



Academic Stress among Tertiary Level Students: A Categorical Analysis of Academic Stress Scale in the Context of Bangladesh

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Authors' contributions

This work was carried out in collaboration among all authors. All authors categorically assisted to make this paper as a whole. Author SCP reviewed all related literatures for the paper. Author DPH developed the methodology and congregated findings as well as analysis of the findings. Author WH collected data through questionnaire survey and proof read the paper. All authors read and approved the final manuscript.

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ABSTRACT

The main objective of the research is to make a comparative study among the five categories of stress a student of a tertiary level faces or is supposed to face based on the questionnaire designed by and make a categorical study for analysis of *Academic Stress Scale* among the students' state of stress prevailing in that level of study in Bangladesh. A random sample of 44 students had been selected from different tertiary level institutions throughout the tertiary level institutions of Bangladesh to conduct the research. Among the 44 respondents, 23 were male whereas 21 were female respondents. A quantitative method has been used in gathering the data by the use of Ordinal Scale (ASS) and mixed methods had been used in analyzing the data. For the purpose of this study, questionnaires had been distributed to students who had been and were receiving tertiary education (the tertiary level student has been dignified as the students in the

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ranges from Honors First year to Honors Third year in Bangladesh). The responses were classified and stratified in order to measure frequency and then the findings were quantitatively and qualitatively analyzed to rate the level of stress the students feel in the tertiary level of Bangladesh.

Keywords: Academic stress; tertiary level; ASS; categorical analysis; Bangladesh.

1. INTRODUCTION

Stress is a major contributing factor of many psychological illnesses that plagues today's society. As results from the American Psychological Association (APA) and American Institute of Stress survey in 2014, found 73% of people experience some level of psychological symptoms caused by stress. In addition, results from 2009 revealed that young people are highly stressed as a result of school pressure related to academic performance.

Academic stress has become a serious issue among educational institutions and policymakers because of the increasing incidence of suicides among students across the globe. In 2012 a student from the College of Science, Technology and Applied Arts of T&T, (COSTAATT) was disappointed with her academic performance and committed suicide because she could not cope with the stress of exams. A Lancet reported in 2012, revealed that students among the university's in Indian found that it is challenging to cope with failure in examinations. National Crime Records Bureau (NCRB) revealed that in 2015, a number of student committed suicides stood at 8,934 because they were depressed about failing their exams and the many unreported attempts of suicides is likely to be much higher [1].

Suicide rates amongst college-aged students are said to be higher than they were, and this was described by American College Health Association statistics published in Psychology Today. Patel [2], also observed that students, who are highly stressed, usually have self-defeating thoughts. Poor management skills among students can be experienced by students when they are stressed, resulting in them being incapable of managing their workload and therefore, underperforming.

For many teachers, they have high expectations of their students despite the educational journey can be very challenging and many students can become stressed. However, when students are stressed, not only they are affected, but it affects their teachers as well and the institution at large.

Due to teachers' high job demands and students' poor performance, teachers become negatively affected and experience stressed and sickness as well [3]. The institution may experience low enrollment as a result of students' low pass rate or dropouts.

Majority of tertiary level students find it extremely difficult to complete academic requirements, do seminar presentations and memorize what they have learnt from each course content for exams. With an avalanche of work to complete within such a short period, students become academically stress and would not be able to perform academically well. In addition, students are stressed about events that are happening internally and externally which can cripple them in such a way that they will not be able to perform at their fullest capacity, and with provoking thoughts of how they are academically stressed, which also affects their academic performance.

1.1 Rationale of the Study

The purpose of this study is to determine whether there is a correlation between academic stress and academic performance among tertiary level students in Bangladesh. Previous studies conducted by Elias, Ping, & Abdullah [4] found that stress and academic performance are significantly correlated. These researchers used The College Undergraduate Stress Scale (CUSS) and students Grade Point Average (GPA) to collect data which revealed that there is a positive correlation. It also showed there was a weak and negative relationship identified between stress and academic achievement [4].

Furthermore, in this study the researchers are seeking to gather information that would be useful for the institutions in Bangladesh and grant them an insight into what academic stressors are affecting students' academic performance. It will also enlighten these academic institutions and school administrators to understand about how academic stress can have an effect on students' academic performance. This study would bring to light students' attitudes towards their academic

performance and discover the best methods to manage them appropriately. The study data gathered will also benefit the institutions as to have proper planning and implementation school facilities to work with students to ensure they are both mentally and psychologically stable to perform academically well. As well as the strategies that can be used to influence these academic institutions in restructuring the present school curriculum throughout the country of Bangladesh.

