A Study on Motivational Incentives for Secondary Students to Attain Academic Achievement in Rural Bangladesh

by

Mahjabin Sultana Mitul

A thesis submitted in partial fulfillment of the requirements for the Master of Philosophy degree in Public Administration
in University of Dhaka

May 2019

Thesis Supervisor: Professor Syeda Lasna Kabir, Ph.D

CERTIFICATE OF APPROVAL

M. PHIL. THESIS

This is to certify that the M.Phil. thesis entitled:

"A Study on Motivational Incentives for Secondary Students to Attain Academic Achievement in Rural Bangladesh', was accomplished by Mahjabin Sultana Mitul encompasses her own effort and to recommend for the submission to the department of Public Administration.

Thesis Supervisor:

Professor Syeda Lasna Kabir, Ph.D

Department of Public Administration, University of Dhaka

Dhaka, Bangladesh

DECLARATION

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university. To the best of my knowledge and belief this dissertation contains no material previously published by any other person except where due acknowledgment has been made.

Signature: ----------

Mahjabin Sultana Mitul
Registration no. 138
Session: 2013-2014
Department of Public Administration
University of Dhaka

Acknowledgement

I finally made it. Thankfully, many others have supported and encouraged me during this challenging and rewarding time in my life. I want to thank with all my heart as many as I can recall, though I am certain that there were others. My family, parents and lovely brother have supported me since the beginning. Their unconditional love and guidance were invaluable. Hope that my family members feel my love for them. In particular, I would like to sincerely thank my dear supervisor, Professor Dr. Syeda Lasna Kabir from the Department of Public Administration, University of Dhaka, who has guided me and encouraged me with great energy and endless faith in my abilities, whose useful suggestions and encouragements kept me going in the right direction. Thank you so much for being there and propelling my efforts.

I also want to thank my other colleagues Sharmin Begum, Atiza Dill Afrose, Niger Sultana from Jatiya Kabi Kazi Nazrul Islam University along with Rita Akter, and Mohammad Ali Mia, great friends in my life, whose moral support, company and "hands-off" guidance are much appreciated. Finally, my heart says thank you to the participants (students) who graciously participated in this research and gave me their time and priceless responses, to all of you, thank you! I could not have made it this far without you.

Abstract

Academic motivation has long been recognized as one of the important goals of education the world over. The aim of this study was to identify incentives that motivate and factors that demotivate students. It also aimed to investigate the relationship between academic motivation and achievement of students, in relation to self-determination theory, existence relatedness growth theory and dual structure approach to motivation. This study used the sequential exploratory type of mixed method research design combining interview and survey methods for data collection that targeted a population of 150 students in secondary schools, especially from rural area in Bangladesh. Following the purposive sampling to identify research unit, 108 students were randomly selected as participants. Data analysis procedure involved Braun and Clarke's (2006) six-phase framework and interactive model of Miles & Huberman (1994) for thematic analysis. After that the descriptive and inferential statistical analysis for quantitative data analysis were done. In order to establish the correlations between independent and dependent variables, in this study, Pearson's correlation coefficient was calculated. The key findings are the major motivating and demotivating factors in schools. Five sub-themes include teacher as motivator, socialization in classroom, recognition of performance, rewards and government's intervention constitute the reasons of student's motivation while the considerable factors of student's demotivation are inadequate subject wise teacher, less friendly teacher, poor classroom equipment, lack of discipline and punishment The other significant finding is that motivating factors are more influential to impact student's academic achievement than demotivating factors. Interestingly, the correlation analysis revealed that mainly intrinsic factors such as 'joy in learning' and 'self-willingness for learning' are most correlated to academic performance. Therefore, the study concluded that student motivation has a positive influence on academic performance. The researcher recommended that future studies should focus on examining the impact of government interventions in promoting student's motivation; secondly, researchers should prioritize study on intrinsic incentives for students; thirdly, the role of gentle discipline in student's engagement can be explored; and lastly, research can be conducted about the impact of school culture on student's academic achievement.

Dedication

This thesis is dedicated to my dear parents and younger brother Sheikh Muhammad Nayem Hossain, whom I dearly love.

Abbreviation

ADB	- Asian Development Bank
B A	- Bachelor of Arts
BANBEIS	- Bangladesh Bureau of Educational Information and Statistics
B B S	- Bachelor of Business Studies
B Com	- Bachelor of Commerce
BP Ed	- Bachelor of Physical Education
BSc	- Bachelor of Science
BSS	- Bachelor of Social Sciences
EFA	- Education for All
ERG	- Existence Relatedness Growth
FEP	- Food for Education Program
IA	- Information Assurance
IQ	- Intelligence Quotient.
GER	- Gross Enrollment Rate
GoB	- Government of Bangladesh
GPA	- Grade Point Average
MBS	- Masters of Business Studies
M Com	- Master of Commerce
MDG	- Millennium Development Goals
MM	- Master of Management
MMR	- Mixed-Method Research
MoE	- Ministry of Education
MoPME	- Ministry of Primary and Mass Education
MSS	- Master of Social Sciences

NER	- Net Enrollment Rate
PE	- Primary Education
QUAL	- Qualitative
QUAN	- Quantitative
SSBE	- Secondary School Board Examination
SD	- Standard Deviation
SDG	- Sustainable Development Goals
SDT	- Self-Determination Theory
SMAQ	- Student Motivation and Achievement Questionnaire
TESOL	- Teachers of English to Speakers of Other Languages

TABLE OF CONTENT

Chapter Three: Research Methodology……48

Chapter Five: Discussion and Integration of Data……106

Chapter Six: Conclusion……116

List of Tables

List of Figures

Chapter One
Introduction

1 Introduction

The idea of motivation has earned huge attention in different researches. But in academia, student's motivation, specially is sought as the essential element for their sound academic achievement, requires further systematic and scientific investigation to develop more effective learning environment in schools. It is very much related to the contemporary Bangladesh because the teaching and learning strategy in this region bears legacy of the British colonial era. Simultaneously, it is fragile and not conducive for student's performance. There are several challenges that threaten student's motivation and impede their academic growth. Nonetheless, studies show that students are progressively participating in schools than before while other evidences denote student's performances are sub-standard in Bangladesh. It seems that there are some motivating and demotivating factors in schools, interplay and influence student's motivation. Thus, this paper attempts to find out and present the incentives that encourage and discourage students at schools. It also investigates what is the nature of this incentives-are they intrinsic or extrinsic and which type of incentive is more effective and helpful for student's academic outcome. There is no question that this research report is important to inform about the student-centered learning process.

1.1 Contextual Information: Secondary Education Administration in Bangladesh

The education system in Bangladesh is a large and complex one. It encompasses both formal and non-formal education. The Ministry of Education (MoE) and the Ministry of Primary and Mass Education (MoPME) share responsibility for the entire education system (Nuffic, 2012). Besides, international donors like Asian Development Bank (ADB), World Bank (WB) along with the private sector support the government to decentralize and manage the education service. The structure of education system is mainly three-tiered: primary education, secondary education and higher education. And each of them is further classified into a number of grades. Five-year primary education under Compulsory Primary Education Act (1990) is being provided to more than 19.5 million learners (50.7 % girls) in Bangladesh through 108,537 institutions by 482,884 teachers (57.8 % female) (cf. DPE 2014, p. 13; cited in Choudhury & Rahaman, n.d.). Bangladesh has achieved significant success in providing universal access to free and compulsory primary education. The gross enrolment rate was 108.4 % (112.3 % girls) and net enrolment rate was 97.7 (98.8 % girls) in 2013 (cf. MoPME, 2014;cited in Choudhury & Rahaman, n.d.).

Following the primary education level, pupils upgrade to the secondary level which poses to be the most important tier of education sector as it builds the foundation of other tiers(Alam & Kabir, 2015). Again, it comprises with three echelons (see figure 1.1), such as, junior secondary (grade VI-VIII), secondary (IX and X) and higher secondary (XI-XII).

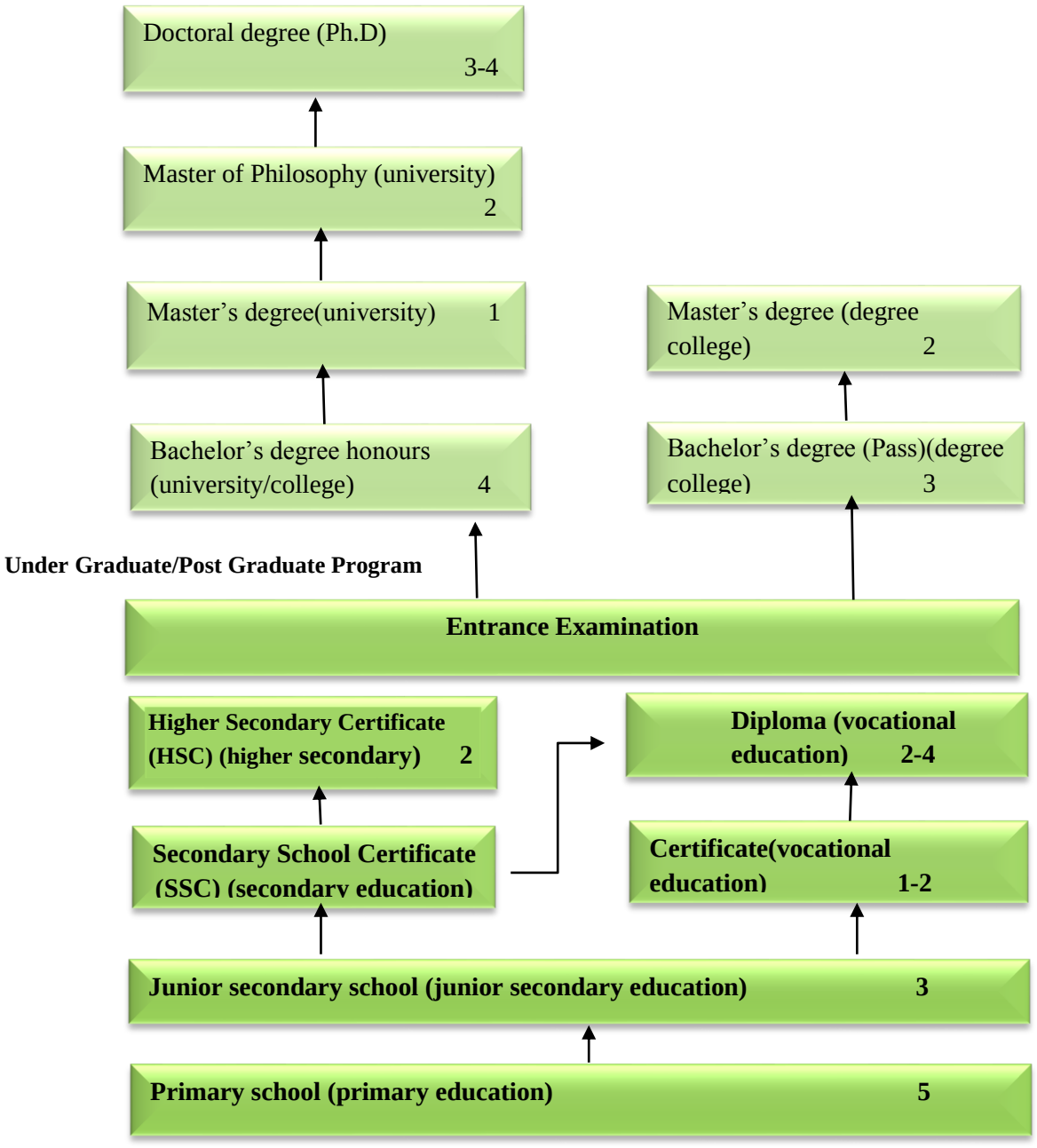


Figure 1. 1 Education administration in Bangladesh

Figure 1.1 shows an overview of education system in Bangladesh, where secondary education exists at the middle level of the structure and lasts for 7 years (3+2+2) and comprises three cycles: junior secondary (grades VI-VIII), secondary (grades IX and X) and higher secondary education (grades XI and XII) (Nuffic, 2012).

Secondary education in Bangladesh is a multi-stream, multi-track system. It has more than 19,000 government-recognized secondary schools, including 3,000 junior secondary schools and 15,400 secondary schools, with 208,500 teachers and over 2 million students.[1] Between 2005 and 2015, secondary new enrolment rate increased from 43% to 57%(Ali, Tatlah, & Saeed, 2011); (Forum, 2018). The stipend program, the Food for Education Program (FEP), grants for books and stationery, emphasize on female students and prevention of early marriage are some of the far-reaching initiatives of the government of Bangladesh have reduced the dropout rate at primary level and impact on the secondary level education.

Yet, current secondary education system is confronting some challenges. Issues of low quality of curriculums, student assessments, and teacher performance remained central challenges to the secondary education system. Indeed, the Campaign for Popular Education, one of the prominent civil society groups documenting educational challenges in Bangladesh and pushing for reform, notes that the rapid expansion of the system (in the number of schools, teachers, and students) aggravated quality issues. The Campaign for Popular Education's 2005 Education Watch report on secondary education traces issues of quality to "well-known causes," including "deficiencies in teachers' skills and capability, inadequate facilities and learning materials, poor enforcement of rules and criteria for approval of government subvention, inadequate low per student expenditure, and poor governance and management of schools."[2] Thus, while issues of educational expansion preoccupied domestic and international stakeholders in the early 1990s, issues of quality are now predominantly in focus.[3] Concurrently, centralized education system, extensive quality divide in between

[1] World Bank. 2013. Bangladesh Education Sector Review: Seeding Fertile Ground: Education That Works for Bangladesh. Washington, DC.

[2] M. Ahmed et al. (2006). Education Watch Report 2005. The State of Secondary Education: Progress and Challenges. Dhaka: Campaign for Popular Education.

[3] A study on educational expansion in Bangladesh argues that the process was primarily politically driven, with the major political parties using education to stamp their own brand of nationhood and identity on the population. The authors suggest the politically driven causes of successful expansion are inseparable from persistent problems of low quality (see N. Hossain, R. Subrahmanian, and N. Kabeer. 2002. The Politics of Educational Expansion in Bangladesh. IDS Working Paper Series. No. 167. Brighton, UK: Institute of Development Studies).

different streams, politically committed school managing committees, poor infrastructure, dependency on private source of finance have adversely affected secondary education system. Thereafter, government should embark rigorous policy reforms to develop the education system.

1.2 Statement of the Problem

Inclusion of motivation in pedagogy is an age-old but ever coveted paradigm. Because motivation is considered a prerequisite of learner engagement. Bangladesh is not an exception in this case. From the very beginning, the government of Bangladesh (GoB) is committed to a large number of policy programs either in domestic or international forums on purpose of motivating student's towards enrollment in schools. Namely, article 17 of the Constitution of the People's Republic of Bangladesh grantees free and compulsory education. It says: "Free and compulsory education: The state shall adopt effective measures for (a) establishing a uniform mass-oriented and universal system of education and extending free and compulsory education to all children to such stage as may be determined by law; (b) relating education to the needs of the society and producing properly trained and motivated citizens to serve these needs; (c) removing illiteracy within such time as may be determined by law" (Hossain, 2011; thedailystar.net). The second Five Year Plan (1980-85) was another step taken to declare and make primary education compulsory for all children in Bangladesh. In 2010, the perspective plan for 2010-2021, titled Vision 2021, was adopted by the government. In it, education, amongst other issues, was strongly emphasized. It aims to provide quality primary and secondary education to every child and ensure that no child is left out by the education system on grounds of his/her family's income, gender, religion, ethnicity, or disabilities. Additionally, secondary schools would be established at every Upazila headquarter in phases (Rahaman, 2017 The daily Star). In addition, National Education Policy (NEP, 2010) brought out the idea of balanced development of the education sector by introducing reforms to secondary education, specifically, facilitation of teacher development and improving the evaluation process. Other reform measures including recruitment of large number of female teachers, provision of stipend to 50% students in

all schools and the introduction of upazila education planning are mention worthy (Asadullah,2013). Later, as signatory to different international commitments, Bangladesh has worked and boosted up efforts for education-related goals by adopting the World Declaration on Education for All (EFA), Millennium Development Goals (MDG) and Sustainable Development Goals (SDGs). Inevitably, commendable progress regarding access to education and gender parity are noticeable in primary as well as secondary level. To be exact, Asian Development Bank (ADB) report (2008) states Bangladesh's improvements in enrollment access are generally in line with those of its South Asian neighbors (e.g., better than Pakistan, comparable to Nepal, and less than India). Its recent PE gross enrollment rate (GER) of 99% increased from 90% in the late 1990s(Assistance & Evaluation, 2008). In a similar fashion, at the secondary level, the gross enrolment ratio rose to 72.78 percent in 2015 from 43.1 percent in 2001. In 2015, the net enrolment ratio (NER) at the secondary level was 67 percent (for boys and girls together), while the gender parity index was at 108 percent. Efficiency parameters saw significant improvement. In 2015, the completion rate was 59.71 percent, compared to 58.06 in 2014. The drop-out rate reduced to 40.29 percent in 2015 from 41.94 percent in 2014, and the survival rate went up to 69.24 percent in 2015 from 63.83 percent in 2014 (Rahman, 2017; The Daily Star).

In spite of these education statistics in success, debate continues about the quantity and quality of advancement in education sector of Bangladesh. Firstly, this progress is short in comparison of other fast-growing economies and then lacks the quality which is indispensable. Recent evidence suggests that despite impressive achievements in enrolment, secondary education fails to equip students with the knowledge or skills the economy needs. The quality and relevance of secondary education is low. Majority of the students have poor concentration in acquiring knowledge which is producing only rote learners instead of skilled students. Two recent studies in Bangladesh measured learning using student answers to publicly released mathematics questions from an international testing agency (Asadullah, Chaudhury and Dar, 2007; World Bank, 2010). The percentage of correct answers ranged between 36% and 38% - this is only marginally better than the scores that would have obtained through random guesswork.

Given that students were given a choice of 4 answers for each question, random guessing would have yielded 25% correct on average. The high dropout rate is an equally major challenge in secondary education. Though incentives in the form of stipends, free textbooks, and free meal programs are being provided, the dropout rate is disheartening. Only 46 percent of students complete the full cycle of secondary education, reflecting a huge waste of financial resources and an inefficient education system. (Rahaman, 2017; The Daily Star). Thus, it can be assumed that in Bangladesh, students lack of motivation in schools. According to a 2004 analysis by the national research council in Washington, D.C. the lack of motivation has serious consequences (Policy, 2012).

Therefore, this study aims to identify what are the motivating and demotivating factors influence student's academic achievement in secondary schools in Bangladesh. This study is particularly done in a rural district of Bangladesh due to a number of reasons: firstly, majority of people in Bangladesh are inhabitants of rural areas; secondly, 96 percentage of secondary schools are privatized and most of the government schools locate in urban areas. Thirdly, each year, many families intend to migrate in cities from rural area for their children's admission in a better secondary school after the completion of primary education. Finally, it can be mentioned that this study is significant to mitigate a gap in education research in Bangladesh. Because most of the surveys have been investigating only the enrollment, literacy and dropout rates whereas, this research findings have included the student motivation perspectives.

1.3 Significance of the Study

This study is significant from several aspects. Firstly, it aims to inform on motivating incentives in secondary schools in rural Bangladesh because prior this no other studies identified it in this region. A number of project findings are there but limited to either the education system or education policy in Bangladesh. Secondly, the knowledge gained from this study will give direction to teachers and the management of schools as the study findings revealed motivating incentives are more strongly correlated with

student's academic performance than demotivating factors. Thirdly, this study is important from methodological aspect owing to its sequential mixed method research design which provided it with a multidimensional approach and more validity to the stakeholders.

1.4 Research Objectives

a) To find out the motivational incentives for students in secondary schools.

b) To find out the factors demotivate students in secondary schools.

c) To investigate the relationship, if any between motivation or demotivation and academic achievement.

1.5 Research Questions

a) What are the incentives motivate students in secondary schools?

b) What are the factors demotivate students in secondary schools?

c) Is there any relationship between motivational incentives and academic achievement?

d) Is there any relationship between demotivational factors and academic achievement?

1.6 Research Hypotheses

A number of prior studies have focused on the relationship of both motivation and demotivation with academic achievement of students. For instance, Eymur and Geban (2011) found that there is a positive correlation between the "academic achievement" and "intrinsic motivation to know" scores (Eymur & Geban, 2011) and a negative correlation between external regulation and academic achievement.

Hypothesis 1:

$H_{01:}$ There is no statistically significant relationship between motivating incentives (M), as measured by joy in learning, self-willingness, rewards, recognition and getting good job, teaching-learning process, positive competition and academic achievement (A) of students in secondary schools.

$H_{A1:}$ There is a s statistically significant relationship between motivating incentives (M), as measured by joy in learning, self-willingness, rewards, recognition and getting good job, teaching-learning process, positive competition and academic achievement (A) of students in secondary schools.

Therefore, the null and alternative hypotheses for hypothesis 1 are:

$H_{01:}\ r_{MA} = 0$

$H_{A1}: r_{MA} \neq 0$

Hypothesis 2:

$H_{02:}$ There is no statistically significant relationship between demotivating factors (D), as measured by unfriendly teacher-student relationship, boring syllabus and sanctions and academic achievement (A) of students in secondary schools.

$H_{A2:}$ There is statistically significant relationship between demotivating factors (D), as measured by unfriendly teacher-student relationship, boring syllabus and sanctions and academic achievement (A) of students in secondary schools.

Therefore, the null and alternative hypotheses for hypothesis 2 are:

$H_{02:}\ \ r_{DA} = 0$

$H_{A2:}\ r_{DA} \neq 0$

Hypothesis 3:

$H_{03:}$ There is no statistically significant relationship between motivating or demotivating factors and academic achievement.

$H_{A3:}$ There is statistically significant relationship between motivating or demotivating factors and academic achievement.

Therefore, the null and alternative hypotheses for hypothesis 3 are:

$H_{03:}$ r$(MA + DA)$=0

$H_{A3:}\ r(MA + DA)$≠0

1.7 Structure of the Paper

Chapter One: Introduction

The current *chapter One: Introduction* states the contextual information, problem of the study, significance of the study, objectives of the research, research questions and what are the research hypotheses.

Chapter Two: Literature Review and Theoretical framework

Chapter Two *Literature Review and Theoretical Framework* reviews existing literatures about motivation and demotivation for student's academic achievement. It also describes three notable theories related to research objectives are Self-Determination Theory, Existence, Relatedness and Growth Theory and the Dual-Structure Approach to Motivation.

Chapter Three: Research Methodology

The third chapter *Methodology* describes research plan about how this study had been designed and instrumentalized. It includes the discussion on methods followed in sampling, developing questionnaire, data collection and analyzing. Additionally, it describes the methods were followed to ensure validity of the current study.

Chapter Four: Findings

The fourth chapter *Findings* communicates the results of the study. It exhibits the analysis of data through tables and figures, presents the test result of hypotheses and confirms whether this research meet the research objectives or not.

Chapter Five: Discussion

The fifth chapter *Discussion* interprets the result of the study regarding the relationship between student's motivation-demotivation and academic achievement in schools. It identifies and discusses the similarities and dissimilarities of the findings of this study with previous studies.

Chapter Six: Conclusion

At the end, the concluding remarks has been drawn by summarizing the research purposes and findings, then describing limitations of the present study and finally highlighting its implications with some future research ideas and opportunities.

1.8 Conclusion

Bangladesh has improved in access to education. Its several accomplishments in education sector are being recognized by national and international communities. At the same time, critics are notifying about the poor quality of students. In other words, there are several factors which contributing to improve literacy rate generally, but it requires students to be skilled and knowledgeable person, resulting human resource for the greater economy. Student's motivation can be a triumph factor to make them skilled and achievers. In this aspect this study proposed to do a survey on the student's motivation at secondary level. Its result included a list of incentives (described in chapter four *Findings*) which stimulate students for more effort in study. It also identified impediments that discourage them and are needed to be replaced by the future policy initiatives.

Chapter Two
Literature Review and Theoretical Framework

2 Introduction

In any school setting, whether it be elementary, secondary, or higher education, student's motivation for learning is generally regarded as one of the most critical determinants, if not the premier determinant, of the success and quality of any learning outcome (Mitchell, 1992). According to Brophy (1981), a leading researcher on student motivation and effective teaching, student motivation to learn is an acquired competence developed through general experience but stimulated most directly through modeling, communication of expectations, and direct instruction or socialization by others (especially parents or teachers). Various evidence documents focused on the relation between student's motivation and demotivation with academic achievement.

2.1 Review of Literatures

2.1.1 Student's Motivation for Academic Achievement

Student motivation has achieved more currency in learning science research over the times. It has been experimented, analyzed and discussed by different schools of scholars. One of these is Ames (1992) *Classrooms: Goals, Structures, and Student Motivation* focused on defining and describing the classroom structures, specified the relation of classroom structures with the academic achievement goals of students and how these structures influence student motivation. The analysis throughout the literature is noticeable at two levels: firstly, Ames described achievement goal theory, differentiated mastery goal from performance goal. Secondly, she identified important classroom structures contribute to mastery and performance goals of students; interrelation of these

structures and the actions that can bring changes in structures. An achievement goal can be defined as an integrated pattern of beliefs, attributions, and affect that produces the intentions of behavior (Weiner, 1986) and that is represented by different ways of approaching, engaging in, and responding to achievement type activities (Ames, 1992b; Dweck & Leggett,1988). According to the achievement goal theory, mastery and performance are two different goals can be distinguished in several aspects. Mastery goals, also known as learning goals emphasize on the willingness to engage in learning, quality of involvement in learning and intrinsic value of learning. It is prone to achievement behavior. On the contrary, performance goals known as ego-involvement goals underscore the public recognition and extrinsic value of learning. It is subjective to failure avoidance attitude of motivation.

According to Ames (1992) classroom structures are the ways in which certain kinds of instructional demands, situational constraints, or psychosocial characteristics relate to various cognitive and affective outcomes in students. Three components of classroom structures, completely based on secondary data, she identified design of tasks and learning activities, evaluation practices and use of rewards, and distribution of authority and responsibility. Diversified, challenging, meaningful and specific tasks and learning activities attract students; intrinsically motivate them to put effort and relate with the mastery goals. In her work, it was mentioned that tasks have social elements which indicates student engagement in learning is influenced by how teachers deliver the task. Ames also explained evaluation and recognition have normative effect on student's motivation. Dependency on grading as evaluation tool results quantity or performance-centered learning. It is detrimental to student's cognitive engagement because grading expands social comparison within the classroom. Consequently, a sense of lack of ability grows not only in students but also among their peers. Students become learned helpless and intend to avoid challenging tasks, risk taking and fear failures. Yet rewards are many times considered as an incentive for increased motivation, Ames found its negative effects. It extrinsically motivates students and undermines their learning interest shifting away from one's ability. Thus, evaluation and recognition are ego-involving goals oriented. The relation of authority and responsibility with goal

achievement, the third component of classroom structure, depends on whether these are distributed to students or not. Evidences from other literatures, put in explanation provided by Ames, support constructive relationship between autonomous classroom environment and student's intrinsic motivation for academic success. Effective autonomous classroom environment requires opportunities for students to evolve and enact their self-management and self-regulatory strategies in task completion. Otherwise, it would not bring students motivation. Exercise of controlling authority, contrary to autonomous classroom environment, directly related to extrinsic incentives for engaging students. It develops positive self-perception of ability and helps to raise skills among student yet unfavorable for mastery goals. Ames identified classroom structures are interrelated and interdependent. Though she did not explain whether they are additive or multiplicative in functioning, rather left it for future research. Besides, she clearly mentioned if they are additive, the structures become complementary, and inadequacies in one structure can be attenuated by strengths in another (Ames, 1992). However, if the structures are multiplicative, they cannot compensate for each other (Ames, 1992). Another important aspect of this literature is that it suggests for interventions to bring changes on purpose of making classroom structures more mastery-oriented. It recommends for adopting comprehensive type of interventions. Generating exemplary practices and integrating these into curriculum and day-to-day classroom routine; changing teacher's goals for children's learning, belief systems, or broader views about school learning (Ames, 1992) are some of these interventions. Limitations include in her analysis, discussion of a few of classroom structures whereas there might have others influential on student's motivation for goal achievement. This literature is also confined to the discussion on the role of classroom structures in achieving mastery goals and performance goals. It does not provide any explanation about the relation between the classroom structure and demotivation in achieving any of those goals.

Pintrich (2003) *A Motivational Science Perspective on the Role of Student Motivation in learning and Teaching Contexts* amalgamates three main themes. Firstly, the analysis of the importance of scientific approach for research on student motivation, secondly, significance of multidisciplinary perspective in research on student motivation and

thirdly, focus on use-inspired basic research in motivational science. In addition, a number of theories essentially explain cognitive, motivational or behavioral ideas are discussed along with what future researches should be taken to enrich the student motivation science under seven substantive questions for motivational science. This paper is exclusively based on the secondary source using different empirical study results to put arguments and rationales. Pintrich has emphasized on studying human behavior, such as motivation based on scientific perspective[4] because motivational studies need to be well-conducted and inferences drawn from studies ought to be supported and well-reasoned by empirical evidences, otherwise, to some extent it may loss it's validity. As Mayer (2000, 2001) has pointed out, the reliance on empirical evidence and reasoned argument are important hallmarks of a scientific approach to educational research in comparison with other perspectives that draw on a more humanities or arts-based epistemology (e.g., Barone, 2001). For example, Gaskins (1999) in a recent essay in this journal on motivation from a Zen Buddhist approach suggested some intriguing ideas about the role of the self in motivation and learning in classrooms. However, he built his argument mainly on the use of quotes and epigrams from various Zen Buddhist texts, not empirical evidence from studies of students in classroom settings. More dangerously, he concluded that one instructional implication of his perspective is that classrooms should not be designed to foster self-regulation, self-efficacy, or self-determination (Gaskins, 1999, p. 213). From a motivational science perspective, this type of argument and conclusion is fatally flawed because it does not rely on empirical evidence from well-conducted studies (Pintrich, 2003). Second theme claims motivational science should draw from multiple disciplinary perspectives in terms of theories, constructs, and methods to address questions regarding the role of student motivation (Pintrich, 2003) since it would help motivational science to be informed, enriched and evolved by renting ideas and methods which bear values from other disciplines. Then he also discussed about the application of use-inspired basic research in research on student motivation. The notable point is that he suggested for Stokes (2011) a 2 x 2 matrix of two different endpoints psychological (basic) and educational (applied) where crossed two dimensions (basic and applied) abolished the

[4] Pintrich (2003) scientific perspective entails the use of empirical evidence to support knowledge claims.

dichotomy approaches and results the four quadrants of research in this field. Four quadrants include *Bohr's quadrant*[5], *Pasteur's quadrant*[6], *Unlabeled*[7] and *Edison's quadrant*[8]. In terms of motivational science, our research should be focused in Bohr's and Pasteur's quadrants. There will always be a need for pure basic research in Bohr's quadrant to help us understand motivational processes (Pintrich, 2003). A rigorous and diligent analysis of extensive number of current research results constitute the later part of this literature which identified seven important questions to reveal nearly each idea of student motivation. To broach, the preliminary question is about *what do students want?* According to Pintrich and Schunk (2002) motivational theories attempt to answer questions about what gets individuals moving (energization) and toward what activities or tasks. Three motivational theories social-cognitive models (Bandura, 1989; Westbrook, Brown, Pryor, & Salvi, 2014) self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000) and self -worth theory (Covington,1998) were used to answer what do they (students) want. Social-cognitive model emphasizes on social context and individual's interaction with others, explains individuals acquire knowledge and experience by observing others within a social environment and then internalize and execute the replication of the actions of others in their behavior. Primary (needs, motives) and secondary (social, cognitive) are two types of motivating factors found at operating in implicit, unconscious and explicit, conscious levels respectively. Self-determination theory integrates both implicit and explicit factors and assumes three basic needs: competence, autonomy and relatedness essentially motivate for students. The need for competence refers to the desire to master and be competent in interactions with

[5] Stokes (1997) labeled the quadrant that is focused on the goal of scientific understanding but with little concern for utility pure basic research or Bohr's quadrant, in honor of the physicist who was only concerned with understanding atomic structure with little interest in the practical applications of his research.

