

# Influence of Lecturers' Competence on Students' Satisfaction of Lecturing: Evidence for Mediating Role of Lecturing Behaviour

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**Abstract** Reviewed literature reveals that how lecturing behaviour mediates the relationship between lecturers' competence and students' satisfaction of lecturing has neither been theoretically argued nor empirically been tested. This paper pursues to investigate empirically how lecturing behaviour could influence the relationship between lecturers' competence and students' satisfaction of lecturing. An integrated, three-construct conceptual model was developed based on the research gap identified for this research paper, and four hypotheses (H<sub>1</sub> to H<sub>4</sub>) were developed through the deductive approach, under which the two general theories (General System Theory and MARS Model of Individual Behavior and Results), arguments, empirical evidence, and logical beliefs of the researcher were used. For the purpose of testing the conceptual model, 100 graduate students who were professional in doing managerial jobs or equivalents reading for MBA in a leading state university in Sri Lanka were considered as respondents through a self-administered survey consisting of three instruments, which possessed validity and reliability adequately. The correlation analysis and multiple regression analysis following the procedure recommended by Frazier, Tix and Barron in 2004 supported substantially the acceptance of the four hypotheses. According to the statistical results of the mediation analysis, lecturing behaviour significantly and fully mediated the relationship between lecturers' competence and students' satisfaction of lecturing.

**Keywords** Lecturer Competence, Lecturing Behaviour, Mediator, Student Satisfaction of Lecturing

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## 1. Introduction

Universities are indispensable to our society as they

provide higher education, which develops informed, educated and specialized human resources that provide human capital for various organizations, which provide various goods and services needed by the people. University students, who may be undergraduates or postgraduates need to be satisfied with the education they obtain from their universities. Students' satisfaction has become an important concept in higher education owing to the reason that students are paying higher tuition fees and increasingly seeing themselves as customers [1]. Furthermore, they have observed that students' satisfaction is commonly used as an indicator of quality by quality assurance agencies and the compilers of rankings and league tables. Attaining students' satisfaction is one of the most critical objectives of all institutions of higher learning [2]. Students can be considered as customers of the service, which is higher education, and therefore they do need to be satisfied. In the United Kingdom, higher education students were considered to be the primary customers of a university, even before they were liable for the payment of 'up-front' tuition fees because they are the direct recipients of the service provided [3]. Customer's satisfaction is the extent to which the customer meets his or her expectations about the relevant product's performance according to famous Marketing Professors, Philip Kotler and Kevin Keller [4]. By deriving possible positive influences of customer's satisfaction explained by Opatha [5], it is possible to argue that a satisfied university student will continue to get the service of higher education being provided by the university, will or may get other qualifications of the same university, will tell his or her friends and acquaintances about the higher education that gave the satisfaction resulting in stimulating others to get that education, will or may give feedback so as to improve the higher education further, and will or may ignore tentative difficulties and fee

changes. In addition to these theoretical arguments, some literature provides empirical evidences to show the importance of the students' satisfaction. Satisfied students tend to achieve higher academic results [6]; are less likely to drop out [7]; become engaged in positive word-of-mouth and collaborate with the institute after their graduation [8]; promote the university by engaging in social networking [9]; and students' satisfaction, retention, and recruitment are closely linked [3]. Thus a satisfied university student is the key driver of demand for the higher education provided by a particular university. This is particularly important when it comes to postgraduate education which is generally not free and considerably expensive. Dissatisfaction of students may have a negative effect on their academic performance too. In the course of providing higher education, particularly postgraduate education to make students happy, lecturing plays a critical role. Universities are in the business of providing higher education, and so it is to be expected that the students' class room experience is a primary determinant of students' satisfaction [10]. Class room delivery is a very important factor of students' meaning of quality education [11]. Hence every university faces a challenge of creating, maintaining, and enhancing the effectiveness of lecturing.

Lecturing occurs in a lecture which is one of the most important teaching methods and has been the most traditional method of teaching in a university. Lecturing involves delivering educational lectures on a particular subject or course that is given to teach people who are students about that subject or course. It is the main method of teaching to students in every university as it can be utilized to give the knowledge, develop the skills and inculcate the attitudes relevant to the subject or course in a face to face situation and in a direct way. As it is the main method, and in some cases only the method being used in teaching in a university, the quantity and quality of learning of the student heavily depend on it.

Lecture is to teach and is more than a speech that is to inform. It is a verbal presentation of information of a certain subject by an expert and it is to teach rather than to inform, and is specific [12]. It is used to transfer information to an audience with controlled content and timing [13]. It can be used to give subject-related knowledge and build appropriate attitudes; it can be made more effective for successful learning with the use of audiovisual tools; a meaningful and organized set of information to a large number of students within a short time can be delivered through this method [14]; and cost per student is low [14]. However this method has been criticized in the way that it has low levels of students' participation, learning initiative, creativity, practice, and feedback [15]. Despite the limitations, it can be organized rigorously so that ideas and principles relate properly one to the other [14]. In view of the large number of students at a particular teaching period, the most

preferred teaching method is the lecture, and despite the fact that new approaches to teaching and learning have been promulgated in higher education institutes, the lecture remains a prominent feature of many courses [16]. Despite of certain weaknesses (in fact some of which can be dealt with by adopting discussion and skill development applications in the class), the lecture will continue to be the main method of teaching in universities.