1.2 Purpose Statement

Majority of college students sometimes feel stressed about their academic performance. The overwhelming burden of academic stress that tertiary level experience in their pursuit for higher education is important. As many tertiary level students have difficulties adjusting to a vast amount of academic material. Research conducted by Saqib and Rehman [5], focus on the impact on the student's academic performance at secondary school level whereas, Elias, Ping, and Abdullah [4] investigated stress and academic performance of undergraduate students. There are several stressors that contribute to academic stress and academic performance. Hence, the purpose of this research is to investigate which categories the learners feel stress and if there prevail probable correlation with the study materials, institutions, teachers and college amenities to influence on the stress.

1.3 Hypotheses/ Research Questions

This research tended to explore if the students from tertiary level face pressure due to the gap between students – teacher relationship, students – teachers interpersonal communication, due to the poor arrangement of teaching aids, of library and lab facilities etc. Upon considering all these, the researchers made two hypotheses as below:

- H₁: There is a relationship between academic stress and tertiary level institutional arrangements.
- H₀: There is no relationship between academic stress and tertiary level institutional arrangements.

Here, the first one is research hypothesis which is tended to be proved, and if the hypothesis is disproved there is also an alternative hypothesis in the guise of null hypothesis which presents that the students do not feel pressure due to the

poor educational arrangements on the part of the institutions.

2. THEORETICAL/CONCEPTUAL FRAMEWORK

The construct of stress represents a broad concept and can be view in different categories. To specify its association with different domains of life such as academic stress, job stress, and relationship stress; the present study explore the construct known as academic stress which, according to Wilks [6], describes individuals' attitudes and behaviors towards academic related demands. As majority of tertiary level students' performance are highly affected by a number of factors which include admission points, socio-economic status, school background, academic, personal and environmental stress [7]. As a result, these contributing factors hinder student's ability to perform academically to their highest potential.

There are several theories created to explain the occurrence of stress and how different kinds of internal and external stressors may cause a person's stress level to increase rapidly. Hans Selye who is known as the father of stress, approached it from a biological perspective. He stated that a stressor or an event that threatens an organism's wellbeing of an organism leads to a three-stage bodily response in alarm is how the body reacts with a "fight-or-flight" stressor. Resistance refers to the body resists towards the stressor and exhaustion stressors continue beyond the body's capacity the resources become exhausted. However, the theoretical framework in this study is one chosen to best explain the link between stress and performance.

To explain the phenomenon of stress in relation to performance, researchers used Lazarus and Folkman Theory of Cognitive Appraisal. According to this theory, a person's interpretation of a situation ultimately influences the extent to which the situation is perceived as stressful. Cognitive appraisals are human emotional functioning that can be a very useful way of gaining insight into a person's perception of themselves, their environment and their ability to cope with stressful situations (Study.com). In other words, the emphasis is on how a student personally measures the level of academic stress they are experiencing, as well as their abilities and options in coping with it.

Lazarus and Folkman [8] define coping as a person's efforts to deal with stress. He stated

that coping is one's ability to "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." Stress can be seen as a result from an "imbalance between demands and resources" [8]. In this case the demands are that of workload throughout the semester that students are challenged with; example managing exams, assignments and personal life. Whereas the resources are access to a computer, internet access and time students have to complete these demands.

The theory contains two major concepts; these are primary and secondary appraisal. The primary appraisal determines whether the stressor or the situation is a threat, a challenge or a harmless situation which is in the context of the performance or an incentive to achieve a goal. For instance, in the event where the student fails in an exam and the view that something that will cause future harm or lost will diminish the performance of and individual. Secondary appraisals involve those feelings related to dealing with the stressor [9]. Those feelings that come with the stressors will determine whether or not the student can accomplish their goals.

