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**The Impact of Teacher-Student Interaction on Student Motivation with special reference to the Advanced Technological Institutes (ATIs), Sri Lanka Institute of Advanced Technological Education (SLIATE) at Ampara-Hardy, Batticaloa, and Sammanthurai., Sri Lanka**

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**ABSTRACT**

*Motivational studies are often subjugated by behaviorists, and it is argued that motivators are external to an individual, and exist in the form of reinforcers and punishers. When internal motivation was first recognized as a revolutionary theory, it was labelled as primarily physiological, and this was believed to be connected with the subconscious. Theories of motivation have emerged since the mid-fifties' and more and more contribution are seen by the day.*

*The objectives of the study are: to identify the impact of teacher-student interaction and student motivation, to identify the variables in the teacher-student interaction and student motivation, to measure the extent of the teacher-student interaction, to prioritise the teacher-student variables in the order of importance, and to formulate a set of recommendations to enhance motivation through teacher-student interaction.*

*The assignment is based both on primary as well as secondary data. From the population of 3,860 students, a sample of 268 was drawn and the interviews were based on a semi-structured questionnaire. This sample relates to a margin of error of 5% and a confidence level of 90%. Also, a sample of thirty lecturers were drawn at random for supplement the study, as per the Griffin and Hauser (1995) theory. The findings deal with the reasons for joining the SLIATE, lecturers' weaknesses and strengths, and recommendations, amongst others. The correlation has been proved positive.*

**Keywords:** *motivation, student-teacher interaction, pedagogy, mindset, performance*

**INTRODUCTION**

It is a widely accepted aphorism that the future of a nation lies in the hands of the next generation and that the success of the next generation is education-driven. Whilst it may be somewhat counter-intuitive to argue that education is best obtained by a "generalist" approach, with focus on voluminous disciplines, many studies have shown that a focused



“specialist” approach may well be the right approach. Such an education evolves around “teacher-student” interaction primarily, in a classroom setting. This is obvious when one examines the scope of the secondary and the tertiary curricula of the education system of a nation.

Motivation is an internal desire or willingness to do something and motivation is what encourages people to set goals and then to take action to work toward achieving those goals. Motivation plays a key role in education and in this context, there are two categories of motivation. It is a well-known dictum that motivation may be either Intrinsic or, Extrinsic. Whilst the former refers to internal motivation - i.e. within oneself, the latter is about motivation that is external to the individual. On the other hand, an interaction is an action, function, service, or relationship that make use of the resource, and in this case, achievement of goals through motivation. Thus, the study on “The Impact of Teacher-Student Interaction on Student Motivation with special reference to the Advanced Technological Institutes (ATIs) at Ampara-Hardy, Batticaloa, and Sammanthurai is an attempt to test some of the popular theories in the work-environment by the author who is also on the teaching faculty of the Advanced Technological Institute, Kovilkulam, Batticaloa.

**The objectives of the study are:**

- 1.1. To identify the impact of teacher-student interaction and student motivation
- 1.2. To identify the variables in the teacher-student interaction and student motivation
- 1.3. To prioritise the teacher-student variables in the order of importance
- 1.4. To measure the extent of the teacher-student interaction
- 1.5. To formulate a set of recommendations to enhance motivation through teacher-student interaction

**LITERATURE REVIEW**

A teacher (also called an educationist) is an individual who supports students to attain knowledge, competences or values (Brophy 2017) and a student is a person or learner who has enrolled in an educational institution with a sole purpose of achieving educational or academic success in a chosen field. The term “Student” refers to an individual who is under the supervision of an educator (Brophy 2017) for the sole purpose of advancing his/her knowledge. Getting an excellent education is a significant keystone in the life of every student and students spend several hours with their teachers every week day and as such; it is natural that the lecturers have an overbearing influence on them. Previous studies show the association between educators and learners is important for motivation and academic accomplishment and as stated by Gehlbach (2016), students who see their teachers in a positive way have better accomplishment outcomes. According to Whitaker (2014), creating learning environments that encourage positive cultures with healthy collaborations can motivate



learner to use his/her energy and desire to achieve goals. The classroom environment plays an important role in maintaining student curiosity and interest and the students become energetic participants in their own learning (Maulana 2017).

The notion of education is how it has evolved over time in distinctive civilizations from pre-historic era until modern times (Oyeleye 2019). The history of teaching can be traced to the Chinese philosopher Confucius around 561 B.C-479 B.C., who is credited to have been the first private teacher of great repute (Stanford.edu). Any study on the topic of education is therefore a study of the past as well as present methods that focus on educational systems, institutions, theories, themes and other related phenomena and any research on education is of fundamental importance to a professional teacher (Counsell, Evans, McIntyre, and Raffan, Sep-Dec, 2000). Although education is universal throughout epochs of the world until modern times but the needs and aspirations of societies differ thereby determining the model or technique through which education is being disseminated to the society (Church n/d). Globally, the task of teaching students has evolved from an unassuming educational occupation into a complex pedagogy over several Centuries, with emphasis on motivation and teacher-student interaction (Oyeleye 2019). Thus, it may be stated that whilst teacher-student interaction is an independent variable, motivation is a dependent variable.

Scholarly undertakings on “process–outcome” relationships had established the importance of achieving interactions with students, in which teachers assume personal responsibility for their students’ achievements of educational goals, often going beyond the realms of textbooks (Brophy 2001). More recent work on teaching has stressed the importance of teaching networks structured around key ideas that are developed in depth, primarily through thoughtful discourse and delivered with strong interactions and empathy (Reusser 2001). Whilst a good teacher engages himself/herself in disseminating the lessons, his/her expressions, body language, empathy, pedagogy and interactions add greater thrust in making the students absorb the discourse (Brophy 2001).

A case in point is a study involving 1,900 secondary school students from several public schools in Indonesia which has revealed that the teacher-student interactions, proximity and influence determined student motivation (Maulana, Opdenakker, Brok and Bosker 2011). However, contrary to the current belief that the student motivation is brought about by external stimuli, such motivation is the outcome of personal influence of the teachers (Moulana et al 2011). In a research conducted in the UK (2017), it was proven that teachers who had positive and meaningful interaction with their students and maintained positive classroom environments contributed to students’ developmental and educational needs ([ukessays.com](http://ukessays.com)). In large-scale, longitudinal and controlled experimental studies conducted in the USA (2019), it was found that, the various indicators of quality including interactions of students with teachers and peers repeatedly showed that unique and positive associations with learning gains (child and family blog). Majeed (2012) claims that in an English-medium classroom in the Sri Lankan Universities, students perform better on account of teacher-student interaction. This, according to him, has



enabled many students to overcome the language barrier, given the fact that their early education had been vernacular [local dialect] either in Sinhala or Tamil. According to Perera (2001), prior to invasions of the Island, the Sri Lankan education system was in the hands of “Gurus” and “Achariyas” and it was mandatory that the students live in “Gurugedera” with such teachers for a considerable period of time and this fostered teacher-student interaction and motivation. The author is aware of similar practices even today, in many parts of India.

It has been observed that the motivational theories such as; Personality theory, Achievement-motivation theory, Motivation-Hygiene theory, Expectancy theories, Operant behavior theories, Goal-setting theories, Maslow’s Hierarchical theory, Theory of Needs, and Theory of X and Y have contributed to the understanding of motivation in general and particularly, in an educational setting. These theories elucidate how to motivate students in the context of the learning tasks that are not inherently interesting. These theories in general, specifies three psychological needs—autonomy, competence, and relatedness—as the basis for sustaining intrinsic motivation and more self-determined extrinsic motivation (googlescholar.com).

In this context, Personality theory by Kurt Lewin postulates that behavior is the result of the individual and the environment. This theory had a major impact on social psychology, supporting the notion that individual traits and the environment interact to cause behavior. Whilst this may be a compelling reason, in the light of classroom experiences, the author is of the view that several other factors also influence and modify behavior. Proponents of the Personality theory argue that individuals develop their personality through social organizations, language, customs and traditions, religion, arts and literature, forms of Government, and economic systems (Dessler 2019). This, the author believes, is a conceivable argument and relates to the experiences in the classroom.

Further, Achievement motivation theory by David McClelland is based on individuals who thrive on competition. Through achievement motivation a person develops high problem-solving skills. As such: practical and realistic goals are imperative. (Beck 2019). Competition motivation is the idea that one performs better when one competes oneself with others. In other words, it is argued that competition determines results. Nevertheless, the author has misgivings as such competition is usually seen at the secondary levels and not witnessed at the tertiary level of education, as per her experience as a lecturer.

