



**ADAPTING THE TRIADIC RECIPROCAL DETERMINISM OF  
SOCIAL COGNITIVE THEORY TO STUDY STUDENT  
PERFORMANCE: COMPARATIVE STUDY  
BETWEEN TUTORING AND WITHOUT IT  
FOR ACCOUNTING SUBJECT AT  
MAE FAH LUANG UNIVERSITY**

**ANCHITTHA NANAN**

**MASTER OF BUSINESS ADMINISTRATION  
IN  
ENTREPRENEURIAL MANAGEMENT**

**SCHOOL OF MANAGEMENT  
MAE FAH LUANG UNIVERSITY**

**2015**

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2015

EXAMINATION COMMITTEE

.....CHAIRPERSON

(Chatrudee Jongsureyapart, Ph. D.)

.....ADVISOR

(Chai Ching Tan, Ph. D.)

.....EXAMINER

(Assoc. Prof. Chew-Shen Chen, D. B. A.)

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Anchittha Nanan

<b>Independent Study Title</b>	Adapting the Triadic Reciprocal Determinism of Social Cognitive Theory to Study Student Performance: Comparative Study between Tutoring and Without It for Accounting Subject at Mae Fah Luang University
<b>Author</b>	Anchittha Nanan
<b>Degree</b>	Master of Business Administration (Entrepreneurial Management)
<b>Advisor</b>	Chai Ching Tan, Ph. D.

## **ABSTRACT**

This research adapts the concept of social cognitive theory, reflected specifically through the triadic reciprocity determinism that attempts to explain the roles of socio-cognitive mechanisms in the influence of the student behaviors towards subject learning, by focusing on only “Accounting”, as the focus, in both normal classrooms and in tutored environment. Specifically, the purpose of this research is to study the roles played by the personal and situational aspects of motivation as well as the teaching quality factor which adapts the SERVQUAL (Service Quality) concept of Parasuraman, Zeithaml and Berry (1988), towards performances and self-efficacy attitude of the students, within the comparative context between tutoring and without it, by the use of “Accounting” as the subject of focus, and by focusing on only the students who have had attended the basic “Accounting” subject at Mae Fah Luang University.

The conceptual model, which adapts the triadic determinism framework of social cognitive theory of Bandura (1989; 2005), demonstrates the roles of situational and individual, intrinsic motivation of the students by stressing on three cognitive motivation factors, namely personal achievement attitude, personal context and learning environment stimulation, and also the teaching service quality-enabled socio-learning environment represented by the empathy, responsiveness, reliability, assurance and tangibles of the so-called service quality (SERVQUAL, cf. Parasuraman, Zeithaml, & Berry, 1988). Thus, teachers should not neglect that, apart from their treatment-oriented efforts to mend the weaknesses of the students through teaching service quality, for instance, they should actively attempt to arouse the working of the intrinsic motivation, i.e., the self-achievement regulated agency, of the students. This is important as this intrinsic motivational virtue of the student, no doubt, can determine how the student can cope with adversity of the learning environment, and allow them to focus without deterrent. Thus, this research provides the social cognitive driving forces of the student learning.

There are many significant findings in this research. For instance, although the tutored and non-tutored groups of students show no differences in the motivational attitudes, i.e. personal achievement attitude and the situational aspect of personal context and learning environment stimulation, those of tutored do have lower level of agreeableness towards the reliability and assurance aspects of the classroom quality. In other words, the students who engage in the tutoring are motivated by the deficiency in the ways the instructors guide about problems solving, and the dependency to guide on the examination, to review the important concepts of the subject, and enable the students to advance their subject knowledge, and also by their lower level of confidence over the instructors over the subject material provided and their knowledge.

In sum, although this research studies the students' perceived performances and self-efficacy attitude in tutored and non-tutored classroom environments, by the use of only one subject known as "Accounting," it can be inferred, from the theoretical and analytical argument perspectives, successful institutions should recognize that sustained emphasis on students' cognitive and social development is foundational to their learning, persistence and completion. In other words, according to Bridglall (2013), high achieving institutions do not leave learning to chance but should actively engage in the conceptualization, implementation and evaluation of activities (i.e. reflected by the different facets of the instruction service qualities, as empathy, responsiveness, reliability, tangibles, and assurance) that promote student learning. To be specific, this can take the form of assessing students' skills in particular domains; placing them in appropriate courses; and providing assistance that enables them to learn and develop, including offering constructive feedback and monitoring their progress, particularly in their freshman year. Additionally, successful institutions not only assess, on a continuing basis, the impact of their teaching practices (i.e. SERVICE QUALITY) on student learning, but also should recognize that performance is self-reinforcing, which this research proves that the higher the performance of the students, the better they feel confident that they can do much better in the future, for different subjects, and thus this research provides a structured look to enable the students to become more agile in dealing with diversity and uncertainties, as intended by self-efficacy.

**Keywords:** Intrinsic Motivation/Instructor's teaching Service Quality/Tutoring Service/Student Performance/Self-efficacy Attitude/Mae Fah Luang University/Triadic Reciprocal Determinism/Social Cognitive Theory

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background to the Research

This research aims to study how students, tutored and non-tutored, react to the accounting subject. The ultimate goal is to study the contributing roles of tutoring and the personal motivational attitude towards the subject performance and the formation of a general self-efficacy attitude in learning, by using accounting as a case subject for the empirical research effort. Accounting subject is chosen as it is a compulsory course for students pursuing different majors, i.e. logistics and supply chain management, in the school of management. In addition, students usually perceive accounting subject as rather difficult partly because of the systematic but integrative mathematical skills needed to perform, for instance, balanced sheet and cost management that focuses on capacity utilization, which the students perceive as technical in nature as compared to other subjects. “The students are also required in the course to provide financial analyses on nearly any topic imaginable – whether to invest in different types of securities, select a price point for a new product, replace manual labor with automation, and so on” (Bragg, 2010).

In the aspect of tutoring, as shown in Cohen, Kulik, and Kulik (1982), tutoring is a useful means to improve students' academic achievement. To gain competitive edge over other students, or for the purpose of individual performance improvement, students have continued to engage in tutoring. This trend has made tutoring to be generally known as a shadow education system (Bray, 1999), functioning as complementary to the mainstream education (Bray & Lykins, 2012), which is expanding at an alarming rate in Thailand as well as in the world, as shown by the following statistics data presented by the Asian Development Bank in 2012 (Bray & Lykins, 2012).

Armenia: Some 47% of secondary students are involved with 2-3 subjects of private tutors, at 30-35 averaging hours per week (United Nations Development Program, 2007), Azerbaijan: Some 93% of students have received shadow education (Silova, Iveta, & Kazimzade, 2006), and Thailand : It was quoted as “The Nation, a national newspaper (Editorial 2011) that there was a lack of official statistics but the cram schools had proliferated and were consuming fees of around 7 billion Baht” (Bray & Lykins, 2012, p. 7).

Tutoring is informal, or complementary, or shadow, because, according to the normative worldview, education is generally perceived as a public good which should be provided by the government (Hartmann, 2007). By the nature of “shadow,” as argued in Bray (1999), the role of tutoring has received negligible public attention. Nevertheless, whether “shadow” or “informal”, tutoring programs can shape or can be shaped by the formal or mainstream education system (Hartmann, 2007), i.e. in curriculum design.