Regardless of a person's age, gender, class, social and educational background, stress affects everyone [10]. Every individual experiences some level of stress from different situations and life events. A survey found in United States (US) 2016, found that financial worries, work/school changes and work/school schedules were the leading source of stress among people [11]. Additionally, reports based on a survey of over 1000 first and second year university students, revealed that 82% of students suffer from stress and anxiety [12]. Stress is viewed in different ways by every individual and means different things to each person. Some people perceive it as a natural part of life, while others view it as an unpleasant physical and emotional stimulus. However, stress is defined as a physiological or psychological response to internal or external stressors [13]. Additionally, it also influences how people feel and behave. This concept of stress was introduced to the world and life sciences by Hans Selye in 1936 [14] and he defined it as "the non-specific response of the body to any demand for change" (American Institute of Stress). Ramli, Alavi, Mehrinezhad and Ahmadi, [15] describe stress as a result of a wide range of issues,

resulting from different educational systems including test and exam burden, a demanding course schedule and thinking about future plans upon graduation. However, in this study, stress is viewed as a negative emotional, cognitive, behavioral and physiological process that occurs as a person tries to adjust to or deal with stressors [16].

Stress is a common emotional or mental phase that tertiary level students experience while studying. According to reference [17], Tertiary level students worry about how they perform; the extent of pressures and anxiety they feel in the process of pursuing their academic career creates a level of stress that they carry which in return will affect their academic performances. The kind of stress that they experience is referred to as academic stress, which is defined by Gupta & Khan [18] as "a mental distress with respect to some anticipated frustration associated with academic failure or even an awareness of possibility of such failure." While the life of a tertiary level student can be a very exciting, unforgettable experience, some students encounter a tremendous amount of stress and pressure to perform at an exceptional level. The thought of entering the world of higher education brings with it a collection of feelings among many tertiary level students.

Upon entry, it is expected that students will become fearful of the unknown as they venture into a higher level of their academic life. This comes with its own challenges that can make the experience exciting, terrifying and overwhelming, which can result in either success or failure. As access to higher education increases, so does the number of students who are academically unprepared and lack confidence in their ability to succeed [19]. Several factors mediate in determining whether a student's academic performance is positively or negatively affected. These factors include economic status, family issues, transitions, environmental, course workload and stress. In addition, some students work either day or night while attending school, and managing both can be very stressful which could morph into academic stress.

Academic Stress among students have long been subject of social research. Some researchers have identified several stressors such as too many assignments, competitions with other students, failures and poor relationships with other students or lecturers [20]. Stress by itself is a complex, dynamic process

which involves the interaction between an individual and their life experiences. This concept is further expanded on by Yikealo, Yemane and Karvinen [21] who stated that academic stress can be seen as a mental and emotional pressure or tension that occurs due to the excruciating demands of college/university life of student's. Further Yikealo, Yemane, and Karvinen [21] states that underlying factors such as academic frustration, academic conflict, academic pressure and academic anxiety are several components of academic stress. Studies conducted by Dhakal [22], indicated that college students' ability to achieve their optimal academic performance, can be attributed to different factors like level of academic degree, nature of course, teaching methods and securing good marks in the final examination.

The transition from secondary to tertiary level is a major period in a student's life. The switch from one educational system to another is a huge difference that can be stressful. Students encounter confusion, social challenges and some level of stress because the majority of students are not fully prepared for the transition to tertiary level education. This transition process can cause deterioration in academic performance and increase academic stress for a student as they attempt to adapt to their new environment. Oduwaiye et al. [17] found that transition is stressful for students, and some experience mild, or profound grief and anxiety. In some cases, students feel intense academic pressure from their family and friends to attend tertiary institution and achieve the highest grades.

Equally important environmental stressors also play a role, in how college student feel and perform academically. An environmental change, exposure to a different climate, new language, behavior, and social customs sometimes create stress for students which could affect their academic performance. Aldwin [23] indicated that stress can include environmental and psychological factors, as students' ability to adapt to the new environment can also create stress. Yikealo, Yemane, and Karvinen [21] stated that stress among college students, can be a result of the change of school environment to university environment, which may cause psychological, academic and social shock to them. Furthermore, they also stated that many students are faced with new methods as teaching, academic requirements, new type of relations between students and faculties and

even new relations among students themselves [21].

In addition, students who are studying at tertiary level are faced with increasing academic demands. College students can easily become overwhelmed with the workload, taking exams, deadlines, feeling intense pressure to obtain high grades, working while attending classes. Faced with a number classes, assignments, tests, midterm and final exams along with other academic projects to complete, the influx of academic programs and demands can compel students to work vigorously to ensure that they cover their work within a short period of time. These overwhelming academic demands can cause students to worry, feel flustered and stressed about their academic performance [17]. Not surprisingly, Tertiary level students who are unable to cope with the workload are at a higher risk of experiencing academic stress. Some students balance both classes and work at the same time, which is very stressful and in turn, create academic stress which affect their performance academically. Porwal and Kumar [24], found that students who are unable to maintain balance between their extracurricular activities from education, imbalance of academic, social performance and time management are all related to stress.