[6] In contrast, the quadrant defined as high utility but low in the goal of scientific understanding was labeled pure applied research and Edison's quadrant by Stokes, after the great inventor Thomas Edison who was only concerned with the development of the practical uses of electricity, not with deeper scientific understanding.

[7] Stokes (1997) left unlabeled the cell that is low in both scientific understanding and utility goals, but suggested that it may represent research taken on by an individual to satisfy his or her own curiosity about a local phenomenon or research undertaken by novices to learn research skills.

[8] Use-inspired basic research, reflects a focus on both goals of scientific understanding and utility. Stokes named this cell Pasteur's quadrant in honor of Pasteur who made contributions to our basic scientific understanding of the microbiological processes of disease, but also applied his knowledge of microbiology to prevent various diseases.

the environment and the need for autonomy reflects a desire to be in control or to feel autonomous or self-determining in terms of one's own behavior (Pintrich,2003). The need for relatedness reflects a wanting to belong or be attached to a group (cf. Baumeister & Leary, 1995). These needs are assumed to be innate for all humans in all cultures and apply across all situations, and if individuals can't satisfy these needs, then their motivation as well as a host of other cognitive, affective, and behavioral indicators of adaptive functioning will suffer (Pintrich,2003). Although these needs are basic to human functioning, self-determination theory proposes that the effects of these needs on behavior or other outcomes are mediated by social–cognitive constructs such as perceived competence, control beliefs, and regulatory styles (Ryan & Deci, 2000). In contrast to self-determination theory, self-worth theory only assumes that there is one basic need, the need for personal self-worth (Covington, 1998) whereas personality researchers like Elliot, McClelland, Stewart found three more motives such as achievement need, power need and affiliation need which may be applied for student motivation. In this literature, similarities and dissimilarities between different theories have been illustrated. McClelland's Human Motivation Theory is similar to self-determination theory since need for achievement and need for affiliation are indistinguishable to competence and relatedness needs, but need for power is incompatible with autonomy motive of an individual and incapable for coexistence. The salient features of this literature are: recognizing the dynamics of driving motivators: intrinsic-extrinsic, implicit-explicit, conscious-unconscious motives and secondly, mention of congruence of two different motives has more impact on individual's higher motivation and better performance. Following question is *what motivates students in classrooms?* Researchers found several numbers of determinants can motivate students in classrooms. According to the expectancy constructs, self-efficacy, perceptions of competence and expectancy for success motivate them. Students who believe they are able and that they can and will do well are much more likely to be motivated in terms of effort, persistence, and behavior than students who believe they are less able and do not expect to succeed (Bandura, 1997; Eccles et al., 1998; Pintrich & Schunk, 2002). There also is good evidence to suggest that these confident students will also be more cognitively engaged in learning and thinking than students who doubt their capabilities

to do well (e.g., Pintrich, 1999; Pintrich & Schrauben, 1992; Schunk, 1991). On the other hand, from a self-regulatory perspective, if students are consistently overestimating their capabilities, they might not be motivated to change their behavior in the face of feedback that provides them with information about their weaknesses (Pintrich,2003). Furthermore, personal control, level of interest, level of value, and goals have correlation with student's motivation and academic achievement. Control and regulatory attitude of students with motivational incentives results external, introjection, identification and integration styles of motivation[9].

Research on both personal and situational interest has shown that higher levels of both are associated with more cognitive engagement, more learning, and higher levels of achievement (Eccles et al., 1998; Hidi, 1990; Pintrich & Schunk, 2002; Schiefele, Krapp, & Winteler, 1992). Interestingly, situational interest develops personal interest when contextual factors actively encourage both situational and personal interests. Nevertheless, the future research directs to investigate on how do they influence one another. Expectancy-value theory infers when task value is higher to the students that means students enjoy the task, and find it useful, meaningful in terms of utility, importance and cost then they are highly motivated in classrooms. Goals, the fifth component of motivation has had a great deal of research attention in student motivation area. Multiple types of goals including academic, social, mastery and performance goals have effect over student's academic outcomes. Particularly, social goals of students confirm relatedness needs from self-determination theory can impact academic goals. But there is a clear need for future research on understanding multiple goals and how this "binding" of goals and values occurs or why students may pursue goals that they do not necessarily value or why they don't pursue goals that reflect their values and also understanding how students may regulate toward multiple goals and the different strategies that they may use to achieve social and academic goals simultaneously (Pintrich, 2003). The third consecutive question in this literature is *how do students get*

[9] External, which is the most externally regulated or controlled by others or by external constraints such as rewards; introjection, which reflects the start of an internalization of values, but control is still perceived as being external to the person as he or she seeks approval from others; identification, where there is more internal control and self-endorsement of values and goals (Pintrich,2003); and integration, which reflects high internal control and congruence between the self and values and goals (R. M. Ryan & Deci, 2000).

what they want? In this regard, self-regulation model was used to explain how students bridge goals to the strategies to get their motives. Research has shown that students who are self-regulating, in other words those who set goals or plans, and try to monitor and control their own cognition, motivation, and behavior in line with these goals are more likely to do well in school (Pintrich, 2000d; Zimmerman, 2000). Mischel, Cantor, and Feldman (1996) also noted that willpower or self-control processes are one of the important linking mechanisms that bind goals to strategies and behavior in a conscious manner. Pintrich (2003) suggested for more micro genetic research on how self-regulating learning is associated with mastery goals or what is the role of intentionality and conscious awareness in the linking of goals to strategies and behavior.

To understand student motivation and their learning behavior, this paper includes the inevitable question *do students know what they want or what motivates them?* Researchers opined that it is not necessary for students to be aware about their wants but it would be more productive if motivation process focuses on the integration of their implicit, non-conscious needs with explicit, conscious needs. It seems clear that an important direction for future research will be to examine how these different implicit and explicit systems interact to influence motivation, learning, and performance and to understand the parameters and moderators of the relations, such as under what task or contextual conditions which system seems to play a more important functional role (Fazio & Olson, 2003). The fifth important question *how does motivation lead to cognition and cognition to motivation* breaks the traditional idea about academic cognition and student motivation demonstrating that neither academic cognition nor student's motivation is isolated, apathetic rather affective. Affect can serve to attune individuals to their goal progress and lead them to attend to and encode different types of information as well as lead to differential behavior (Carver & Scheier,1998; Schutz & DeCuir, 2002). Future research on the link between motivation and knowledge-based models of cognition; between mood variation and learning behavior is emphatically required. The question of *how does motivation change and develop?* reveals a set of concepts. Firstly, the idea of student motivation itself is a pro-change process and exits in environment which is also changing continuously. Secondly, motivation, specifically,

student motivation changes overtime because of age and maturational personal factors and contextual factors. Thirdly, adaptability of students is related to their motivation. There is good empirical evidence from cross sectional and longitudinal studies that over the course of the school years, student motivation on the average declines or becomes less adaptive, with a large drop as students enter the junior high or middle school years (Eccles et al., 1998). And then recent gigantic change in technology is impactful for changes in motivation and cognition. Further research on the dynamics between the development of motivation and expertise in a particular domain (Pintrich,2003) will be helpful to comprehend motivation process.

The above idea of change and development of motivation additionally explores the last but not the least question about *what is the role of context and culture?* It provides motivation idea with more comparative and comprehensive look. It is significant for a couple of reasons such as a paradigm shift in idea of student motivation has been occurred as it has moved beyond individual, forwarded towards social and situated perspective[10]. Secondly, components of motivation like autonomy, competence, or self-efficacy belief and perceptions can differ in non-identical ethnic groups, culture and regions. Therefore, more research on the quality of student motivation in different groups and cultures is important for the future development of motivation idea.

Reeve (2006) in his paper *Teachers as Facilitators: What Autonomy-Supportive Teachers Do and Why Their Students Benefit* explained mainly teacher's role and style of motivating students in the classroom. His explanation considering dialectical framework[11]within self-determination theory denotes a student's inner motivation and the classroom's surrounding influences are dynamically interactive (Reeve, Deci, & Ryan, 2004). He mentioned that inherited and internalized both types of inner motivational resources of students interact effectively in classroom conditions. Classroom condition constitutes with interpersonal motivating styles and classroom

[10] The situated perspective tends to be more popular in educational research than in psychological research on motivation (Pintrich, 2003).

[11] Brewka and Woltran (2010) defined dialectic is a form of reasoning based on the exchange of arguments and counter-arguments, advocating propositions (theses) and counter-propositions (antitheses).

events where the first one has more influence on intrinsic or self-development needs more than the later one. In this aspect, in highly autonomy support of motivating styles, teachers promote student centered learning, recognizes student's interests, preferences, facilitate circumstances where students can experience positive emotionality and engagement. Conversely, controlling teachers emphasize on social demands (goals, expectations, norms) and external events like rewards, evaluation, competition or punishment for failures. In autonomy supportive style of motivating students, teachers appear with some characteristics include, they nurture and encourage student's sense of enjoyment and challenge of task and expect student's spontaneous effort in learning; they prefer to approach and proceed instructions with flexible, informational language over controlling words. After that, they communicate the hidden value and rationality of a task to make students enough convinced, satisfied to concentrate and do hard work for the academic achievement. They present task in a way that seems interesting to the students which additionally pull them towards academic success.

The next important feature of autonomy supportive teachers is that they welcome and accept student's negative affect[12] which is worthwhile to produce classroom activities compatible to the student's inner motivational resources and persuade them to do the tasks. Controlling teachers, in contrast, react to students' expressions of negative affect by countering it. They communicate that such an attitude is unacceptable, something that needs to be changed to be more acceptable to the teacher(Reeve, 2006). The autonomy-supportive behavior, another significant feature, describes teachers who are good listeners, creators of autonomous learning environment, and progress enablers instead of being monopolizer, commander, controller, director or instructors to their students. As its result, students find opportunities to do their task in an innovative way and be motivated and engaged in cognitive actions. Another significant contribution of this literature is that it discussed four ways to develop the teacher-student relation in classroom. These are- attunement is a way of understanding student's state of being, adjusting instruction for students and responding accordingly; relatedness occurs when students feel important to their teacher because teachers are affectionate to them.

[12] Reeve (2006) negative affect means classrooms have rules, requests, and instructional agendas that are sometimes at odds with students' preferences, students sometimes complain and resist.

Consequently, student's engagement raises in the class. Then, supportiveness of teachers in the classroom encourages student's capacity for self-direction. The fourth component of growing teacher-student relationship is gentle-discipline that provides students guidance about right behavior in the classroom. This study carries specific and extensive discussion about classroom conditions and teacher behavior in motivating students but is less devoted to explore student's amotivation or demotivation in classroom.

Moore and Jensen (2007) in their paper *How are students' attitudes and behaviors in college biology classes conditioned by their academic experiences in high school?* found motivation is deemed self-perpetuating. Students who are motivated conduct themselves in ways that maximize learning and success in academia. Motivated students attend classes on regular basis without a need for external rewards, they seek additional help when needed, and they turn in quality work on time. On the other hand, unmotivated students minimize the effort they exert, which result in continued poor performance.

The paper by Zulfiqar Ali, Ijaz Ahmad Tatlah and Muhammad Saeed (2010) on *Motivation and student's behavior: A tertiary level study* tried to understand the correlation between motivation and student behavior. On this purpose they conducted a survey over sampling unit of 200 students at the University of Management and Technology, Lahore, Punjab, Pakistan. To collect data a self-framed 9-point Likert scale was used along with the questionnaire ranges from 0 to 8 such as (never, rarely, very rarely, sometimes, often, very often, most of the time, nearly always, always). It covers all the factors related to student behavior and motivation (Ali & et.al., P. 31). In this study motivation is independent variable consists of goals and rewards; further goals are classified into creativity and competence but rewards are divided into incentives and success recognition. On the contrary, dependent variable 'student behavior' was defined as the beneficial effects of motivation shown by learners when they are intrinsically motivated. In addition, definitions given by several scholars were stated including Rescorla (1992) expressed that when behavior is tested in extinction, these studies show that the given appropriate incentive learning and the outcome devaluation causes a

reduction in performance of moderately trained instrumental actions compared to non-devalued controls. Killcross and Coutureau (2003) suggested that when instrumental actions are over-trained, behavior becomes insensitive to post-training outcome devaluation, and subjects perform the trained action at comparable rates whether the outcome is devalued or not, regardless of incentive learning (that is, even when they are given explicit experience with the outcome's modified value) (Ali & et.al. P. 30). To analyze data, mean and standard deviation were done for each variable through special package for social science (SPSS). The analysis contains low score (2.49) of motivation which demonstrates that students are less motivated in their institution. Among a number of reasons, the prime one is lack of a proper system for appreciating the achievers and rewarding them duly. Students also feel that their creativity is not duly appreciated due to lack of motivation to achieve their goals (Ali & et.al. P.31). The analysis also shows that alternative hypothesis was made such as there is significant correlation between rewards and student behavior ($r = 0.62$, $p < 0.01$); goals and student's behavior are significantly correlated ($r = 0.65$, $p < 0.01$) and similarly, there is significant correlation between motivation and student behavior ($r = 0.75$, $p < 0.01$)(Ali & et.al. P.31). Findings of this paper also delineates that students shows negative behavior towards their institution; they have become poor achiever of their goals. But inspiring students to reach at their goals, appreciation for their creative skills, success as well as provision of rewards for their achievements are essential to create positive student's behavior. In short, tangible and intangible motivation incentives should be entitled in academic institutions at tertiary level.

Williams and Williams (2011) in their *Five Key Ingredients For Improving Student Motivation* purpose to present a set of essential elements for students motivation. According to them the fact is human beings in general and students in particular are complex creatures with complex needs and desires. Students are not purely physical, economic, political, or psychological beings (Williams & Williams, 2011). Based on completely secondary data after reviewing related literatures they provided five critical factors that impact student's motivation: student, teacher, content, method/process, and environment. Each of this component was further detailed in this study findings. First

and foremost, students themselves are important as the raw material of motivation in education process because they bring their own interest in learning, curiosity and desire to be involved (intrinsic motivation) and wants to get reward, recognition or responding to competition (extrinsic motivation) with them in institution. Some other indicators include various individual and social factors such as finding better job after graduation; hierarchy of needs, for example feeling physically or emotionally safe/unsafe within the school settings and conscientiousness and achievement can influence student's motivation. They argued conscientiousness and achievement motivation are positively correlated with GPA. It is suggested that conscientious students may do better because of differences in achievement motivation capacity (Williams & Williams, 2011).

Second ingredient teacher is indispensable to student motivation as s/he should bear skills, qualifications to educate and enthuse students along with strategies of classroom management combining scientific and human relation management ideas. Another contributing factor is content. It should be relevant and useful to the student in his or her life (Williams & Williams, 2011) to pull students towards learning. Olson (1997) notes that student motivation depends on the extent to which the teacher is able to satisfy the student's need for (1) feeling in control of their learning, (2) feeling competent, and (3) feeling connected to others. As such, content also must be included to satisfy each of these student needs (Williams & Williams, 2011). Incorporating method/process as an ingredient of student's motivation has made this paper important as well as different from other literatures. They defined method as the way in which content is presented, that is, the approach used for instruction (Williams & Williams, 2011). They also suggested for the inclusion of incentives (small gift), experimental learning, case work, or guided discussion through the process to attract and stimulate students in learning and achievement. The fifth key factor of motivating students is creating an effective environment comprising their participation, empowerment, structure, teamwork, engagement, online learning and appreciation of emotional support. This literature is important from several aspects, in particular, it mentioned about Barbara McCombs saying. According to her "almost everything (teachers) do in the classroom has a motivational influence on students - either positive or negative." It also claimed for

teachers training and it indicated for not only physical environment but also psychological and spiritual environments for encouraging students' academic success. But this literature lacks the empirical evidence or primary data, neither it does have opinions collected from any specific group of participants such as secondary or college students.

The literature *"How Motivation Influences Student Engagement: A Qualitative Case Study"* by Zyngier and Saeed (2012) is essential for the current research in two ways: firstly, it focuses on the types of motivation incentives which similar to the objectives of the study. Secondly, authentic engagement may lead to higher academic achievement throughout student life (Zyngier, 2008). They administered a study on the forms of student motivation and its relation with types of student's engagement. Following a case study approach over 24 participants from grade five and six in a diverse and multicultural classroom setting, this study revealed that students are motivated by either intrinsically or extrinsically and by both intrinsically-extrinsically at the same period. This study indicates that intrinsically motivated students are authentically engaged in learning and more eager to learn new things. Good relation with teacher is an intrinsic motivational incentive to be happy in their classroom. Pintrich and Schunk (2002) also argue teachers often use different incentives with students to achieve high academic outcomes and to promote good behavior. Many scholars described the attributes of authentically engaged students. For instance, Schlechty (2002) and Newmann (1996) as they demonstrate commitment to their learning tasks and find inherent value in the work being prepared by their teacher. Fredricks, Blumenfeld and Paris (2004) describe behavioral engagement as students' participation in academic, social or extracurricular activities and are considered important in achieving desired learning outcomes. Skinner and Belmont (1993) argue that engaged students are persistently involved in their learning tasks; they participate in learning activities when given chance and put extra effort and concentration in the completion of the learning task. In their study, Zyngier and Saeed (2012) identified some intrinsically motivated students are also ritually engaged because responses of these students showed that they wanted some tangible reward for doing good work and therefore this is indicative of ritual engagement as they

need something in return for their effort with the emphasis on minimum and exit requirements. However, when students are engaged in extrinsic incentives, they showed ritual and retreatist forms of engagement in learning because they do their learning tasks particularly in a group for good marks and grades, reward or praise on good work and for fun and support from the group. The attributes which make ritual and retreatist students different from authentically engaged students are unwilling participation in learning tasks results little achievement of competence, doing easy traditional class work instead of new and challenging tasks, lack of intrinsic benefit or inherent value in their learning and do their learning only for the sake of future job. Absence of extrinsic incentives like rewards or punishment can transform them into rebellious students. Schlechty (2002) defined rebellious students are disengaged from current learning activities and choose to be engaged in other contrary activities such as when students are more interested in sports than doing academic activities. In study result, Zyngier and Saeed (2012) illustrated students showing a combination of intrinsic and extrinsic motivation in their survey responses also revealed different types of engagement in their focus group responses ranging from authentic, to ritual, retreatist and rebellious engagement forms. These students raised the importance of their class/home work for their future job, wanted good grades and high scores on their academic tasks, left difficult and uninteresting learning activities, wanted rewards and desired praise from their teachers for good performance. Relation with teacher and peer relation as an important factor generate student engagement in learning what they termed as *emotional engagement.* It has added an element to the current study. A study by Ainley (2006) supports emotional engagement as a vital motivational factor. It is also coined as social factor which belongs at more personal level of individual student. This study shows that emotions play an important role in motivation and cognition as these three factors relate to learning. Interest in learning raises alertness and attention, which facilitates a desire and motivation to learn.

This study is limited to the student's perception on motivation whether they are intrinsically or extrinsically motivated and the classification of engagement in learning under those type of motivation. But current research identifies the reasons and factors

responsible for disengagement in learning. The investigation of why students are unmotivated to learn and what impacts their academic achievement invents the ways to make rebellious students as the authentically engaged students.

2.1.2 Student's Demotivation for Academic Achievement

In recent years, an increasing amount of attention on student's demotivation is noticeable in academia. Dörnyei and Ushioda (2011) have significantly contributed to define demotivation. According to them, demotivation refers to "specific external forces that reduce or diminish the motivational basis of a behavioral intention or an ongoing action". On the other hand, the term 'amotivation' may appear similar to 'demotivation' but there is a difference between these two. Amotivation is defined as a state in which individuals cannot perceive a relationship between their behavior and that behavior's subsequent outcome (Deci & Ryan, 1985), amotivation is a direct link to the absence of motivation among high school students (Ryan & Deci, 2002). Ford and Roby (2013) also in their *Why Do High School Students Lack Motivation in the Classroom?* mentioned academic amotivation is a multifaceted phenomenon, to a certain extent because its boundaries extend beyond the education domain to the broader social context in which the students are categorized economically as well as socially as being placed in within social strata. In their study, they followed four complimentary aspects of amotivation: ability beliefs, effort beliefs, characteristics of the task and value placed on the task (Ford & Roby, 2013) of Self-Determination Theory (SDT). They did focus group interview of 25 students and administered questionnaire survey over 225 high school students in the Cape Fear Region of North Carolina to find out why is there a "lack" of motivation in the classroom among high school students (Ford & Roby, 2013). The findings illustrated that students lack motivation because they are bored, they feel disconnected or have less competence belief.

Gorham and Christophel (1992) in their study on *Student's Perception of Teacher Behaviors As Motivating and Demotivating Factors in College Classes* explored factors that motivate and demotivate students and later examined student's perception

specifically about teacher behavior as motivator/demotivator. In this purpose they surveyed 308 undergraduate students at a southwestern university following questionnaire tool. Participants were from different academic background such as Science, Arts, Business, Education and Engineering. Study findings revealed that respondents identified 1450 motivator descriptions and 926 demotivator descriptions. Further these were coded into 20 categories and classified into three groups such as context factors, structure/format factors and teacher behavior factors.

Desire for good grades, interest in material or personal growth were coded as context factors while physical classroom environment, organization of material, satisfaction/ dissatisfaction with grading and assignment; opportunity to participate, feedback, positive/ negative behavior of other students etc. were as structure/ format actors and teacher's competence, level of knowledge, sense of humor, inspirational, effective lecture, boring, unorganized lectures etc. as teacher behavior factors. Students listed interest in and perceived relevance of the material, teacher's effectiveness and enthusiasm in lecturing, grade or credit motivation, the teacher's use of student-centered behaviors, positive responses to the organization of the course and material, opportunity to participate and feedback from the instructor, personal achievement motivation and teacher competence/knowledge as the most important motivators in the classes which are accounted for 74% of the descriptions. Among motivators, 37 % were context, 18 % were structure/format and 44% were teacher behavior. Students also found teacher's boring or confusing students, dissatisfaction with grading and assignments, negative responses to the organization of the course and material, the teacher's attitude toward students, dislike and perceived lack of relevance of the subject area, time of day, length of class, and personal factors and the teacher's physical appearance as the major demotivators in classes. These factors occupied 76% of the total demotivating descriptions. Interestingly, 21% of demotivators were context categories whereas 36% were structure/format and 43% were teacher behavior related. Thus, this study result showed two significant propositions about student's motivators and demotivators in classes are, firstly, context factors emerged as relatively more important to motivation and structure/format factors to demotivation(Gorham & Christophel, 1992), secondly,

teacher behavior contributes equally to motivation and demotivation in terms of the data as a whole(Gorham & Christophel, 1992). Yet this study findings is limited to communicate enough information about the consequence of lack of motivation, it appropriately addressed the demotivators along with motivators for students.

Oxford's (1998) paper *The unravelling tapestry: Teacher and course characteristics associated with demotivation in the language classroom* is an advancement in literature of student's demotivation. It was presented at TESOL (formerly Teachers of English to Speakers of Other Languages) 1998 Congress. Oxford did content analysis of approximately 250 American high school and university student's learning experience over five years. This study is important because of time factor used in investigation. Students were asked to recall and write an essay on the situation they experienced conflict with teacher. Results of the study identified four major causes of student's demotivation including the teacher's personal relationship with the student, the teacher's attitude toward the course or the material, the style conflicts between teachers and students and the nature of the classroom activities. This study was limited to asking students about their demotivation relating only to teacher's role. Necessarily, students ignored other potential sources of demotivation they experienced.

Reiss's (2009) *Six Motivational Reasons for Low School Achievement* is noteworthy in literature of demotivation. Steven Reiss was an American psychologist who contributed to identify the causes of poor academic achievement by applying six life motives include acceptance, curiosity, power, order, honor and vengeance. He did this survey in about 50 public school by administering the questionnaire named as Reiss School Motivation Profile (RSMP) consists of 13 items of Reiss Motivation Profile (RMP) scales. The validity of the scale was measured by concurrent or criterion validity assessment.

The findings of this survey illustrate that fear of failure can be an obstacle for students to achieve the success because students with high RSMP Acceptance score tries to avoid failure instead of accomplishing the aim. Though they can do their best when they have acceptance and encouragement from parents and teachers, no acceptance makes them

underachievers. Incuriosity is another reason for student's academic collapse. Student's having low RSMP Curiosity scores suffer from lack of interest in learning and need for cognition. This is due to their apathy with traditional school curricula and intellectual activities. The RSMP Curiosity scale is significantly correlated with intrinsic motivation, $r = .54$ (Olson and Chapin 2007), and with Positive Affect, $r = .26$, $p<.01$ (Olson and Chapin 2007). Reiss also mentioned that teacher can play a vital role in making learning material more interesting to the incurious students. The third important reason is lack of ambition was measured based on RSMP Power scale illustrates students with lack of willpower are non-ambitious, less hardworking and they avoid challenges. They value good grades but devalue persistent effort(Reiss, 2009). Next, scores on RSMP Order scale identifies students of low standard scores are less focused, disorganized and not prepared through the learning process, essentially contradict to students with high RSMP Order score. Students with low RSMP Order need to learn to stay focused on a single course of action, completing one task before moving on to the next. Some spontaneous students think they are impressing teachers by working on multiple projects, when in reality the teachers are thinking they are too scattered to do any one job well. These students are at their best on unstructured tasks and in loosely organized environments (Reiss, 2009). Following this, RSMP Honor scale explores that low scored students in this measurement have lack of responsibility, ethics and morals. They break their former commitments and take opportunities. Consequently, it affects their academic performance and career in the long run. According to the author this type of behavior must be regulated through the rule imposition in academic institutions by their teachers alongside of parents at home. The combativeness, as the sixth reason, behind the underachievement of students demonstrates that students with high standard scores on RSMP Vengeance scale tend to be aggressive and inappropriately competitive which is negatively correlated with academic achievement. This literature is significant in two aspects such as, it applied life motives in measuring low school achievement. Secondly, it explained the reasons of student's poor achievement is more concentration in negative factors. Students are not demotivated but highly motivated towards opposite directions of attaining good grades. This study is limited to linear explanation of what is the behavior of a less accepted and ambitious or high combative students in learning and

achievement. Neither it explains what actually happens when a student becomes less ambitious, or highly competitive nor the interplay occurs between motivating and demotivating reasons in learning process.

2.2 Theoretical Foundation for the Study

Academic achievement is the consequence of learning behavior. Learning frequently occurs in the presence of drive (components of learning process are drive, cue stimuli, response, reinforcement and retention). Drives, in other term motivations are any strong stimulus that impels action. These are basically categorized into two types-primary (or physiological) and secondary (or psychological). These two distinct categories of motivations often interact with each other. Individuals operate under many motivators at the same time. To predict a behavior, it is essential to establish which motivators are stimulating the most. Therefore, in developing students' learning behavior and determining their levels of performance, motivation plays a crucial role at all tiers in academic institutions. In this respect, chapter two purposes to discuss several number of motivation theories including a) Self-Determination Theory (SDT), b) Existence Relatedness and Growth theory and c) the Dual-Structure Approach to Motivation theory.

2.2.1 Self-Determination Theory (SDT)

To be motivated means *to be moved* to do something. A person who feels no impetus or inspiration to act is thus characterized as unmotivated, whereas someone who is energized or activated toward an end is considered motivated (Ryan and Deci, 2000, p.54). In Self-Determination Theory, motivation can be different types particularly intrinsic and extrinsic motivations. *Intrinsic motivation*, which refers to doing something because it is inherently interesting or enjoyable, and *extrinsic motivation*, which refers to doing something because it leads to a separable outcome (Ryan and Deci, 2000, p.54). Intrinsic motivation has emerged as an important phenomenon for educators—a natural wellspring of learning and achievement that can be systematically catalyzed or

undermined by parent and teacher practices (Ryan & Stiller, 1991). Because intrinsic motivation results in high-quality learning and creativity, it is especially important to detail the factors and forces that engender versus undermine it. Intrinsic motivation is defined as the doing of an activity for its inherent satisfactions rather than for some separable consequence. When intrinsically motivated a person is moved to act for the fun or challenge entailed rather than because of external prods, pressures, or rewards (Ryan and Deci, 2000, p.56). Numerous research studies have shown that intrinsically motivated students have higher achievement levels, lower levels of anxiety and higher perceptions of competence and engagement in learning than students who are not intrinsically motivated (Wigfield & Eccles, 2002; Wigfield & Waguer, 2005). These studies demonstrate that there is a positive correlation between intrinsic motivation and academic achievement (Corpus et al., 2009; Law, Elliot, & Murayama, 2012; Lee, McInerney, Liem, & Ortiga, 2010; Lepper, Corpus & Iyenger, 2005).

However, every student is not and cannot be always intrinsically motivated towards certain tasks. According to Krause, Bochner and Duchesne (2006) teachers frequently use extrinsic motivation like rewards, praise, free time, food and even punishment to encourage and stimulate their students towards learning. The majority of researchers believe that motivation is not exclusively intrinsic or extrinsic in orientation. A balanced pedagogical approach in the classroom includes the combination of both types (Harackiewicz & Sansone, 2000; Harackiewicz & Hidi, 2000; Hidi, 2000; Lepper & Henderlong, 2000; Williams, & Williams, 2011). The efficacy of intrinsic and extrinsic motivations depends on time and context. Educators may use these at a particular time and or in a certain activity. Similarly, the same activity can be seen as intrinsically or extrinsically motivating by different students (Areepattamannil, Freeman, & Klinger, 2011; Butler, 2012; Guay, Chanal, Ratelle, Marsh, Larose, & Boivin, 2010; Pintrich & Schunk, 2002).