Also, Fredrick Herzberg’s theory of Motivation-hygiene hypothesizes employee satisfaction has two aspects namely; Hygiene” and “Motivation”. He [Herzberg] also argues that hygiene issues, like, wages and supervision, decrease employees' dissatisfaction with the work environment. On the other hand, motivators, such as recognition of good work, and achievement spur employees to become more productive. Be that as it may, opponents take to the view that there is a “Disconnect” between performance and motivators, as job satisfaction and performance are not always directly correlated (Dessler 2019). By juxtaposing this theory with the author’s personal; experience in the class environment, it is clearly evident that most



lecturers, if not all, are bent on covering the syllabus within the given time-limit, rather than try archive job satisfaction.

In addition, the Expectancy theories by Victor Vroom, Lyman Porter and Edward Lawler is an extension of the Vroom expectancy theory. This theory postulates that one's behavior is driven by conscious choices one makes from several alternatives so as to optimize satisfaction and by all accounts, and reduce distress (Huczynski 2019). Notwithstanding, the author is of the view that the Expectancy theory is flawed as motivation limited to rewards and the focus is on monetary and non-monetary rewards so as to motivate employees. As such; it has limited application to motivation, in schools of higher education.

In this context, Operant behavior theory by Clay Hammer, Fred Luthans and Robert advocates five principles of operant conditioning such as; "positive reinforcement, negative reinforcement, positive punishment, negative punishment, and extinction. Extinction occurs when a response is no longer reinforced or punished, which can lead to the departure of the behavior" (Minor 2007). Further, it is believed that the five principles of the Operant behavior theory is best relegated to the archives as there are neither feasible nor practical to adopt in the classroom, given the fact that any attempt to impose "Corporal" punishment, as defined by the United Nations Committee on the rights of the child as "any punishment in which physical or emotional force is used and intended to cause some degree of pain or discomfort, however light has to be thwarted (orchr.org). Thus, it is discernable that the Operant theory is outdated and outlived its importance.

Next, the Goal setting theory by Edwin Loche and Gary Latham hypothesizes that businesses can record greater success by adopting specific and measurable goals. By clear-cut goals, employees have a better sense of direction and become more productive (Armstrong 2017). It is conjectured that the Goal setting theory is applicable to the classroom environment as well. It has been found by the writer herself that students who set for themselves clear-cut goals have a greater chance of success at the examinations and as such; the onus is on the lecturers to guide the students towards this end.

Another motivational theory is by Locke, et al (1981) who described "goal" in Goal-Setting Theory as what an individual is trying to accomplish; it is the object or aim of an action. They [Locke, et al] also argued that goal setting has a positive influence on task performance. They further postulated that a specific high goal leads to even higher performance. Nonetheless, it is believed that high goals may not always result in high performance, as goals should be specific, practical and achievable, even with additional effort. Otherwise, there is a greater propensity for the students to altogether give-up. Thus, The Goal-setting theory, in the author's opinion, has limited application.

Another popular theory is the Hierarchical theory by Alfred Maslow and is believed to be by far, the most discussed theory of motivation. However, it is felt that the five stages of the theory



cannot be directly applied to education related motivation as it is centered-around physiological, safety, love and belonging, esteem and finally, self-actualization needs.

Further, The Theory of Needs by McClelland states that everyone possesses at least one of three motivators: need for achievement, need for affiliation, and need for or power. These motivators are not inherent, rather they are developed through culture and life experiences (Armstrong 2017). This theory, it is felt, cannot be applied to the classroom environment in toto, as the majority of students, according to the experiences of the author, are not rightly concerned about achievement, affiliation or power. Rather, they are satisfied with a mere pass at the examination in order to be gainfully employed, in the future.

The last theory discussed here is the Theory of X and Y popularized by Mc Gregor elucidates the importance of greater supervision, rewards, and penalties under Theory X, whilst Theory Y is built on the motivational role of job satisfaction and suggests that workers perform their tasks without direct supervision (Dressler 2019). This, according to the author, is totally unacceptable to an academic institution as the subjects meant to be taught are of complex nature and cannot be compared to a repetitive task that is performed on a production floor.

### **Significance of the Study**

Faculties in diverse disciplines continually prioritize their time to effectively manage the many demands of their duties and responsibilities (Meissel, Meyer, Yao, Christine, and Davies 2017). However, the overriding factor is career advancement and most faculty staff undertake research on some pertinent topic, in order to add knowledge to the chosen topic (nap.edu). Among others, a teacher's role is to encourage students to develop their academic potential, through interaction and motivation and the teachers' performance is primarily judged by this singular task (Meissel et al, 2017). Thus, a study on the 'The Impact of Teacher-Student Interaction on student motivation with special reference to the ATIs at Ampara (Hardy), Batticaloa, and Sammanthurai is a step in the right direction.

### **Problem Statement**

In developing a problem statement, it has been observed by browsing the Internet that a significant number of studies had been undertaken in the past by academics and scholars alike, on teacher-student interaction and motivation. However, the origin of these may be traced back to the Western Europe, Africa, South-East Asia and the United States of America. Given the fact that the teaching methodologies differ greatly between the East and the West, findings arising from these studies cannot be adapted in Toto to the local situation. Also, similar studies undertaken previously on the chosen topic in Sri Lanka have been found to be archaic. As such; the proposed study is the need of the hour. Thus, the research problem is whether teacher-student interaction results in motivation of students.

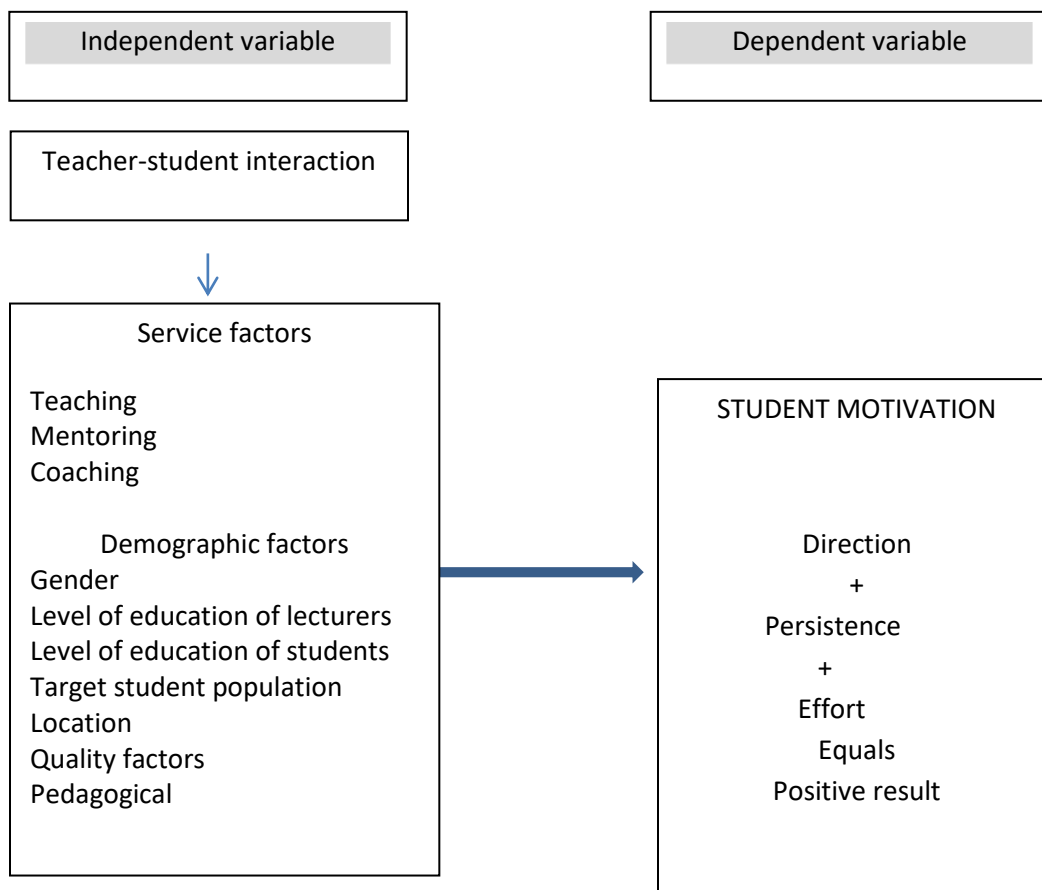


## Conceptual Framework

A conceptual model is a framework that is adopted in research to identify the likely courses of action or to present an idea or thought (Oyeleye 2019). An independent variable is a variable that may be manipulated and it can influence the dependent variable. It may also be stated that the dependent variable is the resulting variable that needs to be measured (Church n/d).