Though most people frequently consider grades when defining academic performance. Saqib and Rehman [5], described academic performance as an "educational aim that is achieved by a student, teacher or institution achieved over a specific time". However, in this study Academic performance is defined as the level of learning in a particular area of subject in terms of knowledge, understanding, skill and application evaluated in the form of test scores and their expected GPA for the current semester [20]. The Grade Point Average (GPA) is now used by most of the tertiary institutions as a convenient summary measure of the academic performance of their students. Maderazo [25] state that academic performance is one of the most vital considerations among students in higher education level and this can be illustrated by (GPA), Aspiras and Aspiras [26] used the (GPA) to collect data and measure academic performance of students. Additionally, Rafidah, et al. [27] stated that the reason researchers obtain students GPA is to find out whether the stress students experience leaves an impact on their academic performance [27].

However, despite all the negative aspects of stress, it helps to create balance and it is considered an essential condition in helping to achieve some level of success in a students' academic life; stress acts as a negative predictor of academic performance, and it is a significant contributor to some students' performance [28]. Therefore, this relationship between academic stress and academic performance continues to intrigue students and researchers alike.

3. METHODOLOGY

3.1 Research Design

For this study, a convenience sampling had been used to carry out the research and students had been randomly chosen to participate in the study. These students had been asked to fill out and complete a structured questionnaire to gather specific information. This questionnaire had been proposed by Kim (1970) which was adopted by Rajendren and Kaliappan [29] in their research on the relationship between academic stress and academic performance. The questionnaire is categorized into five major sections by Kim (1970) where the 40 structured questions follow the category of (a) Personal inadequacy covering question no. 01 to question no. 08, (b) fear of failure covering question no. 09 to question no. 18, (c) interpersonal difficulties with teachers covering question no. 19 to question no. 24, (d) Teacher – Pupil Relationship/ Teaching Methodology covering question no. 25 to question no. 32 and (e) inadequate lab or library facilities covering the last eight questions. The results retained through the data from the questionnaire had been categorized into five divisions, analyzed and made a comparative study among the categories to investigate where the tertiary level students face stress and how academic stress is aggravated by the thorough arrangement of institution, unavailability of effective materials and cultural impediments that a student faces at the very first half periods of their study at a tertiary level institution.

3.2 Participants/ Sample

The target population for this study had been students who are currently enrolled in tertiary level educational institutions throughout Bangladesh, both male and female had been used to collect the data. The 44 participants responded to the questionnaire from five educational institutions of Bangladesh. These 44 respondents comprised of 23 male participants and 21 female participants. Participants in this

study are selected through a convenience sampling procedure, the 44 students willingly complied with the researchers were from the five graduate level colleges; like, Mikle Modhusudan College, Mirpur College, Pirojpur Girls' College, Sarowardy College and Jashore Girls' College.

3.3 Instrumentation

To gather the data needed for answering the question of whether there is a relationship between academic stress and academic performance and where the students face stress and to what level they face the same, the instrument was the Academic Stress Scale (ASS). This (ASS) consists of 40 items and each item has five alternative responses as follow; "No Stress" (NS), "Slightly Stress" (SS), "Moderate Stress" (MS), "Highly Stress" (HS) and "Extremely High Stress" (ES).

The Academic Stress Scale questionnaire was originally developed by Kim (1970) and still being used by several researchers such as (Gill,[30]; Alam & Halder [20], Hill [31], Pandey & Shukla [32], Porwal & Kumar [24]. The scale; the adapted version known as the Students' Academic Stress Scale has been adapted to Indian conditions by Rajendran and Kaliappan [29] that has been referred back. A total number of 285 subjects in their study were assessed for the efficiency of behavioral programs in managing academic stress and improving academic performance [33]. The test-retest correlation of 50 students with an interval of 25 days has been found to be 0.82 [33]. The validated 40- item of ASS has high internal consistency and adequate construct and concurrent validity [34].

Academic performance is measured by the use of Grade Point Average (GPA). Many researchers such as (Aspiras & Aspiras [26]; Maderazo [25] Alhazzani, Masudi, & Algarni [35], Hill [31], Yikealo, Yemane & Karvinen [21], use (GPA) to measure academic performance.