Extrinsic motivation is a construct that pertains whenever an activity is done in order to attain some separable outcome. Extrinsic motivation thus contrasts with intrinsic motivation, which refers to doing an activity simply for the enjoyment of the activity

itself, rather than its instrumental value. However, unlike some perspectives that view extrinsically motivated behavior as invariantly non-autonomous, SDT proposes that extrinsic motivation can vary greatly in the degree to which it is autonomous. For example, a student who does his homework only because he fears parental sanctions for not doing it is extrinsically motivated because he is doing the work in order to attain the separable outcome of avoiding sanctions. Similarly, a student who does the work because she personally believes it is valuable for her chosen career is also extrinsically motivated because she too is doing it for its instrumental value rather than because she finds it interesting. Both examples involve instrumentalities, yet the latter case entails personal endorsement and a feeling of choice, whereas the former involves mere compliance with an external control. Both represent intentional behavior, but the two types of extrinsic motivation vary in their relative autonomy. Given that many of the educational activities prescribed in schools are not designed to be intrinsically interesting, a central question concerns how to motivate students to value and self-regulate such activities, and without external pressure, to carry them out on their own (Ryan and Deci, 2000, p.60). This problem is described within SDT in terms of fostering the *internalization and integration* of values and behavioral regulations (Deci & Ryan, 1985). Internalization is the process of taking in a value or regulation, and integration is the process by which individuals more fully transform the regulation into their own so that it will emanate from their sense of self. Thought of as a continuum, the concept of internalization describes how one's motivation for behavior can range from amotivation or unwillingness, to passive compliance, to active personal commitment. With increasing internalization (and its associated sense of personal commitment) come greater persistence, more positive self-perceptions, and better quality of engagement (Ryan and Deci, 2000, p.61). Precisely, Self-Determination Theory, a broad framework that evolved around in the 1970s concerns people's inherent growth tendencies and innate psychological needs. The logic to employ this theory is to meet the answer of research question "what are the motivational incentives do students have at their schools". It also helps to categorize the incentives into intrinsic motivation and extrinsic motivation.

2.2.2 Existence, Relatedness and Growth Theory

The theory of Existence, Growth and Relatedness, popularly coined as ERG is essential to underpin the theoretical framework for the current empirical study of motivational incentives for students at secondary level as it guides to relate research objectives to research questions. Though inspired by Maslow's Hierarchy of Needs theory (1940), Clayton Alderfer proposed the ERG theory to ensure an alternative and counter the limitations of Maslow's hierarchy as a theory of motivation.

Existence needs

Existence needs include various forms of safety, physiological and material needs. Safety needs mainly refer to the prevention from fear, anxiety, threat, danger, tension, and so on (Yang and Chan,2011, p.7886). Physiological needs refer to an individual's pursuit of satisfaction at the vitality level, such as leisure, exercise, sleep. Material needs refer to resources required for an individual's living, including food and clothing (Yang and Chan,2011, p.7887).

Relatedness needs

Relatedness needs include senses of security, belonging, and respect. Sense of security involves the mutual trust of humanity. Sense of belonging refers to prevention from all forms of suffering, such as isolation, loneliness and distance. People normally wish to be accepted and become members of a group. The needs for belongingness include love given to others or caring accepted from others. Sense of respect simply means feeling of respect from others, such as popularity, social status, superiority, importance and compliment. Such form of need gives people value to their existence (Yang and Chan,2011, p.7887).

Growth needs

Growth needs involve needs for self-esteem and self-actualization. The need for self-esteem refers to self-productive effects such as the ability to pursue, to seek knowledge, to achieve, to control, to build confidence, to be independent and to feel competent. Self-

actualization refers to self-accomplishments including achieving an individual's goals and developing his or her personality. The abilities to realize one's potentials and to support the growth of others are also included (Yang and Chan,2011, p.7887).

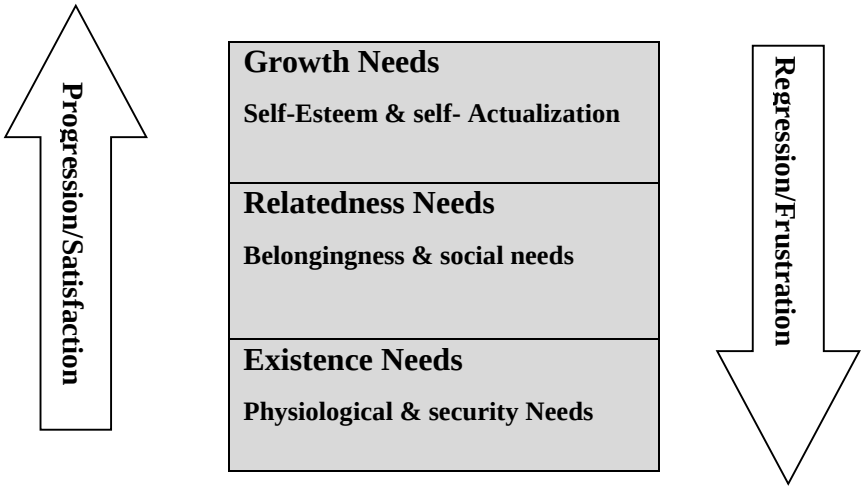


Figure 2. 1 Existence Relatedness Growth (ERG) needs theory

The ERG theory is distinct from the need hierarchy developed by Maslow due to two important features: firstly, ERG theory suggests that more than one kind of need might motivate a person at the same time. For example, it allows for the possibility that people can be motivated by a desire for money (existence); friendship (relatedness). And an opportunity to learn new skills (growth) all at the same time. Secondly, ERG theory has an element of frustration-regression that is missing from Maslow's need hierarchy. Maslow maintained that one heed must be satisfied before an individual can progress to needs at a higher level, for example, from security needs to belongingness. This is termed as satisfaction-progression process. Although the ERG theory includes this process, it also suggests that if needs remain unsatisfied at some higher level, the individual will become frustrated, regress to a lower level and will begin to pursue low level needs again. For example, a worker previously motivated by money (existence needs) is awarded a pay rise to satisfy this need. Then he attempts to establish more friendship to satisfy relatedness needs. If for some reason an employee finds that it is impossible to become better friends with others in the work place, he may eventually become frustrated and regress to being motivated to earn even more money. This is

termed as "frustration-regression" process. Alderfer (1969) made seven propositions about the relationships between human needs and desires and they are presented thus:

i. The less existence needs are satisfied; the more they will be desired.
ii. The less relatedness needs are satisfied; the more existence needs will be desired.
iii. The more existence needs are satisfied; the more relatedness needs will be desired.
iv. The less relatedness needs are satisfied; the more they will be desired.
v. The less growth needs are satisfied, the more relatedness needs will be desired.
vi. The more relatedness needs are satisfied; the more growth needs will be desired.
vii. The more growth needs are satisfied, the more they will be desired (Yang and Chan,2011, p.7887). These seven-core group of propositions can also be shown in a chart form as shown in figure 2.2

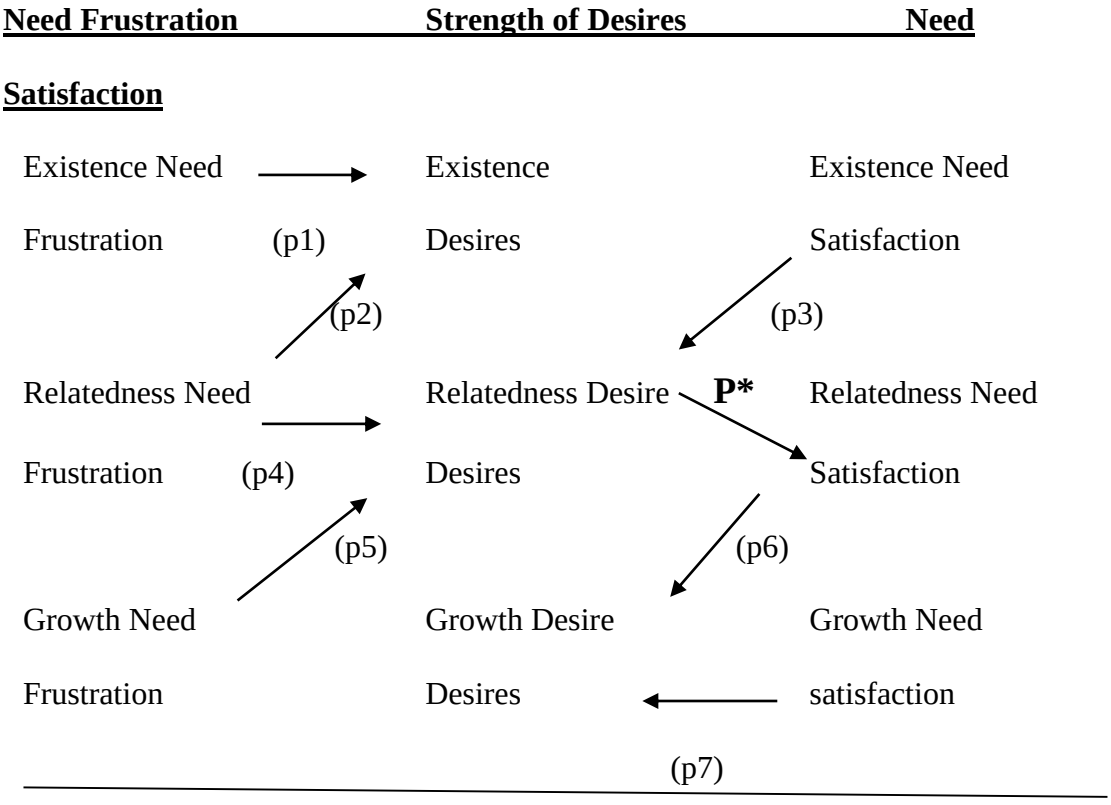
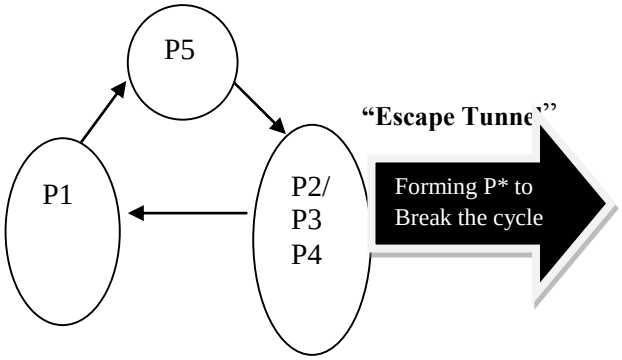


Figure 2. 2 ERG theory in diagrammatic form (Alderfer, 1969).

From the propositions of ERG theory, frustration-regression cycle (see figure 2.3 and satisfaction-regression chain (see figure 2.4) are:



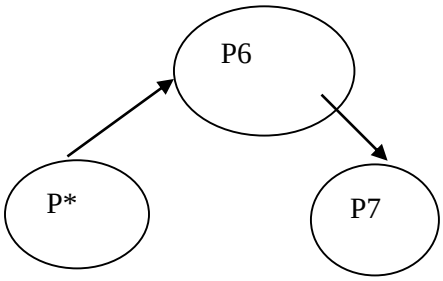


Figure 2. 3 Frustration-Regression Cycle Figure 2. 4 Satisfaction-Progress Chain

Figure 2.3 Frustration-Regression Cycle illustrates when proposition P5 (proposition v, the less growth needs are satisfied, the more relatedness needs will be desired) it leads to either proposition P4 (proposition iv, the less relatedness needs are satisfied; the more they will be desired) or P3 (proposition iii, the more existence needs are satisfied; the more relatedness needs will be desired) or P2 (proposition ii, the less relatedness needs are satisfied; the more existence needs will be desired) which indicates the regression process that pushes to be more motivated by the existence needs. Consequently, proposition P1 (proposition i, the less existence needs are satisfied; the more they will be desired) is produced in absence of required initiatives. It becomes a regression cycle of needs. Through the "Escape Tunnel" (the measures to satisfy individual's relatedness needs/ growth needs), frustration-regression cycle can be transformed into the satisfaction-progress chain. Therefore, figure 2.4 Satisfaction-Progress Chain becomes evident. It is mentioned as a chain, starts with P* (proposition*), the point which indicates the satisfaction of relatedness/ growth desire motivates an individual towards the next needs. It then continues through the proposition P6 (proposition vi, the more relatedness needs are satisfied; the more growth needs will be desired) and ends at proposition P7 (proposition vii, the more growth needs are satisfied, the more they will be desired). Specifically, the Theory of ERG in this study guides to find out the effective incentives and stimulus to encourage and rejuvenate students, breaking down the frustration-regression cycle and achieve the growth in their academia.

2.2.3 The Dual-Structure Approach to Motivation

The Dual-Structure Approach to Motivation, one of the popular content theories of motivation during 1950s to 1960s. It is need-based and classical in nature. American psychologist and professor Frederick Herzberg (1923-2000) developed this approach at the center of which there were two ideas include *job enrichment* and *job satisfaction.* To put it simply, job enrichment is a fundamental aspect of stimulating the effort of employees by expanding job responsibilities and giving increased autonomy over the task processes and completion (Williams, 2004). Job satisfaction represents a combination of positive or negative feelings that workers have towards their work. Meanwhile, when a worker employed in a business organization, brings with it the needs, desires and experiences which determinates expectations that he has dismissed. Job satisfaction represents the extent to which expectations are and match the real awards. Job satisfaction is closely linked to that individual's behavior in the work place (Davis et al.,1985, cited in Aziri, 2011, p. 78). In 1959, Herzberg published his analysis of feelings of 200 engineers and accountants from over nine companies in the United States. These professionals were asked to describe job experiences where they felt either extremely bad or exceptionally good about their jobs and rated their feelings on these experiences (Herzberg, 1966; cited in Tan and Waheed, 2011, p.5). From the responses Herzberg constructed a two-dimensional paradigm of factors affecting people's attitudes about work. He concluded that such factors as company policy, supervision, interpersonal relations, working conditions, and salary are hygiene factors rather than motivators. According to the theory, the absence of hygiene factors can create job dissatisfaction, but their presence does not motivate or create satisfaction. In contrast, he determined from the data that the motivators were elements that enriched a person's job; he found five factors in particular that were strong determiners of job satisfaction: achievement, recognition, the work itself, responsibility, and advancement. These motivators (satisfiers) were associated with long-term positive effects in job performance while the hygiene factors (dissatisfiers) consistently produced only short-term changes in job attitudes and performance, which quickly fell back to its previous level (Gawel, 1997, p. 1). In summary, satisfiers describe a person's relationship with

what she or he does, many related to the tasks being performed. Dissatisfiers, on the other hand, have to do with a person's relationship to the context or environment in which she or he performs the job. The satisfiers relate to what a person does while the dissatisfiers relate to the situation in which the person does what he or she does (Gawel, 1997, p. 1). The dual structure of motivation has been shown in following figure 2.5 consists of motivation factors at upper level and hygiene factors at lower level.

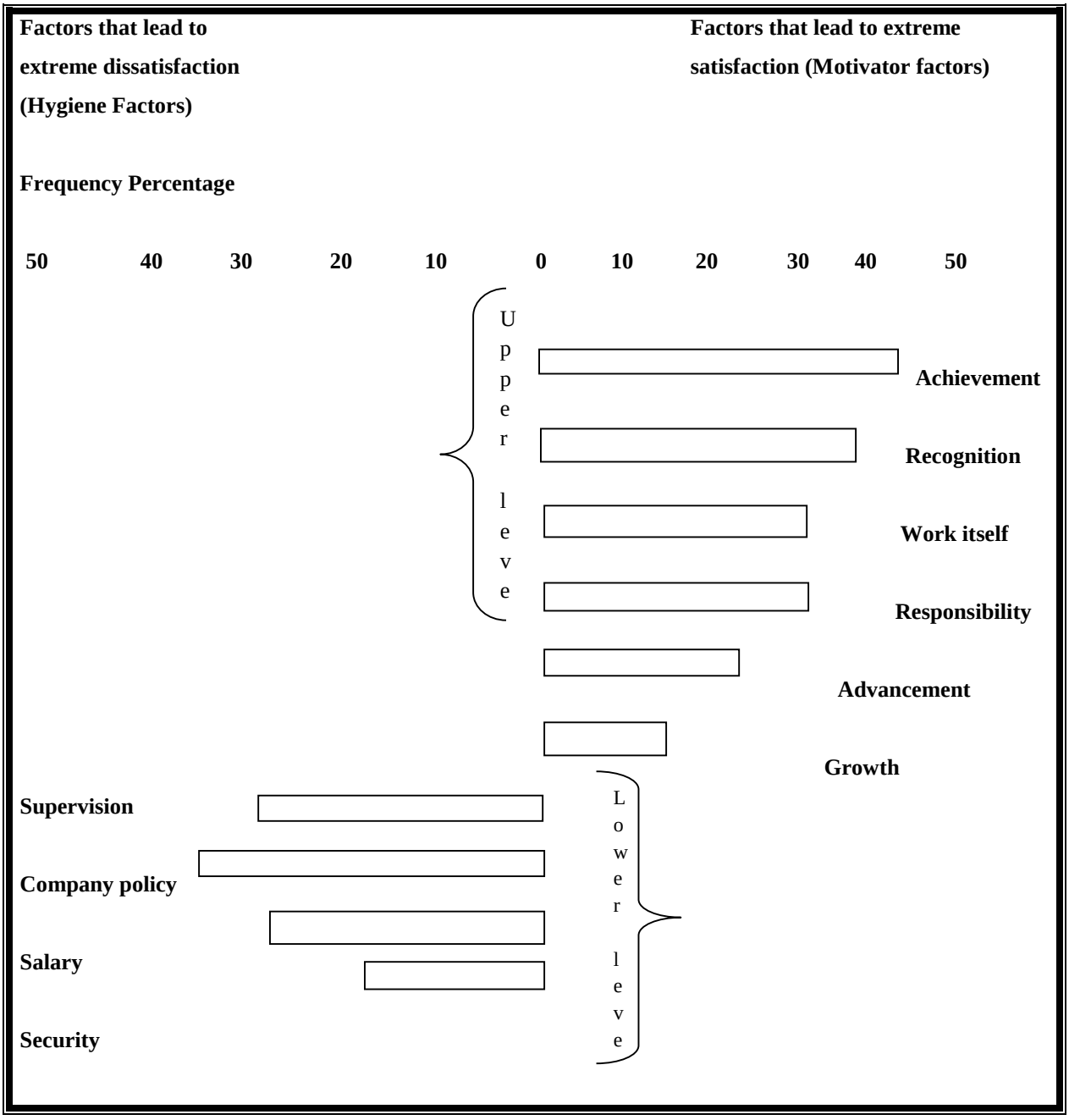


Figure 2. 5 Hygiene-Motivator Factors (modified exhibit from Hergberg,1987)

Herzberg's dual structure approach facilitates the concern of motivation for individual's performance in any organization, however, it suffers from certain flaws. Many researchers criticized Herzberg's theory for its inability to define the relationship between satisfaction and motivation as well as between dissatisfaction and demotivation.

It also unable to pay enough attention to differences between individuals. Additionally, this theory does not focus on the interrelation between two motivator factors or between motivator and hygiene factors. For instance, an individual might have advancement but she or he is not satisfied with the responsibility and company policy. This situation leads towards the new dimensions of Two Factor Theory-2009, presented in figure 2.6

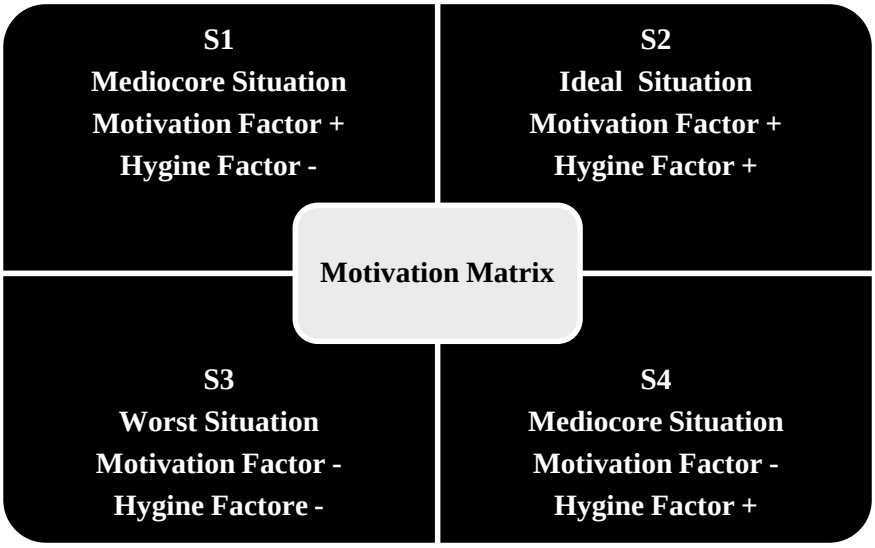


Figure 2. 6 New dimensions of Two Factor Theory-2009, modified from Pani (not published)

From the aforementioned discussion, it is noteworthy that the current study aims to find out which situation is there in schools for secondary students at rural area in Bangladesh. In addition, the analysis of this situation helped to investigate the factors which demotivate students to perform their tasks and achieve academic grades. Consequently, it identified the interrelation between motivation and academic achievement of students. Therefore, the significance of all three above-named theories in this study are summarized in figure 2.7

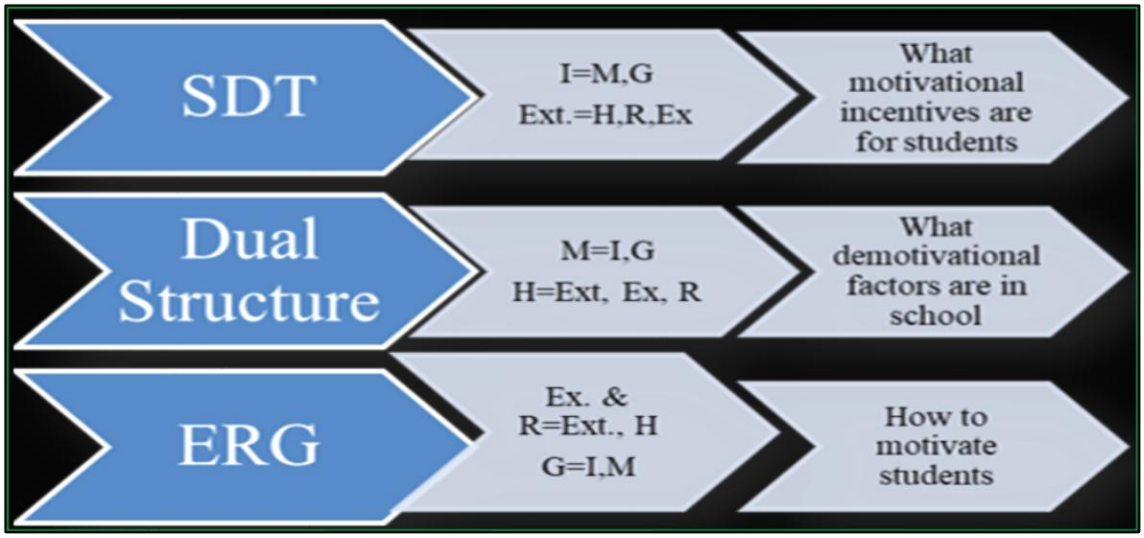


Figure 2. 7 Interrelation and importance of theories

Figure 2.7 shows there are three distinctive but interrelated theories: self-determination theory, dual structure and existence relatedness growth theory. Here, I=Intrinsic factors, Ext=Extrinsic factors, M=Motivating factors, H=Hygiene factors, Ex=Existence needs, R=Relatedness needs and G=Growth needs. Providing students with I, M and G factors can highly motivate them. This indicates the answer of *what motivational incentives are for students?* In contrast, providing no or less Ext., H, Ex., and R can demotivate them from doing study for academic success. This can guide to find out *what factors demotivate students in school?* Finally, question about *how to motivate students?* denotes which factor intrinsic or extrinsic is more important to motivate students; that needs more attention from the school. Though it is not a research question, have relation with findings of research.

2.3 Analytical Framework

The literature review (discussed in 2.2) and theoretical framework (discussed in 2.3) emphasizes on to formulate an analytical framework of the present study. Analytical frameworks provide the basic vocabulary of concepts and terms that may be used to construct the kinds of causal explanations expected of a theory (Coral and Bokelmann,

2017, p.1). This causal explanation include relation between two variables-independent and dependent. Variables that explain other variables are called independent variables, those that are explained by other variables are dependent variables (Bhattacherjee, 2012).

However, the construction and use of a general framework could help to identify the elements a study is to consider, as well as the relationship of these elements to one another. According to Ostrom (2009) frameworks help to organize research and provide a general list of areas or variables that will be used in any type of analysis. The analytical framework for studying motivational arrangements for students at secondary schools in rural areas of Bangladesh reflect three analytical elements which are interrelated with each other (see figure 2.8). These are:

i. Motivation Factors
ii. Demotivation Factors
iii. Academic Achievement of Students

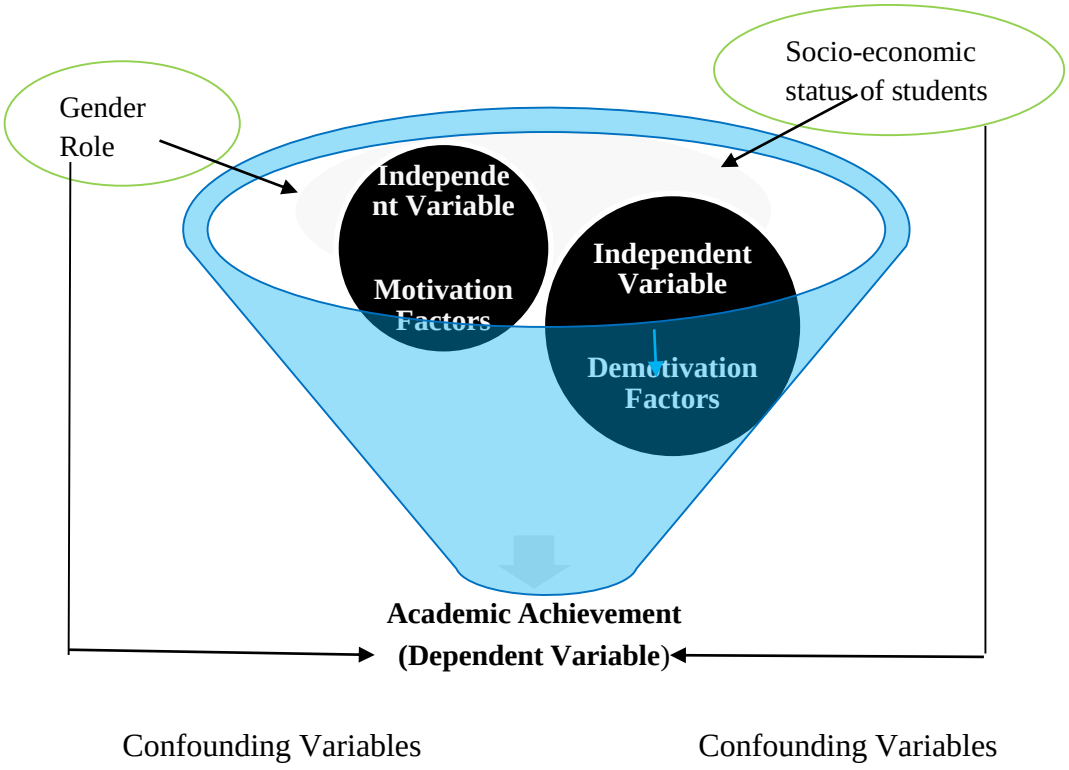


Figure 2. 8 Analytical Framework

The figure 2.8 *Analytical Framework* exhibits the influence of two independent variables- 'motivating and demotivating factors' on the dependent factor 'academic achievement'. In addition, the relationship between motivating factors and academic achievement is perfect positive correlation whereas the relation between demotivating factors and academic achievement is negative correlation. This assumption has been explained more in later Chapter Four: Findings and Chapter Five: Discussion and Integration of Data.

2.4 Conceptualization of Constructs

Conceptualization is the mental process by which fuzzy and imprecise constructs (concepts) and their constituent components are defined in concrete and precise terms. A construct is an abstract concept that is specifically chosen (or "created") to explain a given phenomenon (Bhattacherjee,2012). Constructs used for scientific research must have precise and clear definitions that others can use to understand exactly what it means and what it does not mean (Bhattacherjee,2012). From the analytical framework (see section 2.3), this study finds three main constructs include motivation, demotivation and academic achievement.

2.4.1 Motivation

Educational psychologists have long recognized the importance of motivation for supporting student learning (Lai,2011, p.4). Motivation refers to "the reasons underlying behavior" (Guay et al., 2010, p. 712; cited in Lai, 2011, p.4). Paraphrasing Gredler, Broussard and Garrison (2004) broadly define motivation as "the attribute that moves us to do or not to do something" (cited in Lai, 2011, p.4). Motivation involves a constellation of beliefs, perceptions, values, interests, and actions that are all closely related (Lai, 2011, p.5). Gottfried (1990) defines academic motivation as "enjoyment of school learning characterized by a mastery orientation; curiosity; persistence; task-endogeny; and the learning of challenging, difficult, and novel tasks" (cited in Lai, 2011, p.5). On the other hand, Turner (1995) considers motivation to be synonymous with

cognitive engagement, which he defines as "voluntary uses of high-level self-regulated learning strategies, such as paying attention, connection, planning, and monitoring" (cited in Lai, 2011, p.5).

2.4.1.1 Motivation Factors

A wealth of empirical evidence on motivation factors exists. Motivation factors are those reasons which cause or stimulate any individual to do a particular action. The level of performance from that action depends on those reasons or motivation factors. Motivation factors are classified in different terms. For example, Lange and Adler (1997) report that teachers rated girls significantly higher than boys on intrinsic motivation and mastery-oriented behaviors, although achievement and class grades for these two groups were the same (Lai,2011, p. 13). Guay et al. (2010) found girls to have higher intrinsic motivation for reading and writing than boys did. However, boys had higher intrinsic motivation for math than girls did.

2.4.2 Demotivation

The condition of being without motivation is defined as demotivation. It yields lack of encouragement of doing well in assigned job. In education research, several numbers of studies were done on motivation, nevertheless a few on demotivation because of its negative conception. The current study focuses enough on demotivation of students.