A study done by Long and Kowang [2] was aimed at determining the impact of lecturers' competencies on students' satisfaction in a private university in Malaysia. It was found that competencies such as knowledge on subject, clarity of presentation, interaction with students, teaching creativity, clarifying learning outcome, class activity, and lecture notes positively and significantly relate to students' satisfaction. Also it was found that lecturers' knowledge of the subject contributes most to students' satisfaction. A study done by Wilkins and Balakrishnan [10] attempted to identify the determinants of students' satisfaction at international branch campuses in the United Arab Emirates (UAE). They found that quality of lecturers, quality and availability of resources, and effective use of technology were most influential in determining whether or not a student at a UAE branch campus was satisfied overall with their institution. Hill, Lomas and MacGregor [11] attempted to find out the students' meaning of quality education and they found that quality of lecturer/class room delivery, quality of feedback given to students during lessons and on assignments, and lecture-student relationships in the class room were the most important factors. A study done by Garcia-Aracil (2009) as in [10] about examining students' satisfaction in 11 European countries revealed that students' satisfaction across different European countries was relatively stable irrespective of the differences in their education systems and factors such as contact with fellow students, course content, equipment and stocking of libraries, teaching quality, and supply of teaching/learning materials were the factors which had the highest level of influence on students' satisfaction. Jasmina, Marta, and Frederic [17] first studied relationship between teaching experience and student satisfaction, and second explored the mediating effect of research intensity in this relationship. They found that teaching experience was a determinant of students' satisfaction, but on the other hand, the lecturers' research intensity acts a negative mediator to explain satisfaction. Taking into account both effects, the total effect between experience and satisfaction was non-significant. Altunisik [18] studied the role of lecturer related factors in students' perceptions and satisfaction in distance learning and the survey was carried out on 465 students attending the MBA distance education program at the Sakarya University of Turkey. Factors related to lecturers' ability to present, communication skills of the lecturer, lecturers' ability to respond students' questions logically and reasonably, and

lecturers' attitude to students play a significant role in the formation of students' satisfaction. Having measured students' satisfaction in a UK university Douglas, Douglas, and Barnes [3] found that the most important aspects were those associated with teaching and learning, while the least important were those associated with the physical facilities. Hyun, Ediger, and Lee [19] studied students' satisfaction on their learning process in active learning and traditional classrooms. They found that active learning pedagogy activities are significant factors that increase students' satisfaction with their individual and group learning processes. Lee, Lee, and Kim [20] did a study that aimed at the instructor's role in on-line education and studied how the instructor affects the learners' satisfaction via the instructor involvement. This study confirmed the relationship between learning-environment qualities, learner satisfaction, and instructor's involvement. Suarman (2015) studied teaching quality and students' satisfaction, and the intermediary role of relationship between lecturers and students of the higher learning institutes. They found that the intermediary role of relationship between lectures and students in teaching quality-student satisfaction relationship was significant. According to Gee [22], there is a positive correlation between lecturers' competencies and students' satisfaction.

In order to make students happy about lecturing, lecturing behaviour plays a critical role. The way a particular lecturer performs the task of lecturing leads to make the relevant students happy or unhappy about the lecturing done by that particular lecturer. Lecturing behaviour is an important phenomenon in explaining how lecturers' competence results in students' satisfaction of lecturing. Lecturing behaviour is taken into consideration as a mediating variable in the linkage between lecturers' competence and students' satisfaction of lecturing.

Thus previous studies did not focus on the mediating effect of lecturing behaviour on explaining the relationship between lecturers' competence and students' satisfaction of lecturing. It reveals that how lecturing behaviour mediates the relationship between lecturers' competence and students' satisfaction of lecturing has not been theoretically argued. Also it reveals that a lack of sufficient evidence for lecturing behaviour as an intervening or mediating variable is in the research archives. Hence, evidence is required to ensure the mediating impact of lecturing behaviour on the relationship between lecturers' competence and students' satisfaction of lecturing. This is needed particularly with reference to MBA students in the Sri Lankan context.

This research intends to fill that gap and provide information for relevant personnel in higher education institutes that can be used to improve students' satisfaction of lecturing. Four specific research questions were formulated:

1. Is lecturers' competence positively and significantly related to students' satisfaction of lecturing?
2. Is lecturers' competence positively and significantly related to lecturing behaviour?
3. Is lecturing behaviour positively and significantly related to students' satisfaction of lecturing?
4. Does lecturing behaviour intervene significantly in the relationship between lecturers' competence and students' satisfaction of lecturing?

The main objective of this study is to investigate empirically how lecturing behaviour could influence the relationship between lecturers' competence and students' satisfaction of lecturing. The four specific objectives of the study are as follows:

1. To empirically investigate whether lecturers' competence is positively and significantly related to students' satisfaction of lecturing.
2. To empirically investigate whether lecturers' competence and lecturing behaviour are related positively and significantly.
3. To empirically investigate whether there is a positive and significant relationship between lecturing behaviour and students' satisfaction of lecturing.
4. To empirically investigate the mediating effect of lecturing behaviour on the relationship between lecturers' competence and students' satisfaction of lecturing.