3.4 Procedure

The data had been collected by administering a survey questionnaire scale to a group of the tertiary level students. The respondents had been approached before their classes begin and asked to complete a self-administered questionnaire consisting of 40 questions of (ASS) scale. Again several students were contacted through mail and asked to provide the answer as per the ASS and half of the respondents

responded duly and thus the data were collected from 44 respondent altogether. After collecting the data, scoring and analysis had been made on the basis of Ratio Scale Criteria and stratified following the Ordinal Scale Criteria for analyzing the findings with mixed method.

3.5 Data Analysis Plan

Statistics plays a critical role in research, and it is very important for the summarizing of collected data which will be presented to others. For the purpose of this study, the researchers collected descriptive statistics. This type of statistics seeks to explain the data that aims to be used in the study. To conduct this type of analysis, the researchers used the quantitative survey method with administering questionnaires to students who were receiving tertiary education in Bangladesh. Data had been categorically presented by following ordinal scale transferring from ratio scale stratification of the responses and then mixed method had been applied to analyze the data collected as it is the most appropriate method when conducting this type of research. According to the ASS (Academic Stress Scale), the first response (NS/ No Stress) is scored '0', second response (SS/ Slight Stress) is scored '1', third response (Moderate Stress) is scored '2', fourth response (High Stress/ HS) is scored '3' and the final response (Extreme Stress/ ES) is scored '4'. If eight questions are considered a category the choice of first eight questions is counted '0' (as '0' for every first response makes $0 \times 8 = 0$) and the selection of fifth response for the category is counted '32' (as '4' for every fifth response makes $4 \times 8 = 32$) for every category. So, the lowest point for a category is '0' stress point and the highest point for a category is '32' stress point and the median stress point for every category is $(32+0=32/2)$ 16 and there are 44 respondents for this research that designates that the median stress point for this research is $(16 \times 44) = 704$ stress point. Determining this 704 as the median stress point, every five category had been compared to justify whether any category belongs to lower degree or higher degree of stress. Then, a qualitative analysis had been added in order to justify the effect of intervening variables (teaching materials, lab and library facilities) in the case of aggravating academic stress among the students.

3.6 Limitations

There are several hindering factors that might cause limitations in retrieving the findings of this

research. The limitations within a research study refer to the constraints and difficulties that the researcher cannot control [36]. First is the availability of participants for this study. Secondly, participants may not be honest with their response to the questions or complete the questionnaire given. The population variation of gender may present an issue of gender bias. There were difficulties in sourcing relevant materials such as the scales to carry out the research.

Finances would also be a limitation when carrying out the following research. As material and resources are required to conduct the study which would involve the allocation and necessary expenses incurred to facilitate and attain the researcher's particular objectives. These are some of the limitations the researchers may encounter, that may pose a significant challenges to this study.

3.7 Delimitations

The limitations of this research has been dealt before which designate that money constraint, time limitation and the authenticity of the answers provided by the respondents. Remembering all these limitations, the researchers had collected data from twelve respondents based on snowball sampling and the data from other 32 respondents were collected on the basis of quota sampling. To tackle time and money inconvenience, the researchers collected data from only five graduate level colleges among which data from four colleges were collected through snowball sampling and that from one college were collected through quota sampling.

4. FINDINGS

The data collected from 44 participants (Among which 23 are male respondents and 21 are female respondents) based on the questionnaire prepared by Kim (1970) cover five categories, such as; (1) Personal inadequacy (covering question no. 01 to 08), (2) Fear of Failure (Covering question no. 09 to 16), (3) Interpersonal difficulties with Teachers (Covering question no. 17 to 24), (4) Teacher – Pupil Relationship/ Teaching Method (Covering question no. 25 to 32), and the last category (5) Inadequate Study Facilities (Covering question no. 33 to 40). As per the designed value of every response according to the ASS (Academic Stress Scale), the point of the every category is provided.

This Table 1 reveals that responders chose option 'E' at almost 108 times which is the highest level of choice in the Personal Inadequacy category. As the respondents are 44 in number, the highest point of ASS is $(32 \times 44) = 1408$ for every category if the 44 respondents choose 'E' as their choice. The median score for this responses is $(1408 \div 2) = 704$ that signifies that the average stress level score of the respondents is 704 and the excess of this score designates the respondents stay above average on the point of their 'Personal Inadequacy Level Stress'. The grand total of this level designates that $854 > 704$.