2.4.2.1 Demotivation Factors:

Demotivation factors are those variables which push a person towards poor performance and pull towards no performance and production. A study on 250 American students about their learning experiences was conducted by Oxford found four major types of demotivating factors:

a) Teacher's personal relationship with student;
b) Teachers attitude towards the course or the material;

c) Style conflicts between teachers and students and

d) The nature of the classroom activities (Yadava and BaniAtab, 2013, p. 121).

2.4.3 Academic Achievement

Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university (Steinmayr and Meißneret,al., 2014). Educators such as Ravitch (1988), Hirsh (1987), and Bloom (1987) emphasized on the academic achievement. In an Op-Ed piece in the New York Times, Ravitch (2005) states:

> *"To really get at the problem, we have to make changes across our educational system. The most important is to stress the importance of academic achievement. Sorry to say, we have a long history of reforms by pedagogues to deemphasize academic achievement and to make school more "relevant," "fun" and like "real life." These efforts have produced whole-language instruction, where phonics, grammar and spelling are abandoned in favor of "creativity," and fuzzy math, where students are supposed to "construct" their own solutions to match problems instead of finding the right answers" (p. 2, cited in Orelus, 2010, p.29).*

Motivation is related to academic achievement. For example, Gottfried (1990) also found a relationship between motivation and achievement. Similar to results from other studies, Gottfried found that elementary-age children with higher academic intrinsic motivation tend to have higher achievement and IQ, more positive perceptions of their academic competence, and lower academic anxiety (Lai, 2011, p.15).

2.5 Conclusion

In the field of learning, student motivation/ demotivation is an inseparable concept which has been at the core of education research for decades. Necessarily, a large number of documents were examined but most relevant literatures were sorted out for

the current study. This literature review highlighted existing gaps in extant research and established the significance of the present study in bridging these gaps. This chapter also provided the foundation for the development of the research as the stage of identifying indicators for measuring the research constructs include student's motivation, demotivation. This study mainly followed a series of motivation theories from content types. Due to its focus on what motivates and demotivates students in school environment, adopting the self-determination theory, existence-relatedness-growth needs theory and hygiene-motivator factors theory was inevitable. This indicates the deductive nature of the present study. The subsequent chapter introduces the methods followed in current research.

Chapter Three
Research Methodology

3 Introduction

After the contemplation of reading relating to the research topic, the time came to evaluate the most appropriate methodology for the study. Guba and Lincoln (1989) describe methodology, as "the overall strategy for resolving the set of choices or options available to the inquirer during the research process". In this non-experimental study, mixed method design was used to reach its research objectives and to test the hypothesis. Mixed methods research is increasingly being used today in many disciplines such as sociology, psychology, health, and education (Bentahar & Cameron, 2015). Many researchers point out the importance of mixed methods and their advantages in comparison to mono-methods (Jick, 1979; Creswell, 2003; Johnson and Onwuegbuzie, 2004). In this study, specifically, sequential exploratory type of mixed method was applied to conduct research. The purpose of this design to correlate independent variables a) motivation factors; b) demotivation factors with dependent variable ‘academic achievement’. This method chapter is organized in following sub-sections:

3.1 Research Paradigm

According to Willis (2007) a paradigm is "a comprehensive belief system, world view or frame work that guides research and practice in a field". Determining philosophical stance of researcher can influence the effectiveness of the research methodology. There are four critical paradigms of research include post positivism, constructivism, advocacy/participatory and pragmatism. First, post positivism is also called quantitative research, positivist/postpositivist research, and empirical science while constructivism may refer to qualitative research that claims subjective meanings of the participants responses. Third, the advocacy/participatory research assumes that the inquirer will proceed collaboratively so as to not further marginalize the participants as a result of the inquiry (Creswell, 2003). Fourth, pragmatism emphasizes on well understanding the research problem than methods. The focus of the present study also is to understand well what factors do motivate and demotivate secondary students in their school and explore the relationship between these factors and student's academic achievement. Therefore, this study adopted the pragmatism philosophy of research and applied multiple methods to investigate the research problem. It invested the mixed method research approach through the study combining qualitative and quantitative methods in data collection, analysis and effectiveness test.

3.2 Research Design

Research design is a comprehensive plan for data collection in an empirical research project. It is a "blueprint" for empirical research aimed at answering specific research questions or testing specific hypotheses, and must specify at least three processes: (1) the data collection process, (2) the instrument development process, and (3) the sampling process (Bhattacherjee, 2012). The current study has been developed based on the integrated model of Mixed-Method Research (MMR) (see in figure 3.1). The term 'mixed methods research' is broadly accepted to refer to research that integrates both qualitative and quantitative data within a single study (Wisdom et al., 2012, Creswell and Plano Clark, 2011). A key aspect of the definition of mixed methods research is the 'mixing' of the qualitative and quantitative components within the study (Simons and Lathlean, 2010, Maudsley, 2011). 'Mixing' refers to the process whereby the qualitative and quantitative elements are interlinked to produce a fuller account of the research problem (Glogowska, 2011, Zhang and Creswell, 2013). This integration can occur at any stage(s) of the research process, but is vital to the rigor of the mixed methods research (Glogowska, 2011; cited in Halcomb & Hickman, 2015).

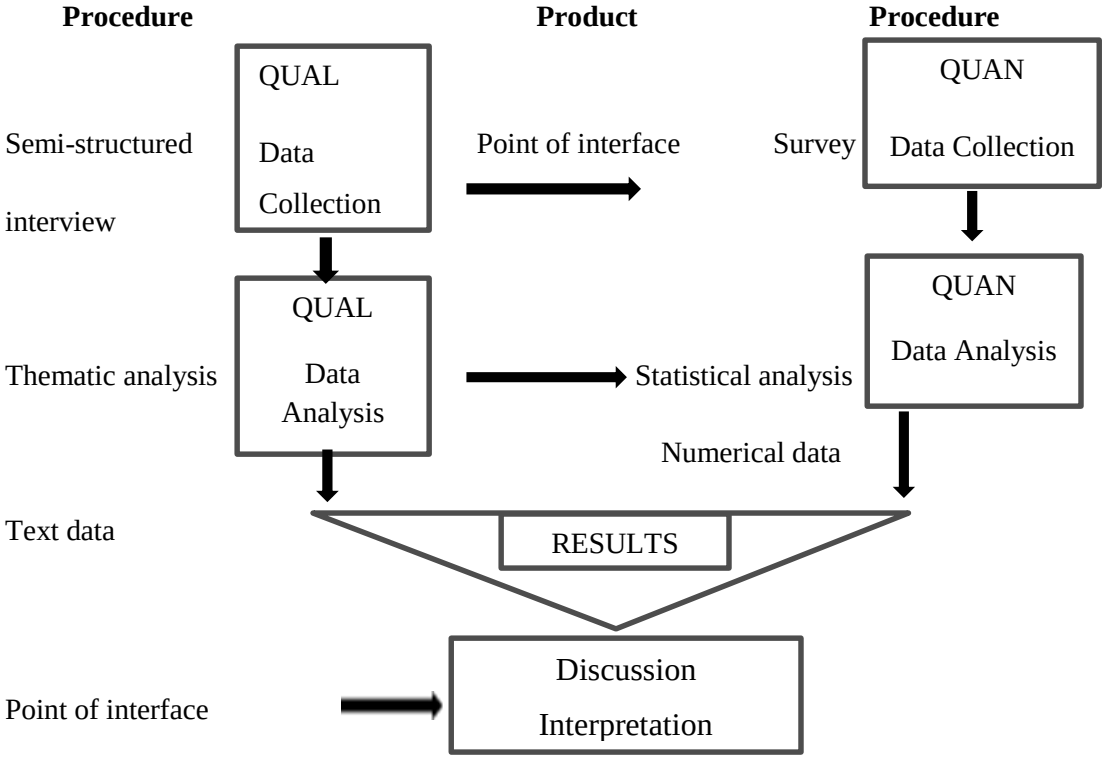


Figure 3. 1 Integrated Model o Mixed Method Research (MMR)

Figure 3.1 exhibits accumulation of different stages data collection, data analysis, results and discussion parts of the current research at one point 'Integrated model of Mixed-Method Research (MMR)'. It also manifests that thematic analysis for qualitative and statistical analysis for quantitative data analysis procedures are followed and most importantly, inferences are drawn based on the interface occurs at data collection and discussion levels of this research. It is noteworthy that this study mainly followed the sequential exploratory research method of MMR.

3.2.1 Rationale of Using Mixed Method Research Design

Mixed methods research offers significant opportunities for researchers to gain a deeper understanding of complex phenomena than would otherwise be possible via the use of either quantitative or qualitative data on its own (Halcomb & Hickman, 2015). That means, it emphasizes on the use of more than one philosophical approach. By the implementation of sequential exploratory mixed method in this research, it underpins critical realism, naturalistic and positivist philosophies. In addition, the use of this approach in the current research has increased its validity. Creswell and Plano Clark (2007) describe this design as follows:

> *In this design, the researcher first qualitatively explores the research topic with a few participants. The qualitative findings then guide the development of items and scales for a quantitative survey instrument. In the second data collection stage, the researcher implements and validates the instrument quantitatively. In this design the qualitative and quantitative are connected through the development of the instrument items. Researchers using this variant often emphasize the quantitative aspect of the study (Creswell & Plano Clark, 2007:77; cited in Cameron, Dwyer, Richardson, Ahmed, & Sukumaran, 2013).*

It is also notable that the priority and sequence of the methods across all the phases of the research is noticeable which was also influenced greatly by the timeframe and contextual issues (access to data sources) and to a large extent the choices made were emergent (Cameron et al., 2013).

3.2.2 Sequential Exploratory Research Design

The sequential exploratory strategy typically consists of an initial phase of qualitative data collection that is followed by quantitative data collection. Findings from both data collection methods are analyzed and integrated during an interpretation phase (Kroll & Neri, 2009). To execute this research method in present study, at the first stage, interview was conducted allowing the researcher to understand better in depth the complexity of the phenomenon or process (Bentahar & Cameron, 2015) and then questionnaire was administered for survey purpose (see figure 3.2).

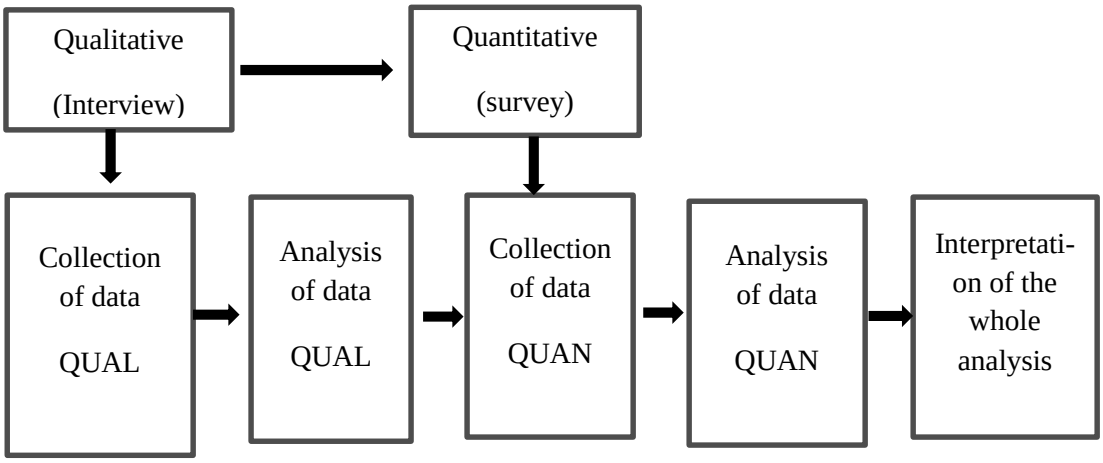


Figure 3. 2 Sequential Exploratory Research Design (Source: Creswell,2003)

As seen in figure 3.2, collection of data by qualitative method essentially produced variables which are coded as sub-themes during thematic analysis (see section 4.1.1) and followed by the collection and analysis of the quantitative data (see section 4.2, 4.2.1 and 4.2.1.3) developed upon the initial qualitative results. Apart from this, quantitative

method was helpful to generalize the qualitative findings discussed in chapter five *Discussion and Integration of Data.*

3.2.3 Rationale of Using Sequential Exploratory Research Design

The rationale of using sequential exploratory method includes two reasons: it is relatively straight forward due to clear, distinct stages and easier to describe than concurrent strategies and this approach allows for greater involvement or participation of target population in refining study instruments and potentially raises the ecological validity of such tools (Terrell, 2012).

3.3 Data Source

Data is the most vital aspect of any research. It can be defined as the quantitative or qualitative values of a variable. This applied research is based on two sources of data collection, include-

3.3.1 Primary Source

Primary data has been collected from the participants of the study because it is reliable and authentic in greater degree. The number and type of participants has been discussed in later section *3.4 The Sampling Design*.

3.3.2 Secondary Source

Secondary data for this study is published data, mainly obtained from survey of documents. According to Ghosh (1983) there are some major sources of documentation, books, published official data, survey reports, memories, travelogues, history. In this study, books, published official data and survey reports were used as the secondary source of data.

3.4 The Sampling Design

Sampling is the process of choosing a representative portion of a population which is the foundation for estimating and predicting the outcome of the population as well as to detect the unknown piece of information. This representative population is well known as sample in research work. In this study, mixed-method sampling strategies was followed by the combination of probability (purposive sampling) and non-probability (simple random sampling) procedures. This mixed method strategy has ensured and increased both external validity and transferability of the sampling procedure of this study. Purposive sampling technique, popular in qualitative research, was applied to select two secondary schools situated in Munshigonj district in Bangladesh whilst simple random sampling technique, popular in quantitative research, applied for selecting 108 participants. Necessarily, prior to sampling, its size was determined by using Survey Software.

Random sampling method was followed because this method is more representative and randomized in nature. 108 participants are in grade 9 and they are from two selected secondary schools which are the sample units. Based on Grade Point Average (GPA 3) total population of the study has been classified into two groups: the 'Achiever Group' of students has minimum GPA 3 and the Maintainer Group has below the GPA 3. Why the participants and their institutions represent the rural Bangladesh has been discussed in -section *3.5 Locating the Participants.*

3.5 Locating the Participants

On purpose of the study, respondents were selected from Malkhanagar High School and Kusumpur High School both are located in Munshigonj district (see appendix-B). Munshigonj district is also known as the Bikrapur, situated in rural area of Dhaka division. Malkhanagar High School is an academic institution established in 1889 at Malkhanagar, Sirajdikhan, Munshigonj. At present, there are 1,166 students studying in

different grades of this school. At grade 9, there are 82 students. Previous record shows that its pass rate in Secondary School Certificate (SSC) examination is 93% but the percentage of GPA 5 achiever is 9%. The other sample unit, Kusumpur High School is a well-known school listed in secondary school category and is situated at kusumpur village in Sirajdikhan, Munshigonj. It was established in 1993. There are 9,87 students. Pass rate is 90% and the percentage of GPA 5 achiever is 6% only. Both school lag behind the good performance because of lack of academic facilities. These schools have similarities regarding their regional area, pass rate and percentage of students having GPA 5 in Secondary School Board Examinations (SSBE). As these schools locate in rural area, researcher took them as the representatives of other secondary schools locate in that research area.

3.6 The Instrumentation

Research instruments are simply devices for obtaining information relevant to your research project (Wilkinson and Birmingham, 2003). In this mixed method research, following instruments were developed in order to collect data.

a) For the qualitative data collection, in the first phase, an interview guide was developed and used to conduct the interview of participants. According to Patton (2002), an interview guide approach provides elements to be covered during the interview. In this study, the interview guide contains some pre-developed questions on purpose of collecting participants demographic profiles and obtaining the depth and detail information about their motivation, motivating and demotivating factors in respective schools.

b) In the second phase, five-point Likert scale questionnaire was executed to reach at quantitative data. This self-administered questionnaire was framed covering all the factors related to two major variables, motivation and demotivation-the independent variable and academic achievement as the dependent variable.

To obtain data from the participants, a 5-point Likert type scale ranging from five for strongly agree, four for agree, three for neutral, two for disagree and one for strongly disagree was used in this survey. In response to the difficulty of measuring character and personality traits, Likert (1932) developed a procedure for measuring attitudinal scales (Boone and Boone, 2012) which is known as Likert Scale. It is one of the popularly used measurements in social science researches. The rationale to use Likert type scale in this study are: it is more reliable and frequently used tool in quantitative research. Secondly, previous researches including Ali, Tatlah and et al. (2011) and Jen and Yong (2013) used the Likert type scale in their studies which are quite similar to the present study. The characteristics of this measurement conforms its validity, reliability and structure, for example, a balance of both positive and negative items is generally recommended to reduce response-set bias. Subjects indicate their feelings concerning each item on a bipolar scale such as "strongly agree, agree, neutral, disagree, and strongly disagree." Responses for each subject are scored from one (1) to five (5), with negative items reverse-coded. The scores for the individual items are then summed to obtain a Summated Rating Score or Likert Scale value for each respondent. Alternatively, the mean scores of the responses of each subject can be used so that the scale scores fall in the same 1 to 5 range as the individual items.

3.7 Procedures

The procedure is twofold including all the critical information about data collection and data analysis method, mainly focused on sequential approach. It informs about when, where, and how the data were collected and analyzed.

3.7.1 Data Collection Procedure

To collect data a mixed procedure was followed by combining semi-structured interview method and survey method. Semi-structured interviews strike a balance between a structured interview and unstructured interview (Srivastava, & Thomson, 2009, p.75). It was used for two reasons: it is structured to some extent but not rigid like structured

interview method and it is advantageous due to its flexibility approach to questioning respondents but not too greater flexible like unstructured interview method. Through the interview, a number of themes were found. Some of them were used as the indicators in and transformed to ‘questionnaire’ for the survey purpose (figure 3.3).

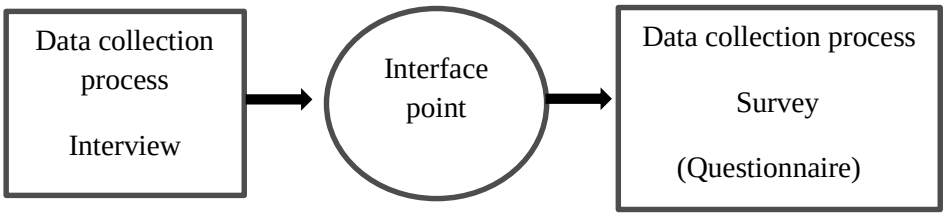


Figure 3. 3 Interface point in sequential exploratory data collection procedure

Figure 3.3 illuminates interview method was used to collect data on motivating and demotivating factors. Some of these factors were used to develop the questionnaire for further collection of data at the second phase. Eventually, questionnaire was administered on the same and equal number of participants who were interviewed.

The structured questionnaire containing 10 items was operated to accumulate data from respondents. This method is more applicable for the respondents as they are relatively educated (Aminuzzaman,1991). Before administering the questionnaire, a pilot test was done over 10 participants out of the original sample to ensure the validity and applicability of the questionnaire. It helped to be certain about clear understanding of the questions by the responded and to identify the flaws of the questionnaire. The questionnaire was translated into Bengali to make it more understandable to respondents as they are from Bengali medium. The questionnaire (attached in appendix-A) was developed following some principles hold within: clear explanation of the purpose of research work; how the participants would be benefitted and their information will be kept as confidential. Apart from providing essential instructions about the questionnaire completion, a rapport building effort was done in the day before when they were informed that it is a voluntary effort and they are not having extra credit for doing this; they can quit the questionnaire at any time. Finally, with the consent of the authority (see

permission letter attached in Appendix-B) and students of the schools, data collection were administered over the participants.

3.7.2 Data Analysis Procedure

Since this applied research is the combination of qualitative and quantitative research, it adopted a mixed method in data analysis too. Consequently, for qualitative analysis 'thematic analysis' method and for quantitative analysis, both descriptive and inferential statistical measures were taken. The idea of qualitative and quantitative data analysis together in one study was supported by Docan (2006) in a similar study on student motivation. In the first stage of data analysis, the use of thematic analysis was done by following both Braun and Clarke's (2006) six-phase framework (see table 3.1) and Miles & Huberman (1994) model (see figure 3.4) that allowed the researcher to capture and organize the data into patterns that provided meaning and answered to the research questions (Braun & Clarke, 2006). These two models of thematic analysis were combined and concurrently used during the analysis of data.

Table 3. 1 Braun and Clarke's (2006) six-phase framework for doing a thematic analysis (Maguire & Delahunt, 2017; p.3354)

Step 1: Become familiar with the data
Step 2: Generate initial codes
Step 3: Search for themes
Step 4: Review themes
Step 5: Define themes
Step 6: Write-up

The use of Braun and Clarke's (2006) six-phase framework as a foundation in conducting thematic analysis empowered to examine the respondent's opinions, thoughts about study motivation and demotivation they experience in their schools. This approach is considered the most appropriate for this study because the researcher aims to examine the data in order to discover common themes and thoughts from more than

one participant and secondly, it illustrates the data in great detail (Ibrahim, 2012). As earlier mentioned, the data analysis coupled with Miles & Huberman (1994) model of thematic analysis which consists of three link stages or 'streams', i.e. data reduction, data display and data conclusion-drawing/verifying as illustrated by the figure 3.4 (Ibrahim, 2012).

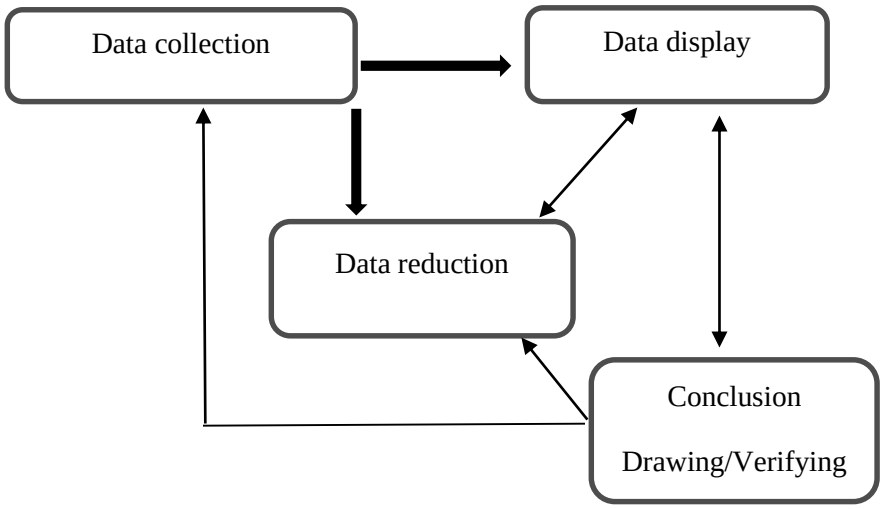


Figure 3. 4 Component of data analysis: interactive model in Miles & Huberman (1994, p.12)

Data reduction phrase simplifies the collected data, displaying data facilitates the understanding of data and in drawing conclusion phase coherent findings are built. This model has some utilities in this research because it helped to remove unnecessary texts or descriptions and its display techniques increased the overall reliability of the research to make it valid for other researchers(Ibrahim, 2012).

Accordingly, at the first stage, the gathered data was familiarized by reading and re-reading the interview transcriptions collected from participants. Next, in 'Generating initial codes' phase, focus was on reducing irrelevant data and the production of initial codes (Attride-Stirling, 2001; Braun & Clarke, 2006) in terms of what should be included. Then, the data was coded into "meaningful and manageable chunks of text, such as passages, quotations, single words…" (Attride-Stirling, 2001, p. 391) and the

codes are shifted and labeled into themes. It is the first and most basic level of analysis that is used as an organizational tool (Braun & Clarke, 2006). Following this the draft themes were checked, reviewed and confirmed to develop a thematic map. It is noteworthy that data analysis was non-linear and explicitly analyst-driven since data was identified in deductive or theoretical way. The realist paradigm of the epistemology of this research guided the data analysis to be exclusively focused on semantic themes but hardly on latent themes. At the fifth phase "Defining and naming themes, ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definition and names for each theme" (Braun & Clarke, 2006, p. 87). However, after defining, themes were displayed in tables and quotations. Finally, at 'write-up' phase a logical and coherent finding are scholarly reported.

In quantitative data analysis stage, the null hypothesis, that there is no significant relationship between motivation-demotivation and academic achievement of students had been analyzed using inferential statistics technique-Pearson's correlation analysis. Correlation, also called as correlation analysis, is a term used to denote the association or relationship between two (or more) quantitative variables. This analysis is fundamentally based on the assumption of a straight–line [linear] relationship between the quantitative variables. The Pearson's correlation coefficient establishes a relationship between the two variables based on three assumptions. These are-

a. Relationship is linear

b. Variables are independent of each other

c. Variables are normally distributed (Gogtay & Thatte, 2017).

To examine the correlation between these two variables descriptive statistics tools- mean and standard deviation were measured first. And to do statistical analysis IBM Statistical Package for the Social Sciences (SPSS) Statistics 23 Software was used. Similar to data collection procedure, a combination of qualitative and quantitative approaches was used in the data analysis following an order. Significantly, thematic analysis (qualitative method) influenced descriptive and inferential analysis (quantitative method) through the data analysis stage (figure 3.5).

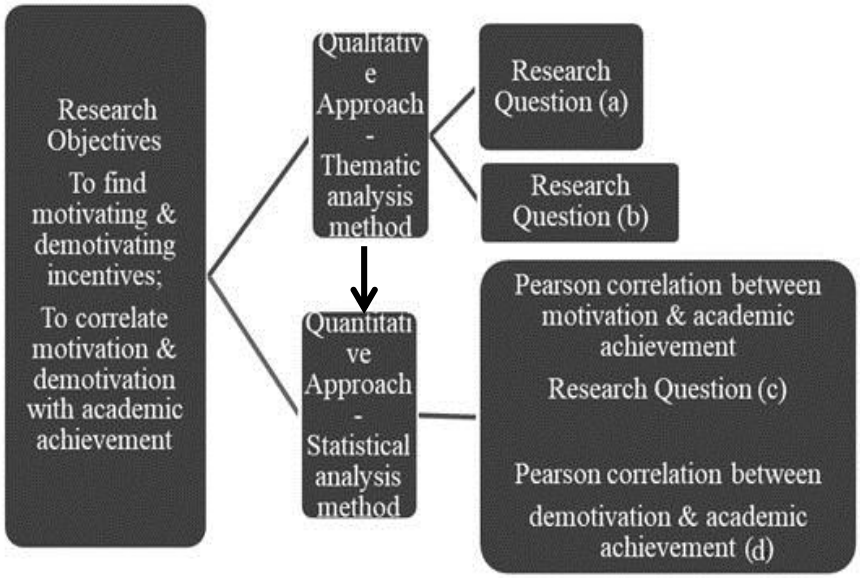


Figure 3. 5 Integrated data analysis plan

Figure 3.5 on data analysis plan indicates that the sequential exploratory mixed-method research approach has an overlapping role to find out the answers of research question. This research approach also added value in this study by connecting and embedding data (figure 3.5) because thematic analysis only provides the reasons of motivation and demotivation while statistical analysis investigates the intensity of motivating and demotivating indicator's influence over academic achievement (broadly discussed in chapter five *Discussion and Integration of Data*).

3.7.2.1 Operationalization of Variables and Indicators

Operationalization refers to the process of developing indicators or items for measuring the constructs and the combination of indicators at the empirical level representing a given construct is called a variable (Bhattacherjee, 2012). Thus, constructs are operationalized using indicators in research. Here, in this study, student's motivation, demotivation was operationalized by *formative* indicators but academic achievement by *reflective* indicators. A formative indicator is a measure that "forms" or contributes to an underlying construct and a reflective indicator is a measure that "reflects" an underlying

construct (Bhattacherjee, 2012). The role of student's motivation and demotivation was determined as independent variables whereas student's academic achievement as the dependent variable. Variables and indicators both are identified and presented in table 3.2.

Table 3. 2 Variables and indicators o the study

Variables	Indicators	Type of Data	Variables measured in scale
A. Independent variable • Motivation factors	• Joy in learning • Self-willingness • Rewards • Recognition • Finding good job • Teaching-learning process • Competition among peers	Nominal Nominal Nominal Nominal Nominal Nominal	Continuous Variable or Scale variable
• Demotivati-on factors	• Unfriendly teacher-student relationship • Boring syllabus • Sanctions	Nominal Nominal Nominal	
B. Dependent variable • Academic achievement	• Grade Point Average (GPA)	Nominal Interval	

Table 3.2 lists 10 formative indicators for independent variables include *motivating and demotivating factors* and 1 reflective indicator for dependent variable *student's academic achievement*. These variables were measured as scale variable by the *Likert scale*. The operational definitions of indicators are:

3.7.2.1.1 Joy in learning

Joy in learning can be defined as experiencing pleasure and interest in knowing new ideas, completing tasks, confronting challenges, resolving challenges during learning and after getting the result. According to Csikszentmihalyi (1997a) the joy of learning is specified as an experience of success and know-how either during the learning process or after it. It is about identifying emotions and emotional state of students in learning. Whether they are happy or delighted with the process of learning they are going through can impact the level of student's motivation and academic achievement.

3.7.2.1.2 Self-willingness in learning

Self-willingness denotes an inner, conscious attempt to master and achieve the goal set out already. In learning, students are called self-willing when they are determined and put efforts continuously to attain academic goals yet challenges are there or there are no external incentives for them. They want to be succeeded in study at any cost, they do not wait for the facilities but do hard work to reach at their goal. They may face failures but try to conquer it.

3.7.2.1.3 Rewards

Rewards can be defined as an external incentive specially provided when an individual perform a desired behavior. It can take many forms such as prize, tokens and praise. For

students, rewards function as a positive reinforcement for their desired behavior in schools. It channels them further to maintain and sustain their achievements in study.

3.7.2.1.4 Recognition

Recognition is a motivational strategy involves concrete feedback and appreciation for what an individual does in her/his institution. According to Jeffries (1997) it is the acknowledgement of the efforts, creativity and willingness of employees to put in extra effort. Students can be motivated if they get feedback and appreciation for their performance regularly in their schools. This appreciation strategy can vary in designs. It includes formal recognition such as, contest, advancement opportunities or reward programs and informal recognition for instance small thank you notes, congratulating or delegating tasks, responsibilities and so on.

3.7.2.1.5 Finding Good Job

Finding good job indicates taking career as a goal. Thinking about career can motivate individuals towards doing hard work. It is also extrinsic in character as a motivating factor for students. Though it is not found in school environment, many times students are made conscious by their teachers because higher academic achievement may add value to compete in the job market. Consequently, finding themselves (students) fit for job can stimulate them for studying hard.