## 2. Conceptualization of the Variables

### 2.1. Student Satisfaction of Lecturing

As mentioned above, students are customers of education service. Customer satisfaction is the ultimate test for an organization's customer relationship management [23]. Based on observation done by Oliver, [24], customer satisfaction is something that is the product of some kind of evaluation done by the customer. Customer satisfaction is the customer's fulfillment response to a customer experience, or some part thereof [25]. Further according to him, customer satisfaction is a pleasurable fulfillment response, and the satisfaction evaluation can be directed at any or all elements of the customer's experience which include product, service, process, and any other components of the customer's experience. It is generally accepted that satisfaction refers to the pleasure that one gets from a certain product (good or service). As far as this study is concerned, one refers to a graduate student and a certain product refers to lecturing performed by the course or subject lecturer. According to Elliot and Healy [26], students' satisfaction refers to a short-term attitude based on an evaluation of their experience with the education service supplied. Students become satisfied or dissatisfied with various aspects or

domains of his or her education life in a university or higher educational institute such as lecturing, learning facilities, learning materials, students' performance assessments, issuing results, academic and supportive personnel, recreational facilities, canteen and accommodation faculties and others. In this study, the focus is only on lecturing. Students' satisfaction of lecturing is the extent to which the student meets his or her expectations about lecturing. When expectations are met, students' satisfaction occurs, and when not, students' dissatisfaction occurs. Student is a human being who has expectations about learning to be met. Students' satisfaction is the extent to which students of the subject or course are happy because of meeting their learning needs or expectations. Thus, the working definition of the variable of students' satisfaction of lecturing is *the degree of positive or pleasurable state of the student resulting from the evaluation of lecturing he or she received*. Working definition is the result of conceptualization and it is the nominal definition that is the specific definition given by the author of this paper in order to accomplish the objectives of the study by avoiding possible confusion and disagreement among the researchers [27, 28, 29]. The extent of teaching given by the lecturer or the extent of learning that has taken place is a very important expectation that students use in evaluating teaching effectiveness [30, 31].

## 2.2. Lecturer Competence

According to Dessler [32], competence includes demonstrable characteristics of a person, which enable performance of a job. Dessler's definition is more relevant to work setting and it includes characteristics of an employee, which can be shown or proved and they enable the person to perform a certain job. Competency is defined as an individual's capability or ability of performing a certain task or a job successfully [12]. Adapting from this definition, *lecture competence can be defined as the lecturers' capability or ability of performing the task of delivering lectures in the class room successfully*. This is the working definition of the variable *lecturer competence* adopted for this study. Teachers' competencies are the skills and knowledge that enable a teacher to be successful [33]. For many including teachers, the most obvious requirement to be an effective teacher is the content knowledge of the subject [34]. In order to enhance learning and achievement of students, to have a good content knowledge is one of the vital factors and qualities that an effective teacher is required to possess [35]. According to Reynolds and Muijs [36], good content knowledge responses to spontaneous and demanding students questioning. Students expect a teacher to have good content knowledge to be considered effective, which inspires the students' confidence in the teacher [37]. The students want their lecturers to be

knowledgeable [38]. The first component of great teaching that has strong evidence of impact on students' outcomes is content knowledge, and the most effective teachers have deep knowledge of the subjects they teach, and when teachers' knowledge falls below a certain level, it is a significant impediment to students' learning [39]. Knowledge of specialization area and years of teaching experience are major components of quality of teachers [40]. lecturers' competence comes from knowledge and skills acquired through right education and experience. Education includes secured qualifications which are relevant to the subject or course being taught and they are basically academic and professional. Experience includes adequate experience in teaching the subject in terms of years of hand-on-engagement in the subject delivering. Furthermore, extensive engagement in researching and publishing exhibits competence of the lecturer. Own developed teaching materials indicate the lecturers' competence indeed. Wide and deep subject knowledge gets exhibited from the teaching materials developed by the particular lecturer. Thus, it was considered that lecturer competence consists of four dimensions: (1) qualifications (both academic and professional), (2) teaching experience, (3) researching and publishing, and (4) own developed teaching materials.

## 2.3. Lecturing Behaviour

Generally, it is accepted that behaviour of an employee refers to particular activities or actions carried out in performing the job, and behaviours are not results but they lead to them [41, 42, 43, 44]. The term *behaviour* in the literature of organizational behaviour is a broad concept and it includes different types such as task performance (goal-directed behaviors under the individual control that support organizational objectives), organizational citizenship (behaviors that extend beyond the employee's normal job duties), and counterproductive work behaviors (voluntary behaviors that are potentially harmful to the organization's effectiveness), joining and staying with the organization, and maintaining work attendance [41]. As far as this study is concerned, the focus is on task performance, particularly lecturing performance. The working definition assigned to the variable of lecturing behaviour is *the way lecturer acts in relation to the task of delivering lectures in the class room*. The pedagogical cycle developed by Arno Bellack in 1966 describes the interaction between the teacher and students and the four steps of the cycle are (1) structure (providing information, providing direction and introducing the topics), (2) question (asking questions from the students), (3) respond (answering the questions by students), and (4) react (providing feedback to the students' answer) [45]. Further they define effective teaching as the kind of teaching that enables students to learn and achieve; and specify that the components that can be found in an

effective academic structure include objectives, review, motivation, transition, clarification, examples, directions, enthusiasm, and closure [45]. Teaching clarity, exhibiting enthusiasm, showing task oriented, and engaging in creative teaching are effective behaviours of university instructors [46]. Effective teachers use diverse resources to plan and structure engaging learning opportunities [47]. Case studies [48], critical incidents [49] and skill builders [50] are three main teaching techniques for management education, particularly teaching Human Resource Management (HRM). A component of great teaching is quality of instruction which has strong evidence on students' outcomes, and it includes elements such as effective questioning, reviewing previous learning, providing model responses for students, giving adequate time for practice to embed skills securely, and progressively introducing new learning (scaffolding) [39].