It is also generally believed that those students that are benefited by the tutoring will excel better than those that have not being able to engage in tutoring. Numerous reasons are cited in the Asian Development Bank report in 2012 (Bray & Lykins, 2012) which stimulate the motivation to engage in tutoring services. For instance, investment in supplementary education or tutoring service can generate strong returns such as better opportunity to enter reputable university, tutoring serves as complementary function to the generally known state of poor quality in the mainstream schooling systems, students engaged in tutoring as norm of cultural influence such as in China, partly to maintain advantages of career prospects in comparison to others. There are also demographics oriented reasons, i.e. family with few children tend to receive more tutoring than otherwise (Liu, 2012).

Apparently from what are stated above in Asian Development Bank report 2012 (Bray & Lykins, 2012; Liu, 2012), there are two apparent clusters of reasons for students engaging in tutoring at the secondary or pre-university level education, namely the motivation at individual level and the quality factors of the mainstream education and the tutoring complementary. Nevertheless, research that studied “how these two factors influence the student perceptions in the comparative differences between the mainstream classes and supplementary tutoring activities” is still vastly

lacking, and this research thus takes this as opportunity to attempt to study the student perceptions at the university level, by taking accounting as its subject focus.

Theoretically, this research would lead to identification of a structured theoretical framework that embraces key determinants to influence student performances to help them develop self-efficacy attitude for success. Practically, it establishes the key awareness points for the students, the teachers (both tutored and the mainstream education), and the university to perform their respective duties effectively. For instance, the teacher could know what and how to improve in the teaching or supervision environment, as well as to work on stimulating the intrinsic motivation of the students.

Besides, the research steps taken for this research would provide the groundwork for further research, for instance, as an attempt to shift the mindset of the markets, such as to shift the understanding of the supplementary tutoring away from “shadow education” (Bray & Lykins, 2012) or “informal market” (Hartmann, 2007) to its inherited potential and benefits that stand up from the mainstream. To do that, unless more insights or understandings are gained about the role played by tutoring, it would still lack the thrust to stimulate creativity in making tutoring truly alive, by, for instance, embracing the diversified choices of educational products available in the markets (Heyneman, 2011), as seamless functional integration to deliver a total educational system, in order to transcend the image of being a shadow to the mainstream education.

## 1.2 Research Objective and Hypotheses

According to Locke, Spirduso, and Silverman (2000), a research objective statement indicates not only what one intends to accomplish in a research study but also captures the rationale. Further in Creswell (2003), a proper research objective statement should clearly states the variables involved, which refers to a characteristic or attribute of the phenomenon studied.

The purpose of this research is to study the roles played by the personal and situational aspects of motivation as well as the teaching quality factor which adapts

the SERVQUAL (Service Quality) concept of Parasuraman, Zeithaml and Berry (1988), towards performances and self-efficacy attitude of the students, within the comparative context between tutoring and without it, by the use of “Accounting” as the subject of focus, and by focusing on only the students who have had attended the basic “Accounting” subject at Mae Fah Luang University. This research objective will be addressed by the adapting the triadic determinism framework of social cognitive theory.

Social cognitive theory, introduced by Bandura (1986), has been acknowledged as a pioneering theory in the ability to explain human psychosocial functioning of the stakeholders in a social context, i.e. education, and this research exploits this concept and infer to apply to study how the students perceive the roles of both the tutored and non-tutored learning in influencing their performances and self-efficacy attitudes. In other words, theoretically, this research reinforces the important role of psychological field which states the social environment as perceived by the individual, manifested here through the quality services provided by both normal-class teachers and the tutoring teachers, as a key role in influencing students’ performance and their self-efficacy attitude, which concerns how the students make sense of the service providers and themselves.

To address the research objective, two hypotheses are raised, and tutored or non-tutored student groups as the main comparative variable of this research, and some of the demographic variables are also included, which are aimed to examine, statistically, for their significant roles in the socio-cognitive framework suggested.

#### Hypothesis 1 (H1)

Which states that personal factors, in terms of personal context (personal subject background), personal achievement attitude and learning environment stimulation, are influenced by the teaching service quality of the regular classroom.

#### Hypothesis 2 (H2)

The success of the students, tutored or non-tutored, needs the simultaneous working of the individual motivation attitude, characterized by both personal and situational aspects of motivation, and the quality of the teaching represented by empathy, responsiveness, reliability, assurance and the tangibles.

### Hypothesis 3 (H3)

The self-efficacy attitude of the students, whether tutored or non-tutored, needs the simultaneous working of the individual motivation attitude, characterized by both personal and situational aspects of motivation, and the quality of the teaching represented by empathy, responsiveness, reliability, assurance and the tangibles, and the perceived student performance.

### 1.3 Justification for the Research

Beginning in the 1960s, the scientific study of the art of teaching (Gage, 1978) invoked a predominantly process and product design logic in order to study how teacher performance influenced student outcomes. According to Cochran-Smith and Lytle (1991), this is primarily knowledge for teaching. A lively debate aroused along this view in the late 1970s but, in general, only weak correlations were found between teacher behavior and student outcomes, and the research findings also vastly lacked causal links and thus the researches were not able to explain why particular teacher behaviors were effective (Elbaz-Luwisch & Orland-Barak, 2013).

This research attempts to exploit service quality concept of the teacher behavior, but is structured within “Triadic Reciprocal Determinism of Social Cognitive Theory” (Bandura, 1997) by incorporating individual cognition and service environment to help provide further structure and power of explanation for the teacher behavior to explain student performance outcomes. The research also contributes by transcending beyond the generic service quality concept, but situating the service attributes of teaching right from within the advanced research in teaching and student performances.

Service quality is used for numerous reasons as there are available evidences in the research of teaching. For instance, the metaphorical image of “classroom as home” indicates the “empathic” attribute of service quality, which extant research show the role played by relational, interacting, and cooperating aspects of the mutual relationships between the teachers and the students in influencing student behavior

(Clandinin, 2013). Fundamentally, as it can be inferred from Dewey (1934, p. 42), empathy induced affection is a moving and cementing force in an experience.

The “assurance” aspect of service quality can also be seen in research involving teaching issues. For instance, teaching planning, which represents a design issue (Yinger, 1977), can reflect the attitude and knowledge of the teachers, such as the ability of the teachers to draw on many sources of knowledge for answering different questions (Hashweh, 2013). The knowledge “assurance” aspects of the teachers were also stressed in Richardson (2001) and Wittrock (1986). A holistic structure of “assurance” could be referred to the concept of teacher’s pedagogical construction framework that is consisted of elements of assurance such as “content knowledge, knowledge and beliefs about learning and learners, pedagogical knowledge and beliefs, knowledge of context, knowledge of resources, curricular knowledge, and aims, purposes and philosophy” (Hashweh, 2013, p. 125).