Fig. 1

### INDEPENDENT VARIABLES AND THE DEPENDENT VARIABLES



## Research Hypotheses

The following two hypotheses are selected for testing the validity of the findings:

$H^0$ : There exists no correlation between teacher-student interaction and student motivation



**H<sup>1</sup>:** There exists correlation between teacher-student interaction and student motivation

The literature supports the framing of the above-stated two hypotheses and to quote from Oyeleye, (2019), “Globally, the task of teaching students has evolved from an unassuming educational occupation into a complex pedagogy over several Centuries, with emphasis on motivation and teacher-student interaction. In order to test these hypotheses, the Pierson correlation method was adopted and the result reveal that the correlation of teacher-student interaction is positively correlated. The calculations are given below:

## **OBJECTIVES**

- 1.1. To identify the impact of teacher-student interaction and student motivation
- 1.2. To identify the variables in the teacher-student interaction and student motivation
- 1.3. To prioritise the teacher-student variables in the order of importance
- 1.4. To measure the extent of the teacher-student interaction
- 1.5. To formulate a set of recommendations to enhance motivation through teacher-student interaction

## **METHODOLOGY**

### **Research Design**

The research design refers to the overall strategy that the researcher chooses to integrate the diverse elements of the study in a comprehensible and logical way, thereby, ensuring that the research problem is properly addressed (Kotler 2010). The proposed research design shall consist of Data source, Research approach, Research instrument, Sampling plan and Contact methods (Kotler 2010), all of which are dealt with, below.

### **Study Population and Sample**

All the Higher National Diploma in Accountancy (HNDA) and Higher National Diploma in Management (HNDM) students and their lecturers at the Ampara-Hardy, Batticaloa and Sammanthurai ATIs were considered as the population. The sampling of the student population is calculated as in Fig.2. In addition to the students, a total of thirty lecturers were interviewed, on a random basis, using a separate semi-structured and self-administered questionnaire in English, on the basis of ten per chosen ATI. This is in line with the recommendations of Griffin and Hauser (1995) who claim that a sample of 20 to 30 could provide a result compatible with 95% of accuracy.





The population statistics of the three ATIS is given below, segmented by location and gender:

**Fig.2**

**POPULATION STATISTICS OF AMPARA-HARDY**

**BATTICALOA AND SAMMANTHURAI ATIs (May, 2020)**

ATI	Student population	Percentage	Males-Percentage	Females-Percentage
Ampara (Hardy)	1,100	28.5	30	70
Batticaloa	1,730	44.8	40	60
Sammanthurai	1,030	26.7	35	65
Total	3,860	100	-	-

*Source: SLIATEs of Ampara (Hardy), Batticaloa and Sammanthurai*

*Note: Except for the population percentage, all Figures have been rounded-up to the nearest ten*

Building on the data in Fig.2, the sample of 268 is arrived at, employing “Raosoft Sample Calculator.” The following data is also relevant to the sample:

**Fig.3.**

**SAMPLE CALCULATION**

Variable	Percentage/Nos.
Margin of error (e)	5%
Confidence level	90%
Population (N)	3,860
Distribution	50
Sample size (n)	268

Note: This means 268 or more measurements/surveys are needed to have a confidence level of 90% that the real value is within  $\pm 5\%$  of the measured/surveyed value.

*Source; [www.raosoft.com/samplesize.html](http://www.raosoft.com/samplesize.html)*

The sample of 268 has been converted into a stratified random sample in Fig.3, below:



**Fig.4.**

**SAMPLE DISTRIBUTION**

SLIATE	Student population	Stratified sample size	Male: Female sample breakdown
Ampara-Hardy	1,100	76	22:50
Batticaloa	1,730	120	45:68
Sammanthurai	1,030	72	27:41
Total	3,860	268	-

Source: P. Kotler (2010). *Marketing management: Analysis, Planning and Implementation. (12<sup>th</sup> ED.).* New Delhi: Prentice-Hall

**Data Collection Method**

Data was collected through a semi-structured questionnaire. The data for this research was collected both from primary and secondary sources. The researcher employed a semi-structured questionnaire as the primary source and books, journals, articles and findings of other researches was referred for the secondary data collection. In pursuance of the above, the methodology was based on data inputs, which consist of primary and secondary sources, the former by way of personal interviews and the latter through desk research. The research was both qualitative as well as quantitative. The research approach is a survey. Research instrument is a semi-structured questionnaire in English, Sinhala and Tamil. Contact method is field visits. Sample size is 268 (see Fig. 2, 3 & 4). Data collection was based on respondents’ active participation in answering the questionnaire under the strict supervision of the researcher. In addition, the researcher employed the WhatsApp group which is active among all students and staff of the SLIATEs.

**Pre-testing**

For the pre-testing, 10 copies of the student questionnaire and 5 copies of lecturer questionnaire were distributed among the students and the lecturers respectively as part of a pilot study.

**RESULTS AND DISCUSSIONS**

A random survey among 286 students [both males and females] was conducted at the ATIs in Ampara-Hardy, Batticaloa and Sammanthurai, in the Eastern Province, Sri Lanka. The objective was to collate feedback on “The Impact of Teacher-Student Interaction on Student Motivation,

with special reference to the Advanced Technological Institutes (ATIs). The findings as well as the analyses are given hereunder:

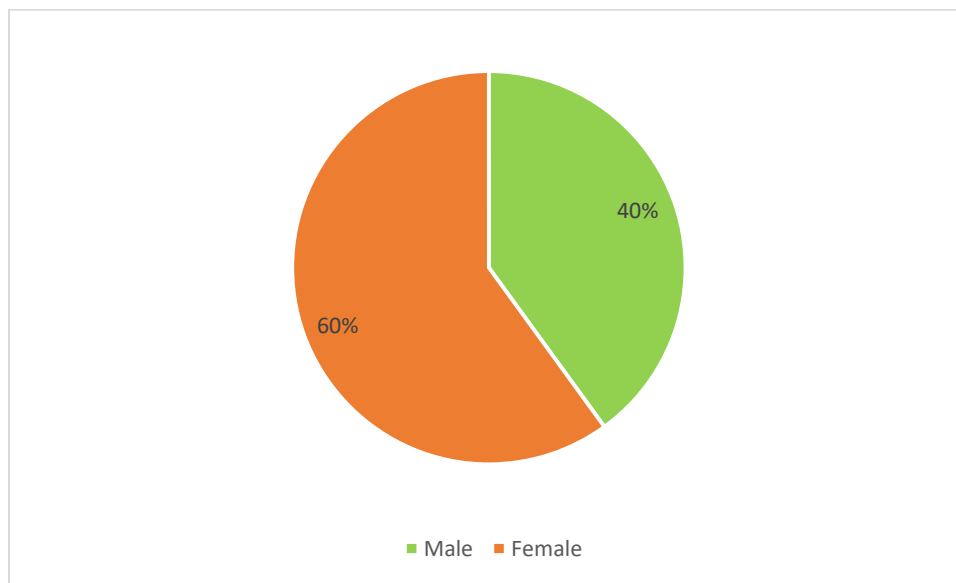
### 1. Gender

It may be observed that from Table 1, a total of 286 students have been interviewed of which, 40% is males and 60% females.