3.7.2.1.6 Teaching-Learning Process

Teaching and learning process connote the procedures, methods and exercises through which students are taught and evaluated in their academic institutions. According to Williams (2011), the five key ingredients impacting student motivation are: student, teacher, content, method/process, and environment. The method or process must be inventive, encouraging, interesting, beneficial, and provide tools that can be applied to the student's real life (Vero & Puka, 2017).

3.7.2.1.7 Competition Among Peers

Competition in classrooms among peers demonstrates that students may compete with one another on tasks, such as assignments or exams. Ross and Van den Haag (1957, in Deci & Ryan, 1985) regard such activity as direct competition, where people struggle against one another. However, students can also compete against objective standards, such as a personal best or pre-set target. This is known as indirect competition. The impact of competition on student's motivation has developed a debate among education researchers. Tjosvold, Johnson, & Johnson (2006) focused on how to have a constructive competition to yield more positive effect on students learning. Both students and educators have much to gain by structuring a classroom and a school environment that includes a good balance of "healthy" competition (Vockell, 2011). On the other hand, Zeng, & LeTendre (1998) stated that pressures caused by competition on entrance exams have been linked to higher rates of juvenile delinquency, bullying, and suicide.

3.7.2.1.8 Unfriendly Teacher-Student Relationship

Relationship between teacher and student stipulates how they are communicating with each other in the classroom. McGrath (2005) finds relationships are at the heart of teaching since it is an activity based on communication. Lack of constructive relationship may affect the student's motivation because less empathy and less sense of caring students yield a classroom environment where students are less passionate about learning.

3.7.2.1.9 Boring Syllabus

The syllabus may provide an overview of the content areas, elaborate on how the course will be taught, and introduce the instructor(Ludy et al., 2016). The syllabus provides a first impression, which may be important (Matejka & Kurke, 1994) because it can motivate students or, alternatively, disinterest them in the course. The role of syllabus in

motivating students varies according to its type and formats. For instance, the traditional syllabus is considered less effective to draw the student's attention in learning. Because it is a short document focused on a limited range of the most important course information from the instructors' perspective. It typically includes the instructor's name and contact information and a schedule of when different topics, events, and deadlines will occur throughout the term (Ludy et al., 2016). But there is usually little attempt to get the student interested in the material or to be concerned about the student's impressions of the syllabus or the class in general (Matejka & Kurke, 1994). It makes learning process monotonous and affect student's motivation. On the contrary, learner centered and engaging types of syllabus motivates students to take an active role in their learning with captivating and strengthening student's enthusiasm for learning (Ludy et al., 2016) due to rich text yet student friendly explanations, purposeful use of graphics and media.

3.7.2.1.10 Sanctions

Sanctions are external incentives to control and shape the behavior of individuals in their institutions. According to Kanungo (1983), a sanction is any action (disciplinary in nature) initiated in response to unacceptable performance or behavior. It is viewed as a negative reinforcement opposite of reward purposes to avoid the undesirable actions of persons and to motivate them to act in a particular way in order to ensure the achievement of the intended goals. Oliver (1980) illustrated that rewards and punishments are positive and negative incentive and both are essentially efficient for motivating others towards collective action but negative incentives have the potential side effects of disharmony and discord. Sanctions may have adverse effect on student's interest in learning and achievement. Ilegbusi (2013) explained that punishment has negative impact on students learning. Punishment is just a temporary drive. Students motivated by fear of punishment usually stop work once the fear is removed. So, it's difficult to use punishment effectively to motivate learning of students(Jabeen, Iqbal, Haider, & Iqbal, 2015).

3.7.2.1.11 Grade Point Average

Grade point average (GPA) is defined as the numerical average of letter grades received in schools (Lincoln et al., 1983). (see table 3.3). Like other nations, academic performance of students at secondary level in Bangladesh, is also appraised in Grade Point Average (GPA) process (see table 3.3).

Table 3. 3 Academic grading system in school in Bangladesh

Class interval	Letter grade	Grade point
80-100	A+	5
70-79	A	4
60-69	A-	3.5
50-59	B	3
40-49	C	2
33-39	D	1
0-32	F	0

Table 3.3 shows that in Bangladesh, academic grading system comprises with seven discrete letter grades indicate separate grade point for each. For instance, the letter grade "A+" is assigned a numerical value of 5 (grade point), while an "F" is assigned the value of zero (0) (grade point). In this study, student's academic performance was measured by their grade point average in most recent examination.

3.8 Reliability and validity

3.8.1 Reliability and Validity of Research Instruments

To ensure the acceptance of the scientific and systematic investigation of an idea to the stakeholders, researchers need to establish reliability and validity of the study. Put simply, reliability is the degree to which a measuring procedure produces similar, in

other words consistent outcomes, when it is repeated under similar conditions (Islam, 2011). By validity we mean that a research study, its parts, the conclusions drawn, and the applications based on it can be of high or low quality, or somewhere in between (Onwuegbuzie, & Johnson, 2006) . But Lincoln and Guba (1985) point out that instead of obtaining the same results, it is better to think about the dependability and consistency of the data. To this end, the *investigator's position* and *audit trial* techniques were used in the present study. Accordingly, details on the research design (see section 3.2), rationale of using mixed method research design (see section 3.2.1), sequential exploratory research design (see section 3.2.2), Locating the participants (see section 3.5) and procedures of data collection (see section 3.7.1) and analysis (see section 3.7.2) are described. In addition, to meet the standards, *content validity* of research instruments was accomplished. Both instruments of the study interview guide and questionnaire (Likert scale SMAQ) were examined by a panel consists of three teachers currently working in secondary schools and two researchers who have more than five years of research experience. According to their suggestions, closed, yes/no questions were avoided and the sub-theme: *Government's policy for student motivation* was not included later in questionnaire (Likert scale SMAQ measurement) for data collection. Because it may not meet the research objectives.

Additionally, internal consistency of the survey instrument was estimated through the application of a coefficient alpha, known as Cronbach's Alpha (Huck, 2007). In exploratory research, Cronbach's Alpha is popular in measuring internal reliability and it was done by Statistical Package for the Social Sciences (SPSS) Statistics 23 Software in this study which produced following reliability test results (see table 3.4).

Table 3. 4 Cronbach's Alpha Correlation Coefficient

Reliability Statistics	
Cronbach's Alpha	**Number of Items**
0.874	**10**

Table 3.4 reports the survey has scored 0.874 in Cronbach's Alpha Correlation Coefficient reliability test which indicates the survey instrument is reliable enough.

3.8.2 Reliability and Validity of Research Findings

Research findings also require to be reliable and valid. Internal reliability of findings deals with the consistency of collecting, analyzing and interpreting the data and internal validity of it is concerned with the congruence of the research findings with the reality. To ensure the reliability and validity of the study findings *respondent validation or member check* method was followed. The respondent validation (or member check) is returning to the study participants and asking them to validate analyses (Mays & Pope, 1995; Barbour,2001 & Long & Johnson, 2000; cited in Burnard, Gill, Stewart, Treasure, & Chadwick, 2008). In this purpose, the transcripts where interviewees responses were stored and on which they rated the indicators in scale were brought back to them. Then they were asked to carefully read through their interview transcripts and/or data analysis to validate, or refute, the researcher's interpretation of the data (Burnard, Gill, Stewart, Treasure, & Chadwick, 2008). In this process, a few participants modified their opinion on the questionnaire data. Finally, modifications of those respondent's opinions were restored and data were re-analyzed accordingly. This added the validity of the research findings. One more issue to be considered is the external validity. External validity is concerned with the applicability of the findings in other settings or with other subjects(Zohrabi, 2013). As Burns (1999) notes "How generalizable to the other contexts or subjects is our research". To ensure the external validity, the study findings were compared and contrasted with other similar studies and further discussed in the fifth chapter: *Discussion and Integration of Data.* For example, De Wolff & Van Ijzendoorn (1997) and Kochanska's (2002) findings regarding attuned teachers is similar to the result of current study about teacher as a motivating factor for students in secondary schools.

3.9 Conclusion

This chapter has described, in detail, the research methods used in the present study. It simplified the philosophical position of this study and guided to reach at the research objectives. It's explanation for methods applied throughout the study provides more transferability and helped to avoid biases and produce more reliable results.

Chapter Four
Findings

4 Introduction

In this chapter, data has been identified, analyzed and presented following a particular order and relating to the ideas that are apparent in literature review and theoretical framework. The entire chapter combines two parts. In the first place, it denotes thematic analysis ensuring Braun and Clarke's (2006) six-phase framework and Miles & Huberman (1994) model as mentioned earlier in section 3.7.2. It is pertinent to mention that thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data and a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set (Braun and Clarke, 2006, p.10). To provide a rich thematic description of rigorous data set, a recursive process is incumbent in each step from transcription to analysis and reporting and it found three themes. However, in the second place, quantitative analysis was started with *Histogram testing* of the normality of data distribution and ended to finding the correlation analysis between *motivation-demotivation factors*-the independent variable and *academic achievement*-the dependent variable.

4.1 Qualitative Analysis

4.1.1 Thematic Analysis

This study found and explained three important themes relevant to student motivation at secondary schools can be seen in table 4.1.

Table 4. 1 Thematic map on motivational incentives showing three main themes

	Themes	Sub-themes	Type of motivation
1	Reasons of motivation in school	• Teacher • Classroom environment/ Socialization • Recognition • Rewards • Government supports for student's motivation	Extrinsic motivation
2	Reasons of demotivation in school	• Lack of subject based teacher • Less friendly teacher • Poor physical classroom environment • Absence of discipline • Punishment/sanction	Extrinsic motivation
3	Miscellaneous: Student's type based on traits	• Retreatist students	Not included in types of motivation

The themes identified in this study are summarized in table 4.1. It illustrates three themes namely, reasons of motivation in schools, reasons of demotivation in schools and miscellaneous: student's type based on traits. The first two themes directly meet the research questions (a) what are the incentives motivate students in secondary schools? and (b)What are the factors demotivate students in secondary schools? Yet, the third

theme: *student's type* does not provide the research objective, it was obtained from the interview transcriptions.

4.1.1.1 Reasons of Motivation in School

The thematic analysis results the following sub-themes which constitute the reasons of motivation in school (see table 4.2). These are the factors which encourage and help students to be more engaged in learning.

Table 4. 2 Thematic map for reasons of motivation in school

Theme: Reasons of motivation in school

Sub-theme 1: Teacher as motivating factor **Codes** • Teacher's personality. • Talking about the goals. • Focus on clear standards and on improving results. • Emotional support to students. • Making task and lessons easy. • Providing feedback about performance. • Praising in class.	**Sub-theme 2:** Socialization in classroom **Codes** • Solving complicated assignments with friends. • Teacher's caring. • Sharing and encouragement from friends. • Group works in lab.	**Sub-theme 3:** Recognition **Codes** • Verbal and public recognition. • Acceptance by teachers. • Responsibility given to arrange program.
Sub-theme 4: Rewards **Codes** • Certificates, • Financial endowment • Welcome notes	**Sub-theme 5:** Government's intervention for student motivation **Codes** • Free textbooks • Stipend for good result	

Table 4.2 illustrates that there are five sub-themes constitute the main theme *reasons of motivation in school.* These are: teacher as a motivating factor, socialization in classroom, recognition, rewards and government's intervention for student motivation. Each sub-theme consists of a number of codes. Coding reduces lots of data into small chunks of meaning(Maguire & Delahunt, 2017).

4.1.1.1.1 Teacher

Results of the study finds most of the participants think their teachers inculcate the spirit of motivation in them to learn lessons and achieve good grades. They mentioned that their teachers explain lessons and make it easy to comprehend. They also added that teachers are punctual, objective in paper evaluation and regular in class. During interview, students in this study, asserted that they find their teachers as first and foremost important reason to be motivated. One respondent stated:

> *Teachers take classes regularly. It encourages us to be regular in study. Even during the monsoon season teachers take classes. Whenever, I missed any class, teachers asked about it and sometimes I had to go through sanctions. (Extract from interview transcript of a student, Achiever, Girl, 1st school, 8 August 2018).*

It can be assumed that student's motivation is influenced by teacher's regularity in class. Respondents also mentioned that some of their teachers teach in unconventional approaches like quiz competition between boys and girls or odd and even roll number of students in the class which makes their classroom enjoyable. A number of students explained they are motivated by teacher's friendly behavior and praise for good result. The analysis finds that 63 of 77 achievers, and 28 among 31 maintainers, reported that teacher is one of the motivating incentives whereas 17 respondents disagreed with teacher as a motivating factor.

4.1.1.1.2 Socialization in Classroom

Students were interviewed about their engagement with their teachers and peers in classroom and asked to give an explanation whether their academic performance is influenced by this engagement or not. They identified that their academic performance is strongly influenced by the positive engagement with their teacher and friends. From their statements it seems that the socialization in the classroom of the respective schools occurs mainly based on team work approach and teachers concern for student's performance. But one respondent mentioned an unusual incident he experienced:

> *I was surprised and encouraged parallelly when my class teacher came to our village and visited my parents because I could not attend the school for several days for some personal issues. (Extract from interview transcript of a student, Maintainer, Boy, 1st school, 8 August 2018).*

From the above statement, it can be assumed that socialization on purpose of motivating students can be developed outside of the classroom which may appear even more significant to them. However, there was no illustration about the adjustment in syllabus or teaching-learning method-two important factors in socialization in classroom (mentioned earlier in section 2.1.1) according to the student's choice.

4.1.1.1.3 Recognition

Recognition, another factor that nurtures the atmosphere of learning and academic achievement in the schools has drawn much attention of the respondents in this study. The survey shows that forty-six students are concerned with the acknowledgement of their achievement in examination and efforts they give in class performance. Among them 24 students were achievers and 22 students were maintainers. They identified that the verbal and public recognition, acceptance by their teachers and classmates encourage them for their good academic performance.

Interviewees mentioned:

> *A good performer often gets more attention from teachers and peer group than an average performer in their class. (comment taken from 26 respondent's transcripts, 15 Maintainers and 11 Achievers, both schools, 8 & 9 August 2018).*

Participants also stated:

> *We, the students, who have good results are encouraged for participating in cultural programs in schools; we did not take part in competition only but also sometimes had been assigned in organizing programs such as arranging annual cultural program, Ekushey February program (each year 21st February is observed as the international mother language day). It makes us to feel as we are being recognized by the authority of schools. (comment taken from 12 Achievers transcripts, both schools, 8 & 9 August 2018).*

4.1.1.1.4 Rewards

Rewards is a well-practiced strategy to motivate target groups in all institutions. Secondary schools in Bangladesh are not exceptional in this case. From interviews with students, it was found that they are also familiar with rewards in schools. Many of them stated that certificates, financial endowment from memorial award encourage them to do hard work during examination. A student said:

> *I am fascinated by the small but decorated welcoming note for the class topper, presented by the headmaster when he declares the result. (remark is taken from a respondent, Boy, Achiever, 1st school, 8 August 2018).*

On the other hand, fifty-four students reported that rewards as a motivating tool is rarely applied in their school. This indicates secondary schools have poor attention on extrinsic motivation initiatives.

4.1.1.1.5 Government's Intervention for Student's Motivation

Respondents also informed that support from Government of Bangladesh (GoB) is another noticeable factor that motivates them towards study. One of them described as:

> *Provisions of free textbooks and stipend for good result, specially waivers for girls from rural areas persuade us to study well. (remark is taken from a respondent, girl, Achiever, 2nd school, 9 August 2018).*

It is noteworthy that besides other policy reforms in Bangladesh's secondary education in 2008, government's support for free textbook provision instead of privatization brought successful change in both parents and student's psychology to be engaged more in study. Evidently, student's stipend program for female facilitated increasing gross enrollment of girls in secondary schools which reached at 66.75 percent in 2016 (BANBEIS, 2017). Indisputably, it indicates that government intervention can be a precondition to motivate students for higher academic achievement and implement quality in education.

4.1.1.2 Reasons of Demotivation in School

The interview result finds following reasons are responsible for the student's lack of interest in and enthusiasm about academic success in their school (see table 4.3).

Table 4. 3 Thematic map for reasons of student's demotivation in school

Theme: Reasons of demotivation in school

Sub-theme 1: Inadequate subject wise teacher **Codes** • Teacher who teaches mathematics also teaches computer science. • Barely explain the context of a lesson. • Instruct to memorize the lessons. • Hardly put examples to explain the lessons in the classroom. • Poor appreciation for questioning in classes.	**Sub-theme 2:** Less friendly teacher **Codes** • Talk about only lesson. • No jokes during teaching. • Teacher's less movement around the classroom. • Make evaluation public. • If students miss class, do not care about why. • No opportunity to ask about the lesson after the class.	**Sub-theme 3:** Poor classroom equipment **Codes** • Poor science lab. • Limited computers in ICT class. • Most of the time ICT class done by models and drawings in textbooks. • Still use of chalkboards.
Sub-theme 4: Lack of discipline **Codes** • No teacher-parents meeting. • Sometimes teachers do late. • No prior official notification for students to attend cultural programs, they are informed only by verbal announcement.	**Sub-theme 5:** Punishment **Codes** • Students are penalized for absence. • Acerbic words are used as punishment for poor performer.	

Table 4.3 illustrates five sub-themes compose the main theme *reasons of student's demotivation in school*. These are: inadequate subject wise teacher, less friendly

teacher, poor classroom equipment, lack of discipline and punishment. The analysis of the interview transcripts results various codes which specify the substandard learning environment for students at secondary schools in rural Bangladesh.

4.1.1.2.1 Inadequate Subject Wise Teacher

Though subject based teaching is an indicator of quality education and demand of students at all levels in any education system. But it has been suffering in Bangladesh for decades. In this study, a participant mentioned:

> *We do not have any subject wise teacher for Bengali, Environment Management, Bangladesh Studies and Computer Science unlike for English, chemistry or Biology. The teachers in those subjects are insufficient number too. (remark is taken from a respondent, Boy, Achiever, 2nd School, 9 August 2018).*

Majority of the students reported that they are demotivated due to lack of subject based teachers. They also described the consequence of lack of subject wise teacher in teaching and learning process including less explanation of the context of lessons or barely put examples for explanation, emphasis on memorization and poor appreciation for student's question etc. Thus, it can be assumed that paucity of human resources in secondary schools is also coupled with lack of subject based teacher. According to the annual reports of each school under this study, teacher's education qualification has been presented in the following table 4.4 and 4.5.

Table 4. 4 School 1: Malkhanagar High School (source: Annual Report, 2016)

Education Qualification of Teachers	**Number of Teachers**
B.A., B.P.Ed	12
B.B.S., M.B.S.	1
B.Com., M.Com.	1
B.Sc.	5
B.S.S., M.S.S.	1
I.A.	1
I.Com.	1
M.B.S.	1
M.M., S.T.C.	2
Total	25

From the annual report, 2016 of the Malkhanagar High school, it is noticeable that only 5 teachers have subject based higher degrees in chemistry, geography, accounting, political science and management.

Table 4. 5 School 2: Kusumpur High School (Source: Annual Report, 2017)

Education Qualification of Teacher	Number of Teacher
B.A., B.P.Ed	10
B.B.S., M.B.S.	7
B.S.S., M.S.S.	4
I.A.	1
Total	22

The annual report 2017, of the Kusumpur High School illustrates that only 2 teachers have subject based higher degree in accounting and history.

4.1.1.2.2 Less Friendly Teacher

Teacher's behavior over students has influence on the success of their academic achievement. At any rate, this study did not try to investigate the influence of teacher's behavior on students but it finds that thirty-two respondents figured out that less friendly approach of the teachers create a fear to understand lessons in the class. They mentioned that in spite of doing homework they feel nervous when teacher asks question during the class. They stated why do they feel like that:

> *We feel nervous, not in all but some of classes because sometimes teachers shout at us, call us blockheads and make compares to other peers. (remark is taken from a respondent, Girl, Achiever, School 2, 9 August 2018).*

Another participant also identified:

> *What I do not like most about classes are teachers only focus on marks and provide evaluation publicly. (remark is taken from a respondent, Girl, Maintainer, 1st School, 8 August 2018).*

From the above statements it is noticeable that teachers are less friendly, less tolerant to failures and focus more on external control over student's performance. On the other hand, a few of respondents have noted that they are motivated by strict classroom climate (for example, academic criticism and authoritatively enforced discipline). This finding suggests that the way teachers are approaching in the classroom can affect student achievement at different levels.

4.1.1.2.3 Poor Classroom Equipment

This survey finds the lack of classroom equipment as barrier of student's motivation which indicates poor physical classroom environment as a demotivating factor on students' achievement. Respondents were asked whether they are satisfied with and motivated by their classroom equipment and environment or, is it supportive for their academic achievement? In general, the major findings were that they are dissatisfied with classroom equipment and not motivated because they have lack of logistic support,

no upgraded classroom technology for learning and communication. Some of the respondents added:

> *Electricity and lighting are not always available in our classroom, noise from the vehicles and roadside markets disturbs our concentration during learning, and the seating arrangement is not comfortable. (remark is taken from 17 respondents, among them 8 Girls, 9 boys; 10 Maintainers and 7 Achievers, 1st school, 8 August 2018).*

Dissatisfaction with the classroom environment is also clear in the following excerpt:

> *I do not enjoy the class. Our classrooms are small in size. Our teachers use chalk (a white soft earthy limestone) to write or draw in blackboard which causes itching in my eyes and skin. I am not comfortable with the benches we sit, because we, five or six classmates have to sit together in a single bench. (remark is taken from a respondent, Girl, Maintainer, 2nd School, 9 August 2018).*

This narrative is similar to Lyons (2001) which summarizes the importance of physical environment to educational achievement by detailing the existing links in the research literature between classroom conditions and learning. The significant effect of classroom environment on concentration levels, listening, and writing is supported by research results that have found higher test scores and more positive student outlooks in upgraded learning environments (Lyons,2001, p.7).

4.1.1.2.4 Lack of Discipline

Participants also reported that lack of discipline in their school discourage them for higher academic performance. Only six respondents described about absence of discipline in their schools. Such as, following statement of a participant details about this.

> *We do not have any teacher-parents meeting schedule in our school as like other schools have in urban areas. Even we do not get any prior notice about cultural programs. Actually, we do not have any calendar to follow. (remark is taken from a respondent, girl, Maintainer, 2nd school, 9 August 2018).*

In addition, they mentioned about teacher's being late or sometimes they have proxy classes. According to the students, these proxy classes are not much effective because teachers who do proxy classes are less attentive in conducting the class.

4.1.1.2.5 Sanctions/Punishment

Punishment means to penalize or discipline a person. (Dehkhoda, 1994). Through interview, most of the respondents explained that the incidence of punishment demotivates them. They reported:

> *Punishment for being absent in the classes is very common in our school but when teachers use acerbic words in academic criticism in front of the classmates, it hurts. It discourages us to put effort in studying and doing well in examination. Forcing students to study should be avoided. (remark is taken from respondents, 22 boys, 27 girls, 30 Maintainers, 19 Achievers, from both schools, 8 & 9 August 2018).*

Thus, findings from the study suggests negative reinforcements like punishment is not expected to students for increasing effort in study.

4.1.1.3 Miscellaneous: Student's Type Based on Traits

Analyzing *student's type* was not the purpose for the current research, yet interview of participants discovered it. It has been termed as the miscellaneous theme in findings because it is indirectly related to student's motivation and signifies the engagement of students in their study. The theme: *student's type* is also the *latent* in nature. From the result, it has been found that two-thirds of the participants commented that they are regular in class and well engaged in their study. However, a few of the respondents talked about their self-willing disengagement in study. They identified that they lag behind in academic performance and have no interest in study. For instance, 2 of 108 who participated in interview, reported:

> *We are extremely disengaged from study because we willingly do not put effort in learning. We do not like to do study (remark is taken from respondents, 2 boys, Maintainers, from 2nd school, 9 August 2018).*

Their responses demonstrate similarity with the "retreatist students" classified by Schlechty (2002). "Retreatist students" are who engage in study not willingly but due to some other reasons. These might be family or social reasons. Schlechty identified them as students disengaged from the classroom and learning activities and will only do the bare minimum to avoid punishment (Saeed & Zyngier, 2012). Future research can identify the reasons of their high disengagement in learning and amotivation. After the qualitative analysis of data under the thematic analysis method, some of the reasons of student motivation and demotivation have been identified and included as significant variables in the second phase of questionnaire administration. These are: reward, recognition, teaching-learning process, unfriendly teacher-student relationship and sanctions/punishment. In addition, self-willingness for learning, joy in learning, competition among peers, tedious curriculum and syllabus are extracted as variables from the review of literatures and pilot study. Therefore, the quantitative data analysis stage of research findings is presented in section 4.2.

4.2 Quantitative Analysis

4.2.1 Descriptive Analysis

The participants of the study provided demographic data which are (categorical variables) gender, academic achievement and category of respondents were analyzed by descriptive statistics. While the inferential statistical analysis-correlation was followed to analyze the significance of motivating and demotivating factors (willingness, rewards, good job, unfriendly teacher-student relation, tedious syllabus, sanctions) and their relation with the academic achievement of respondents. The findings point to two types of student including *achievers* who have minimum GPA 3 and *maintainers* who have GPA below 3 (see table 4.6).

Table 4. 6 Percentage of achiever and maintainer students

Students	Frequency	Percent
Achiever	76	70.4
Maintainer	32	29.6
Total	108	100.0

Table 4.6 *Percentage of achiever and maintainer students* shows that 70.4 percent students are achievers who are more motivated and 29.6 percent maintainers who are unmotivated or demotivated. This was analyzed based on their academic achievement (collected GPA from last examination held in their respective school). It is also found that over half of the 108 subjects of this study are male (see figure 4.1). Interestingly, the gender difference among respondents is not notable.

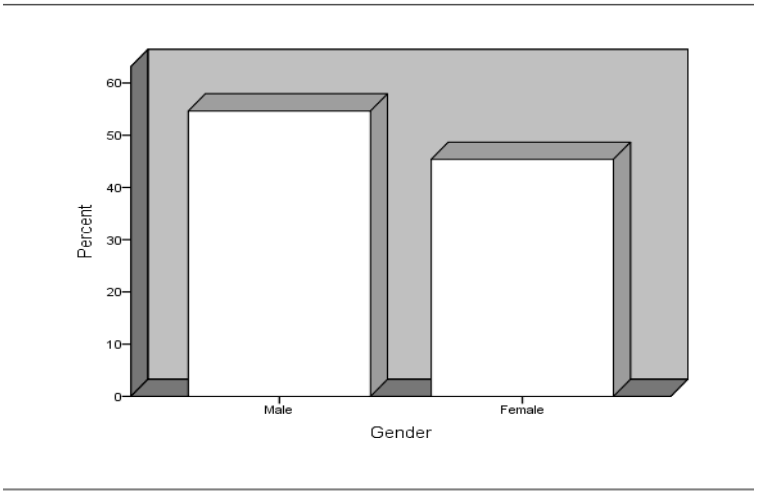


Figure 4. 1 Percentage of male and female

As shown in figure 4.1, the percentage of male respondents is 54.6 and female is 45.4.

As regards normal distribution of data, the histogram normality test denotes the achievers and maintainers distributions were sufficiently normal (i.e., skewness, 1.57 and kurtosis, -1.15) in figure 4.2

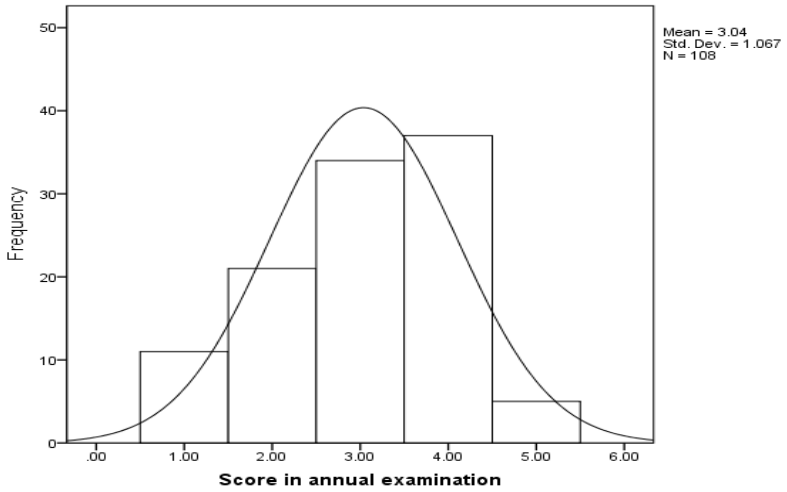


Figure 4. 2 Histogram test for achiever and maintainer distribution

From the figure 4.2, it can be noted that it has a bell-shaped curve which reveals the necessity of Pearson correlation analysis of independent (motivating and demotivating factors) and dependent variables (academic achievement) of the current study, has been presented in the section 4.2.1.3

4.2.1.1 Motivating Factors for Better Academic Achievement

To meet the research question *what are the incentives motivate students in secondary* schools in Bangladesh, a list of motivating factors was presented to the respondents and measured in *Likert* scale (mentioned in table 3.2). This helped to examine the level of importance of these motivating factors on the student's academic success. The descriptive statistical analysis of these factors has been presented through table and bar charts in following sections.

4.2.1.1.1 Joy in Learning as a Motivating Factor

Joy in learning is a motivating factor comes from inner state of a student has impact over his/her learning and result. The majority of respondents identified that joy in learning is essential to make good academic result (see figure 4.3).

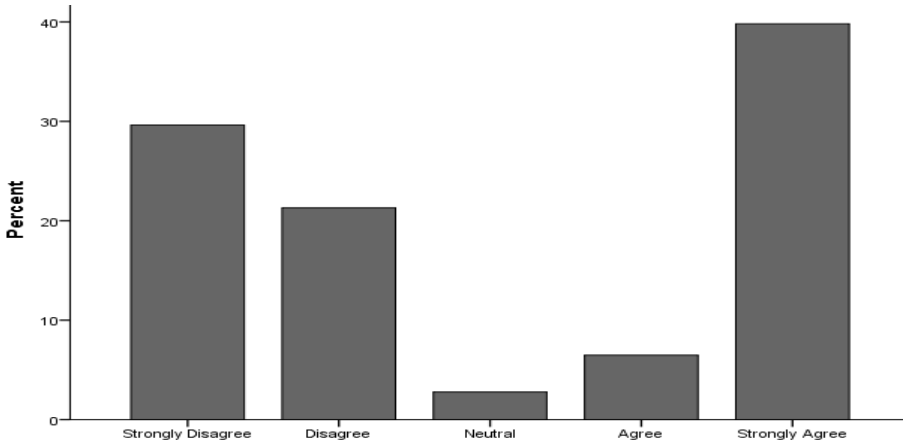


Figure 4. 3 Joy in learning motivates for academic achievement

As illustrated in figure 4.3, 39.8 percent participants strongly agree and 6.5 percent agree that for good academic performance individual joy in learning and studying is very essential. But 29.6 percent participants strongly disagree and 21.3 percent disagree with this statement whereas only 2.8 percent were neutral in response. The remarkable observation from the data is that 38(88.37%) share in *strongly agree* response is from achievers and 5(11.13%) is from maintainers. On the other hand, 19(59.37%) achievers strongly disagreed along with 13(40.63%) maintainers.