### 3. Conceptual Model

An integrated, three-construct conceptual model or theoretical framework was developed based on the research gap identified for this research paper. Three constructs or abstract variables considered were: lecturers' competence, lecturing behaviour and students' satisfaction of lecturing. Students' satisfaction of lecturing was considered as the dependent variable because it was the variable in which the researcher was primarily interested. lecturers' competence was considered as the independent

variable because it was the variable which directly influenced the dependent variable *student satisfaction of lecturing*. Lecturing behaviour was considered as the mediating variable because of the reason that the impact of lecturers' competence on students' satisfaction of lecturing occurred through lecturing behaviour. The schematic diagram of the conceptual model is given in Figure 1. Two general theories were utilized to support the network of relationships among the three variables. The first general theory was General System Theory developed originally by Bertalanffy that explains how something can be materialized through taking inputs, processing and giving outputs [51]. This theory provides a strong support for the framework given in Figure 1. While lecturers' competence is treated as an input, lecturing behaviour is treated as a throughput or process and students' satisfaction of lecturing is treated as output. The second general theory was MARS Model of Individual Behavior and Results developed by McShane et al [41] in which M stands for motivation, A stands for Ability, R stands for Role perceptions, and S stands for situational factors. According to the theory, these four factors lead to behaviour and results. Here lecturers' competence is the ability, lecturing behaviour is the behaviour, and students' satisfaction of lecturing is the result. Thus, the three variables of this study were positioned in Figure 1, i.e. lecturers' competence as the predictor (independent) variable, lecturing behaviour as the mediating variable, and students' satisfaction of lecturing as the outcome (dependent) variable.

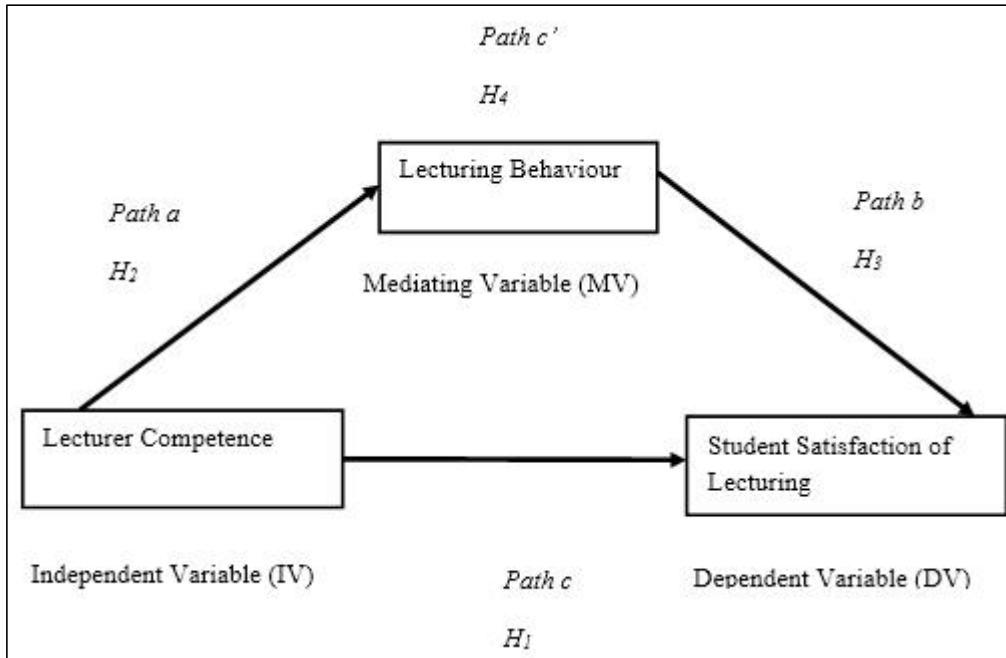


Figure 1. Conceptual Model of the Study

### 3.1. Hypotheses Development

Four hypotheses ( $H_1$  to  $H_4$ ) were developed through the deductive approach to test the relationships among the three variables in the conceptual model. Under the deductive approach, the above mentioned two general theories (General System Theory and MARS Model of Individual Behavior and Results), arguments, empirical evidence, and logical beliefs of the researcher were used.