In the aspect of the “tangibility” of service quality, evidences of the research in teaching are also available. For instance, the tangible content of the teaching is stressed. The tangible content is known as the pedagogical content knowledge in Shulman (1987). Other tangible evidences include the use of video (De Le Torre Cruz & Arias, 2007) and other teaching-enabled technologies (Borko, Jacobs, Eiteljorg, & Pittman, 2008) in the classroom (Hou, Chang, & Sung, 2008), which help to stimulate students’ cognition, practices and development (Schussler, Poole, Whitlock, & Evertson, 2007). Social learning and school environment provides opportunities for a host of skills and knowledge development (Jurasaité-Harbison & Rex, 2010).

Overall, teaching and learning social environment plays significant role in influencing student behaviors and performance. In this aspect, Sato and Kleinsasser (2004) further noted that school culture also has a direct role to influence the learning and teaching environment, and as a result, the school can proactively adjust its systems of beliefs and norms of practices and services to help foster a more sustainable favorable learning and teaching environment. Thus, it can also be inferred for this research that attractive learning and teaching social environment also provides a platform to support the development of the various service quality attributes, for instance, as evidenced in Jurasaité-Harbison and Rex (2010), the environment as such promotes the continuous interaction with each other. The learning social environment

could also be reflected by the intensity and commitment of the establishment of professional learning communities (Vescio, Ross, & Adams, 2008).

## **1.4 Overview of Research Design and Methodology**

This research underpins on an objective paradigmatic stance to approach the design and execution of the research methodology. Design wise, this research exploits the approach of deduction, which relies on the advantage of the knowledge already made available in the publications to make deductive inferences, such as about the conceptual framework based on social cognitive theory. Nevertheless, to have meaningful valid understanding of the phenomena investigated, it is important the literature review be as specifically relevant to the context of the study as possible.

In other words, instead of simply exploiting the generic concept of, for instance, service quality (SERVQUAL) to be transferred to the teacher-student environment, the literature review effort makes an attempt to study directly from the evidences in the educational literature, as already evidenced in the Justification section.

Specifically, based on the deductive approach, the research sequence is stated as follows.

First, literature review is critically conducted in an attempt to address the research objective. The literature review section concludes by suggesting a conceptual framework based on the triadic determinism model of social cognitive theory. This structural framework provides a robust basis to equip the research findings with the ability to explain the phenomenon under investigation.

Second, rooted in the literature review, questionnaires are developed that ensure content validity is preserved with respect to the definitions and the theoretical context of the argument. Questionnaires are developed along the reliability principles of measurement instrument through ensuring unitary dimension of meaning and by eliminating the risks for misunderstanding from the respondents' perspective. The methodological section also delineates the sampling populations, which is consisted of the students currently pursuing the Bachelor degree from the two schools, namely the school of management and the school of sinology. The school of management

includes accounting, business administration, tourism management, aviation business management, hospitality industry management, economics, and logistics and supply chain management majors. The school of sinology is predominantly of business Chinese major.

Third, the data collected through convenience-based sampling over the first-year to fourth-years students are statistically analyzed with the use of SPSS software, version 20. A special emphasis on exploratory factor analysis is needed to help ensure that each of the constructs involved in this research is one-dimensional in nature. In other words, if there is any construct showing two or more distinctive characteristics, the factor analysis would provide the evidences and then different names be assigned as depicting a different factor of variable. In addition, prior to data analysis, the questionnaires of each construct are subjected to inter-item reliability analysis in which Cronbach's Alpha coefficients would be used as a judgment. Both descriptive and inferential statistical tools are used to help validate the applicability of the proposed conceptual model, and to clarify the two hypotheses and a demographic research question that are raised in chapter one and chapter two.

Forth, after the systematic data analysis in the sequence arrangement to answer each of the raised hypotheses and a demographic research question, the last chapter makes an attempt to conclude and draw implications, both theoretically and practically.

## **1.5 Outline of the Research**

This academic research includes five chapters suggested by Tan (2015) and Nenty (2009) as follows:

Chapter one Introduction: “This section presents and analyzes current Observations, experiences, views, opinions, etc. that reflect or bear on the existence of the problem.” (Nenty, 2009)

Chapter two Literature Review: This chapter attempts to review other researcher’s empirical experience that related to this research (Nenty 2009) and also

build the theoretical conceptual model to demonstrate the knowledge structure of the research (Tan, 2015).

**Chapter three Research Design and Methodology:** This section focus on outlining the process to implement the research procedure and questionnaire design in quality and conformance manner, for instance, the ability to demonstrate validity and reliability of the research (Tan, 2015).

**Chapter four Results and Analysis of Data:** This section attempts to use statistical knowledge to study and build for patterns of structure and relationships in the collected data (Tan, 2015).

**Chapter five Conclusions and Implications:** This section provides the conclusion and implications for theory and practice, and also the connection of the knowledge for future research (Tan, 2015).

## **1.6 Definitions**

### **1.6.1 Intrinsic Motivation**

Intrinsic Motivation is generally defined as individuals doing something based on inherent interest of the motivator, as it is known that those being motivated intrinsically could usually perform for the fun or challenge rather than for the sake of external pressures or rewards (Ryan & Deci, 2000).

Specially, in this research the intrinsic motivation is known as personal issue variable that describes how the students are willing to study because of the intrinsic motivational belief and intention i.e. to achieve their personal academic goals, for instance, graduate with honors. In other words, the intrinsic motivation is known as personal achievement attitude motivation in this research, in which the intrinsic motivation is driven by the student's sense of achievement in believing in their ability to challenge difficult tasks and to drive them towards success (Atkinson & Feather, 1966).

### **1.6.2 Instructor's teaching Service Quality**

Service Quality in general perspective is the perceived performance of the service provider from the view of the customer with respect to their expectations

(Oliver, 1997). This research interprets the student perceptions in the aspect of Instructors' teaching service quality. To help the measurement, the five broad-based service-quality attributes advocated by Parasuraman et al. (1988) are adapted, represented by "tangibles" (i.e. teaching materials and the equipment such as projectors or computers used in the classes), "reliability" (i.e. which obtains the perceptions of the students on the ability of instructor in providing accurately prompt services to the students in need), "responsiveness" (i.e. evidenced by the student perceptions about the willingness of instructors in helping the students to understand the subject, without delay), "assurance" (i.e. which gives the confidences to the students that instructors can be depended upon, in terms of the delivery of quality standards of the teaching), and "empathy" (i.e. which reflects the caring of instructor to student, such as by paying attention to individual students). Two types of teaching environment, one belonging to regular class and the other, tutoring, are considered as the context for the research.

Regular class is the mainstream educational service, and in this research, it refers to the accounting subject offered at Mae Fah Luang University. Tutoring is complementary to the mainstream teaching to provide extra assistance to the students in order to help them advance knowledge and academic skills (Powell, 1997).

### **1.6.3 Student Performance**

Students' academic performance is defined by how student perceive after studying the accounting subject in both regular class and tutoring classes, manifested for example, by the students' own perception that studying can advance students' progress and enhance efficiency level of learning, increasing the ability of student to study on other related subject or work on future career, and improving student academic skills. This line of definition matches with those of Yusuf (2002) in that individual performance is also about the measurable behaviors that one can observe or perceive to have made a difference towards the task at hand, i.e. for this case, accounting subject.