**Table 1. Gender**

Gender	Frequency/Nos.	Percentage
Male	116	40
Female	170	60
Total	286	100

**Chart 1. Gender**



### 2. Locations

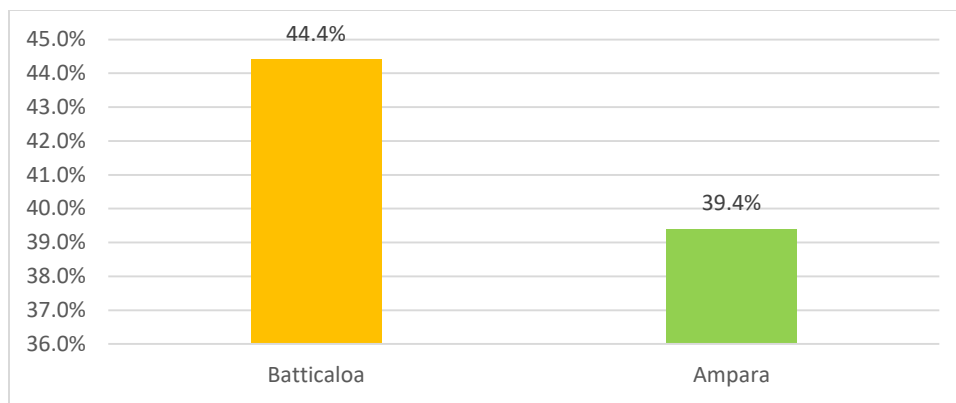
The survey also identified the location of the ATIs from which the respondents are selected for the survey. Accordingly, 44.4%, 39.4%, and 16.2% represent Batticaloa, Ampara, and Sammanthurai Districts, respectively.



**Table 2. Location**

Location	Frequency/Nos.	Percentage
Batticaloa	126	44.4
Ampara	114	39.4
Sammanthurai	46	16.2
Total	286	100

**Chart 2. Location**



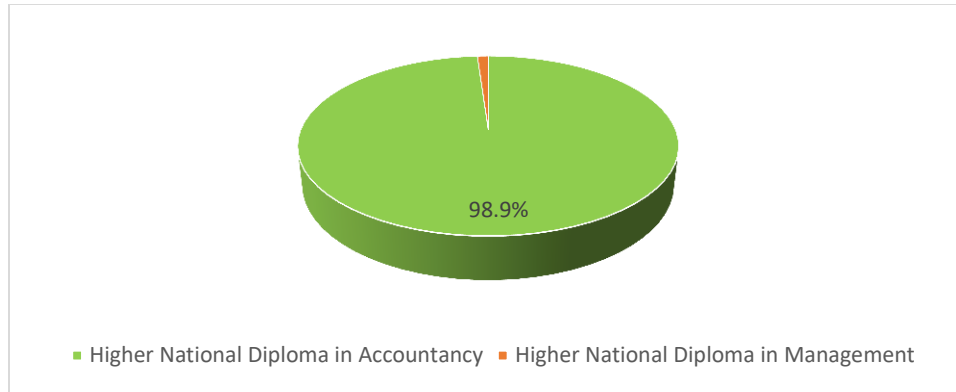
**3. Course identification**

Two courses were identified namely: Higher National Diploma in Accountancy (HNDA) and Higher National Diploma in Management (HNDM). According to the findings, 98.9% is studying for the former whilst only 1.1% has opted for the latter. It is believed that the above findings are a true reflection of the demand for accounting personnel, both overseas and Sri Lanka.

**Table 3. Course identification**

Course	Frequency/Nos.	Percentage
Higher National Diploma in Accountancy	282	98.9
Higher National Diploma in Management	4	1.1
Total	286	100

**Chart 3. Course identification**



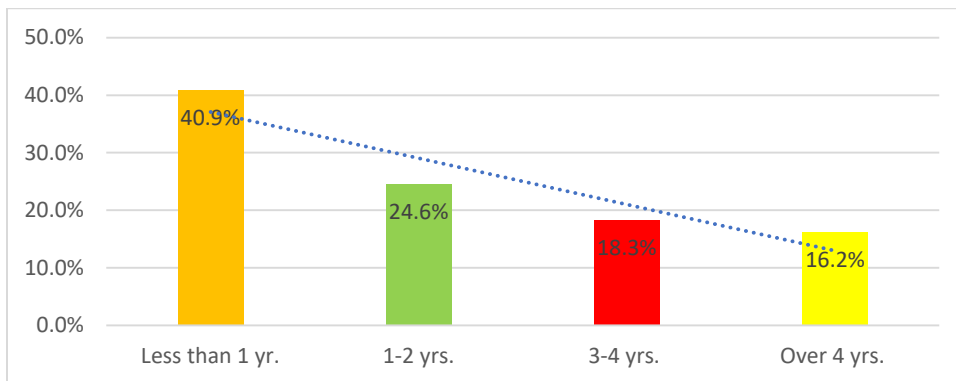
**4. Duration of stay with the SLIATEs**

It may be observed from Table 4 that as much as 40.9% has stayed with the ATIs for less than a year, followed by 24.6% remaining one to two years, 18.3% three to four years and 16.2% over four years. The data set indicates that the drop-out rate is as high as 83.8% and only 16.2% stayed over four years. This is amply illustrated by the Trend Line in Chart 4, below:

**Table 4. Duration of stay**

Duration of stay	Frequency/Nos.	Percentage
Less than 1 yr.	117	40.9
1-2 yrs.	71	24.6
3-4 yrs.	52	18.3
Over 4 yrs.	46	16.2
Total	286	100

**Chart 4. Duration of stay**





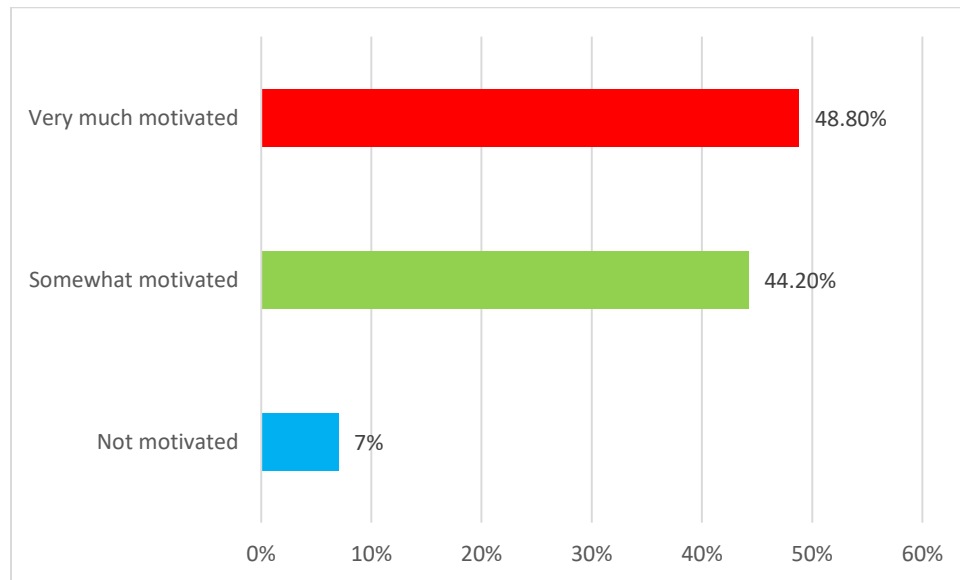
## 5. Motivation

When questioned whether students are motivated to study at the ATIs, 48.8% claimed that they are very much motivated and 44.2% claimed that they are somewhat motivated. Cumulatively, this stands at 93% and this is considered very favorable to the SLIATEs. This information is given in Table. 5 as well as Chart 5, below:

**Table 5. Motivation**

Variable	Response/nos.	Percentage	Rank
Not motivated	22	7.0	3
Somewhat motivated	124	44.2	2
Very much motivated	140	48.8	1
Total	286	100	-

**Chart 5. Motivation**



## 6. Interaction

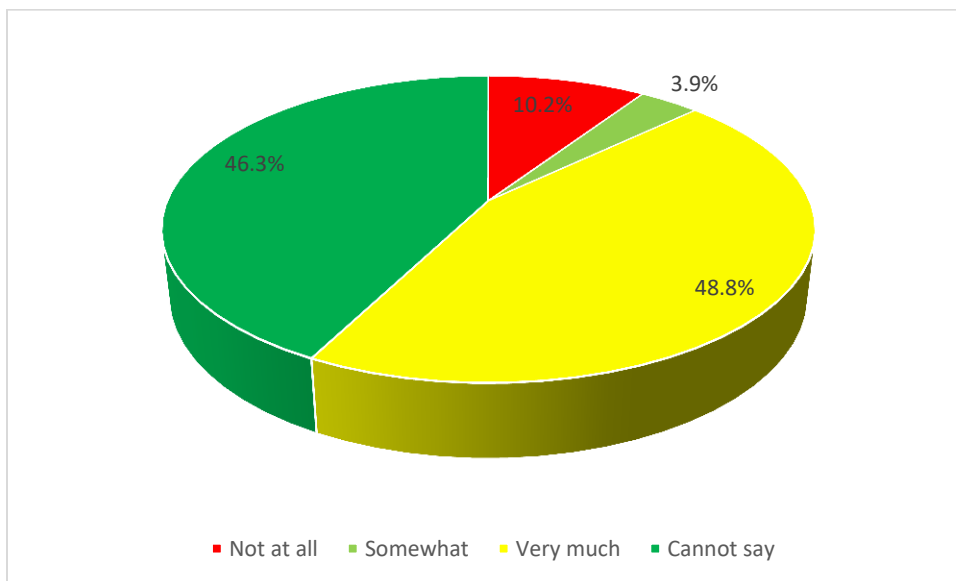
On being questioned whether interaction exists between the students and the lecturers, 39.6% answered affirmatively whilst a further 3.9% stated “somewhat.” This question also received the largest neutral response of 46.3%. This neutral response of almost 50% cannot be ignored as this may indicate the lapses in interaction between the lecturers and the students, at the SLIATEs and which may impact the success of the students at the examinations. This data is presented in Table 6 and Chart. 6, below:



**Table 6. Interaction**

Variable	Response/ Nos.	Percentage
Not at all	29	10.2
Somewhat	11	3.9
Very much	114	39.6
Cannot say	132	46.3
Total	286	100

**Chart 6. Interaction**



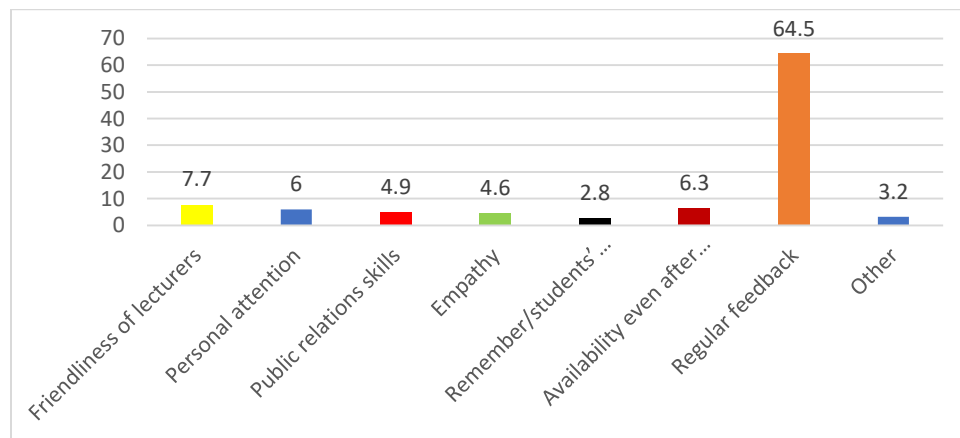
## 7. Criteria for the identification of interaction

In all, seven criteria have been listed by the respondents and occupying the first rank is “Regular feedback.” This was followed by “Friendliness of lecturers” and “Availability of lecturers even after school hours”, in the 2<sup>nd</sup> and 3<sup>rd</sup> places, respectively. Thus, it is obvious that students appreciate regular feedback on their classroom activities and assignments in order to further improve on them. Friendliness of lecturers is positively correlated to “approachability’ meaning students could approach the lecturers without apprehension to clear their doubt. Availability of lecturers even after school hours is also appreciated by the students as it enables them to discuss the difficult topics and receive advice. This data is presented in Table and chart 7, below:

**Table 7. Interaction criteria**

Criteria	Response/Nos.	Percentage	Rank
Friendliness of lecturers	22	7.7	2
Personal attention	17	6.0	4
Public relations skills	14	4.9	5
Empathy	13	4.6	6
Remember/students' names	8	2.8	8
Availability even after school hours	18	6.3	3
Regular feedback	185	64.5	1
Other	9	3.2	7
Total	286	100	-

**Chart 7. Interaction criteria (by percentage)**



**8. “Other” aspects influencing interaction**

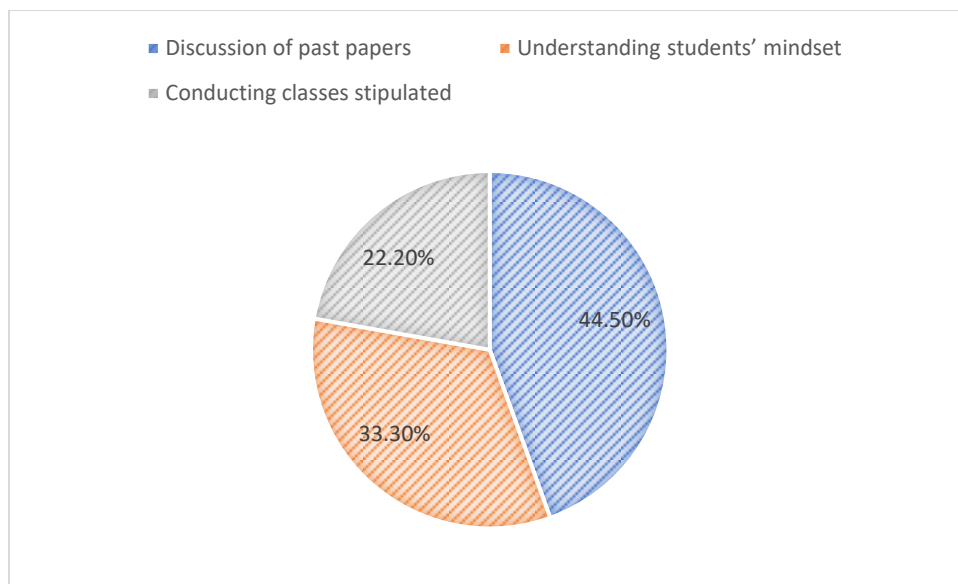
According to the survey findings, a total of nine respondents have identified three variables over and above those listed under Table and Chart 7. These include: Discussion of past papers (44.5%), Understanding students’ mindset (33.3%) and Conducting classes beyond the stipulated hours (22.2%). Though these appear to be distantly interrelated with lecturers’ interaction with students, nonetheless, these are appreciated by the students and believe they contribute in building the interaction with the students. This information is given in Table 8 and Chart 8, below:



**Table 8. “Other” aspects influencing interaction**

Comment	Response/ Nos.	Percentage
Discussion of past papers	4	44.5
Understanding students’ mindset	3	33.3
Conducting classes stipulated	2	22.2
Total	9	100

**Chart 8. “Other” aspects influencing interaction**



**9. Student-Lecturer interaction and motivation**

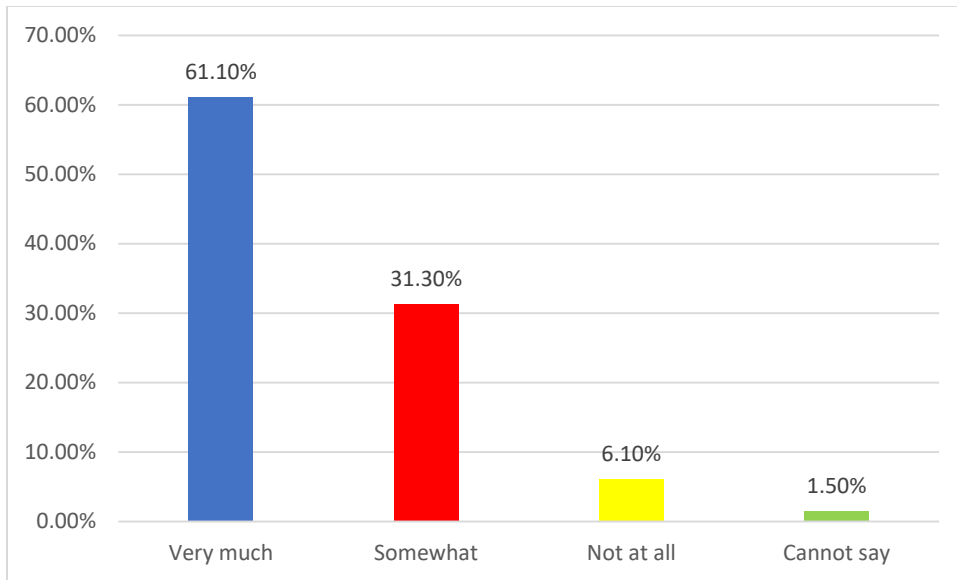
The next question posed to the respondents was framed with an intention of assessing whether Lecturer-student interaction results in motivation of students. In this context, 61.1% stated “Very much.” and 31.3% claimed “Somewhat.”. Cumulatively, the percentage is 92.4%, which augurs well. The data is presented below:

**Table 9. Interaction and Motivation**

Comment	Observation/Nos.	Percentage	Rank
Very much	175	61.1	1
Somewhat	88	31.3	2
Not at all	17	6.1	3
Cannot say	6	1.5	4
Total	286	100	-



**Chart 9. Interaction and motivation**



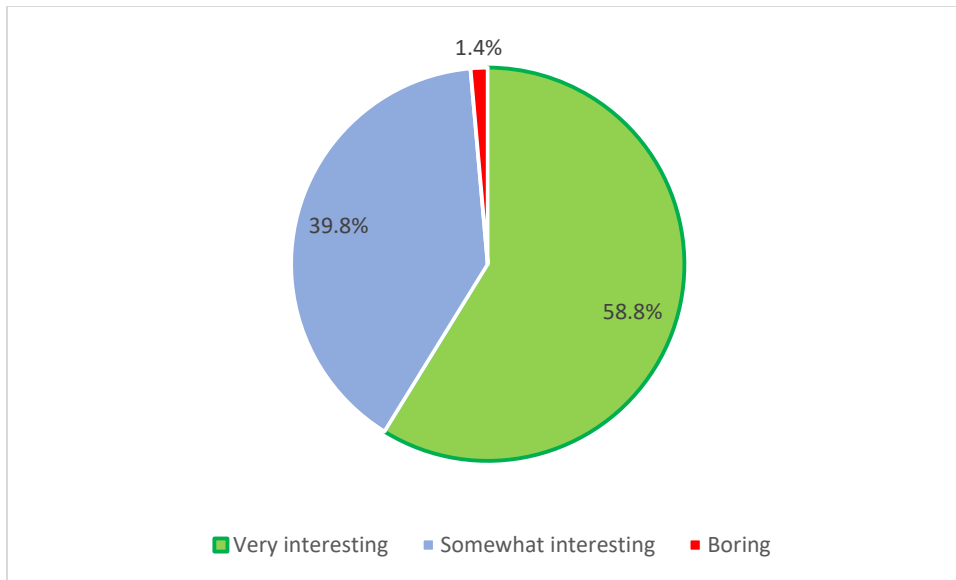
**10. Pedagogy**

This phrase refers to the “Art and Science” of teaching. When questioned on this, the respondents overwhelmingly stated that the teaching approach of the lecturers was in line with the expectation of the students and as such; the subject-matter was interesting to them. This data is given below in Table 10 and also, chart 10:

**Table 10. Pedagogy**

Comment	Observation/Nos.	Percentage
Very interesting	168	58.8
Somewhat interesting	114	39.8
Boring	4	1.4
Total	286	100

**Table 10. Pedagogy**



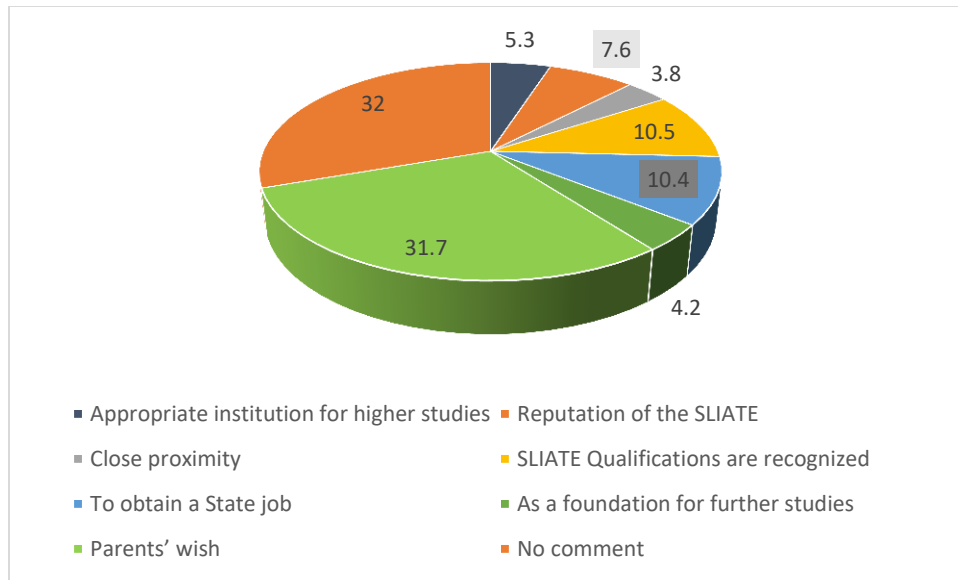
**11.. Reasons for joining the SLIATE**

The question on “Reasons for joining the SLIATE drew seven responses of which, 31.7% has cited “Parents’ wish”, followed by “SLIATE qualifications are recognized” (10.5%), and” To obtain a State job” (10.4%). Notwithstanding, the highest number of respondents i.e. 32% have not responded. This begs a question- To what extent are the students of the ATIs matured and able to think independently? The findings are given below:

**Table 11. Reasons for joining the SLIATE**

Reason	Observation/Nos.	Percentage	Rank
Appropriate institution for higher studies	17	5.3	5
Reputation of the SLIATE	21	7.6	4
Close proximity	11	3.8	7
SLIATE Qualifications are recognized	14	10.5	2
To obtain a State job	30	10.4	3
As a foundation for further studies	12	4.2	6
Parents’ wish	90	31.7	1
No comment	91	32.0	-
Total	286	100	-

**Chart 11. Reasonx for joining the SLIATE**



**11. Attributes that promote interaction**

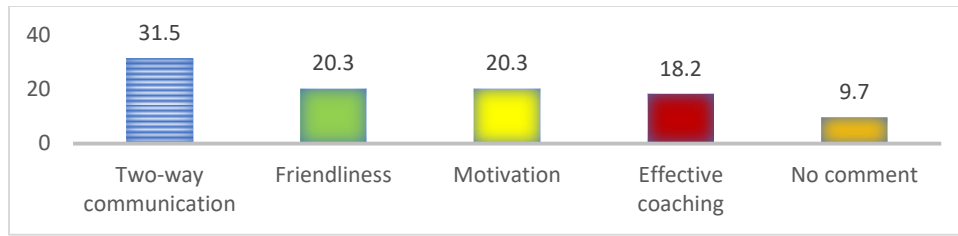
The questionnaire employed to extract data from the respondents also had a question on Factors that promote interaction between the students and the teachers. The findings reveal that the highest number of students identified “Two-way communication” (31.5%), followed by “Friendliness of the teachers” (20%) and “Motivation” (20.3%). In addition, 18.2% of the respondents identified “Effective coaching.” This information is furnished below:

**Table 12. Attributes that promote interaction**

Desired attribute	Response	Percentage	Rank
Two-way communication	90	31.5	1
Friendliness	58	20.3	2
Motivation	58	20.3	2
Effective coaching	52	18.2	3
No comment	28	9.7	
Total	286	100	-



**Chart 12. Attributes that promote interaction**



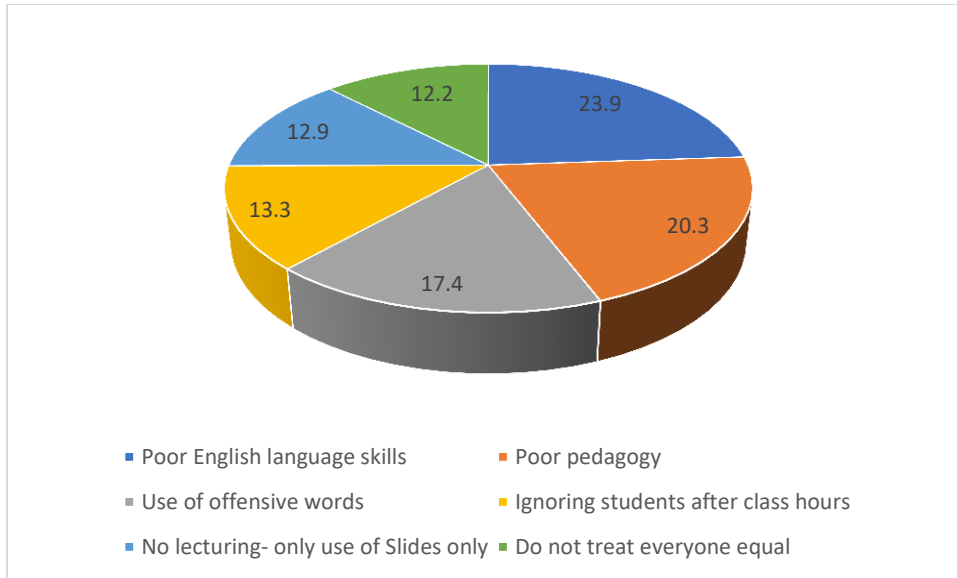
**12. Attributes that hinder interaction**

A similar question as that of the previous one, but attempting to identify those attributes that hinder interaction was posed to the respondents and in all, six attributes were then identified. Ranking No.1 is “Poor English language skills of the lecturers” (23.9%), followed by (rank No.2) “Poor pedagogy (20.3%), [Pedagogy is the science and art of teaching]. Ranking No. 3 is “Use of offensive words” (17.4%), followed by “Ignoring students after class hours” (13.3%), Rank No. 5 is “No lecturing, only Slides presentation” (12.9%) and ranking No. 6 is “Lecturers do not treat everyone equal” (12.2%).