#### **Hypothesis 1**, Relating to Lecturer Competence and Student Satisfaction of Lecturing

Content knowledge possessed by the university lecturer has strong evidence on students' outcomes and it makes great teaching [39]. The content knowledge of the subject being taught by the teacher is the most obvious requirement to be an effective teacher [34]. Graduate students in business management want their lecturers knowledgeable in the courses they teach [38]. lecturers' knowledge significantly relates to students' satisfaction in positive way [47]. Students tend to be satisfied when they perceive that their lecturer is highly competent. lecturers' competence is indeed an input used or a trait possessed by the lecturer and it will result in making students satisfied. Accordingly it is hypothesized that:

*H<sub>1</sub>: Lecturer competence is positively and significantly related to student satisfaction of lecturing.*

#### **Hypothesis 2**, Relating to Lecturer Competence and Lecturing Behaviour

Competencies are capabilities of superior performers [52] implying that lecturers' competence leads to superior performance of lecturing. Quality of instruction delivered by the university lecturer makes great teaching [39]. Teachers cannot help children learn things if they themselves do not understand [53]. Behind even the most brilliant teaching performance, there is usually hard, honed, practiced skill at work [45]. It is assumed that mastering the course content adequately by the instructor influences clarity which is an attribute of effective lecturing [54]. Knowledge and skills acquired by the lecturer from education and experience in teaching, researching, and publishing enables him or her to perform successfully the work of lecturing which is the core duty of university teacher. Lecturer cannot make students learn if he or she is not capable of teaching. Educational competence of a university lecturer produces indicators of behaviour such as acting as an active facilitator and contributor to students' growth and adapting the content, methods and escalation of teaching to the intellectual and absorption capacity of students [55]. lecturers' competence is viewed as ability or an input and lecturing behaviour is viewed as an act or action or activity. It is argued that right action can be made by using right ability. Thus right ability leads to right action assuming that there are no moderators or interaction variables which will cancel the relationship between the former and the latter. Thus,

second hypothesis for this study is formulated as follows:

*H<sub>2</sub>: Lecturer competence has a significant positive influence on lecturing behaviour.*

#### **Hypothesis 3**, Relating to Lecturing Behaviour and Student Satisfaction of Lecturing

Quality of instruction which includes effective questioning, reviewing previous learning, providing model responses etc has strong evidence of impact on students' outcomes such as students' satisfaction [39]. When the university lecturer acts as an active facilitator and contributor to students' growth, the students become satisfied [55]. Consistency of teaching quality is a very important area for students' satisfaction [3]. Right lecturing behaviour makes students happy about lecturing. Lecturing behaviour is considered as an activity or a throughput, and students' satisfaction of lecturing is considered as its output. Hence, right lecturing behaviour results in students' satisfaction of lecturing. Accordingly, the third hypothesis of this study is formulated as:

*H<sub>3</sub>: Lecturing behaviour and student satisfaction of lecturing are positively and significantly linked.*

#### **Hypothesis 4**, Relating to Mediating Impact of Lecturing Behaviour on the Relationship between Lecturer Competence and Student Satisfaction of Lecturing

Mediating variable is one that surfaces between the time the independent variable starts operating to influence the dependent variable and the time its impact is felt on [56]. It is logically arrived at that lecturers' competence has a positive effect on students' satisfaction of lecturing through lecturing behaviour. Thus, lecturers' competence is the independent variable while students' satisfaction of lecturing is the dependent variable. Lecturing behaviour plays the mediating role. lecturers' competence, lecturing behaviour, and students' satisfaction of lecturing are the predictor, mediating variable, and outcome respectively. It is believed that lecturing behaviour surfaces between the times lecturers' competence operates to affect students' satisfaction of lecturing and its impact on students' satisfaction of lecturing. Thus, lecturing behaviour has a temporal quality and it works as a function of lecturers' competence and helps to explain how lecturer competence has an influence on the variability of students' satisfaction of lecturing. This logical belief directed to formulate the final hypothesis of this study:

*H<sub>4</sub>: Lecturing behaviour significantly mediates the relationship between lecturer competence and student satisfaction of lecturing.*

## 4. Methods

### 4.1. Study Design

The hypothetico-deductive method which is a typical version of the scientific method [56] was utilized to

achieve the four objectives of the study. Purpose of the study was analytical and predictive as it tested hypotheses. Extent of researcher interference was minimal because studying the three variables was done when they normally occurred without manipulating or controlling any variable. Study setting was non-contrived as the study was carried out in the natural environment without creating an artificial environment. Research strategy was survey as it involved collecting primary data through the use of a questionnaire. Unit of analysis was individual: graduate student reading for Master of Business Administration (MBA). Time horizon was cross sectional as data collection was done at one point in time to answer the research questions.

For the purpose of testing the conceptual model, graduate students reading for MBA in a leading state university were considered. There were 100 graduate students who enrolled for MBA 2019 batch and all the graduate students were utilized to respond to the questionnaire after they had completed a core course titled Human Resource Management. All MBA students were professionals doing managerial or equivalent jobs. Our society depends on specialized institutions and organizations to provide the goods and services we desire, and these organizations are guided and directed by the decisions of one or more individuals designated as "Managers" [57]. Managers are an indispensable category of employees for any organization to accomplish its goals as they are the personnels who do decision-making which is the essence of management and get works done through other employees. Without right managers, there are no survival or sustainable growth of organizations in both private sector and public sector. The success of every organization depends heavily on the ability of its managers [58]. Management is a universal consideration, and almost every problem faced by organizations or nations can be at least partially solved through effective and efficient management practices. Postgraduate

Management Education refers to teaching current managers so as to develop them and thus becomes critical for organizational development. Hence, MBA students were taken as the respondents for the purpose of testing the four hypotheses. The course MMS 5202 Human Resource Management was considered as it was a core subject of MBA, a compulsory subject, and the attendance of the graduate students to the lecture series was very high.