### **1.6.4 Students' Self-efficacy Attitudes**

Self-efficacy is defined as the beliefs, feelings, and thoughts of individuals regarding to their own capabilities to perform the task of doing the thing, which lead

to their action and performance (Bandura, 1997). Numerous research efforts have shown that self-efficacy is a critical variable in influencing the future behaviors of individuals that are able to propel them to success (Mooi, 2006).

As a result, students' self-efficacy attitudes are measured by the use of questionnaire items that match with the definition, for instance, students believe they are able to do the examination, expect to get a grade in this course, and how they feel and think about the subject that could be useful for them. The questionnaire items for self-efficacy are designed in this research as a final dependent variable which depicts a post-learning attitude of the students at post-instruction stage, tutored or non-tutored.

## 1.7 Limitations

Limitations of the research are things that the researchers cannot easily control or are purported for reasons of convenience or constraints of resources. Nevertheless, limitations should be properly asserted or announced as they might influence the results of the research and also the areas for the generalizations (Tan, 2015). Putting in another words, there are three approaches to structure the limitations section in a thesis, namely the announcing, reflecting (which provides greater depth in explaining the nature of the limitations and provide justifications), and forward looking move, i.e. including provide the rationality for overcoming the limitations (Laerd, 2015).

Immediate limitations, on the aspect of announcing move (Laerd, 2015), are two-fold. First, it is about using accounting as the only subject for the center of focus in this research. Although a general background on the use of accounting has been discussed in the background section, but accounting has certain analytics structure which may not cover the other scopes of the educational curriculum. In addition, to what per cent the students at the case university involved in accounting is not attempted, which otherwise would provide further contextual clarification for generalization purpose. Another aspect of limitation is due to the use of convenience method in the sampling or sample approach, which renders unequaled distribution of

the tutored students spread across first year of students to the last year of students. This unequaled distribution leads to unreliable ANOVA analysis.

Nevertheless, through interviews with the students, accounting subject is the core tutored subject for the students majoring in the school of management, and students felt the subject more analytical in nature, and often the normal-class instruction does not lead them to digest the knowledge of accounting confidently and thus tutoring as complement is needed. In this sense, the subject is chosen as it is justifiable by the need to improve from the view of performance or capability deviations. In addition, to delimit the constraint, comparative studied between the tutored and non-tutored phenomena of how students perceive in the triadic determinism framework of social cognitive theory are conducted.

The future research should first survey to identify all the possible subjects the students currently engage in the tutoring services, and then researcher sorts out the key subjects, as this additional variable would help to further enrich the understanding of the research and provide a better structural understanding to the phenomena.

## 1.8 Timetable of the Research Study

A very intensive effort is required for this research which is reflected in the timetable.

September 2015: Attending the research class, and start the research concurrently, with a priority on literature review and the development of questionnaires.

October 2015: Data analysis and writing up a conference paper, and get accepted for full-paper conference presentation.

November 2015: Start writing thesis consisting of five chapters. While the first chapter is the summary of the entire independent study efforts which also includes the justification and background of the research, the other four chapters state the works of a deductive sequence of the research effort, starting from the literature review of chapter two, to methodological design in chapter three, and data analysis and

discussion in chapter four, and finally conclusion and implications of the contributions in chapter five.

December 2015: Finish the whole Independent Study by year-end.



## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

The literature is the general body of published scientific knowledge (Privitera, 2014), and the review of it is the search and synthesis performed on this general body of knowledge that culminates in outlining the opportunities for the research and the structure of the knowledge proposed to address the research objective raised.

In this chapter the discussion relies on the triadic reciprocal determinism of social cognitive theory to help chart the route which depicts as a map (Toulmin, 1953) or a blueprint to help illustrate the understanding of the student tutoring phenomenon, by taking accounting as a subject, at the university level. The triadic reciprocal determinism of social cognitive theory is used not only for its suitability on the tutoring phenomenon, as inference, but most important, the theory has shown wide scopes of utilities (Hull, 1943) which have prompted a great deal of research. The other advantage is that this theory is simplicity in nature and comprehensive enough to embrace a diversity of variants of the phenomenon under investigation.

Rooted in the triadic determinism model of the social cognitive theory of Bandura (1989), this chapter is laid out as follows. First accounting subject is explained as it is the subject background in which the survey instrument is addressed to, and then, on the second, the relevant broad-based background to the theory of motivation is discussed, which is then followed, on the third, by a section on intrinsic and extrinsic motivation concepts are introduced which pertains to this research issue.

Fourth, teaching quality as the background knowledge of service quality concept is laid down, which is followed on the fifth, by discussing over the service quality concept used in this research.

Sixth, the evolution of social cognitive theory is narrated which is followed by the key adapted theoretical concept known as the triadic reciprocal determinism of social cognitive theory of Bandura (1997, 2005).

The last section explains and proposes the theoretical conceptual model which includes the hypotheses, tutored or non-tutored student groups as the main comparative variable of this research, and some of the demographic variables to be examined for their significant roles in the socio-cognitive framework suggested.

## 2.2 Accounting Subject

Accounting is often known as the language of business (Marshall, McManus, & Viele, 2002) and at the university level students majoring in management and business-related disciplines have to take accounting as their compulsory subject. In a broad sense, accounting is the process of identifying, measuring, and communicating economic information about an organization for the purpose of making decisions and informed judgments (Marshall et al., 2002). In the study of accounting, the ability to read and understand, and perform financial statements in accordance with the given accounting concepts and principles is needed, but students without a knowledge base of accounting at the secondary educational level (pre-university level) often find it hard to comprehend (Papageorgiou & Halabi, 2014). To this end, there are existing researches that study the determinants of student performance in accounting subjects (Doran, Bouillon & Smith, 1991; Papageorgiou & Halabi, 2014).

As there are no definite theory exists to explain how students perform well in accounting subjects, many researchers have only attempted the research study at the factor-levels. For instance, Koh and Koh, (1999) studied the age factor, partly because as students grow older, they become more disciplined and thus are more capable to perform better (Guney, 2009). Other researchers, such as Bloom, (1976) and Eskew and Ramsay (1988) advocate the pre-attendance background of the knowledge, for instance, of accounting, as essential in learning new discipline. On the other hand, Gul and Fong (1993) noted the insignificant role of a-priori background as an

advantageous factor for the students undertaking first college-level accounting subjects.

In view of the inconclusive research discovery with regard to the determinants that influence the student performance in college-level accounting, this research exploits accounting subject as the focused subject but aims in studying the roles played by the different domains or attributes of the service quality, i.e. assurance, empathy, responsiveness of normal classroom and tutoring sessions, and self-achievement motivational attitude (Khalaila, 2015) in influencing student performance in the accounting subject and student's academic self-efficacy attitude (Abd-Elmotaleb & Saha, 2013). Service quality of the teaching is incorporated in this study as teaching methods by instructors have been shown to play critical role in influencing student performance (Petruzzellis & Romanazzi, 2010). In this research, the measurement of service quality of both normal classroom and tutoring would exploit the five widely used domains of the SERVQUAL instrument owed to Parasuraman et al. (1988).