4.2.1.1.2 Self-willingness as a Motivating Factor

The overall response to the question whether self-willingness is important for academic achievement or not was quite positive because current study finds that 60 respondents *strongly agree* and 27 of 108 *agree* (see figure 4.4).

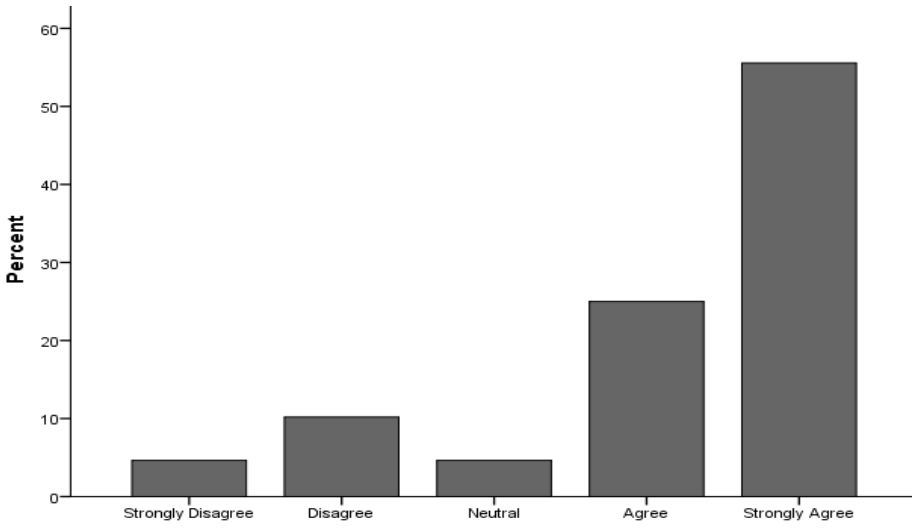


Figure 4. 4 Self-willingness is important for academic achievement

The above figure states that 55.6 percent of respondents *strongly agree* which constitutes of 73.33% of achievers and 26.67% of maintainers. Next to this, 25 percent of respondents *agree* that self-willingness is an important component for academic achievement but 4.6 percent and 10.2 percent respondents *strongly disagreed* and *disagreed* for each separately. Surprisingly, the respondents who strongly disagreed all were maintainers while 8(72.73%) were maintainers among disagreed participants.

4.2.1.1.3 Reward, Recognition and Getting Good Job as Motivating Factors

The study result also confirms that there are three different incentives namely, reward, recognition and getting good job which are extrinsic and motivating in nature (see table 4.7).

Table 4. 7 Respondents for rewards, recognition and getting good job (in percentage)

Scale	Reward	Recognition	Getting good job
Strongly agree	6.5	36.1	23.1
Agree	48.1	50.0	25
Neutral	15.7	3.7	7.4
Disagree	20.4	8.3	27.8
Strongly disagree	9.3	1.9	16.7

Table 4.7 summarizes the data on the percentages of respondents on reward, recognition and getting good job following the Likert scale measurement. From the compare and contrast among these three incentives, it can be assumed that the highest percentage (50%) of respondents agreed recognition is one of the vital motivating factors. Close to this, 48.1% and then only 25% of respondents agreed for reward and getting good job as the encouraging factors respectively. On the contrary, 27% of participants disagreed that they are motivated by finding good job in future.

4.2.1.1.4 Teaching and Learning Process as a Motivating Factor

The study finds two more motivating factors such as, teaching-learning process and positive competition among peers as important for student's motivation (see table 4.8).

Table 4. 8 Teaching and learning process as a motivating factor (in percentage)

Scale	Frequency	Percent
Strongly Disagree	2	1.9
Disagree	9	8.3
Neutral	4	3.7
Agree	52	48.1
Strongly Agree	41	38.0
Total	108	100.0

It is apparent from the above table that 48.1% of the study population reported they agree and 38% strongly agree that good teaching and learning process encourages them for academic achievement whereas only 1.9% strongly disagree it.

4.2.1.1.5 Positive Competition Among Peers as a Motivating Factor

Competition among peers in the classroom might have mixed impact on student's motivation in learning and achievement. Positive competition among peers as a motivating factor is derived from the literatures in the study. The survey finds participants response about this motivating factor at different degrees (see table 4.9).

Table 4. 9 Positive competition among peers as a motivating factor (in percentage)

Scale	Frequency	Percent
Strongly Disagree	7	6.5
Disagree	13	12.0
Neutral	4	3.7
Agree	44	40.7
Strongly Agree	40	37.0
Total	108	100.0

This is illustrated in the table 4.9 that 40.7% and 37% of respondents agreed and strongly agreed for positive competition as a stimulating factor for their academic achievement. In contrast to this 6.5% and 12. % respondents strongly disagreed and disagreed.

4.2.1.2 Demotivating Factors for Academic Achievement

Demotivation refers to lack of motivation concerns external factors (KHOUYA, 2018). This study systematically reviews the respondent's opinions to identify the extent to which the following demotivating factors are correlate to poor academic achievement (Critical, 2014).

4.2.1.2.1 Unfriendly Teacher-Student Relation and Demotivation for Academic Achievement

The results for this section demonstrate that a highly overwhelming number of students (KHOUYA, 2018) strongly agreed that unfriendly relation between teacher and student discourages them to study and achieve academic excellence (see figure 4.5).

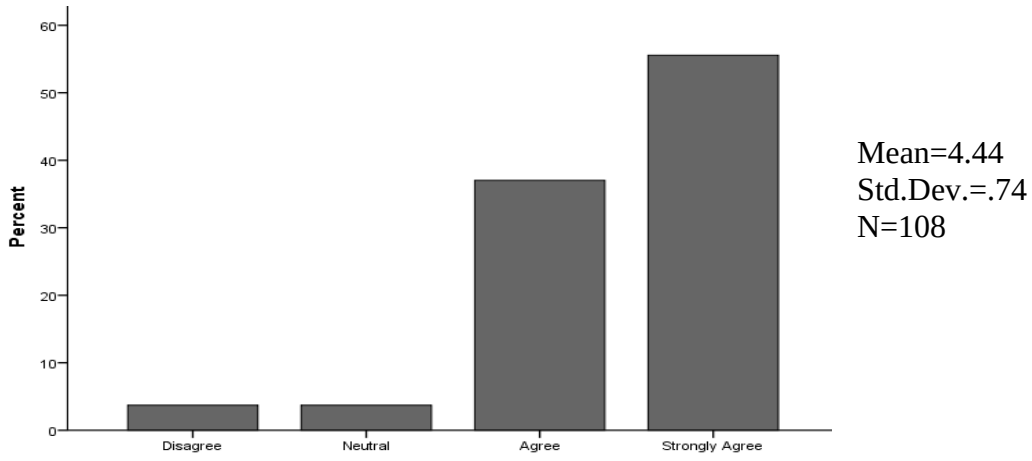


Figure 4. 5 Unfriendly relation between teacher and student as a demotivating factor (in percentage)

Figure shows most of the respondents, 55.6% and 37% respectively reported that they strongly agreed and agreed unfriendly relation of students with their teacher demotivates them for academic achievement. This may have an explanation that the vertical and unfriendly relation develops stress and lack of confidence among students that they become nervous to ask academic questions to their teacher. Secondly, students fear to discuss about academic concepts and lessons again with their teachers on purpose to make it understandable. In comparison to 33.33% maintainers, 66.67% achievers claimed unfriendly teacher-student relation affects their study negatively. On the other hand, very few participants (3.7%) reported they disagreed or neutral while no one of the respondents was found to disagree strongly with this statement. Moreover, the mean (*m*) = 4.44 and standard deviation (*SD*) =.74 for 'unfriendly relation between teacher and student as a demotivating factor' indicates that the average is high and deviation from standard is low which proves it as one of the main demotivating factors for the student's academic achievement. This result has a number of similarities with KHOUYA (2018) findings where 45.6%, strongly agreed or agreed on the fact that they had a strong relation with their teacher of English that helped students to engage in learning. In other words, it may be retained that the students of secondary schools in Bangladesh consider they need friendly teachers who will share an open and flexible relation with students to encourage them for better performance.

4.2.1.2.2 Boring Syllabus and Demotivation for Academic Achievement

The course curriculum is important for students, particularly for finding what academic content they are going to learn, how they will learn and will be evaluated and when they will be evaluated. As the course content and evaluation procedures are critical aspects of learning system these also influence student's motivation to succeed in academic performance. Therefore, in the current study curriculum was considered and investigated but as a demotivating factor because in pilot study an evident number of students claimed that they do not like the curriculum because it is monotonous. Similar result was also found in the final study (see figure 4.6).

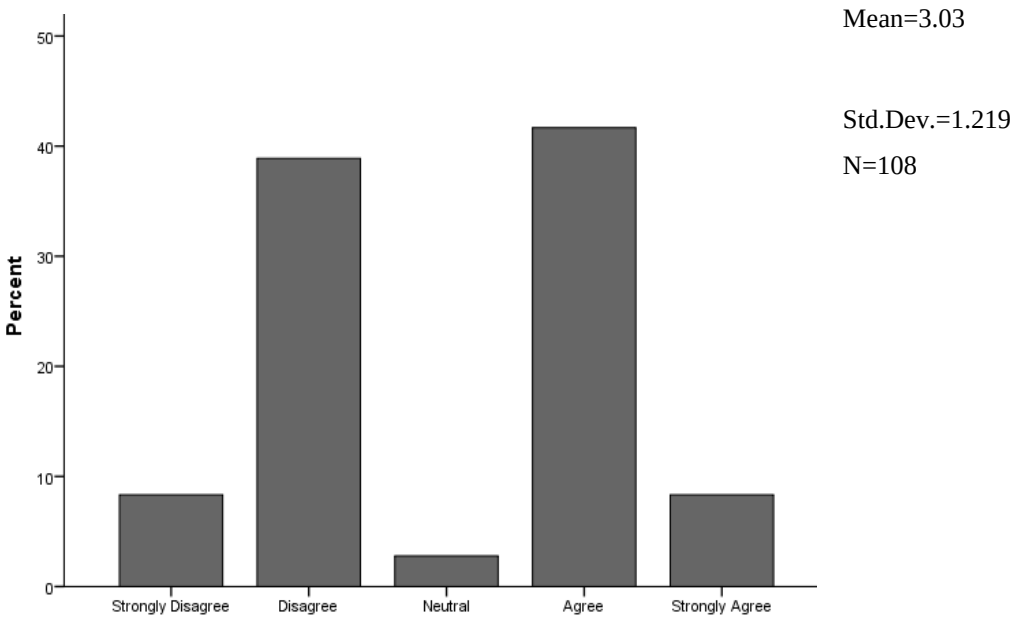


Figure 4. 6 Boring syllabus as a demotivating factor

Figure 4.6 demonstrates that of the 108 students who completed the questionnaire, 45(41.7%) agreed on that boring syllabus demotivates them in learning. A plausible explanation they provided like they want change in academic content and introducing courses and assignments that will develop their job skills. Some of them also added that they want laboratory like to practice what ideas and concepts they have been taught in classes. This finding is consistent with Vanhala's (2008) who suggested that curriculum and assessment system as such might reduce student motivation and deep learning. However, this figure also shows that 42(38.9%) of students disagreed with they are demotivated because of boring course curriculum in their school. A possible explanation for this result may be (Critical, 2014) these participants consider other factors are more demotivating for their learning. In addition, there are other two points (point 1=Strongly disagree and 3=Neutral) in this figure highlight that a few of them disagreed strongly or undecided about the effect of boring syllabus on their academic achievement. The mean value (e.g., *m*=3.03) of this demotivating factor pinpoints participants are moderately

affected by boring syllabus in their school while it's high standard deviation (e.g., *SD*=1.219) explains there are greater variability of the current observation from the mean of this statement.

4.2.1.2.3 Sanctions and Demotivation for Academic Achievement

Sanctions as well as rewards are operated in schools around the world to leverage the academic achievement. But much of the research suggests that sanctions or any other external control in schools affects student's academic performance. The present study also acknowledges this idea. It found that students agreed sanctions is one of the demotivating factors for them though it temporarily controls their behavior. Sanctions lead them to avoid failure in academic tasks but do not persuade them for higher academic achievement. The descriptive statistical analysis of *sanctions as a demotivating factor* shows majority of the respondents observe sanctions as highly demotivating factor in their schools (see figure 4.7).

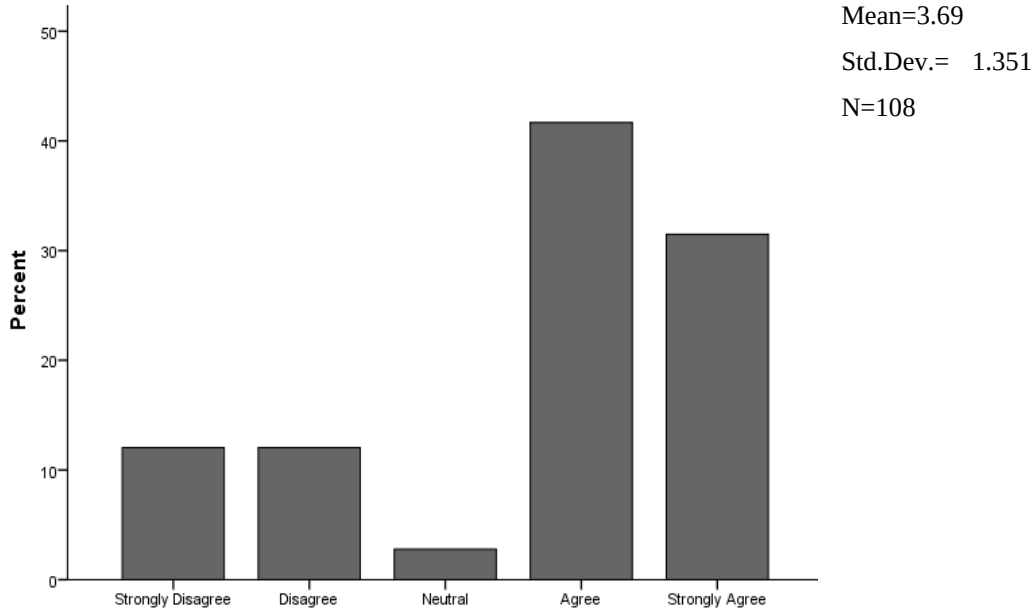


Figure 4. 7 Sanctions as a demotivating factor

It can be seen in figure 4.7 that of the 108 respondents, 41.7% agreed and 31.5% strongly agreed that sanctions demotivate them for academic achievement. Conversely,

only 12% of the participants disagreed or strongly disagreed that sanctions discourage them for academic success while 2.8% were neutral. In addition, the mean value (*m*=3.69) depicts sanctions affect students' learning and academic achievement considerably, nonetheless the high standard deviation (SD=1.351) ensures higher variability of the observation from the mean. The analysis also found that among the respondents who think sanctions is a demotivating component, 67% are from achiever group. They included that sanctions such as warning and relocation with the classroom is very common in their classes because of talking with other classmates or distracting others. But for lack of effort in studying or for incomplete homework they get punished verbally which seems very abusive to them. Students also informed that they had a very few incidents of getting physically punished. However, they also claimed that they did not face any internal or external suspension or reporting to parents in earlier. It is noteworthy that some of them identified attitudinal difference towards unsuccessful students by both teachers and peers is a kind of punishment to them. They requested for weekly evaluation besides half yearly examination; they demanded for deletion of sanctions and replacement of extra discussion about the incomplete homework or making understandable who are poor performer.

4.2.1.3 Inferential Statistical Analysis

4.2.1.3.1 Correlation Analysis

Let us look at the second part of the quantitative analysis which proclaims a Pearson product-moment correlation was conducted to examine the relationships between motivating and demotivating factors with academic achievement of students in secondary schools in rural Bangladesh. In general, the findings of the study disclosed that motivating factors are positively and demotivating factors are negatively related to academic achievement. A complete list of correlation is presented for both types of factors separately in table 4.10 and table 4.11. Additionally, the scatterplot of each scale variable explains their linear relationship with academic achievement (see figure 4.8 to figure 4.13).

Table 4.10 Correlation matrix of motivating factors with academic achievement

		Score in annual examination	"Joy in learning motivates you for academic achievement"	"Self-willingness is important for academic achievement"	"Rewards encourage you for academic achievement"	"Recognition is an important factor for academic success"	"Getting good job motivates you for academic achievement"	"Positive competition among class mates is important for academic achievement"	"Teaching and learning process in your school is good and encourages you for academic achievement"
Score in annual examination	Pearson Correlation	1	**.283****	**.216***	.148	.005	.124	.162	**.234***
	Sig. (2-tailed)		.003	.025	.126	.955	.203	.095	.015
	N	108	108	108	108	108	108	108	108
"Joy in learning motivates you for academic achievement"	Pearson Correlation	.283**	1	.457**	-.020	-.043	-.017	.007	.085
	Sig. (2-tailed)	.003		.000	.834	.660	.863	.942	.380
	N	108	108	108	108	108	108	108	108
"Self-willingness is important for academic achievement"	Pearson Correlation	.216*	.457**	1	.285**	.143	-.015	-.118	-.026
	Sig. (2-tailed)	.025	.000		.003	.141	.875	.225	.789
	N	108	108	108	108	108	108	108	108
"Rewards encourage you for academic achievement"	Pearson Correlation	.148	-.020	.285**	1	.180	-.093	.098	.062
	Sig. (2-tailed)	.126	.834	.003		.063	.337	.311	.526
	N	108	108	108	108	108	108	108	108
"Recognition is an	Pearson Correlation	.005	-.043	.143	.180	1	-.156	-.032	.028

important factor for academic success"	Sig. (2-tailed)	.955	.660	.141	.063		.106	.746	.776
	N	108	108	108	108	108	108	108	108
"Getting good job motivates you for academic achievement "	Pearson Correlation	.124	-.017	-.015	-.093	-.156	1	-.152	-.009
	Sig. (2-tailed)	.203	.863	.875	.337	.106		.116	.927
	N	108	108	108	108	108	108	108	108
"Positive competition among class mates is important for academic achievement "	Pearson Correlation	.162	.007	-.118	.098	-.032	-.152	1	.043
	Sig. (2-tailed)	.095	.942	.225	.311	.746	.116		.659
	N	108	108	108	108	108	108	108	108
"Teaching and learning process in your school is good and encourages you for academic achievement "	Pearson Correlation	.234*	.085	-.026	.062	.028	-.009	.043	1
	Sig. (2-tailed)	.015	.380	.789	.526	.776	.927	.659	
	N	108	108	108	108	108	108	108	108

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

*. Correlation is significant at the 0.05 level (2-tailed).

P-values arising from Pearson's Correlation analysis

From table 4.10, it can be assumed that a Pearson's correlation coefficient revealed all seven motivating factors are correlated with the academic achievement. But only three of them are critically influential on academic achievement. In the first place, 'joy in learning' is more strongly and positively correlated with academic achievement of students at secondary level, $r(108) = .283$, $p < 0.01$ than self-willingness and teaching-

learning process. Despite their appreciable relation to academic achievement, r (108) = .216 and .234, p< 0.05 consequently. This correlation matrix also shows that rewards, recognition, opportunity of getting good job and positive competition among peers are related to academic success but very marginally, where, r (108) = .148, .005, .124 and .162, p>0.05 accordingly. This provides the result of correlation test of hypothesis 1 and confirmed that there is significant and positive correlation between motivating factors and academic achievement of secondary school students. Thus, the alternative hypothesis ($r_{MA} \neq 0$) is accepted but null hypothesis (r_{MA}=0) could not be accepted.

Table 4.11 Correlation matrix of demotivating factors with academic achievement

		Score in annual examination	"Unfriendly teacher-student relation discourages you for academic success"	"Boring syllabus demotivates you for academic success"	"Sanctions discourages you for academic achievement"
Score in annual examination	Pearson Correlation	1	-.033	-.037	-.050
	Sig. (2-tailed)		.736	.706	.606
	N	108	108	108	108
"Unfriendly teacher-student relation discourages you for academic success"	Pearson Correlation	-.033	1	-.055	.076
	Sig. (2-tailed)	.736		.570	.436
	N	108	108	108	108
"Boring syllabus demotivates you for academic success"	Pearson Correlation	-.037	-.055	1	.022
	Sig. (2-tailed)	.706	.570		.818
	N	108	108	108	108
"Sanctions discourages you for academic achievement"	Pearson Correlation	-.050	.076	.022	1
	Sig. (2-tailed)	.606	.436	.818	
	N	108	108	108	108

P-values arising from Pearson's Correlation (2-tailed) analysis

Table 4.11 reports Pearson's correlation coefficient of demotivating factors, as measured in parameters include unfriendly teacher-student relation, boring syllabus and sanctions, are negatively correlated but poor to influence student's academic achievement, r (108) = -.033, -.037 and -.050, P>0.05 accordingly. However, the single most observation from the data is that the correlation between these two broad variables is non-significant compared to relation of motivating factors. Therefore, the correlation test of hypothesis 2 accepts the null hypothesis ($H_{DA} = 0$) that there is no relationship between demotivational incentives and academic achievement of students in secondary schools. Consequently, the alternative hypothesis {r(MA+DA) ≠0} of third hypothesis that both motivating and demotivating factors have relation to academic achievement could not be accepted.

4.2.1.3.2 Scatterplot for Correlation Analysis

The scatterplots were produced for each independent variable with the dependent variable to investigate if the relationship is linear. Firstly, scatterplots of significant motivating factors from correlation matrix (mentioned in table 4.8) such as, joy in learning, self-willingness to learn and teaching-learning process show their positive linear relationship to academic achievement in figure 4.8, figure 4.9 and figure 4.10 respectively. On the other hand, the negative relation between academic achievement and demotivating factors such as unfriendly teacher-student relation, boring syllabus and sanctions produced less significant linear relationship in scatterplot analysis are presented in figure 4.11, figure 4.12 and figure 4.13 respectively.

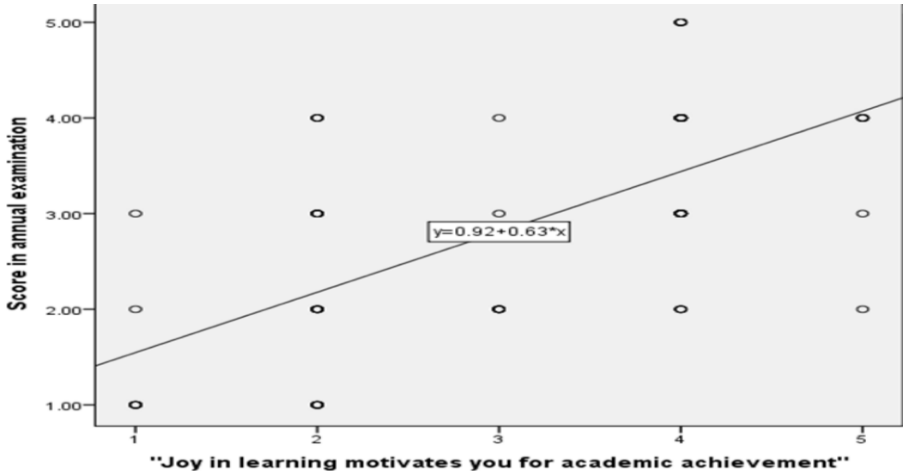


Figure 4. 8 Scatterplot for joy in learning

It can be perceived from the scatter plot (see figure 4.8) that the points are reasonably closely scattered so there is a very strong linear relationship between the independent variable ‘joy in learning’ and the dependent variable ‘academic achievement’. The value of independent variable in X-axis is 0.63<1and the value of dependent variable in Y-axis is 0.92<1 and the coefficient of determination, r2=0.420 which delineate that as the score of joy in learning increases so the score in annual examination increases and it indicates a significant positive linear relationship of these two variables.

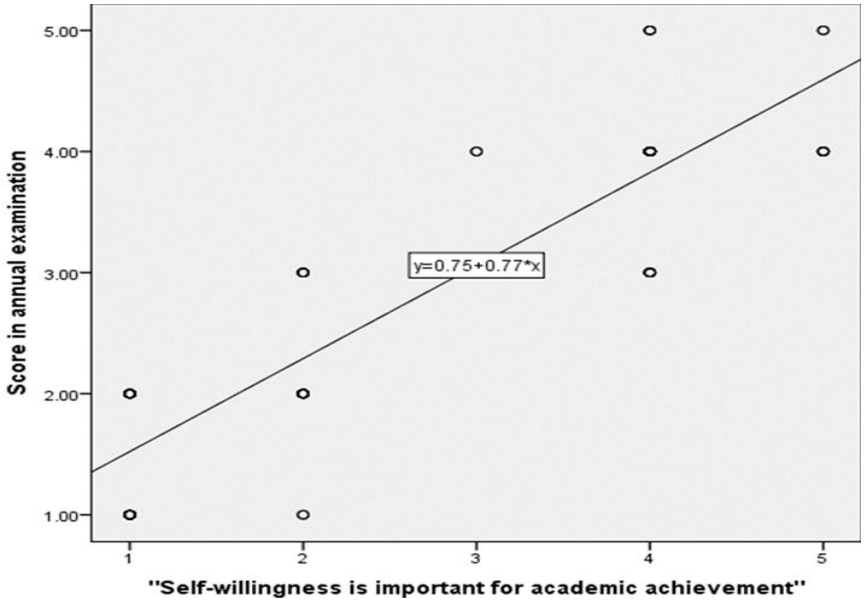


Figure 4. 9 Scatterplot for self-willingness

Figure 4.9 implies that the association between the motivating factor ‘self-willingness’ and student’s academic achievement is clearly linear. The value of independent variable in X-axis is 0.77<1 and the value of dependent variable in Y-axis is 0.75<1 constitute an upward fit line and the coefficient of determination, r2=0.788 which indicates positively strong relationship between them.

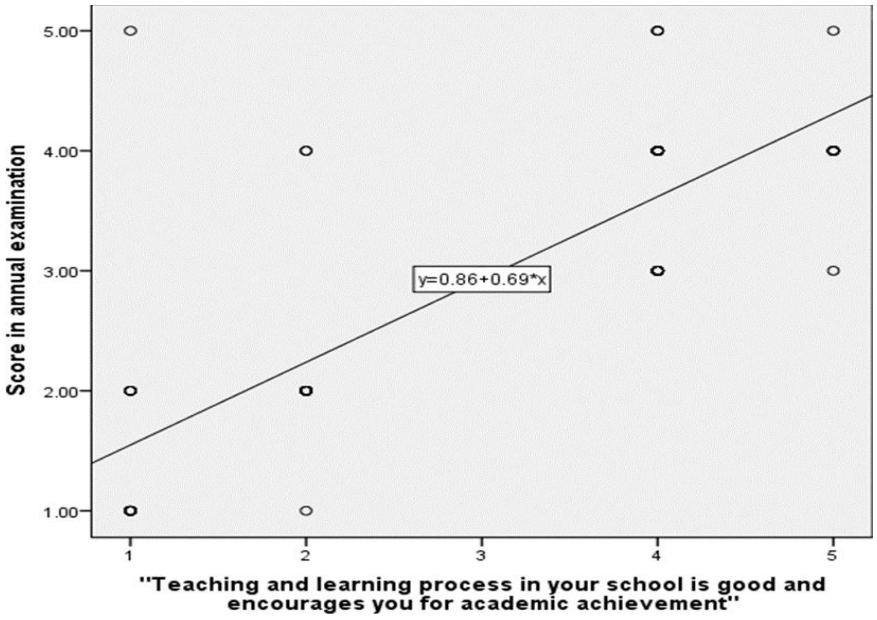


Figure 4. 10 Scatterplot for teaching and learning process

The fit line in figure 4.10 shows that the independent motivating factor ‘teaching and learning process in school’ significantly associated with the dependent variable ‘score in annual examination’. It is mentionable that the value of the independent variable in X-axis is 0.69<1 and value of the dependent variable in Y-axis is 0.86<1 and the coefficient of determination, r2=0.642 implies enough strong relationship between them. Nevertheless, the findings of the current study surprise that the relationship between demotivating factors and academic achievements of students is found marginally associated (see figure 4.11, figure 4.12 and figure 4.13).

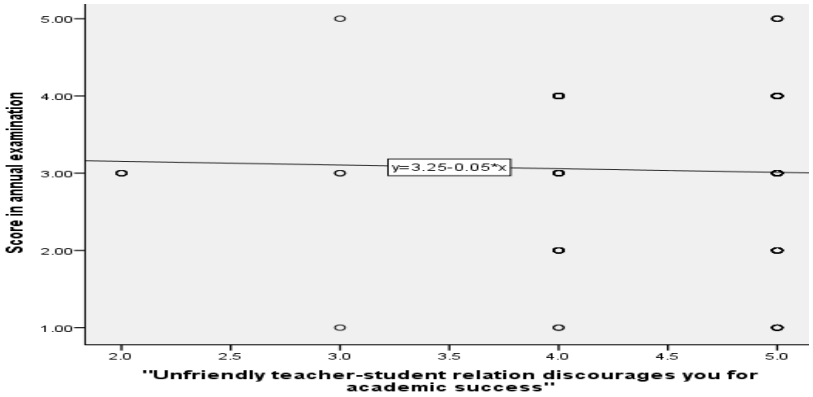


Figure 4. 11 Scatterplot for unfriendly teacher-student relationship

It can be seen in figure 4.11 that the correlation between the demotivating factor ‘unfriendly teacher-student relation’ and ‘academic achievement’ is negative but very weak because the value of the independent factor in X-axis is -0.05<-1 but the value of the dependent variable in Y-axis is 3.25>1. The coefficient of determination, r2=0.057 reports about less variation in their linear relation.