#### 4.2. Instruments

Three instruments were developed by the researcher for the three variables under the study. They were multi-item interval scales, and the question statement items were developed from the elements and dimensions identified from the acts of conceptualization and operationalization of the variables. Table 1 presents the dimensions and elements of the variables which were used to develop individual measurement instruments. Accordingly lecturers' competence has four sub constructs (called here as dimensions) which include qualifications, teaching experience, researching and publishing, and own developed teaching materials. The construct *lecturing behaviour* has six dimensions including structuring, questioning, responding, clarifying, motivating, and engaging students in applications while the construct *student satisfaction of lecturing* has three dimensions such as volume of learning, interesting nature of learning, and nature of learning. The responses to the individual measurement instruments were captured on a 5-point Likert scale which had points ranging from 1 to 5 as strongly disagree (1), disagree (2), indifferent (neither agree nor disagree) (3), agree (4), and strongly agree (5) respectively. The final questionnaire had 35 question statements combining the three individual measurement instruments. One question item was about the graduate students' educational background and another one was about the gender.

**Table 1.** Dimensions and Elements of the Three Variables for Development of Measurement Instruments

<b>1) Lecturer Competence-10 Question Statements</b>	Sources: [32, 34, 37, 38, 39, 40, 45]
<b>Dimensions</b>	<b>Elements</b>
Qualifications	Right academic qualifications, Doctorate in the field of lecturing, and Relevant professional qualifications
Teaching Experience	Years of experience in teaching the relevant subject, and Being well-experienced to teach
Researching and Publishing	Degree of engagement in extensive research in the field of lecturing, and Degree of publishing extensively in the field of lecturing
Own Developed Teaching Materials	Having own developed materials to teach, and degree of wide and deep subject knowledge exhibited in own developed teaching materials
<b>2) Lecturing Behaviour-15 Question Statements</b>	Sources: [39, 41, 42, 45, 46, 47]
Structuring	Giving objectives of the current lecture at the outset, Degree of being well-organized, and Using own framework/model to teach an issue rather than others most of the time
Questioning	Securing student participation by directly asking questions, and Encouraging students to ask questions
Responding	Answering questions asked by the students adequately, and Giving feedback to answers given by students
Clarifying	Defining concepts and principles clearly, Teaching in the way that makes students understand, and Not using abstract and difficult language in lectures without clearly explaining
Motivating	Providing real-life and personal examples, Speaking in the way that the student could hear clearly, and Maintaining motivation during lectures
Engaging Students in Applications	Using case studies and critical incidents in the class, and Doing skill builders or exercises in the class to develop skills
<b>3) Student Satisfaction of Lecturing-10 Question Statements</b>	Sources: [1, 2, 3, 10, 26, 30, 31]
Volume of Learning	Learning a lot, Feeling satisfied with the content of the course, and Positive attitude about the course
Interesting Nature of Learning	Feeling happy about learning, Lucky to have the teaching given by this lecturer, and Pleasure at the end of the course
Nature of Lecturing	Good, Not boring, Very interesting, and Not dissatisfied

#### 4.3. Validity and Reliability of the Instruments

Content validity is an essential type of validity for any instrument measuring any concept and it refers to the extent the instrument includes an adequate and representative set of items that tap the concept [56]. One question statement was developed for each of the elements identified from the literature and therefore each of the three instruments contained an adequate degree of content validity. Factor analysis was used in order to measure the construct validity of the instruments, and it is a multivariate technique that confirms the dimensions of the concept that have been operationally defined, as well as indicating which of the items are most appropriate for each dimension (establishing construct validity) [56]. Under the KMO & Barrett's Test of Sphericity, the three instruments (lecturer competence (.829), lecturing behaviour (.907), and student satisfaction of lecturing (.87) had Kaiser-Meyer-Olkin (KMO) values above .5 ( $p > 0.05$ ), which ensured that the sample size was adequate to perform the Factor Analysis [59]. All the items used to measure dimensions of the three variables contributed to measure the relevant concepts by above 50% (cumulative %). According to the Principal Component Analysis, (total variance explained) factors together in each instrument explained high variances: lecturer

competence-57.180%; lecturing behaviour -50.101%; student satisfaction of lecturing-58.000%. This total variance ensured that all the items in the three instruments performed well. Thus, these results show that the construct validity of the instruments was established. Furthermore, the construct validity of the instruments used for this study was ensured by the fact that the correlation analysis supported the hypotheses formulated linking the relationships among the independent, dependent, and mediating variables.

In order to get the interitem consistency reliability of the instruments, the Cronbach's Coefficient Alpha was used [60]. In respect of the instrument measuring lecturers' competence, the first run of the reliability test produced a Cronbach's alpha of .908. There were no items that were negatively correlated. Also there were no items which had alpha near to .1 or .2 when considered Corrected Item-Total Correlation. The results suggested that the instrument for lecturer's competence possessed a high degree of interitem reliability. Similarly the other two instruments measuring lecturing behaviour and students' satisfaction of lecturing had high degrees of interitem reliability (.923 and .902). Furthermore, Correlations Between Forms and Guttman Split-Half Coefficients for the instruments measuring lecturers' competence, lecturing behaviour, and students'



satisfaction of lecturing were respectively .750, .834; .708, .826; and .810, .895.