As the weakest link in the SERVQUAL instrument or conception is that there is no governing theory working in the background to explain the phenomenon of a service, i.e. tutoring or normal classroom study for accounting subject, apart from disconfirmation theory that exploits the gap between perception and expectation (Parasuraman et al., 1988), this research underpins on the triadic determinism model of the social cognitive theory of Bandura (1989). In the following, background to the theory of motivation would first be discussed, followed by intrinsic motivation and instructor's teaching service quality. These form the necessary variables for understanding the triadic reciprocal determinism of social cognitive theory.

### 2.3 Background to the Theory of Motivation

The word “motivation” has its Latin root by the meaning of “to move” (Beck, 2004). Theoretically, motivation is a broad-based concept, such as it could be goal oriented, or risk or events avoidance. Motivation construct is known in the psychological theory that behavior has causes, which means people are not free to

choose our behaviors, i.e. a positive or a negative learning environment could motivate the students to decide on engaging with private tutoring. In taking a causative analytics the research study is deterministic in nature, i.e. the research design would exploit the literature review to provide a deduced hypothetical assertion about the model to describe the nature of the student tutoring phenomena.

Deterministically, motivation can be of “external” or “internal” events. While the “external events” have been illustrated, as above, in brief, the “internal events” could simply be due to the knowledge gained from experience. By deterministic, it prompts the researchers to study the different conditions that are prevailing at the time of the motivated occurrences i.e. tutoring, as without knowing what are the conditions that could predict motivation, the study of motivation itself would be unreliable (Beck, 2004). Nevertheless, motivation is a mind-issue, which is subjective, directly known only to the individual possessing it, whereas the body is the mind-induced behavior, and the relationship may be dualistic, inter-relational in nature in that any of one the body-mind could influence each other.

In this research the personal achievement attitude aspect of intrinsic motivation as well as the learning environment and subject background as the external conditioning factors are considered. Why these variables motivational can be examined from the works of Hull (1943). Clark Hull was noted early in his career for work on aptitude testing and hypnosis, but about 1930 he began to develop a theory of behavior (Hull, 1943). Hull (1943) treats motivation as drive which activates habit into excitatory potential and thus performance. Hull (1943) further acknowledges that “why do we call some variables motivational” could be due to that an increase in the level of the variable energizes a wide range of response, or that an increase in the level of the variable is punishing.

The level of variables i.e. personal achievement attitude, learning environment stimulation and subject background, as potential motivational drives, could be analyzed by the use multivariate regression analysis in their capacity to explain the variance of the response, i.e. perceived student performance in the subject being tutored as well as the self-efficacy attitude formed as a result of confidence gained through performance. Thus, these motivational drives that energize student learning

activities and thus performance can be referred also to a behavioral theoretical root i.e. Hull (1943), Dashiell (1925) and Skinner (1938,1953).

The operant conditioning behavioral theory of Skinner (1938, 1953) is useful to interpret and acknowledge the environmental variable. Operant, to Skinner (1953), means that the organism operates or works on the environment. The environmental or conditioning variables are broadly known as the reinforcers rather than rewards, i.e. “positive reinforcer is any stimulus whose presentation will increase the probability of a response that it follows it, and negative reinforcer is any stimulus whose removal will increase the probability of a response that it follows” (Skinner, 1953). The opposite of reinforce is known as punisher, i.e. “any stimulus whose presentation will decrease the probability of a response that it follows, or any stimulus whose removal will decrease the probability of a response that it follows” (Skinner, 1953).

While there are other motivational theories, the most relevant is intrinsic motivation which will be discussed in the next section. Basically, intrinsic motivation refers to the fact that the student behaviors in the studying efforts are enjoyable and rewarding in themselves. Although this research does not discuss further about other relevant theory such as self-determination theory, the intrinsic motivation that is enhanced by feeling of competence (i.e. compared with other students in this class, I expect to do, as a result of competence), and relatedness (i.e. I think I will be able to use what I learn in this class in my future). Self-determination theory is owed to Deci and Ryan (1985) which proposes that the level of intrinsic motivation in a person is determined by three psychological needs, namely autonomy, competence, and relatedness. In reality, both of the questionnaire items used to describe relatedness and competence actually also contain autonomy, that is the students feel that they can initiate their behavior in order to perform, i.e. “I prefer class work that is challenging so I can learn new things”. In other words, although not in particularly stressed, self-determination theory of intrinsic motivation is applicable.

## 2.4 Intrinsic and Extrinsic Motivation

Albert Einstein stated a very straightforward statement which has since provided the guidance to rigorous research study, namely “things should be as simple as possible, but no simpler” (Carr & Wu, 2004). This “simple but not simpler” concept is understood as being parsimonious in explaining the phenomena investigated yet it allows a good understanding of the problem and the important factors that influence it (Sekaran, 2000). Theory of intrinsic motivation that attempts to describe the intrinsic-motivation phenomena shares a similar simple-but-not-simpler attitude in the research effort. Fundamentally, the “simplifying” notions are based on a goal-structure perspective that springs up from within the mind of the motivator. This approach clearly differentiates out the salient and non-salient rewards (Deci & Ryan 1985; Pittman & Heller, 1987), with the sources drawn from the diversity of personality characteristics and cultural backgrounds instead.

There are differences between extrinsic motivation and intrinsic motivation. Extrinsic motivation is highly contextualized which presents that people are motivated for an operational purpose rather than the motivation arises to serve a general utility such as to the challenging task at hand is worth the trial and efforts as it can lead to better learning and improvement of future career opportunities. In other words, extrinsic motivation is about what the rewards can do to the motivator, and intrinsic motivation illustrates what the motivator is willing to do for the rewards (Sansone & Harackiewicz, 2000). In this research, extrinsic motivation is measured by situational motivation characterized by the socio-cognitive assessment of the situation that motivates the students to move forward, i.e. to make a decision to study harder, or to turn to tutoring to improve the understanding of the subject. Two constructs that characterize the situational or contextual motivation includes “personal construct” which measures the perceptions of the students towards their strengths and weaknesses dealing with the subject of interest (i.e. “my study skills are weak compared with others in this class”, and “my English skills are weak, so I don’t understand in the class”), partly contributable to the perceived threat of the possibility of failing the subject because of its difficulty in the concepts and the assignments

given on the subject of interest. The other situational motivation involves the perceived “learning environment stimulation”, which measures the perceptions of the students towards the overall environmental climates and scale of attractiveness that favor the students, i.e. the materials in the class is hard to understand, or exciting and challenging contents.

On the intrinsic aspect of motivation, as it is demonstrated in Kruglanski (1975), the activities of the motivator are the result of the value of the activities. For instance, in this research, students who study diligently, with certain methods such as critical reflection, are motivated by the capacity of the learning process to lead to a goal. This goal-structure framework is parsimonious. Nevertheless, apart from the activities as the intrinsic reasons for the motivation, there are other intrinsic reasons that motivate one to take actions, without a need for the external reward, such as to gain a competency or being mastery of the subjects of interest (Ryan, Sheldon, Kasser & Deci, 1996).

Whether extrinsically or intrinsically driven, motivation is described as a force that energies and directs a behavior towards a destination i.e. what is aimed for. Nevertheless, actions must be taken to build the necessary trust towards the original inspiration of the motivation, and thus to gain self-conviction or confidence about the ability of the motivation and its activities to achieve goals.