**Table 13. Attributes that hinder interaction**

Poor attribute	Response	Percentage	Rank
Poor English language skills	68	23.9	1
Poor pedagogy	58	20.3	2
Use of offensive words	50	17.4	3
Ignoring students after class hours	38	13.3	4
No lecturing- only use of Slides only	37	12.9	5
Do not treat everyone equal	35	12.2	6
Total	286	100	

**Chart 13. Attributes that hinder interaction**



**13. Additional comments**

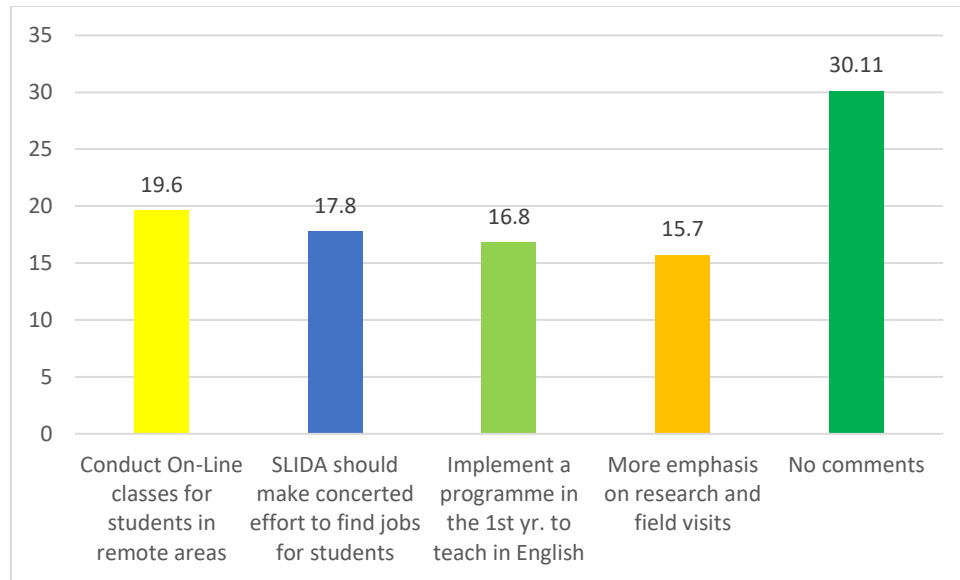
In all five additional comments have been made and are listed below, and which are self-explanatory.

**Table 14. Additional comments**

Additional comments	Response	Percentage	Rank
Conduct On-Line classes for students in remote areas	56	19.6	1
SLIDA should make concerted effort to find jobs for students	51	17.8	2
Implement a programme in the 1 <sup>st</sup> yr. to teach in English	48	16.8	3
More emphasis on research and field visits	45	15.7	4
No comments	86	30.11	5
Total	286	100	-



**Chart 14. Additional comments (in percentage)**



**15. Impact of teacher-student motivation**

According to the students’ survey, the teacher-student motivation has positively impacted the progress of the students at the ATIs in Ampara, Batticaloa and Sammanthurai. Ranking 1<sup>st</sup> is “very much” (88%), followed by “Somewhat” (25%), and “Very little” (6%), in the 2<sup>nd</sup> and the 3<sup>rd</sup> places, respectively. It is believed that positive teacher-student relationship is the cornerstone to success in education. When students feel comfortable and supported in the classroom, they are very likely to excel in learning which results in better educational outcomes. The author has also noted that when students have positive interactions with teachers, they tend to have fewer behavioral issues and lower absenteeism. Data pertaining to this is given below:

**Table 15. Positive impact of teacher-student motivation**

Response	Frequency	Percentage	Rank
Very much impact	235	88	1
Somewhat impact	25	13	2
Very little impact	6	9	3
Not at all impact	0	0	-
Total	268	100	-



**i. Identification and prioritization of the variables (Objectives # 2 & 3)**

The student survey has revealed several important variables in the teacher-student interaction that lead to motivation of the students. These variables have been prioritized in the order of importance and ranked 1 to 4, the former being the highest and the latter being the lowest in priority. Of the four variables identified, two-way communication is ranked first, followed by friendliness, extrinsic motivation, and pedagogy. With the advancement in technology, teachers communicate with their students via emailing, video calls, WhatsApp calls and other apps that include a messaging system, in the developing countries. It is believed that friendliness may be enhanced by teachers by being enthusiastic each day, greetings the students, enquiring after their studies, mutual respect, and praise publicly but reprimand privately. Extrinsic motivation by teachers is largely based on praise and recognition of good work. Pedagogy is the art and science of teaching. Pedagogy in teaching can be signified as a teacher’s understanding of how the students master a subject. Teachers should present the subject to the students in such a way that it may be considered plain and simple to them. Thus, pedagogy warrants classroom interactions between the teacher and students so as to create a considerable impact on the learner’s mind. Teacher empathy is the degree to which teachers understand students’ personal and social circumstances, caring and showing concern in response to students’ positive and negative emotions. In short, the teacher should himself/herself in the “boots” of the student. Data pertaining to this is given below:

**Table 16. Identification of variables**

Important variables for motivation	Frequency/ Nos.	Percentage	Rank
Two-way communication	90	31.5	1
Friendliness	58	20.3	2
Extrinsic Motivation	58	20.3	2
Pedagogy	52	18.2	3
Empathy	18	6.3	4
No comment	10	3.4	-
Total	286	100	-

**ii. Measurement of the extent of the teacher-student interaction (**

The response or mark has been averaged as the study was conducted in three ATIs. The total is further averaged to arrive at the final figure which is 61.6%. This result indicates that the extent of the teacher-student interaction is very good, though not excellent. This data is presented below:



**Table 17. Measurement of the extent of the teacher-student interaction**

Variable	Average Mark assigned	Rank
Friendliness of lecturers	78	1
Empathy	65	3
Personal attention	70	2
Regular feedback	64	4
Remembering students' names	64	4
Availability even after class hours	40	5
PR skills	70	2
Other	0	-
Total	431	-
Average	61.6	-

In addition to the students' survey, the findings of which have been already discussed in this chapter, a parallel survey of thirty lecturers was also conducted in the same ATIs in Ampara, Batticaloa and Sammanthurai as per the Griffin and Hauser method (1995), details of which are discussed below:

**18. Gender**

Of the total number of lecturers interviewed, 36.6% are males and 63.4% are females. According to The Organization for Economic Cooperation and Development (OECD), about 82% of primary school teachers, 63% of secondary school teachers and 59% of tertiary teachers are women. This is attributed to the shorter working hours, term holidays, and the very likelihood of being posted to an educational institution closer home. The shorter working houses and the holidays also mean that they can profitably engage in self-employment such as: private tuition, agriculture or garment production. Also, many teachers have been able to pursue higher education during the spare time and this included male lecturers and teachers, as well. It has also been stated that 59.3 % of lecturers are females and 40.7% are males, worldwide (google.com).