**4.4. Data Analysis Techniques**

Statistical Package for Social Sciences (SPSS) was used to analyze the primary data collected from the respondents. The Pearson Product-Moment Correlation Technique was utilized to test the relationships among the variables which were with regard to the three hypotheses numbering H<sub>1</sub> to H<sub>3</sub>. As these three hypotheses were directional, the ‘one-tail’ test was performed. The fourth hypothesis was with regard to mediating effect of lecturing behaviour on the relationship between lecturers' competence and students' satisfaction of lecturing. Multiple Regression Analysis and procedures which were recommended by Frazier, Tix and Barron [61] were adopted to test the fourth hypothesis.

**5. Results**

It was possible to collect data from 95 MBA students. The response rate was 95% which is a very high response rate. Among the respondents, males were 47 while females were 42. When considered the background of the MBA students management related, engineering, science, arts, accounting, and other were respectively 48, 7, 14, 6, 12, and 8. Hence majority of the respondents had a background of ‘management related’. For the study, four hypotheses were formulated and the hypothesized relationships are shown in Table 2.

**Table 2.** Hypotheses (from H<sub>1</sub> to H<sub>4</sub>) of the Study

No	Hypothesized Relationship	H <sub>1A</sub>
1	Lecturer Competence: Student Satisfaction of Lecturing	H <sub>1</sub> (+)
2	Lecturer Competence: Lecturing Behaviour	H <sub>2</sub> (+)
3	Lecturing Behaviour: Student Satisfaction of Lecturing	H <sub>3</sub> (+)
4	Lecturing Behaviour: Relationship between Lecturer Competence-Student Satisfaction of Lecturing	H <sub>4</sub>

According to Table 2, H<sub>1A</sub> stands for the alternative hypothesis and + stands for a positive relationship. The four hypotheses have been postulated to be directional and

positive in nature. The results of Pearson’s Product Moment Correlation that was used to test the null hypotheses for the three hypotheses (from H<sub>1</sub> to H<sub>2</sub>) are given in Table 3. The level of significance is .05 as a 95 percent confident level is desired.

**Table 3.** Pearson Correlation Coefficients for all the Variables

No	Variables	Coefficient	Sig
1	Lecturer Competence and Student Satisfaction of Lecturing	.362**	.000
2	Lecturer Competence and Lecturing Behaviour	.426**	.000
3	Lecturing Behaviour and Student Satisfaction of Lecturing	.680**	.000

\*\*p < .01 n = 95

According to Table 3, the correlation coefficients of lecturers' competence and students' satisfaction of lecturing, lecturer competence and lecturing behaviour, and lecturing behaviour and students' satisfaction of lecturing were significant at p < .01 and therefore the null hypotheses pertaining to the three alternative hypotheses formulated for the study were rejected. The correlation analysis supported substantially to accept the three hypotheses. It is empirically and statistically evident that lecturers' competence has a positive relationship with students' satisfaction of lecturing; lecturers' competence has a positive relationship with lecturing behaviour; and lecturing behaviour and students' satisfaction of lecturing are positively related.

The fourth hypothesis of the study was with regard to the mediating effect of lecturing behaviour on the relationship between lecturers' competence and students' satisfaction of lecturing. This hypothesis was tested by using Multiple Regression as recommended by Frazier, Tix and Barron [61]. According to their procedure, there are four steps (performed with three regression equations) for the purpose of establishing a mediating effect of a variable on the relationship between a predictor variable and an outcome variable. The four steps are: to show that the predictor is significantly related to the outcome (step 1); to show that the predictor is significantly related to mediator (step 2); to show that the mediator is significantly related to the outcome variable (step 3); and to show that the strength of the relationship between the predictor and the outcome is significantly reduced when the mediator is added to the model (step 4).

**Table 4.** Testing Mediator Effect of Lecturing Behaviour on the Relationship between Lecturer Competence and Student Satisfaction of Lecturing

Tested Steps	Regression Coefficient	Sig.
<b>Step 1 Path c</b> Outcome (Student Satisfaction of Lecturing), Predictor (Lecturer Competence)	0.607	0.000
<b>Step 2 Path a</b> Predictor (Lecturer Competence), Mediator (Lecturing Behaviour),	0.914	0.000
<b>Step 3 Path b</b> Mediator (Lecturing Behaviour) and Outcome (Student Satisfaction of Lecturing)	0.532	0.000
<b>Step 4 Path c'</b> Predictor (Lecturer Competence), Mediator (Lecturing Behaviour), Outcome (Student Satisfaction of Lecturing)	0.502	0.000

The relevant results of the regressions performed are given in Table 4. The statistical results of performing the first step produced a regression coefficient, i.e. 0.607 of the effect of the predictor (lecturers' competence) on the outcome (students' satisfaction of lecturing). This value was statistically significant at .01 (.000). The first requirement was met. The performance of second step resulted that regression coefficient value associated with the relationship between the predictor (lecturers' competence) and the mediator (lecturing behaviour) was .914 which was significant at .01 (sig.  $p < 0.000$ ). The second requirement too was met. After performing the third step, the regression coefficient value was .532 which was significant at .01 showing that the mediator was significantly related to the outcome. The third requirement was met. Thus, it was established that zero-order relationships among the variables exist [62]. Hence the step four was performed. A multiple regression analysis was done with the predictor (lecturers' competence) and the mediator (lecturing behaviour) predicting the outcome (students' satisfaction of lecturing). As the effect of the mediator (lecturing behaviour) remains significant after controlling for the predictor (lecturers' competence) ( $B = .502$ , sig.  $p < 0.000$ ), it is evident that some form of mediation exists. The results show that the predictor is no longer significant when the mediator is controlled ( $B$  coefficient associated with the relationship between lecturers' competence and students' satisfaction of lecturing was .148, sig.  $p > .294$ ). Hence, the mediation played by the mediator (lecturing behaviour) is full. Thus, according to the results of the mediation analysis, the fourth hypothesis is accepted.