## **2.5 Teaching Quality: the Background Knowledge of Service Quality Concept**

This section presents the background knowledge of service quality concept which would be adapted by this research to study the quality of teaching that involves a subject, and in the next section, service quality concept which is related to teaching quality is established.

Assessing the quality in teaching is never straightforward. For instance, “despite numerous Science Technology Engineering and Math (STEM) initiatives in the past decades, science instruction has not significantly improved” (Dorph, Shields, Tiffany-Morales, Hartry & McCaffrey, 2011). “To support improvements in teacher understanding of science content, instructional practice, and student learning, an

evidence-based observation instrument that provides formative and summative feedback to teachers is developed" (Schultz & Pecheone, 2014). Schultz and Pecheone (2014) clustered the assessment dimensions in three categories, namely "assessing teacher's knowledge and pedagogy, engaging students in science learning, and promoting laboratory-based inquiry". This research instead relies on the generic structure of instrument of SERVQUAL, which assurance aspect would take care of "the teacher's knowledge and pedagogy" as stated in Schultz and Pecheone (2014), and the other teacher's service quality domains would capture the student engagement in the tutoring and normal classroom learning.

Instructor's teaching service quality needs to ensure effectiveness of teaching. Biggs and Tang (2011) provide an extensive discussion in this aspect, stressing that two important issues need to be considered, namely "what the teacher does, and quality of teaching matters" (p. 69). What the teacher does includes, for instance, feedback for error correction (p. 195), teaching meta-cognition strategies such as student self-assessment and teacher assessment (p. 205), peer tutoring, and the reciprocal relationship between the student and the teacher (p. 69).

In view of the quality of teaching, Biggs and Tang (2011) illustrate, for instance, the assurance aspect of the teacher in the ability to effectively use existing declarative knowledge to help the students learn how to apply the theory to practical problems, and also to be able to rely on student's critical observation of the problematic issues to create theory or knowledge. Leinhardt, McCarthy and Merriman (1995) called the former as "university" knowledge, and the latter as the "professional knowledge". The intertwined usage and integration provides a holistic learning experience for the students (see Kolb & Fry, 1975; Kolb, 1984). Both knowledge types stress on the students to be able to build on what is already known, sort of a metaphorical construction project (Biggs & Tang, 2011).

In addition, it is important that teacher is able to set up learning environment to encourage the student to perform the learning activities (Biggs & Tang, 2011, p. 97). The teacher must demonstrate the "dependable", "flexible", and "responsive" skills (cf. by exploiting the service quality terms, from Zeithaml, Bitner & Grempler, 2009), as it is generally known that there is no "right way" of learning (Kolb & Fry, 1975).

## 2.6 Service Quality Concept Used in this Research

This section makes an attempt to present the quality of the teachers and their teaching processes and the materials which they use in the lexicons of service quality (SERVQUAL). Literature is reviewed to shed light on how the student performances can be significantly influenced by the practices of the teachers and their teaching quality, known as the service quality, which is consisted of, for instance, responsiveness, empathy and assurance. As an implication, the use of service quality (SERVQUAL, Parasuraman, et al., 1988) can serve as an objective measurement platform from which the university and the teachers could use to assess not only the student perceptions and performances, but also to reflect and infer on the intellectual ability of the teacher.

Service quality has been known to play significant role to satisfy university students (Atheeyaman, 1997; Cheng & Tam, 1997; Oldfield & Baron, 2000; Poe, Tan & Jongsuriyapart, 2015; Zammuto, Keaveney & O'Connor, 1996). These research findings imply to the university administrators to stress on improving service quality of its operations or risk losing the viability (Kitchroen, 2004) or competitiveness (Teewattanawong , Tan, & Jongsuriyapart, 2015). Nevertheless, knowledge gaps exist about how the students perceive the impact of service quality contributable to instructors' teaching on their academic performances.

The “intellectual equipment” of teacher has been advocated by Dewey (1902), noted, for instance, as “the teacher’s understanding of material of the lesson is vital” (p. 398), which when viewed from the lexicons of service quality, “intellectual equipment” is known as the assurance aspect of the teaching quality (Richardson, 2001; Wittrock, 1986), or as the “assurance” attribute of the so-called service quality (SERVQUAL, Parasuraman, et al., 1988). To be specific, the “assurance” attribute of the instruction role equips the teachers with the right, trustable knowledge and the capability to facilitate the learning process of the students, such as in enabling the students to clarify difficult contents.

The results of the published research have provided significant evidences on the “assurance” aspect of teaching quality. In one research publication, Alves and

Raposo (2007) demonstrate that “assurance” of the instructor does have significant influence to college students’ satisfaction. On the other occasions, research conducted by Hashweh (2013) shows that students perceive the important role played by the teachers in exhibiting their ability to draw on many sources of knowledge to address the different questions of the subject, to be able to command of subject matter, and thus, the teachers would need to demonstrate the competencies and the ability to apply the effective pedagogical content knowledge. It is also acknowledged that teaching is a highly complex activity, which requires intellectual sophistication in a dynamic space (Leinhardt & Greno, 1986), such as by the use of pedagogical content knowledge, which actually has been widely cited in the professional literature on essential knowledge for teachers (Grossman, 1990; Ma, 1999; Shulman, 1987; Howard & Aleman, 2008).

The role of pedagogical contents is the “Tangible” attribute of service quality (SERVQUAL, Parasuraman et al., 1988). Tangibles dimension of the service quality in a learning context involves not only the learning materials and curriculum, but also the physical facilities, equipment used, and the appearances of the instructors and the other personnel involved in the learning processes, which are shown by Hill and Epps (2010) to have significant impact on student’s satisfaction. With the heightened standards on student performance and the public demands for accountability of the instructors and the university, students and the society are increasingly expecting the curriculum and the other aspects of tangible service quality in education to meet higher levels of standards (Cohen & Ball, 1996).

In addition, teachers should be empathic (i.e. giving students individual attention) and be committed to students and their learning, be responsible for managing and monitoring student learning, be able to think systematically about their practice and learn from experience of the students (National Board for Professional Teaching Standards, 2001). Empathically, a growing number of scholars have posited that effective teaching practices must recognize and show caring for the students, and embrace a more holistic perspective in the overall teaching planning and its design issues (Yinger, 1977), so as to empower the students intellectually, socially, emotionally, to impart knowledge, skills, and attitudes needed for success (Gay, 2000).

The other two important qualities of teaching and education which can also be adapted from the concept of SERVQUAL are known as “Responsiveness” and “Reliability.” Responsiveness is a quality of service in which education is one, and is referred to the ability to solve problem immediately (Zeithaml, et al., 2009), and to provide the necessary clarification to the students to help the students improve their understanding promptly, including the behaviors demonstrated in the willingness of the instructors. “Reliability” aspect of the quality in teaching and education demonstrates the evidences of service to meet the promises communicated (Parasuraman, et al., 1988), which means the service can be depended upon, such as to enable the students to advance their subject knowledge and to handle the examination. Thus, both reliability and responsiveness are also important quality of a teaching or educational service (Danish, Malik & Usman, 2010).