In case of 'Fear of Failure', the mode level is 'Moderate Stress' occurring 86 times and the grand total of the score is super close to the

average score of Stress level as the data shows 732 is near to 704.

In the Table 3 the respondents show average result in case of their complexity with teachers and the score (714) is close to average stress score (704) for this research.

In case of frequency 'ES' selection is insignificant and other four choices follow a symmetrical result and the grand score is less than the average ($692 < 704$) implying that the respondents face less than average level of stress in regards to 'Teacher - Pupil Relationship/ Teaching Method'.

The Table 5 projects 794 points of stress that exceeds the average point and the more respondents (84) feel 'Extreme Stress'.

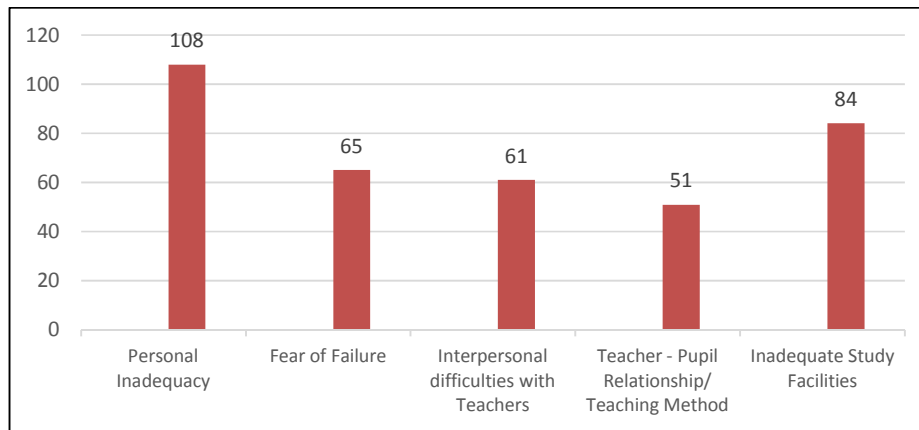


Fig. 1. The frequency of extreme stress for five categories

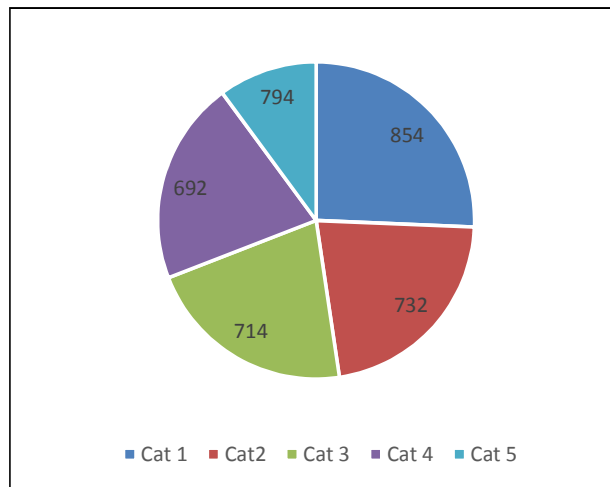


Fig. 2. The grand score of five categories

Table 1. Personal inadequacy

Choice	Responses	ASS Point	Total Point
A (No Stress/ NS)	53	0	0
B (Slight Stress/SS)	52	1	52
C (Moderate Stress/MS)	47	2	94
D (High Stress/HS)	92	3	276
E(Extreme Stress/ES)	108	4	432
Grand Total=854			

Table 2. Fear of failure

Choice	Responses	ASS Point	Total Point
A (NS)	48	0	0
B (SS)	84	1	84
C (MS)	86	2	172
D (HS)	72	3	216
E (ES)	65	4	260
Grand Total=732			

Table 3. Interpersonal difficulties with teachers

Choice	Responses	ASS Point	Total Point
A (NS)	65	0	0
B (SS)	67	1	67
C (MS)	77	2	154
D (HS)	83	3	249
E (ES)	61	4	244
Grand Total=714			

Table 4. Teacher –pupil relationship/ Teaching method

Choice	Responses	ASS Point	Total Point
A (NS)	60	0	0
B (SS)	79	1	79
C (MS)	80	2	160
D (HS)	83	3	249
E (ES)	51	4	204
Grand Total=692			

Table 5. Inadequate study facilities

Choice	Responses	ASS Point	Total Point
A (NS)	53	0	0
B (SS)	52	1	52
C (MS)	80	2	160
D (HS)	82	3	249
E (ES)	84	4	336
Grand Total=794			

5. ANALYSIS

Upon researching whether the students at the graduate levels in Bangladesh feel stress in case of managing academic state of affairs, the findings provided stunning data. The forty questions are categorized into five divisions and the findings present mixed responses from the forty four respondents.