## 6. Discussion and Conclusions

In this study, a conceptual model was developed based on two general theories, theoretical arguments, previous empirical evidence, and logical belief of the researcher. Four hypotheses were formulated and they were tested in a postgraduate teaching setting-MBA programme. The first objective of the study was to empirically investigate whether lecturers' competence is positively and significantly related to students' satisfaction of lecturing. The statistical results show that lecturers' competence is positively and significantly related to students' satisfaction of lecturing. In other words, the higher the lecturers' competence is, the higher the students' satisfaction of lecturing will be. As theorized, lecturers' competence predicts student satisfaction of lecturing. Hence it is very important for the university that is responsible for right education given to its students, particularly postgraduate students to ensure that the lecturer for a course is indeed capable. In this regard selection of candidates for the post of lecturer needs to be concerned with making the choice of the most appropriate

person from the pool of applicants recruited to fill the relevant job vacancy. Basically 'the most appropriate' means becoming the best in terms of competence. Qualifications, experience, researching and publishing, and own developed teaching materials characterize lecturers' competence.

The second objective of the study was to empirically investigate whether lecturers' competence and lecturing behaviour are related positively and significantly. It was statistically evident that both lecturers' competence and lecturing behaviour are related positively and significantly. When the lecturers' capability or ability of performing the task of delivering lectures in the class room successfully gets increased, the way lecturer acts in relation to the task of delivering lectures in the class room becomes more effective. The more competent the lecturer is, the more effective the lecturing behaviour of that lecturer is. The third objective of the study was to empirically investigate whether there is a positive and significant relationship between lecturing behaviour and students' satisfaction of lecturing. It was empirically found that a positive and significant relationship exists between lecturing behaviour and students' satisfaction of lecturing. When the particular lecturer engages in lecturing behaviour in the right way (or effectively) students who receive that lecturing become satisfied.

The fourth objective of the study was established to fill the gap in the empirical knowledge, i.e. lack of sufficient evidence for lecturing behaviour as an intervening or mediating variable in the research achieves. The fourth objective was to empirically investigate the mediating effect of lecturing behaviour on the relationship between lecturers' competence and students' satisfaction of lecturing. The statistical results of the mediation analysis revealed that lecturing behaviour significantly and fully mediated the relationship between lecturers' competence and students' satisfaction of lecturing. Lecturing behaviour is a significant, full mediator on the link: lecturers' competence and students' satisfaction of lecturing. The major contribution to the existing body of knowledge that is made by this study is this empirical evidence as the previous studies did not focus on the mediating effect of lecturing behaviour on explaining the relationship between lecturers' competence and students' satisfaction of lecturing. An important implication of this finding is that any university that needs to (of course it is supposed to) make students satisfied about lecturing, particularly with reference to MBA students in the Sri Lankan context, should make sure that lecturing behaviour occurs in the right way. The meditational effect of lecturing behaviour in which lecturers' competence leads to students' satisfaction of lecturing through lecturing behaviour is full, not partial. Thus, lecturing behaviour works fully as a function of lecturers' competence operating in a situation, and helps to conceptualize and explain the influence of lecturers' competence on students'

satisfaction of lecturing.

Lecturing behaviour plays a significant full role in explaining the influence of lecturers' competence on students' satisfaction of lecturing. It substantiates that right competence of lecturer leads to make students satisfied with lecturing through right lecturing behaviour. Six dimensions were considered in the construct of lecturing behaviour and they essentially need to be focused on selecting, training, evaluating and rewarding lecturers. These six dimensions were structuring, questioning, responding, clarifying, motivating, and engaging students in applications. It is possible for the university to take into account these dimensions as essential specific behaviours or actions under the concept of lecturing behaviour. In the course of improving students' satisfaction of lecturing, the university (relevant responsible personnel) will need to ensure right lecturers' competence and right lecturing behaviour.

The developed conceptual model which was empirically tested will be an original contribution to the existing body of knowledge of university lecturing. This study was limited to MBA students reading for a course in a leading state university in an economically emerging country. Hence generalizability of the findings of this study may be limited. All the data were taken from the students through self-survey. Hence verifying the results through method or perceptual triangulation can be done in a future research. The researcher recommends that future local and global studies should explore lecturers' competence, lecturing behaviour and students' satisfaction of lecturing in different courses within MBA programme, different programmes of studies other than MBA, and different state universities. Researching in respect of various aspects of lecturing in educating managers and professionals is to be promoted, particularly in Sri Lanka as management education including HRM education is indispensable [63].

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