Collectively, the holistic teacher quality as well as the cognitive motivation factors of the students themselves would establish a social environment conducive to foster carefully designed experiences in classrooms in order to help motivate the students towards more effective learning (Dewey, 1904; Kenney, 1987; Kessels & Korthagen, 1996; Schon, 1987), essentially matching to the themes of the triadic reciprocal determinism, social cognitive theory and self-determination theory, as already discussed in the previous section.

## 2.7 The Evolution of Social Cognitive Theory

This section makes an attempt to study the evolution of social cognitive theory, being pioneered by Professor Albert Bandura. The excerpts are obtained by the understanding of Bandura himself (Bandura, 2005). First, the agentic perspective of social cognitive theory is explained, and this lays the cognitive background of the social cognitive theory that is applicable in this research. In the agentic perspective, Bandura (2005) stresses the role played by intentionality and foresight, i.e. towards future-directed plans, which is applicable to the student-behavior and its performance context, in that students “anticipate likely outcomes of prospective actions to guide and motivate their efforts anticipatorily” (p. 10). In this research, this anticipatory

human agency variable is measured, for instance, by the students to anticipate or expect to do well in the subject when compared with other students in the class, and the students are able to use what they learn in the class in the future, and that their efforts would lead to graduate with Honors. In the words and understandings of Bandura (2005), “although a future cannot be a cause of current behavior because it has no material existence, but by being represented cognitively in the present, visualized futures serve as current guides and motivators of behavior”. In addition, Bandura (2005) further discusses that human agents are not only planners and fore thinkers, but they are also self-regulators, in that they are able to take reading from the environment including their own motivational repertoire to self-regulate their actions towards achievement. This self-regulatory aspect of human agency is also a part of the questionnaire items that describe or characterize “personal achievement attitude,” manifested, for instance, by “I prefer class work that is challenging so I can learn new things.” The students believe that the challenging works are needed to ensure they succeed, and on top of that, the students would take the signals from the quality of the tutoring and normal-class services as the deviation from their expectations to help them self-regulate.

When these intentional, foresight and self-regulatory “self-achievement” motivation is established, as inferred in Bandura (2001), this motivation would lead to a potential functional self-awareness which can gradually be developed into personal efficacy, manifested in the trust and confidence of the soundness of their thoughts and actions (Bandura, 2005). In the next section a theoretical conceptual model would be introduced which captures this perspective of phenomenon. In this theoretical conceptual model, in addition to the human agency level of cognition, the service quality and the student’s perceived performance towards the subject would be considered as another important domain of (cognitive) social system. As stressed in Bandura (2005) and Bandura and Bussey (2004), human functioning plays a significant role in social systems, depicted in how human agency organizes, guides, and regulates human activities. This social environment is activated by the service quality rendered through the instructor’s instruction and teaching services, i.e. the tutors provide a social environment that gives extra care, especially towards weaknesses of the students, and thus paying particular attention to the individual

students to help them make progress towards the subject knowledge. These are the questionnaire items developed in the service quality construct for tutoring and have been validated to reflect robust inter-item reliability and consistency.

As a completion, to be able to develop self-efficacy, according to Watson (1908) and Thorndike (1898), the human agents (i.e. the students here in this research) would require performance of responses. As a result, the phenomenon of student attitude towards tutoring and normal-class learning situation fits the notion of social cognitive theory, through the triadic reciprocal determinism framework of the interrelationship of person, environment and behavior (i.e. self-efficacy), governed by self-achievement motivation and outcome expectations and the service quality environment.

A further literature review also shares the similar structure to self-determination theory (SDT). SDT is an approach known to study student motivation which stresses on the role that students' inner motivational resources played in explaining their classroom engagement and effective functioning i.e. performance (Ryan & Deci, 2000; 2002). What is stressed is that the teachers also have a role to play in developing and enhancing the motivational resources of the students, such as through the quality or ambience of a teacher's interpersonal style toward students during instructional episodes in which the teacher tries to encourage the students to initiate or regulate engagement in a learning activity (Reeve, 2009). What is stressed in the self-determination theory is that autonomy (i.e. which is the inner endorsement of one's actions, as has already discussed as self-achievement motivation), the perceived service quality and competence represented by student performance or ability to deal with the studying needs would form the fundamental bases for self-efficacy.

In sum, the triadic reciprocal determinism, social cognitive theory and an adapted structure of SDT reflect that, although students are agentic, engaged and responsible but they also require the social context to energize and catalyze them forward, i.e. to help them for self-efficacy attitude and explain student performance.

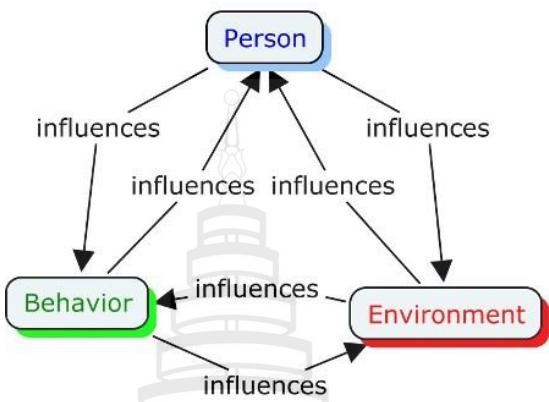
## 2.8 Self-Efficacy and Triadic Reciprocal Determinism of Social Cognitive Theory

Self-efficacy can be treated as an enabler to help sustain the capacity of intrinsic motivation. Self-efficacy, being an abstract term, should be concretely defined so that measurement procedure can be reliably established to obtain the necessary reliability, content and construct validity. A useful definition can be found in Stajkovic and Luthans (1998, p. 66) that is applicable to this research, namely: Self-efficacy is “an individual’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of actions needed to successfully execute a specific task within a given context.”

Thus, it is important that the motivators, after being moved by their intrinsic motivation, takes the necessary actions to arrive at a goal, to gain the self-conviction (or confidence) of their abilities. Nevertheless, the motivators are conscious that they also need to supports of the external environment in addition to their own internal motivating thrust. This forms the theoretical connection to self-efficacy as the exercise of control (Bandura, 1997) and social cognitive theory (Bandura, 1989), owed to a Stanford University Professor.

The triadic reciprocal determinism of Bandura’s (1997) social cognitive theory is depicted in Figure 2.1 which states the mutual interactive relationships of personal cognitive and environmental variables, and behaviors. The causative relationship structure is emphasized, for instance, in Figure 2.1, it can be seen that behavior is depicted as being shaped and controlled either by environmental influences or by internal dispositions (Bandura, 1997).

### Bandura's (1989) Theory of Reciprocal Causation



**Source** Bandura (1989)

**Figure 2.1** Triadic Reciprocal Determinism of Social Cognitive Theory

Figure 2.1 is applied to students' performance and their self-efficacy attitudes towards the subjects of the study as a result of both personal disposition (characterized as intrinsic motivation in this research) and environmental influence (represented by the instructor's service quality, both tutoring and normal classroom). In other words, both personal disposition (motivation) and environmental influence through instructor's service quality shape and influence the students' behaviors. Although in Bandura (1989), reciprocal causation is studied, this research stresses only on the uni-dimensional nature of the theory. In addition, behavioral consequential domain of the behavior is studied rather than the behavior itself. The next section would describe the proposed theoretical, conceptual model, and the hypotheses needed to provide the empirical evidences to support the validity of the model.