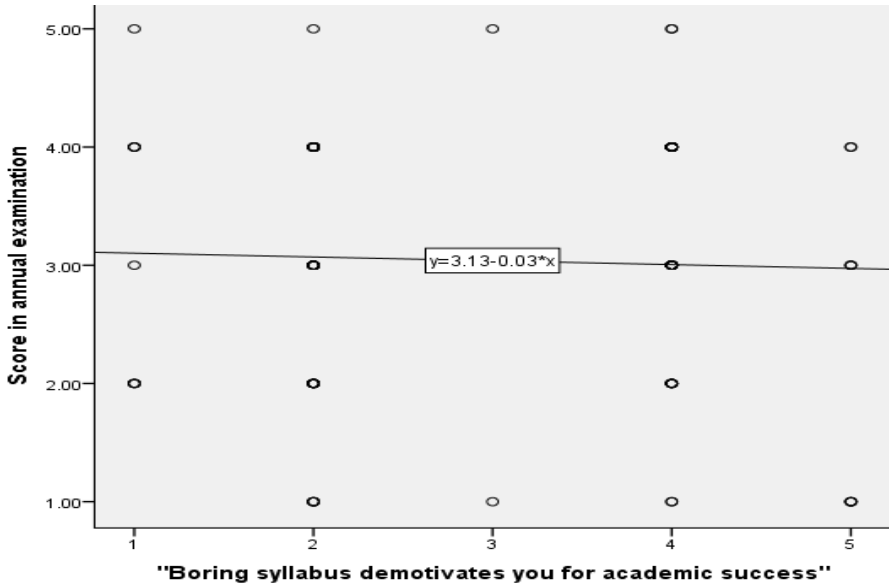


Figure 4. 12 Scatterplot for boring syllabus

The above figure illustrates the demotivating factor ‘boring syllabus’ is negative but poorly related to academic achievement. The X-axis value for the independent variable is -0.03<-1 while the Y-axis value for the dependent variable is 3.13>1. Here, the coefficient of determination, r2=0.001 states there is nearly no association between these two variables boring syllabus and score in annual examination.

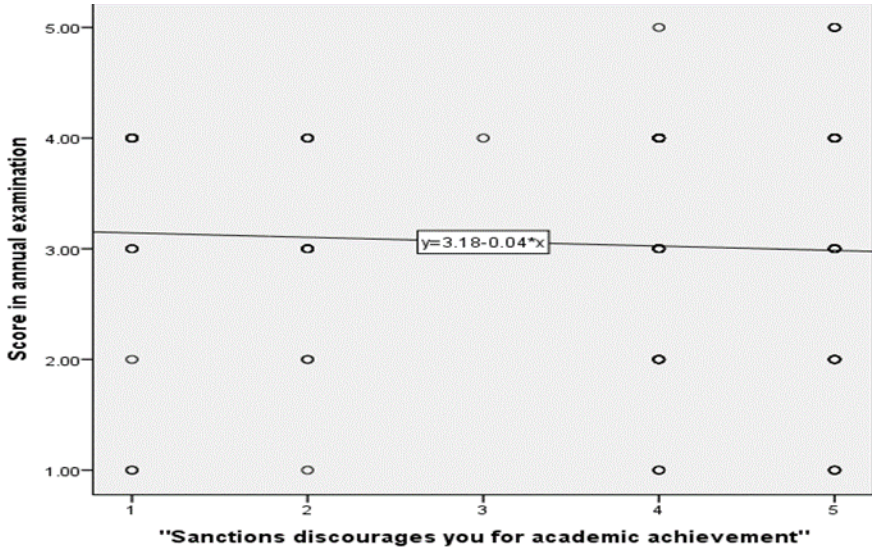


Figure 4. 13 Scatterplot for correlation between sanctions and academic achievement

From the figure 4.13 scatterplot for correlation between sanctions and academic achievement, it can be seen that in the X-axis, sanctions have value of -0.04<-1 whereas, in the Y-axis, score in annual examination has value of 3.18> 1 clearly shows a negative but non-significant relationship between these two variables. Additionally, the coefficient of determination, r2=0.003 ensures a very weak relation of these variables.

4.3 Conclusion

This chapter began with an overview of data analysis procedures. Following this at the qualitative data analysis phase it provided the interpretation of major themes about the student's motivation and demotivation for academic achievement. Then it narrated the demographic data of the 108 participating students besides the normality of the data distribution in this study at the quantitative data analysis phase. This is where both approaches of this study have engaged at an interface level too. Each response of the individual participant was analyzed using descriptive statistics including frequencies, mean, and standard deviation. The main focus of the study was to determine if there was significant relationship between motivation-demotivation factors and academic achievement of the students at secondary level. The data analyzed using the inferential

statistics (Spearman-correlation coefficient analysis) suggested there is significant correlation between motivating factors and academic achievement. But the insights gained from the current study indicates these motivating factors are mostly intrinsic motivating factors. On the contrary, this study explored that the relation between demotivating factors and student's academic achievement is not significant. This research findings may contribute in education research fields by emphasizing that intrinsic motivating factors should have increasing attention than demotivating factors for student's academic success.

Chapter Five
Discussion and Integration of Data

5 Introduction

Indeed, the question of what motivates students to achieve is central to education and educational psychology (Legault & Green-demers, 2006). Although academic motivation has received much conceptual and empirical focus, the fact remains that an abundance of high school students lacks academic motivation (Snyder & Hoffman, 2002; Statistics Canada, 2002). Despite this fact, there has been little focus on the reasons why students neglect their studies. Therefore, the main objective of this paper is to find out both the motivating, demotivating factors for student's academic success and their association with student's achievement. The research finding confirmed that there are some intrinsic and extrinsic factors which play intensive role in growth of student's motivation. The present chapter *discussion* explores and integrates the main findings from the research and where applicable, links the literature to the research outcomes("CHAPTER 5 :," 2008).

5.1 Discussion

In this section, results are interpreted and discussed elaborately in following sections:

5.1.1 Significant Motivating Factors for Student's Academic Achievement

The empirical findings of this mixed-method study yield six big motivating factors for student's academic achievement in secondary school: the role of teachers, classroom environment, rewards, recognition, joy in learning and self-willingness which meet the first objective of the current study. This study finds the role of teacher in motivating

students can be both intrinsic and extrinsic. Making class task more understandable to the students develops more personal interest on that specific task or activity and students believe that they are able to master their task. It indicates teachers within the classroom context, play role in increasing student's self-efficacy, competence and level of interest in learning. This finding corroborates the ideas of Reeve (2006) who suggested that teachers help students to generate self-determined motivation by articulating why the undertaking is useful. Autonomy-supportive teachers provide students who face an uninteresting lesson with a rationale that is convincing and satisfying (from the students' point of view), then students understand why they are being asked to invest their attention and effort in a requested activity (Reeve, 2006). Previous research on both personal and situational interest has shown that higher levels of both are associated with more cognitive engagement, more learning, and higher levels of achievement (Eccles et al., 1998; Hidi, 1990; Pintrich & Schunk, 2002; Schiefele, Krapp, & Winteler, 1992). Apart from teachers help students to set goals and make easy to perceive the importance of academic activity or lessons to the students, their qualification and experience motivates students for academic achievement. Evidence from Adeyemo, 2005; Ali,2009; Akinsolu, 2010 and Olaleye, 2011 validate this finding from current study except (Kosgei, Mise, Odera, & Ayugi, 2013) suggested that teacher qualification does not influence student's academic achievement but concluded that there is statistically significant relationship between the number of years teachers have been teaching the subject and student academic achievement.

The present study results also claim that classroom environment, another extrinsic motivation factor contributes to motivate students in secondary school in two ways: firstly, building an interactive relation between teacher and student alongside peers; secondly, nurturing and raising inner interests for learning. In classroom, teacher's high-quality socialization with students helps teachers to sense the needs, preferences of students while students are also ready to accept the instruction and discipline provided by teachers in classroom. This finding is in agreement with De Wolff & Van Ijzendoorn (1997) and Kochanska's (2002) findings which showed that attuned teachers adjust their instructions in accordance of student's state of being. The present study significantly

finds that classroom environment which is an extrinsic motivating factor includes student's acceptance to teacher and peer groups (relatedness motivating factors) and satisfaction of this relatedness factor further motivates students for self-efficiency and competence (intrinsic motivating factors) and it consequently results student's academic achievement. Thus, it confirms Alderfer's proposition that *the more relatedness needs are satisfied; the more growth needs will be desired* about the relationships between human needs and desires. The role of teacher and classroom environment both are inevitable variables in teaching and learning process for student's motivation. The inferential statistical analysis denotes that there is a strong relationship between teaching and learning process and academic achievement. The scatterplot line of teaching-learning process (see figure 4.10) is a clear attestation of this relation.

According to the present research findings, reward the third motivating factor is synonymously used for reinforcement to motivation in cognitive behavior for secondary school students. A reward is a pleasant occurrence that has not been shown to necessarily strengthen behavior (Cameron & Pierce, 1994). Participants in this study identified reward has positive effect on their increasing interest in learning. Contrary to expectations, the Pearson's correlation analysis of the study finds no significant relation between reward and academic achievement of secondary school students. It has been a continuous debate in literatures. For instance, Bandura's (1986) and Cameron's (2001) findings advocated rewards enhance inner motivation of students. Notably, they found that rewards can enhance intrinsic motivation, particularly if measured as time on task. This is in accordance with Bandura's (1986) finding that most activities have little initial interest for people, but that engagement in the activity may increase interest. This has important implications for schools as many children do not find academic tasks initially appealing. The use of reward then may be used to increase students' time on task and intrinsic motivation for a task. Besides, Cameron et al. did not find detrimental effects with the use of verbal praise for either children or college students. Instead, they found significant increases(Akin-little, Eckert, Lovett, & Little, 2004). In contrast to this, in *How to Kill Creativity*, Tegano and et al. 1991,cited in (Eisenberger & Armeli, 1997) stated:

> *The expectation of reward can actually undermine intrinsic motivation and creativity of performance.... A wide variety of rewards have now been tested, and everything from good-player awards to marshmallows produces the expected decrements in intrinsic motivation and creativity of performance.... (making) them (students) much less likely to take risks or to approach a task with a playful or experimental attitude.*

Another previous research on the role of extrinsic rewards in education also produces similar conclusions. Tangible rewards-both material rewards, such as pizza parties for reading books, and symbolic rewards, such as good student awards-are widely advocated by many educators and are used in many classrooms, yet the evidence suggests that these rewards tend to undermine intrinsic motivation for the rewarded activity. Because the undermining of intrinsic motivation by tangible rewards was especially strong for school-aged children, and because studies have linked intrinsic motivation to high-quality learning and adjustment (e.g., Benware & Deci, 1984; Ryan & Grolnick, 1986), the findings from this meta-analysis are of particular import for primary and secondary school educators(Deci, Koestner, & Ryan, 2001).

Next, the findings of the study argue that recognition of student's achievement is another motivating factor in schools. A possible explanation for this might be that recognition like public recognition or verbal recognition of students for their outstanding performance can stimulate their determination, self-efficiency to continue and give effort in learning behavior. Contrary to this, the correlation analysis depicts the association between recognition and academic achievement is very weak. This finding supports previous research into praise and student achievement gains. In analysis based on class means (comparing teachers), correlations between praise and student achievement gains are weak and mixed in direction (Dunkin & Biddle, 1974; Rosenshine & Furst, 1973); (cited in Brophy, 1981). Analysis within class, using individual student as the unit, reveal that rate measures (frequency of praise per unit time) usually correlate positively with achievement gains but percentage measures expressing the rate of praise of good answers or good work relative to the opportunity to praise such good answers or good work usually do not correlate significantly one way or the other (Brophy, 1981).

Last but not least, this study shows 'joy in learning' and 'self-willingness for learning' are two most important factors for students' motivation in learning. Both indicators are notable in two ways: in the first place, they are not inherited from qualitative analysis like previous ones but from substantive review of literatures to measure statistically their interrelation with academic achievement. In the second place, both of them are significantly important intrinsic motivating factors for students because of having strong association with the academic achievement. One of the important issues that emerges from these findings is that intrinsic factors are more influential than extrinsic in student's education motivation. These results match those observed in earlier studies. For example, intrinsic motivation is autotelic as the activity is undertaken for its own sake, for the inherent satisfaction in doing the task, and from involvement in the task. Individuals will also experience higher levels of interest. Intrinsic motivation has been positively linked to a number of important and desired cognitive and motivational outcomes in both academic and non-academic settings (Deci & Ryan, 1985; R. M. Ryan & Deci, 2000)(cited in Pintrich, 2003). Hence, it can conceivably be hypothesized that there are connections between motivating factors and academic achievements of students, yet individual motivating factor is supposed to vary in relationship density with academic performance.

5.1.2 Significant Demotivating Factors for Student's Academic Achievement

In present study, the sequential exploratory approach reveals a number of demotivating factors responsible for student's poor academic achievement which meet the second objective of this research. It finds teacher, as a common factor in both motivation and demotivation for students' academic performance in school. Existence of qualified, friendly and adaptive teachers in classroom motivates students whereas controlling and lack of course wise academic background and less qualified teachers cause demotivation among students. It has been evidenced in previous researches. For instance, Huang & Moon (2009) documents that teacher qualification accounted for approximately 40 to 60 percent of the variance in average of students' achievement in assessment and Richardson (2008) reveals that students in urban areas performed better than those in

rural areas(cited in Kosgei et al., 2013). In addition, Rowan et al., (1997) report a positive relationship between student achievement and teachers' majoring in mathematics(cited in Kosgei et al., 2013).

This study also illustrates that classroom environment impacts the students' academic demotivation as well as motivation. It is apparent from the analysis of codes under thematic analysis that high level of socialization in classroom motivates them for appreciable academic achievement while lack of classroom facilities or ineffective physical classroom environment demotivates student. Absence of these extrinsic factors or existence needs lead students to be dissatisfiers and may their dissatisfaction with classroom environment affect their intrinsic needs. It can be a future investigation that how poor classroom affects intrinsic motivation. Though very little was found in the literature, some researchers have indicated the impact of classroom environment on the academic performance of a student. A study conducted by Rosssenfield, Lambert, Nadine and Black (1985), revealed that when desk are arranged in a circular pattern, students are likely to listen attentively, participate in discussions, they tend to rely more on their own knowledge and that confidence causes test scores to rise, but when compared with scores when desks are arranged in clusters or rows, instances of cheating went up(cited in Akomolafe, 2015). Similarly, studies conducted by Heschong, Wright and Okura (2002), revealed that elementary school students tend to measure good academic performance where daylight is present when compared to classrooms without daylight. The average school child records 1 to 1.5 points per month on test scores in math and reading in a classroom with no day lighting while the same child improves twice as fast, gaining 2 to 3 points per month in classroom that includes daylight(cited in Akomolafe, 2015). Absence of discipline in institution, another demotivating factor, students find responsible for their poor academic performance. Though negligible number of participants in this study think lack of discipline demotivates them, researchers in previous literatures on learning behavior admitted the importance and effect of discipline on students' academic achievement. It may be the case therefore that discipline has importance in growing students' self-control. And the general trend is that students who believe they have more personal control of their own learning and behavior

are more likely to do well and achieve at higher levels than students who do not feel in control, such as those who are often labeled as learned helpless (Pintrich & Schunk, 2002; Skinner, & et al., 1998)(cited in Pintrich, 2003). Moreover, Reeve also argued for gentle discipline as one of the elements of high-quality relationship between teacher and student (see figure 5.1).

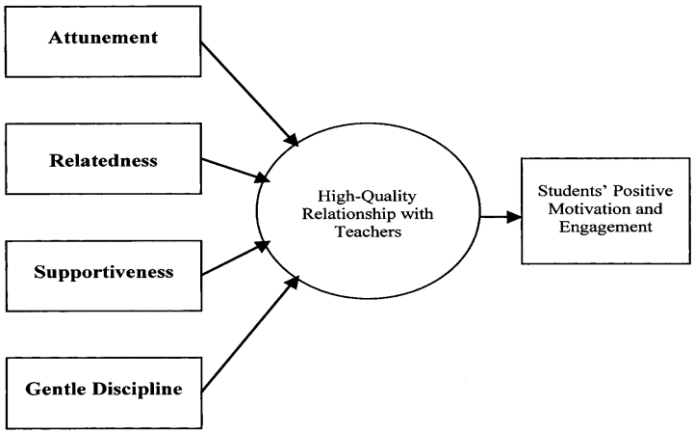


Figure 5. 1 Four teacher characteristics within the provision of a high-quality teacher-student relationship

Figure 5.1 shows an overview on high quality teacher student relationship which has influence over the student's positive motivation. Gentle discipline contributes in this process by providing rationales and accepting students' expressions of negative affect (Reeve, 2006).

According to him gentle discipline is a supportive socialization strategy that involves guiding and explaining why one way of thinking or behaving is right and another is wrong(Reeve, 2006). Charles and Senter (2005) examined positive discipline in the classroom and how it is used and intended to empower students to become more successful in all areas of their life(cited in Bellamy, 2016). Nelsen, Escobar, Ortolano, Duffy and Owen-Sohocki, (2001) suggested there are many ways to establish positive discipline in the classroom(cited in Bellamy, 2016). Nelsen suggested one way is to teach and model the many facets of positive discipline is by using cooperation, mutual respect, kindness and firmness, offering choices, and involving students in the decision-

making process. used and intended to empower students to become more successful in all areas of their life.

Next, punishment, one of the negative reinforcements, is used by teachers to control student's behavior in schools. The current study finds it as a demotivating factor for academic performance because it causes fear of failure instead of self-willingness to thrive in examinations. It works for short-term control of student's behavior. Students who are penalized frequently for failure to conform a standard behavior in academic settings do poorly and become accustomed to avoid failure rather than to experience success(Reiss, 2009). Earlier research findings support this proposition. Kohn (1993; cited in Meece, Mccolskey,1997) mentioned in his book *Punished by Rewards:*

> *"The research literature leaves no doubt that punishment is counterproductive. Studies over more than a half a century show that when adults use disciplinary approaches variously described as "highly controlling", "power assertive", or just plain punitive, children become more disruptive, aggressive, and hostile."*

Surprisingly, quantitative findings of the study exhibit that yet a good percentage of students agree in this study that sanctions demotivate them, there was no statistically significant relation between sanctions/punishments and students' academic achievement. Syllabus can serve as a cognitive map and learning tool for students (Matejka & Kurke, 1994; Parkes & Harris, 2002). That is, the syllabus allows teachers to provide students with a visual layout of the course and, ideally, an explanation of how to succeed(Richmond & State, 2016). Interestingly, the statistical analysis shows, unfriendly teacher-student relationship and boring syllabus are nearly zero significant for students' academic demotivation in achievement. It demonstrates the truth of the dual-structure approach's doctrine to motivation, given by Frederick Herzberg which stipulates that absence of hygiene factors in organization creates dissatisfiers only. Prior studies have identified that student motivation is related to the syllabus and curriculum provided in classroom because improving students 'motivation and interest in learning were both a cause and effect of curriculum developments (Shawer, Gilmore, & Banks-

joseph, 2008). A possible explanation for this might be syllabus for learning ideas or activity consists of both task characteristics and task value genuinely important for intrinsic motivation when a conventional and non-experimental syllabus can impede the learning interest of students. Consequently, student's disengagement from learning process produces their dissatisfaction which may not be demotivation but necessarily amotivation.

This is supported by Legault and Green-demers during analyzing student's amotivation. For instance, when a task is void of interesting or stimulating qualities and when it is boring, routine, tedious, arduous, or irrelevant, amotivation may ensue. Such an activity is likely to be abandoned or neglected. Thus, the unappealing characteristics of the academic task may indeed lead to academic disengagement(Legault & Green-demers, 2006). However, the findings of the current study do not support the previous research because the statistical analysis (the feeble coefficient of determination, r2=0.001) advocates approximately no association between boring syllabus and performance in annual examination. Therefore, it can be generalized that demotivating factors has nearly zero relation with academic achievement.

Finally, integration of findings from both qualitative and quantitative analysis suggests two important issues. Firstly, even though students find extrinsic motivating factors important, self-willingness and pleasure in learning are most significant for their academic success in schools. Secondly, secondary schools in rural area of Bangladesh predominantly suffers from lack of motivating factors include competent teachers and effective classroom.

5.2 Conclusion

Overall, the present findings suggest that student's motivation for academic attainment needs more attention from teachers and authority in secondary schools. Particularly, student's intrinsic motivation, namely self-willingness and enjoyment in learning should be nourished. Teachers and classroom environment can ensure and impact on student's

interest and determination of studying. Student's engagement in learning can be functional only when the factors responsible for their amotivation can be eliminated. Demotivating factors such as disciplinary actions, non-supportive learning environment can result student's disengagement from studying and affect academic performance albeit this study finds no causal relation between demotivation and academic achievement.

Chapter Six
Summary and Conclusions

6 Introduction

Motivation is one of the basic concepts in learning. It reveals the reasons for goal-directed behavior and explains why people behave as they do. It is fully noted by educational psychologist and researcher in the world of academia that a problem exists throughout the nation to motivate secondary school students in the classroom. Therefore, the central tenet of the present study is to investigate on what motivates students as well as what demotivates. Secondly, to determine the strength of relation between these factors and their academic achievement. In this study, to understand student motivation, theories from education psychology and content theories of motivation were adopted which mainly focus on student's self-efficacy, goals, reinforcement and achievement needs during their learning. This study belongs to the critical realism paradigm embodying a constructivist epistemology. The critical realism believes in a world that is constructed through our individual standpoints and perceptions (Creswell & Plano Clark, 2011; cited in Shannon-baker, 2016). The rationale of using critical realism paradigm in this study is it provides theory as helpful in guiding the research process, while recognizing that such theories are impartial or otherwise incomplete views of reality(Shannon-baker, 2016).

6.1 Summary of Major Findings

The major findings of this sequential mixed method study include a number of important motivating and demotivating factors for student's motivation. At the first stage, in qualitative data analysis, participants emphasized particularly on teacher's role, classroom environment, rewards, recognition for motivating student's in learning while lack of discipline, punishment, poor teacher-student relationship, less qualified teachers

discourage them. At the second stage, in quantitative data analysis, the inferential statistical findings showed that the other two intrinsic motivating factors 'joy in learning' and 'self-willingness' are significantly associated with student's motivation and academic achievement. The noteworthy findings to emerge from this study is that 'joy in learning' is most important for student's motivation. It is interesting to note that joy in learning is intrinsic in character which possibly assumes that pleasure or comfort in learning process directs and magnifies student's effort, hard work. Intrinsic motivation is more conducive to learning (Guiffrida, et al., 2013; cited in Erten, 2014).Thus, the study implies the acceptance of first alternative hypothesis that there is a relation between motivating factors and student's academic achievement.

Apart from this, the result reveals all the motivating factors found are extrinsic in nature (except enjoyment in learning and self-willingness were embraced from literatures) have contribution to develop students' intrinsic motivation. It indicates a reciprocal relation between intrinsic and extrinsic motivating factors, which can be explored in future research. However, neither the unfriendly teacher-student relation nor the sanctions, boring syllabus are found correlated with student's academic achievement. Consequently, the second null hypothesis of no correlation between demotivation factors and academic achievement is accepted and alternative hypothesis was rejected. Eventually, this study could not generalize the third alternative hypothesis that both motivating and demotivating factors are associated strongly with academic achievement.

6.2 Limitations

Though this research was carefully prepared and implemented, there were some limitations and shortcomings. Firstly, on account of time constraint, a small number of participants were investigated and this investigation had to be limited to a small research area which may affect the research findings. Secondly, fear to unknown activity had an influence on the participants response as they are not well accustomed to this kind of research interview and questionnaire fill up. In this regard, participants were introduced and make comfortable with the researcher by visiting before the questionnaire administration. This study also has limitations in respect of methodology because its

mixed method approach might increase the complexity of evaluations. As remedy, the researcher used sequential but simple mixed research methodology. Finally, the research was correlational, not experimental in design which identified only the degree of association between independent and dependent variables of the study not their cause and effect relationship which directs for further study of motivation from contextual perspective.

6.3 Implications and Future Research

This deductive study has implications in three respects: theoretical, methodological and practical contributions. Theoretical implications are discussed in Section 6.3.1 proceeded by the methodological implications in Section 6.3.2. Lastly, the practical implications are summarized in Section 6.3.3.

6.3.1 Theoretical Implications

The present study is significant in education research because of a number of reasons. At first, it investigated the relation between student's motivation and academic achievement not only relating motivating factors but also demotivating factors in secondary schools. Then, it applied multiple motivation theories in this investigation include Self-Determination Theory (SDT), Existence Relatedness and Growth (ERG) theory and Dual-structure theory. By reflecting upon the findings of the study, three salient concerns are noticeable regarding student's motivation and these need theories. Students in school must be facilitated with an environment which develops and maintain their intrinsic motivation pleasure in learning and willpower; student's satisfaction of social relationship in school results from quality, friendly teachers in classrooms which may promote growth needs like higher achievement in learning. It illuminates '*Escape tunnel*' from Frustration-Regression Cycle to Satisfaction-Progress chain. In addition, the correlation analysis in this study confirmed that absence of motivating factors in schools lead to student's amotivation not their demotivation in learning. Finally, it

indicates about the role of extrinsic motivating factors in developing intrinsic motivation like self-efficacy which requires further research in motivation field.

6.3.2 Methodological Implications

This study is appreciable from methodological perspectives as it used mixed method approach to understand research problem by incorporating multiple methods. It emphasized on the two important aspects: development and initiation of using sequential exploratory mixed methods. In development effect, it employed qualitative design to develop survey tool SMAQ (Student Motivation & Achievement Questionnaire). Its internal and external validity support future researchers to replicate this instrument in their studies. The second contribution is that it initiated contradictions of findings for instance, thematic analysis reported secondary student's motivating and demotivating factors are mainly extrinsic in character whereas statistical correlation analysis found intrinsic motivating factors are more impactful on academic success.

6.3.3 Practical Implications

This study has implications on two major stakeholders particularly, teachers and researchers. The findings of this study provide information for teachers related to class management. Specially, teacher's quality and being attuned in classroom can help them to draw the student's concentration in learning. Furthermore, this study emphasized on customized teaching practices adding friendly environment, technology, discipline and excluding punishment, less qualified teachers and boring syllabus.

For researchers, this study exemplified the conjunction of survey method with interview for overarching understanding of the student's motivation in achievement. The present study extends potentially important insights into relation of extrinsic incentives in schools to encourage secondary student's self-determination in learning. There are a number of areas where future research is warranted (Akin-little et al., 2004). First, research should be designed to investigate the impact of government interventions in

student's motivation; second, the role of gentle discipline in student's engagement can be explored; third, future researchers should prioritize study on intrinsic incentives for students. Another major future research can be conducted on the impact of school culture on student's academic achievement. In particular, the emphasis might be on the regional differences during evaluation of school culture.

6.4 Conclusion

To summarize, over the past decades, considerable research and writings have addressed the importance of student's motivation but more recent attention has focused on how student's motivation is correlated to their academic achievement. Pertinently, which factors in school are critical to influence both student's motivation and demotivation needs to be examined. To meet this objective, the current study investigated following the sequential mixed method research approach and found both intrinsic and extrinsic types of motivating incentives for secondary school students in Bangladesh. The major trend of this study that it revealed an argumentative finding. But it clearly agrees with some of the propositions from self-determination theory, existence-relatedness-growth needs theory and dual structure approach to motivation. It has added value to research literature by identifying that demotivating factors has nearly zero gravity while motivating factors particularly intrinsic factors are influential on student's motivation and strongly correlated with their academic achievement. In addition, this study noted that lack of adequate and qualified teachers and congenial classroom environment as extensive challenges for motivating secondary school students in rural area in Bangladesh. Therefore, further research is required in this field to reveal information essential for a student supportive education system.

References

Adeyemo, D. A. (2005). Parental Involvement Interest in Schooling and School Environment as predictors of Academic Self-efficacy among Fresh Secondary School Student in Oyo State, Nigeria. *Electronic Journal of Research in Educational Psychology, 3*(1),163-180.

Ainley, M. (2006). Connecting with learning: Motivation, affect and cognition in interest processes. *Educational Psychology Review*, 18, 391-405. doi:10.1007/s10648-006-9033-0

Akin-little, K. A., Eckert, T. L., Lovett, B. J., & Little, S. G. (2004). Extrinsic Reinforcement in the Classroom : Bribery or Best Practice, *33*(3), 344–362.

Akinsolu, A.O. (2010). Teachers and Students' Academic Performance in Nigerian Secondary Schools: Implications for Planning. *Florida Journal of Educational Administration & Policy, 3*(2), 86-103.

Akomolafe, C. O. (2015). The Classroom Environment : A Major Motivating Factor towards High Academic Performance of Senior Secondary School Students in South West Nigeria, *6*(34), 17–21.

Alam, S. S., & Kabir, S. S. (2015). Classroom Management in Secondary Level : Bangladesh Context, *5*(8), 1–4.

Ali, A. A. (2009). The impact of teacher wages on the performance of students. Retrieved July 21, 2015 from PIS Ampra.ub.unimuenchen. de/.../Impact_of_teacher_wages_on_the_.

Ali, Z., Tatlah, I., & Saeed, M. (2011). Motivation and students behavior: A tertiary level study. *International Journal of …*, *3*(February), 29–32. Retrieved from http://www.academicjournals.org/journal/IJPC/article-full-text-pdf/55E940214344

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*(3), 261–271.

Ames, C. (1992b). Achievement goals and the classroom motivational climate. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom*, 327-348. Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.

Aminuzzaman, M. S. (1991). *Introduction to Social Research*. Dhaka: Bangladesh Publishers.

Areepattamannil, S., Freeman, J. G., & Klinger, D. (2011). Influence of motivation, self-beliefs, and instructional practices on science achievement of adolescents in Canada. *Social Psychology of Education, 14*(2), 233-259.

Asadullah, M. N. (2013). Schools governance and educational outcomes: A look across Bangladesh districts. *Institute of Governance Studies*. BRAC University.

Assistance, S., & Evaluation, P. (2008). Education Sector in Bangladesh : What Worked Well and Why under the Sector-Wide Approach ?, (December).

Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research,1*(3), 385-405.

Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.

BANBEIS (2017). Bangladesh Education Statistics 2016. BANBEIS Publication, 499. Retrieved fromhttp://lib.banbeis.gov.bd/BANBEIS_PDF/Bangledesh%20Education%20Statistics%202016.pdf

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development. Vol. 6. Six theories of child development* (pp. 1-60). Greenwich, CT: JAI Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Bangladesh Bureau of Educational Information and Statistics. (2017). *2016 annual report of the Bangladesh Bureau of Educational Information and Statistics.* Retrieved from http://lib.banbeis.gov.bd/BANBEIS_PDF/Bangledesh%20Education%20Statistics%202016.pdf

Barbour, R. (2001). Checklists for improving rigour in qualitative research: a case of the tail wagging the dog? *British Medical Journal,* 322, 1115-1117. (doi:10.1136/bmj.322.7294.1115).

Barone, T. (2001). Science, art, and the predispositions of educational researchers.*Educational Researcher, 30*(7), 24–28.

Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin,* 117, 497–529.

Bellamy, L. S. (2016). Classroom Environment : Content Analysis Examining Characteristics of Classroom Environments That Affect Students ' Academic Achievement.