**Table 18. Gender of Lecturers interviewed**

Gender	Nos.	Percentage
Male	11	36.6
Female	19	63.4
Total	30	100



## 19, Duration

According to the survey, 36.8% of the lecturers have been with the ATIs for 6-10 yrs., followed by 30% (1-5 yrs.), 26.6% (11-15 yrs.) and 6.6% (over 15 yrs.), respectively. This data is presented below:

**Table 19. Duration of work at the ATI**

Duration (Yrs.)	Frequency/Nos.	Percentage	Rank
Less than 1	0	0	
1-5	9	30.0	2
6-10	11	36.8	1
11-15	8	26.6	3
Over 15	2	6.6	4
Total	30	100	-

## 20. Motivators

The lecturers were presented with a list of “motivational variables” and the respondents have chosen eight of them in the order of importance, 1 being the most important and 10 being the least important. In the first rank is “Recognition in the job market” followed by employability-rank No.2. Thus, it may be observed that there is a strong connection between the two variables, as the former automatically enhances the employability rate. Pass rate has ranked no.3 and this may be due to the students’ attrition in the 1<sup>st</sup>, 2<sup>nd</sup> and the 3<sup>rd</sup> years resulting in a smaller number of students in the final year. Regular feedback and qualified academic panel have ranked no. 4. The other three have received negligible scores and ranked accordingly. This may be seen in the following table and the chart:

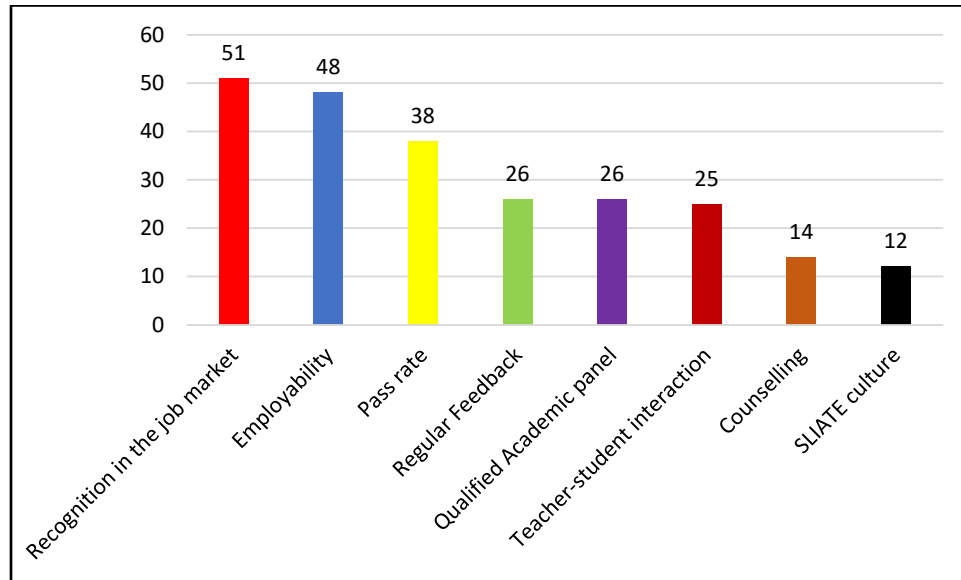
**Table 20. Motivators**

Variable	Frequency/Nos.	Rank
Recognition in the job market	51	1
Employability	48	2
Pass rate	38	3
Regular Feedback	26	4
Qualified Academic panel	26	4
Teacher-student interaction	25	5
Counselling	14	6
SLIATE culture	12	7
Other	0	-



Note: Multiple responses. Total exceeds 30.

**Chart 20. Motivators (Nos.)**



**21. Necessity to motivate students**

The next question was on the necessity to motivate students in the classroom. In this context, all thirty lecturers/respondents have answered in the affirmative. This would involve verbal praise for accomplishment. Personal attention to students is also considered a motivating factor. Further, constructive feedback may also be considered as a motivational tool. However, the writer who is also a lecturer believes that for all these to be effective, there should not be any delay between performance and praise or feedback. Data pertaining to this is given below:

**Table 21. Necessity of motivating students**

Motivation necessary	Response	Percentage	Rank
Yes	30	100	1
Don't know	0	-	-
No	0	-	-
Total	30	100	-



## 22. Adoption of motivational theories, in practice

The questionnaire meant for lecturers also had a question on whether the lecturers ever put into practice, any motivational theories that they are aware of. In this context, the highest number of lecturers namely, 60.2% answered in the affirmative. Responses like “Sometimes” “occasionally”, and “Rarely” were also noted and these represent 26.5%, 6.6%, and 6.6%, respectively. However, there is no way one could verify these claims.

**Table 22. Adoption of motivational theories, in practice**

Response	Frequency/Nos.	Percentage	Rank
Always	18	60.2	1
Sometimes	8	26.6	2
Occasionally	2	6.6	3
Rarely	2	6.6	3
Never	0	0	-
Total	30	100	

## 23. Motivational theories adopted, in teaching

Although the Maslow’s Hierarchy of Needs theory has scored 40.3% and earned the 1<sup>st</sup> rank, serious doubts arise as already highlighted in the literature review, that the adoptability of this theory to higher educational setting is indeed questionable, as it is constructed-around physiological, safety, love and belonging, esteem and self-actualization needs which is considered to have no bearing on the ATI students. In this context, the Personality theory scoring 11.8% and ranking 2<sup>nd</sup> by Kurt Lewin postulates that behavior is the result of the individual and the environment. Whilst this may be a compelling reason, in the light of classroom experiences, the author is of the view that several other factors also influence and modify behavior. Proponents of the Personality theory postulate that individuals develop their personality through, language, customs and traditions, religion, arts and literature. (Dessler 2019). This, the author believes, is a conceivable argument and relates to the experiences in the classroom. The Goal-setting theory by Edwin Loche and Gary Latham is built-around clarity, challenge, commitment, feedback, and task complexity. It is therefore believed that the Goal-setting theory scoring 11.4% and ranking 3<sup>rd</sup> may be applied to the higher educational institutions in order to motivate students. In the Motivation-Hygiene theory, Frederick Herzberg hypothesized that that employee satisfaction has two aspects namely; “hygiene” and motivation.” It is therefore, felt that Herzberg’s theory of motivation is best suited to the production floor and not to higher educational institutions. Although this has scored 11.4% and is in the 3<sup>rd</sup> rank, it is highly doubtful that lecturers utilize this theory in their day to day work, for motivating students.



**Table 23. Motivational theories adopted, in teaching**

Motivational theory	Response/Nos.	Percentage	Rank
Hierarchical theory by Alfred Maslow	28	40.3	1
Personality theory by Kurt Lewin	9	11.8	2
Goal setting theory by Edwin Loche and Gary Latham	8	11.4	3
Motivation-hygiene theory by Fredrick Herzberg	8	11.4	3
Operant behaviour theory by Hammer, Luthans et al.	6	8.6	4
Theory of Needs by McClelland	5	6.1	5
Theory of X and Y by Mc Gregor	5	6.1	5
Expectancy theories by Victor Vroom, and Porter et al.	1	1.4	6
Total	70	100	-

Note: Multiple responses. Total exceeds 30.

## CONCLUSION

The foregoing discussions based on primary research among students and lecturers of the ATIs in Ampara, Batticaloa, and Sammanthurai have established without an iota of doubt that the teacher-student interaction on motivation is positive, as per the Pearson correlation technique. This outcome has been intertwined with many factors that spur the interaction, notably empathy, friendliness, and pedagogy, to mention a few. Some of the approaches adopted in Western countries and those that may be adopted by local academic institutions include setting realistic performance goals and helping students achieve them by encouraging them to set their own reasonable goals. design assignments that are appropriately challenging but achievable with some effort, and place prominence on testing and grading on a regular basis.

## RECOMMENDATIONS

Motivation in teaching results in effectiveness in the classroom and the learning process. A self-motivated teacher is essential for a better learning outcome. Motivation stimulate, concentrate and sustain positive outcome over a sustained period of time. Firstly, the teacher should conduct himself/herself both in the classroom and elsewhere in such a way so as to be considered as a "Role model."- someone who inspires others to emulate his/her good behavior and actions. A good role model has high moral values, confident and knowledgeable in his subjects, and radiate self- confidence. Further, the role model should be hardworking, committed to their call, respectful, and both optimistic and creative. Secondly, the teacher should be liberal in praising the students and in public, whilst reprimanding in private and this reprimanding must be free of bias and venom. Thirdly, comparison of one student with another should not be done, as everyone is unique and possess distinctive qualities and talent. Fourthly,



interaction in teaching is essential and lecturing from beginning to end should be done away with. Fifthly, students do not need sympathy, but empathy and all students, irrespective of their class performance should be treated equally and fairly. Sixth, lecturers should endeavor to master the art and science of teaching [pedagogy] in order to be effective and efficient. Seventh, lecturers who are deficient in their knowledge of English should make a concerted effort to master the language.

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