5.1 Personal Inadequacy: The Highest Level of Stressful Area

In this first category, the paper tries to judge whether the learners face stressful situation in case of dealing with personal maladjustment with the formal study. This category justifies data on several key areas, such as; a. Teachers' high expectation on students, b. Poor interest in

subjects, c. The teachers' unfriendly attitude towards the students, and d. lack of concentration, of self – confidence and worriedness about exams etc. In this category, the 108 responses are speculated as 'Extreme Stress' implying that the learners feel more stress in dealing with personal state of affairs. It implies that they cannot easily cope with the mode of graduate level of study as this level projects totally different style of learning unpracticed in the secondary and higher secondary levels in Bangladesh. Upon finishing this level, a student moves to the job field for earning livelihood that poses pressure to them as the maladjustment with the syllabus, routine, self-paced learning threaten them impliedly to a future of uncertainty at a certain stage. The grand total of 854 projects this ideation true which exceeds the median level of Stress point (704) for this study.

5.2 Teacher- Pupil Relationship/ Teaching Method: The Lowest Stressful Area

This category four scores only 692 points that is lesser than the median score of Stress. The asked questions for this part is-

(i) if the students get scope to have lots of discussion in the class, (ii) if the students feel lack of helpful mindedness among the co – learners, (iii) if they face trouble in sharing their feelings in the classes while interacting with the teachers, their asked questions, and fellow mates. It aims at justifying whether the learners fail to cope up with the class room environment that is measured through their success or failure of interaction with the co – learners and the teachers.

This presents the fact that the learners are able to cope with cultural and social barriers and they are able to increase interpersonal communication with peers as well as instructors. A comparison may be suitable here to show through graphs-

This figure reveals that the difference between highest level point of Stress and median level point of Stress is significant and visible whereas the median level is at the verge of the border line of the lowest level of stress point which dignifies that the learners feel at least median stage of academic stress all through graduate level of study.

5.3 Inadequate Study Facilities: An Addressable Area

This category must not be remained untouched from the discussion. This area reveals several stunning reports that the frequency of (Moderate Stress: High Stress: Extreme Stress) is (80:82:84) and the grand total point for this fifth category is 794 that reveals that most of respondents (246 out of 351 respondents in ratio 70.09%) feel more than median stress in their graduate level owing to the inadequacy of study facilities. This area covers, a. inadequate subject knowledge of the teachers, b. inadequate study materials, c. inadequate lab and library facilities, d. difficulty in grasping subject matter etc. This is a revelation that the students face institutional barrier as the institutions cannot provide with requisite number of qualified teachers, quality study materials and various lab as well as library facilities which are integral part for a graduate level student to gain knowledge on various arenas.