Bentahar, O., & Cameron, R. (2015). Design and Implementation of a Mixed Method Research Study in Project Management. *Electronic Journal of Business Research Methods*, 13(1), 3-15.

Benware, C. A., & Deci, E. L. (1984). Quality of learning with an active versus passive motivational set. *American Educational Research Journal, 21*(4), 755-765. http://dx.doi.org/10.2307/1162999

Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods, and Practices*.

Boone, H. N. & Boone, D. A. (2012). Analyzing Likert data. *Journal of Extension, 50* (2). Retrieved from http://www.joe.org/joe/2012april/tt2p.shtml

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Brewka, G., & Woltran, S. (2010). Abstract Dialectical Frameworks, (Kr), 102–111. Critical, B. (2014). Academic Phrase bank Critical, 3–5.

Brophy, E.J. (1981). Teacher Praise: A Functional Analysis. *Review of Educational Research, 51* (1), 5-32.

Broussard, S. C., & Garrison, M. E. B. (2004). The relationship between classroom motivation and academic achievement in elementary school-aged children. *Family and Consumer Sciences Research Journal, 33*(2), 106–120.

Burnard, P., Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Analysing and presenting qualitative data, *204*(8), 429–432. https://doi.org/10.1038/sj.bdj.2008.292

Burns, A. (1999). *Collaborative action research for English language teachers*. Cambridge: University Press.

Cameron, J., & Pierce, W. D. (1994). Reinforcement, Reward, and Intrinsic Motivation: A Meta-Analysis. *Review of Educational Research, 64*(3), 363–423. https://doi.org/10.3102/00346543064003363

Cameron, L. (2001). *Teaching Languages to Young Learners.* Cambridge: Cambridge University Press.

Carver, C., & Scheier, M. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.

Charles, C. M., & Senter, G. W. (2008). *Building classroom discipline.* Boston: Pearson/Allyn and Bacon.

CHAPTER 5 : (2008).

Choudhury, R. K., & Rahaman, M. (n.d.). Education for All Realities , Achievements and Challenges The Story of Bangladesh, 33–37.

Coral, C., Bokelmann, W. (2017). The Role of Analytical Frameworks for Systemic Research Design, Explained in the Analysis of Drivers and Dynamics of Historic Land-Use Changes. *Systems*, 5, 20.

Corpus, J. H., McClintic-Gilbert, M. S., & Hayenga, A. (2009). Within-year changes in children's intrinsic and extrinsic motivational orientations: Contextual predictors and academic outcomes. *Contemporary Educational Psychology, 34*, 154-166

Covington, M. (1998). *The will to learn: A guide for motivating young people.* New York: Cambridge University Press.

Creswell, J.W. (2003). *Research Design: Qualitative and Quantitative, and Mixed Approaches.* Thousand Oaks, CA: Sage Publications.

Creswell, J. W. & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research.* Thousand Oaks, California: Sage Publications.

Critical, B. (2014). Academic Phrasebank Critical, 3–5.

Csikszentmihalyi, M. (1997). Happiness and creativity: Going with the flow. Special report on happiness. *Futurist, 31*(5), 8–12.

Date, P. U. B., Type, P. U. B., & Price, E. (n.d.). A Guide for each9rs and School Improvement Teams.

Davis, F. D. & Warshaw, P. R. (1985). Disentangling behavioral intention and behavioral expectation. *Journal of experimental social psychology, 21* (3), 213-228.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic Rewards and Intrinsic Motivation in Education : Reconsidered Once Again. *Review of Educational Researchl, 71*(1), 1–27.

De Wolff, M., & Van Ijzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development, 68,* 571–591.

Docan, T. N. (2006). Positive and Negative Incentives in the Classroom: An Analysis of Grading Systems and Student Motivation. *Journal of Scholarship of Teaching and Learning*, 6(2), 21-40.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2 nd ed.). Harlow: Pearson Education.

Dunkin, M. J., & Biddle, B. J. (1974). *The study of teaching.* Washington, D. C.: University Press of America, Inc.

Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*(2), 256-273.

Eccles, J., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology,3. Social, emotional, and personality development (5th ed., pp. 1017–1095).* New York: Wiley.

Eisenberger, R., & Armeli, S. (1997). Can Salient Reward Increase Creative Performance Without Reducing Intrinsic Creative Interest ? *Journal of Personality and Social Psychology,72*(3), 652–663.

Erten, H. I. (2014). Interaction between academic motivation and student teachers' academic achievement. *Social and Behavioral Sciences, 152,* 173 – 178.

Eymur, G., & Geban, Ö. (2011). An Investigation of the Relationship between Motivation and Academic Achievement of Pre-service Chemistry Teachers Kimya Öğretmeni Adaylarının Motivasyon ve Akademik Başarıları Arasındaki İlişkinin İncelenmesi, 36(161).

Fazio, R., & Olson, M. (2003). Implicit measures in social cognition research: Their meaning and use. *Annual Review of Psychology, 54,* 297–327.

Ford, B. V, & Roby, E. D. (2013). Why Do High School Students Lack Motivation in the Classroom? *Global Education Journal,* 101-113.

Forum, B. D. (2018). Fostering Quality Education and Skills for Employment, 1–5. Retrieved

fromhttps://www.google.com/search?q=2018+Fostering+Quality+Education+and+Skills+for+Employment&oq=2018+Fostering+Quality+Education+and+Skills+for+Employment&aqs=chrome..69i57j69i60.3859j0j4&sourceid=chrome&ie=UTF-8

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research, 74*(1), 59–109. https://doi.org/10.3102/00346543074001059

Gaskins, R. (1999). "Adding legs to a snake": A reanalysis of motivation and the pursuit of happiness from a Zen Buddhist perspective. *Journal of Educational Psychology, 91,* 204–215.

Gawel, J. E. (1997). Herzberg's theory of motivation and maslow's hierarchy of needs. *Practical Assessment, Research & Evaluation, 5*(11). Available online: http://PAREonline.net/getvn.asp?v=5&n=11.

Ghosh, P. S. (1983). World Oil Outlook: Some Policy Implications for India. *India Quarterly, 39*(4), 393–407. https://doi.org/10.1177/097492848303900401

Glogowska, M. (2011). Paradigms, pragmatism and possibilities: Mixed-methods research in speech and language therapy. *International Journal of Language & Communication Disorders, 46,* 251-260.

Gogtay, N. J., & Thatte, U. M. (2017). Statistics for researchers principles of correlation analysis. *Journal of The Association of Physicians of India*, *65*(March), 78–81.

Gorham, J., & Christophel, D. M. (1992). students' Perceptions of Teacher Behaviors As Motivating and Demotivating Factors in College Classes, *Communication Quarterly, 40*(3), 239–252.

Gottfried, A. E. (1990). Academic intrinsic motivation in young elementary school children. *Journal of Educational Psychology, 82*(3), 525–538.

Guay, F., Chanal, J., Ratelle, C. F., Marsh, H. W., Larose, S., & Boivin, M. (2010). Intrinsic, identified, and controlled types of motivation for school subjects in young elementary school children. *British Journal of Educational Psychology, 80*(4), 711–735.

Guba, E. & Lincoln, Y. (1989). *Fourth Generation Evaluation.* California: Sage Publication.

Guiffrida, D., Lynch, M. F., Wall, A. F., & Abel, D. S. (2013). Do Reasons for Attending College Affect Academic Outcomes?: A Test of a Motivational Model From a Self-Determination Theory Perspective. *Journal of College Student Development, 54*(2),121-139, DOI: 10.1353/csd.2013.0019.

Halcomb, E. & Hickman, L. (2015). Mixed methods research. Nursing Standard: promoting excellence in nursing care. *Faculty of Science, Medicine and Health - Papers,* 29 (32), 41-47.

Harackiewicz, J.M., & Sansone, C. (2000). *Intrinsic and Extrinsic Motivation*: *The Search for Optimal Motivation and Performance*. Academic Press.

Heschong, L., Wright, L. R. & Okura, H.W. (2002). Daylighting impacts on Human Performance in School http://www. Lightingcontrols.com/campus.pdfs/IESNA. Paper 41 schools pdf. *Journal of the illuminating Engineering Society*, (Summer), 101-114

Hidi, S. (1990). Interest and its contribution as a mental resource for learning. *Review of Educational Research, 60*, 549–571.

Hossain, Z.M.S. (2011). Education as a fundamental right. *The Daily Star*. https://www.thedailystar.net/news-detail-186529. Accessed date 17/03/2019.

Huang, F.L. & Moon, T.R. (2009). Is experience the best teacher? A multilevel analysis of teacher characteristics and student achievement in low performing schools. *Educ Asse Eval Acc 21*, 209–234.

Huck, S. W. (2007). *Reading Statistics and Research* (5th Ed.). New York, NY: Allyn & Bacon

Ibrahim, M. (2012). THEMATIC ANALYSIS : A CRITICAL REVIEW OFITS PROCESS AND EVALUATION, (2011), 8–21.

Illegbusi, M.I. (2013). An analysis of the role of rewards and punishments in motivating school learning. Computing, *Information System & Development Information,* 4(1),35-38.

Jabeen, L., Iqbal, N., Haider, N., & Iqbal, S. (2015). Cross Correlation Analysis of Reward & Punishment on Students Learning Behavior. *International Letters of Social and Humanistic Sciences 59,* 61–64. https://doi.org/10.18052/www.scipress.com/ILSHS.59.61

Jick, T.D. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action. *Administrative Science Quarterly, 24*(4), 602-611.

Johnson, R.B. & Onwuegbuzie, A.J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher, 33*(7), 14-26.

Kanungo, R.N. (1983). Work alienation : A pencultural perspective. *International Studies of Management and Organization, 13(1-2), 119-138.*

KHOUYA, Y. B. (2018). Students Demotivating Factors in the EFL classroom : The Case of Morocco. *Advances in Language and Literary Studies, 9*(2), 150–159.

Killcross, S. & Coutureau, E. (2003). Coordination of Actions and Habits in the Medial Prefrontal Cortex of Rats. *Cerebral Cortex, 13*(4),400-8

Kochanska, G. (2002). Mutually responsive orientation between mothers and their young children: A context for the early development of conscience. *Current Directions in Psychological Science, 11,* 191–195.

Kohn, A. (1993). *Punished by rewards: The trouble with gold stars, incentive plans, A's, praise, and other bribes*. Boston, Mass: Houghton Mifflin.

Kosgei, A., Mise, J. K., Odera, O., & Ayugi, M. E. (2013). Influence of teacher characteristics on students ' academic achievement among secondary schools. *Journal of Education and Practice 4*(3), 76–82.

Krapp, A. (2002). Structural and dynamic aspects of interest development: Theoretical considerations from an ontogenetic perspective. *Learning and Instruction, 12*, 383–409.

Krause, K.-L., Bochner, S., & Duchesne, S. (2006). *Educational psychology for learning and teaching* (2nd ed.). VIC. Australia: Thomson.

Kroll, T., & Neri, M. (2009). Designs for Mixed Methods Research. In: Andrew, S., Halcomb, E.J. (Eds.), *Mixed Methods Research for Nursing and the Health Sciences(pp. 31–49).*

Lai, E. R. (2011). Motivation: A Literature Review. Pearson's Publication. http://www.pearsonassessments.com/research.

Lange, G. W., & Adler, F. (1997). *Motivation and achievement in elementary children.* Paper presented at the biennial meeting of the Society for Research in Child Development, Washington, D.C.

Law, W., Elliot, A. J., & Murayama, K. (2012). Perceived competence moderates the relation between performance-approach and performance-avoidance goals. *Journal of Educational Psychology*, 104, 806-819. doi: 10.1037/a0027179

Lee, J.Q., McInerney, D.M., Liem, G.A.D., & Ortiga, Y. (2010). The relationship between future goals and achievement goal orientations: An intrinsic–extrinsic motivation perspective. *Contemporary Educational Psychology, 35*(4), 264-279

Legault, L., Green-demers, I. & Pelletier, L. (2006). Why Do High School Students Lack Motivation in the Classroom ? Toward an Understanding of Academic Amotivation and the Role of Social Support. *Journal of Educational Psychology, 98*(3), 567–582. https://doi.org/10.1037/0022-0663.98.3.567

Lepper, M. R., Corpus, J. H., & Iyengar, S. S. (2005). Intrinsic and Extrinsic Motivational Orientations in the Classroom: Age Differences and Academic Correlates. *Journal of Educational Psychology, 97*(2), 184-196. http://dx.doi.org/10.1037/0022-0663.97.2.184

Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic inquiry.* Thousand Oaks, Calif.: Sage.

Long, T., & Johnson, M. (2000). Rigour, reliability and validity in qualitative research. *Clinical Effectiveness in Nursing, 4*(1), 30–37.

Ludy, M.-J., Brackenbury, T., Wm Folkins, J., Peet, S. H., Langendorfer, S. J., & Wm, J. (2016). Student Impressions of Syllabus Design: Engaging Versus Contractual Syllabus Recommended Citation. *International Journal for the Scholarship of Teaching and Learning , 10*(2). https://doi.org/10.20429/ijsotl.2016.100206

Lyons, J.B. (2001). Do School Facilities Really Impact a Child's Education? Scientiic Research: An Academic Publisher, Retrieved from http://sdpl.coe.uga.edu/articlesandpapers/lyons.html.

Maguire, M., & Delahunt, B. (2017). Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. *. *All Ireland Journal of Teaching and Learning in Higher Education* , *8*(3), 3351–33514. Retrieved from http://ojs.aishe.org/index.php/aishe-j/article/view/335

Matejka, K., & Kurke, L. (1994). Designing a Great Syllabus. *College Teaching, 42*(3), 115-117. Retrieved from http://www.jstor.org/stable/27558664

Maudsley, G. (2011). Mixing it but not mixed-up: Mixed methods research in medical education (a critical narrative review). *Medical Teacher,* 33, e92-e104.

Mayer, R. (2000). What is the place of science in educational research? *Educational Researcher, 29*(6), 38–39.

Mayer, R. (2001). Revisiting the assault on science: The case for evidence-based reasoning in educational research. *Educational Researcher, 30*(7), 29–30.

Mays, N., & Pope, C. (1995). Qualitative Research: Rigour and qualitative research. *The Bmj, 311(6997),109-12.*

McGrath, H. (2005). Directions in teaching social skills to students with specific emotional and behavioural Difficulties. In P. Clough, P. Garner, J.T. Pardeck & J. & F. Yuen (Eds.), *Handbook of emotional and behavioural difficulties.* London: Sage Books.

Meece, J. & McColskey, W. (1997). *Improving Student Motivation. A Guide for Teachers and School Improvement Teams*. Florida:SERVE.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: an expanded sourcebook.* London:Sage Publications

Mischel, W., Cantor, N., & Feldman, S. (1996). Principles of self-regulation: The nature of willpower and self-control. In E. T. Higgins & A. Kruglanski (Eds.), Social psychology: *Handbook of basic principles (pp. 329–360).* New York: Guilford Press.

Moore, R. & Jensen, P.A. (2007). How are students' attitudes and behaviors in college biology classes conditioned by their academic experiences in high school? *The Learning Assistance Review, 12(2),* 47-55.

Nelsen, J., Escobar, L., Ortolano, K., Duffy, R., & Owen-Sohocki, D. (2001). *Positive discipline a teacher's A-Z guide* (2 ed.) N.Y.: Three Rivers Press.

Nuffic. (2012). Education system Bangladesh. www.nuffic.nl/en/home/copyright.

Olaleye, F.O. (2011). Teachers Characteristics as Predictor of Academic Performance of Students in Secondary Schools in Osun State–Nigeria. *European Journal of Educational Studies 3*(3), 505-511.

Oliver, P. (1980). Rewards and punishments as selective incentives for collective action: theoretical investigations. *American journal of sociology 85* (6), 1356-1375.

Onwuegbuzie, A. J., & Johnson, R. B. (2006). The Validity Issue in Mixed Research. *RESEARCH IN THE SCHOOLS, 13*(1), 48-63.

Ostrom, E. (2009). A general framework for analyzing sustainability of social-ecological systems. *Science,* 325, 419-422. http://dx.doi.org/10.1126/science.1172133

Oxford, R. L. （1998). *The unraveling tapestry: Teacher and course characteristics*

associated with demotivation in the language classroom. Demotivation in foreign language learning. Paper presented at the TESOL '98 Congress, Seattle, WA, March 1998.

Parkes, J., & Harris, M. B. (2002). The Purposes of a Syllabus. *College Teaching, 50*(2), 55-61, DOI: 10.1080/87567550209595875

Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Pintrich, P. R., & Schrauben, B. (1992). Students' motivational beliefs and their cognitive engagement in classroom tasks. In D. Schunk & J. Meece (Eds.), *Student perceptions in the classroom: Causes and consequences* (pp. 149–183). Hillsdale, NJ: Erlbaum.

Pintrich, P. R. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International Journal of Educational Research, 31*, 459-470.

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). San Diego, CA: Academic Press.

Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

Pintrich, P. R. (2003). A Motivational Science Perspective on the Role of Student Motivation in Learning and Teaching Contexts. *Journal of Educational Psychology, 95*(4), 667–686. https://doi.org/10.1037/0022-0663.95.4.667

Usher, A. & Kober, N. (2012). What is motivation and why does it matter ?

Rahman, M.M. (2017). Secondary education: A long way to go. *The Daily Star*. https://www.thedailystar.net/education-employment/secondary-education-long-way-go-1366504. Accessed date 16/03/2019.

Ravitch, D. (2005). Every State Left Behind. *The New York Times.* https://www.nytimes.com/2005/11/07/opinion/every-state-left-behind.html. Accessed date 17/05/2019.

Reeve, J., Deci, E. L., & Ryan, R. M. (2004). Self-determination theory: A dialectical framework for understanding socio-cultural influences on student motivation. In D. M. McInerney & S. Van Etten (Eds.), *Big theories revisited* (pp. 31-60). Greenwich, CT: Information Age Press.

Reeve, J. (2006). Teachers as Facilitators : What Autonomy- Supportive Teachers Do and Why Their Students Benefit. *Elementary School Journal*, *106*(3), 225–236.

Reiss, S. (2009). Six Motivational Reasons for Low School Achievement. *Child Youth Care Forum, 38*, 219-225. https://doi.org/10.1007/s10566-009-9075-9

Rescorla, R. A. (1992). Response-outcome vs. outcome-response associations in instrumental learning. *Animal Learning and Behavior*, 20, 223–232.

Richardson, A. R. (2008). *An Examination of Teacher Qualifications and Student Achievement in Mathematics.* Masters Dissertation, Unpublished. Alabama: Auburn University. etd.auburn.edu/etd/bitstream/handle/.../Richardson_Antoine_8.pdf

Richmond, A. S., & State, M. (2016). Constructing a Learner-Centered Syllabus : One Professor ' s Journey, (September).

Ross, R., &Van Den Haag, E. (1957). The Fabric of Society. *An Introduction to the Social Sciences.* New York: Harcourt, Brace, 777.

Rossenfield, P., Lambert, N.M., and Black, A. (1985). Desk Arrangement effects on pupil classroom behaviour. *Journal of Educational Psychology*, *77*(1), 101-108.

Rosenshine, B., & Furst, N. (1971). Research on teacher performance criteria. In B.O. Smith Ed.), *Research in Teacher Education* (pp. 37–72). Englewood Cliffs, NJ: Prentice Hall. http://dx.doi.org/10.1037/0022-0663.77.1.101

Rowan, B. Chaing, F.S., & Miller, R.J. (1997). Using research on employees' performance to study the effects of teachers on students' achievement. *Sociology of Education, 70*(1), 256-285.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68–78.

Ryan, R. M., & Grolnick, W. S. 0986). Origins and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions. *Journal of Personality and Social Psychology*, 50, 550-558.

Ryan, R. M., & Stiller, J. (1991). The social contexts of internalization: Parent and teacher influences on autonomy, motivation and learning. In P. R. Pintrich & M. L. Maehr (Eds.), Advances in motivation and achievement: Vol. 7, Goals and self-regulatory processes (pp. 115-149). Greenwich, CT: JAI.

Saeed, S., & Zyngier, D. (2012). How Motivation Influences Student Engagement: A Qualitative Case Study. *Journal of Education and Learning*, *1*(2), 252–267. https://doi.org/10.5539/jel.v1n2p252

Schiefele, U., Krapp, A., & Winteler, A. (1992). Interest as a predictor of academic achievement: A meta-analysis of research. In K. A. Renninger, S. Hidi, & A. Krapp (Eds.), *The role of interest in learning and development* (pp. 183–212). Hillsdale,

NJ: Erlbaum.

Schlechty, P. C. (2002). *Working on the work: An action plan for teachers, principals, and superintendents.* San Francisco: Jossey-Bass.

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*, 207–231.

Schutz, P., & DeCuir, J. (2002). Inquiry on emotions in education. *Educational Psychologist, 37,* 125–134.

Shannon-baker, P. (2016). Making Paradigms Meaningful in Mixed Methods Research. *Journal of Mixed Methods Research, 10*(4) 319–334.

Shawer, S. F., Gilmore, D., & Banks-joseph, S. R. (2008). Student Cognitive and Affective Development in the Context of Classroom-level Curriculum Development. *Journal of the Scholarship of Teaching and Learning 8*(1), 1–28.

Simons, L. & Lathlean, J. (2010) Mixed Methods. In Gerrish, K. & Lacey, A. (Eds.) *The Research Process in Nursing.* 6th ed. Chichester, GB. Wiley-Blackwell.

Skinner, E. & Belmont, M.J. (1993). Motivation in the classroom: Reciprocal effect of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*(4),571-581

Skinner, E. A., Zimmer-Gembeck, M.J., Connell, J.P., Eccles, J.S., & Wellborn, J.G. (1998). Individual differences and the development of perceived control. *Monographs of the society for Research in Child Development, i-231.*

Srivastava, A., & Thomson, S.(2009). Framework Analysis: A Qualitative Methodology for Applied Policy Research. *Journal of Administration and Governance,* 72.

Available at SSRN: https://ssrn.com/abstract=2760705

Statistics Canada. (2002). *Youth in Translation Survey.* Ottawa, Ontario, Canada: Statistics Canada.

Steinmayr, R., Meißner, A., Weidinger, A. F., & Wirthwein, L. (2014). Academic achievement. *Oxford Bibliographies Online Datasets.* doi:10.1093/obo/9780199756810 0108

Stokes, D. (1997). *Pasteur's quadrant: Basic science and technological innovation.* Washington, DC: Brookings Institution Press.

Snyder, T., & Hoffman, C. (2002). *Digest of educational statistics*, 2001 (NCES Publication No. 2002–130). Washington, DC: National Center for Education Statistics.

Tan, T. H. & Waheed, A. (2011). Herzberg's Motivation-Hygiene Theory and Job Satisfaction in the Malaysian Retail Sector: Mediating Effect of Love of Money. *Asian Academy of Management Journal 16*(1), 73 - 94.

Tegano, D.W., Moran, J.D. & Sawyers, J.K. (1991). Creativity in Early Childhood Classrooms (NEA Early Childhood Education Series). West Haven, CT: National Education Association.

Terrell, S. R. (2012). Mixed-Methods Research Methodologies. *The Qualitative Report,17*(1), 254-280. Retrieved from https://nsuworks.nova.edu/tqr/vol17/iss1/14

Tjosvold, D., Johnson, D. W., Johnson, R. T., & Sun, H. (2006). Competitive motives and strategies: Understanding constructive competition. *Group Dynamics: Theory, Research, and Practice, 10*(2), 87-99.

Turner, J. C. (1995). The influence of classroom contexts on young children's motivation for literacy. *Reading Research Quarterly, 30*(3), 410–441.

Vanhala, A. (2008). How to motivate students and create a favourable learning environment. JAMK University of Applied Sciences, Jyvaskyla, Finland.

Vero, E., & Puka, E. (2017). The importance of motivation in an educational environment. *Formazione & Insegnamento XV, 15*(1), 57–66. Retrieved from http://ojs.pensamultimedia.it/index.php/siref/article/viewFile/2164/1973

Vockell, E. (2011). Social Aspects of Motivation: Classroom Goal structure. *Educational Psychology: A Practical Approach.* Retrieved from http://education.calumet.purdue.edu/vockell/edPsybook/Edpsy5/edpsy5_social.htm

Weiner, B. (1986). An Attributional Theory of Achievement Motivation and Emotion. New York: Springer-Verlag.

Westbrook, J. & et al,. (2014). *Pedagogy, curriculum, teaching practices and teacher education in developing countries.* Technical Report. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London., London.

Wigfield, A., & Eccles, J. S. (2002). The development of competence beliefs, expectancies for success, and achievement values from childhood through adolescence. In A. Wigfield & J. S. Eccles (Eds.), *A Vol. in the educational psychology series. Development of achievement motivation* (pp. 91-120). San Diego, CA, US: Academic Press. http://dx.doi.org/10.1016/B978-012750053-9/50006-1

Wigfield, A. and Wagner, A.L. (2005) Competence, motivation, and identity development during adolescence. *Handbook of Competence and Motivation,* 222-239.

Williams, J. R. (2004). Job Satisfaction and Organizational Commitment. Sloan Work and Family Encyclopedia, Retrieved March31, 2009, from Entry. http://www.bc.edu/bc_org/avp/wfnetwork/rft/wfpedia/index.htm .

Williams, K. C., & Williams, C. C. (2011). Five key ingredients for improving motivation. *Research in Higher Education Journal, 1-23*. Retrieved from http://aabri.com/manuscripts/11834.pdf

Willis, J. W. (2007). *Foundations of qualitative research: Interpretive and critical theory approaches.* Thousand Oaks, CA: Sage Publications.

Wilkinson, D., & Birmingham, P. (2003). *Using Research Instruments: A guide for researchers.* NY: RoutledgeFalmer. ISBN 0-415-27279-3 www.routledgefarmer.com.

Wisdom, J. P., Cavaleri, M. A., Onwuegbuzie, A. J. & Green, C. A. (2012). Methodological reporting in qualitative, quantitative, and mixed methods health services research articles. *Health Services Research, 47*, 721-745.

Yadava, S., & Bani. (2013). *Inclusive Education: Challenges and Prospects in India Educationia. Confab, 2*, (4). http://confabjournals.com.pdf.

Zeng, K. & LeTendre, G. (1998). Adolescent Suicide and Academic Competition in East Asia. *Comparative Education Review, 42*(4), 513-528.

Zhang, W. & Creswell, J. (2013). The use of "mixing" procedure of mixed methods in health services research. *Medical Care,* 51(8), e51-7.

Zimmerman, B. J. (2000). Attaining self-regulation: A social–cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation: Theory, research, and applications* (pp.13–39). San Diego, CA: Academic Press.

Zohrabi, M. (2013). Mixed Method Research : Instruments , Validity , Reliability and Reporting Findings, *Theory and Practice in Language Studies, 3*(2), 254–262. Retrieved from https://doi.org/10.4304/tpls.3.2.254-262

Appendix-A

Interview Guide for Motivation Study

We are carrying out an evaluation of motivation incentives for students at secondary level. We assure you all responses will be held strictly confidential and will be entirely anonymous. With your consent, we can start the interview session. If you have any questions about this interview, please let us know. We appreciate you time and generosity.

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

Section A - Demographic Data

1. Male ☐
2. Female ☐

Your CGPA: ☐

CGPA ≥ 3

=Achiever

CGPA<3

=Maintainer

Category of student:

1. Achiever ☐
2. Maintainer ☐

Section B- Motivating & Demotivating Factors

1. What are the factors in school encourage you for engagement in learning?

2. What are the factors in school responsible for your disengagement in learning?

3. Are you satisfied with the classroom environment you have in your school?

4. How do your teachers appreciate your academic performance?

5. Do your friends encourage you for better academic performance?

Thank you so much.

Questionnaire on Student Motivation & Academic Achievement

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

Variables	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Student motivation can significantly affect academic achievement		☐	☐	☐	☐
2. Self-willingness is important for academic achievement		☐	☐	☐	☐
3. Rewards is important for academic achievement		☐	☐	☐	☐
4. Recognition encourages for academic achievement		☐	☐	☐	☐
5. Getting a good job motivates for academic achievement		☐	☐	☐	☐
6. Unfriendly teacher-student relation discourages for academic achievement		☐	☐	☐	☐
7. Boring syllabus is responsible for poor academic achievement		☐	☐	☐	☐
8. Sanctions discourage you for academic achievement		☐	☐	☐	☐
9. Teaching & learning process in your school is good and encourage you for academic achievement		☐	☐	☐	☐
10. Positive competition among class mates encourage you for academic achievement		☐	☐	☐	☐

If you have any other comments, please do note them below: Thank you for taking the time to answer the questionnaire.

Appendix-B

SCHOOL PERMISSION TO CONDUCT RESEARCH

Jun 17, 2018

Dear sir,

I would like to ask your permission to allow me to conduct the survey titled as "*A Study on Motivational Incentives for Secondary Students to Attain Academic Achievement in Rural Bangladesh*" among the students in your school.

Participation in the survey is entirely voluntary and there are no known or anticipated risks to participation in this study. All information provided will be kept in utmost confidentiality and would be used only for academic purposes.

Your approval to conduct this study will be greatly appreciated. Thank you in advance for your interest and assistance with this research.

Sincerely,

Approved by:

14/08/18

(মোঃ আব্দুল মতিন মিয়া)
প্রধান শিক্ষক (ভারপ্রাপ্ত)
মালঞ্চনগর হাই স্কুল
সিরাজদিখান, মুন্সীগঞ্জ।

SCHOOL PERMISSION TO CONDUCT RESEARCH

Jun 19, 2018

Dear sir,

I would like to ask your permission to allow me to conduct the survey titled as "*A Study on Motivational Incentives for Secondary Students to Attain Academic Achievement in Rural Bangladesh*" among the students in your school.

Participation in the survey is entirely voluntary and there are no known or anticipated risks to participation in this study. All information provided will be kept in utmost confidentiality and would be used only for academic purposes.

Your approval to conduct this study will be greatly appreciated. Thank you in advance for your interest and assistance with this research.

Sincerely,

Arifuul 13.08.18

Approved by:

১৬.০৮.১৮

মুঃ মাহফুজুল আলম
প্রধান শিক্ষক
কুসুমপুর উচ্চ বিদ্যালয়
সিরাজদিখান, মুন্সিগঞ্জ।
আই ডি নং-৪৭৫৭৭০

Researcher in a photo with teachers from Malkhanagar High School, Shirajdhikhan, Munshigonj.

Researcher with students from Malkhanagar High School. Before administering the research questionnaire, she was briefing about the instructions to students(participants).

Researcher in a photo with teachers from Kusumpur High School, Sirajdhikhan, Munshigonj.

Researcher with students from Kusumpur High School. Before administering the research questionnaire, she was briefing the instructions to students (participants).