: _____
9. Mother

   Education: _____

   Occupation: _____

Appendix-C

GROWTH MINDSET INVENTORY

Note: Please respond to the following items by marking on the scale of 1-7.

1. **People learn new things all the time, but they really cannot change their basic, general level of intelligence.**

Mostly false			Not sure			Mostly true
1	2	3	4	5	6	7

2. **Work is best when it:**

Make me think hard					Is easy to accomplish without much difficulty	
1	2	3	4	5	6	7

3. **I am comfortable with making many mistakes along the way to figuring things out.**

Most of the time						seldom
1	2	3	4	5	6	7

4. **If work is <u>very</u> hard or it is difficult for me to understand:**

I take it as a challenge					I don't want to continue	
1	2	3	4	5	6	7

5. **When others succeed while I make errors, it:**

Doesn't bother me at all						Bothers me a lot
1	2	3	4	5	6	7

Appendix-D

BRIEF RESILIENCE SCALE

The following statements concern about your ability to perform when you encounter a stressful situation in life. Please respond to each statement by indicating how much you agree or disagree with each statement.

	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I tend to bounce back quickly after hard times.					
2.	I have a hard time making it through stressful events					
3.	It does not take me long to recover from a stressful event					
4.	It is hard for me to snap back when something bad happens.					
5.	I usually come through difficult times with little trouble.					
6.	I tend to take a long time to get over set-backs in my life.					

Appendix-E

SCHOOL ENGAGEMENT SCALE

Please respond to the following statements by indicating how much you agree or disagree with it.

		Never	**On Occasion**	**Some of the Time**	**Most of the Time**	**All of the Time**
1.	I pay attention in class					
2.	When I am in class I just act as if I am working					
3.	I follow the rules at school					
4.	I get in trouble at school					
5.	I feel happy in school					
6.	I feel bored in school					
7.	I feel excited by the work in school					
8.	I like being at school					

9.	I am interested in the work at school					
10.	My classroom is a fun place to be					
11.	When I read a book, I ask myself questions to make sure I understand what it is about					
12.	I study at home even when I don't have a test					
13.	I try to watch TV shows about things we are doing in school					
14.	I check my schoolwork for mistakes					
15.	I read extra books to learn more about things we do in school					

Appendix-F

PSYCHOLOGICAL WELLBEING SCALE

Below are 8 statements with which you may agree or disagree. Using the 1–7 scale below, indicate your agreement by writing the numbers with each item by indicating the response for each statement in the column provided.

7	6	5	4	3	2	1
Strongly Agree	**Agree**	**Slightly agree**	**Neutral**	**Slightly disagree**	**Disagree**	**Strongly disagree**

1. I lead a purposeful and meaningful life.	
2. My social relationships are supportive and rewarding.	
3. I am engaged and interested in my daily activities	
4. I actively contribute to the happiness and well-being of others	
5. I am competent and capable in the activities that are important to me	
6. I am a good person and live a good life	
7. I am positive/hopeful about my future	
8. People respect me	

Appendix- H

Correspondence with Authors to Use School Engagement Scale

Re: Permission to use scales
Yahoo/Inbox

- **sundus Jadoon** <sundusjadoon@yahoo.com>

  To: jfred@conncoll.edu

  Apr 20 at 1:59 PM

  I am an MS scholar from International Islamic University, Pakistan. I am undergoing my thesis for which I needed a School Engagement Scale. I found your scale and wanted to use it in my research for which I need your permission. Please allow me and along with that provide me with the psychometric properties of this scale. I shall be highly thankful.

  Regards,

  Sundus Jadoon

- **Jennifer Fredricks** <jfred@conncoll.edu>

  To: sundus Jadoon,feedback

  Apr 21 at 3:38 PM

  Hi. Yes, you are able to use the scale in your research. You just need to cite the MacArthur Network The attached article has more information on the scale.

  Jenny

  Show original message

Appendix- I

Correspondence with Authors to use Growth Mindset Inventory

Re: Growth Mindset Inventory3

Yahoo/Inbox

- **Doris Wells-Papanek**

Dear Sundus. Thank you for the inquiry. I have recently spoken to Dr. Greenleaf regarding your request. Please respond to the following questions and consider the comments below: What is the focus / context of your thesis? Who are you researching and why? If permission is granted, are you able to share your findings?

Apr 30 at 1:41 AM

- **sundus Jadoon**

Hello Thank you for the reply. My thesis is regarding growth mindset and school engagement among adolescents in Pakistan. I would share my findings with you. But I need to use the inventory. Only if I can get the psychometric properties of the inventory and whether it is reliable to use on adolescents? If I can have full confirmation that it will provide reliable results than I'll use the inventory. Thankyou. Regards Sundus. Sent from Yahoo Mail on Android

May 1 at 2:40 PM

- **Doris Wells-Papanek** <doris@designlearning.us>

To:sundusjadoon@yahoo.com

Cc:Doris Wells-Papanek

May 3 at 10:01 PM

Dear Sundus,

We are glad to hear of the growth mindset and school engagement research you plan to conduct. Furthermore, we look forward to receiving the findings of the study.

You indeed have our permission to cite and use our inventory.

Growth and Fixed Mindset Inventory

https://drive.google.com/file/d/0B7dCg1fKL5EaM2N5SWg5bTEyNzg/edit

Please do let us know if you have questions. All the best.