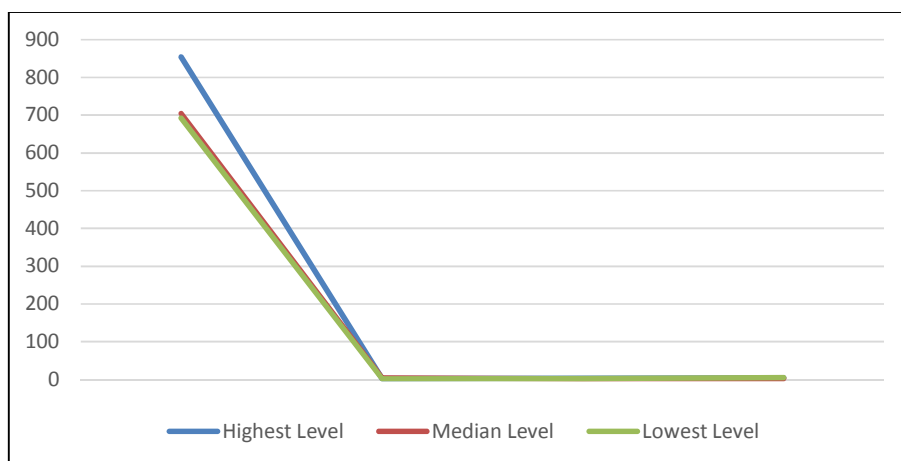


Fig. 3. Comparison of stress points

6. CONCLUSION

The assertion of Oduwaiye et al. [17] is validated through the findings of the research on 44 learners that the tertiary level of students experience stress that culminates to the degree of Extremity in most of the cases which the paper finds to be true as the learners' responses scored higher than median score level of stress (704) in four categories (personal inadequacy, fear of failure, interpersonal difficulties with teachers and inadequate lab and library facilities) except 'Teacher – Pupil Relationship/ Teaching Methodology' category where the responses are quantified below the median point of stress level. It implies that the arrangement of educational providence, the way of disseminating lessons, provision of teaching aids and materials and the services provided by the teachers as well as institutions cannot provide a congenial atmosphere of effective learning as well as secured future which Gupta and Khan [18] addresses being academic stress that a learner is encountering due to our poor arrangement of educational and tertiary institutional systems. Thus, the research proves that the learners face pressure in the tertiary level of study due to the institutional lack of proper management, teachers' incompetence or their non co – operation as well as the learner's inability for interpersonal communication development.

7. RECOMMENDATIONS

This research signifies that the learners face pressure which was not clearly identified before in the context of Bangladesh and this will help the authority, curriculum designers, college administrations as well as the learners themselves to identify the problems and try to eliminate them. Along with the five categories of Academic Stress Scale, four categories experience more than median stress that needs to be addressed in order to retain smooth maintenance of study from the part of the students. In order to ensure stress free tertiary level of education it is recommended that:

1. A counselling cell needs to be established in the institutions that aims at identifying and mentoring the case of personal inadequacy,
2. The institution needs to address the cultural, social barriers a student pose at the very entry of tertiary level to guide them so that they can gradually cope with the new atmosphere,

3. The authority should focus on the arrangement of teaching materials, texts, teacher training as learners face stress in the shortage of mentioned elements.

CONSENT

The participants had been provided with a cover letter explaining the purpose of the questionnaire given, and the inclusion criteria. The researchers had clearly explained to the participants that information collected would remain anonymous. Students who were participating in the study would have been informed about confidentiality of the information provided. Also, that the participation was voluntary, and that there was no penalty for withdrawal as participants were free to do so at any given time in the study. They were also assured that participating in the study would not affect their academic performance. Incomplete questionnaires had not been acknowledged.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDIX

Academic Stress Scale

This scale consists of 40 items describing the stress in your institution/ college life from the various sources.

1. Teachers make too many extra demands on students.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

2. Poor interest in some subjects.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

3. Progress reports to parents

() No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

4. The teacher is not humours towards us.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

5. Lack of concentration during study hours.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

6. Difficulty in remembering all that is studied.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

7. Worrying about the examinations.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

8. Lack of self-confidence.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

9. The teachers do not listen to our ideas.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

10. Conflict with friends/college authorities.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

11. Teachers give more punishment in the class.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

12. Worry about results after examinations.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

13. Hesitate to ask the teacher for detailed explanation.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

14. Biased attitude of the teacher.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

15. Inadequate space or room for study at home.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

16. Not knowing how to prepare for the examinations.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

17. Lack of assertiveness (confidence) in the class.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

18. Lack of opportunity to meet teachers.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

19. Teacher shows socio-economic status on students.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

20. Slow in getting along with the curriculum.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

21. Exam papers are tough and not valued well.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

22. Unable to complete the assignment in time.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

23. Lack of communication between teachers and students.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

24. Monotonous (boring or tedious) teaching style by the teacher.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

25. Not enough discussion in the class.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

26. Lack of mutual help among classmates.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

27. Lack of fluency while speaking the language other than the mother tongue.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

28. Difficulty in public speaking.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

29. The teacher is fast and does not use blackboard legibly.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

30. Teachers lacking interest in students.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

31. Examination syllabus is too heavy in some subjects.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

32. Feeling of inferiority.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

33. Unable to discuss Academic failures with parents.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

34. Not able to grasp the subject matter.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

35. Incomplete and confusing study material.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

36. Eleventh hour preparation for the examinations.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

37. Importance of the subject matter.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

38. Difficulty in adjusting with opposite gender.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

39. Inadequate subject knowledge of the teacher.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

40. Inadequate lab and library facilities.

(a) No Stress (b) Slight Stress (c) Moderate Stress (d) High Stress (e) Extreme Stress

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