In Bandura (1989), the personal-environmental-behavioral triadic reciprocal structure is known to represent the causative interrelationship between thought, affect and action. For instance, cognitive expectation and the perceived influence of the

environment are known to give shape and direction to behavior. In other words, what people think and feel affects how they behave (Neisser, 1976).

## 2.9 Theoretical Conceptual Model

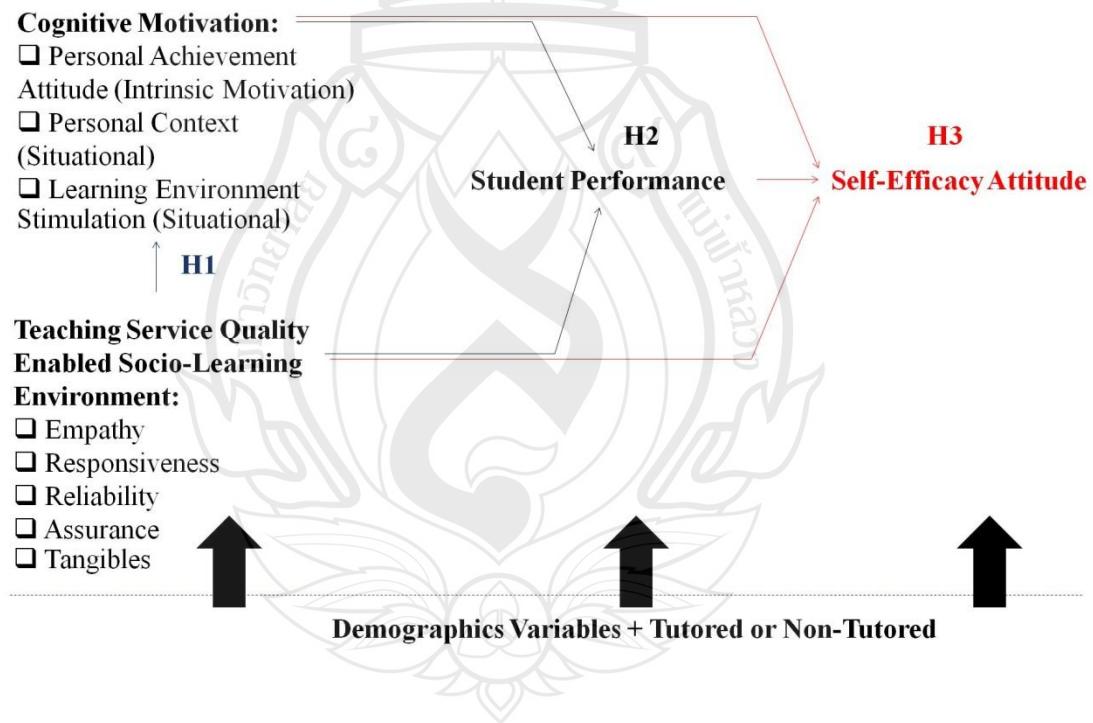
In short, this research adapts the concept of social cognitive theory, reflected specifically through the triadic reciprocity determinism that attempts to explain the roles of socio-cognitive mechanisms in the influence of the student behaviors towards subject learning, by focusing on only “Accounting”, as the focus, in both normal classrooms and in tutored environment. The conceptual model is shown in Figure 2.2 which demonstrates the roles of situational and individual, intrinsic motivation of the students by stressing on three cognitive motivation factors, namely personal achievement attitude, personal context and learning environment stimulation, and also the teaching service quality-enabled socio-learning environment represented by the empathy, responsiveness, reliability, assurance and tangibles of the so-called service quality (SERVQUAL, Parasuraman, et al., 1988).

Personal context is a construct that attempts to study the perceptions of the students towards their perceived weaknesses, such as in areas of study skills as compared to others in the class, the deficiency in English skills, the non-familiarity with the subject, the inability to focus and pay attention in a subject, the felt non-confidence in dealing with the subject and its assignments. Thus, to an extent, this construct is an attitudinal schema that skews towards the “negative” aspect of attitude, rather than on the “positive” aspect of the student attitude as self-achievement.

Personal achievement attitude is a construct that illuminates the potential engagement attitude and efforts of the students, such as towards challenging class works which the students perceive can help them to learn new things and be able to utilize in future classes. Many research efforts in educational fields indicate that personal achievement attitude that drives student engagement or involvement in academic work can lead them to acquire new level and scopes of knowledge and thus improve their general cognitive development (Pascarella & Terenzini, 1991), partly because they really care about what they are learning, or in short, they want to learn

(Barkley, 2009), or make meaning of what they are learning (Barkley, 2009). Towards this end, the further research could explore into active learning construct which seems to share similar characteristics, namely as “doing what we think and thinking about what we are doing” (Bonwell & Eison, 1991) or intending to do – essentially a driving force behind the working principle of personal achievement attitude.

Learning environment stimulation attempts to reflect how the students perceive towards the normal-class learning environment, such as in aspects of their perceptions over how the teachers at the normal class dedicate in terms of time and the degrees of efforts to the students, including the provision of the types and appropriateness of assignment materials to guide them in the understanding, and the process of facilitation.



**Source** Developed for this Research

**Figure 2.2** Conceptual Model

Specifically, the purpose of this research is to study the roles played by the personal and situational aspects of motivation as well as the teaching quality factor

which adapts the SERVQUAL (Service Quality) concept of Parasuraman et al. (1988), towards performances and self-efficacy attitude of the students, within the comparative context between tutoring and without it, by the use of “Accounting” as the subject of focus, and by focusing on only the students who have had attended the basic “Accounting” subject at Mae Fah Luang University.

To address the research objective, three hypotheses are raised, and tutored or non-tutored student groups as the main comparative variable of this research, and some of the demographic variables are also included, which are aimed to examine, statistically, for their significant roles in the socio-cognitive framework suggested.

Hypothesis 1 (H1): Which states that personal factors, in terms of personal context (personal subject background), personal achievement attitude and learning environment stimulation, are influenced by the teaching service quality of the regular classroom.

Hypothesis 2 (H2): The success of the students, tutored or non-tutored, needs the simultaneous working of the individual motivation attitude, characterized by both personal and situational aspects of motivation, and the quality of the teaching represented by empathy, responsiveness, reliability, assurance and the tangibles.

Hypothesis 3 (H3): The self-efficacy attitude of the students, whether tutored or non-tutored, needs the simultaneous working of the individual motivation attitude, characterized by both personal and situational aspects of motivation, and the quality of the teaching represented by empathy, responsiveness, reliability, assurance and the tangibles, and the perceived student performance.

Specifically, multivariate regression analysis technique would be used to study the level of behavioral performance variants caused by service environment and personal cognitive mechanisms. Behaviors are exempted from the study so that this research can focus on the fundamental structure of the Triadic Reciprocal Determinism of Social Cognitive Theory of Bandura (1989).

The provision of the conceptual model arrangement allows the property of equi-finality principle of psychology to work in the background, which states that student performance can actually be attained through a number of different routes (Lewin, 1935; Heider, 1958), although under the contextual associative linkage structure of the tripartite relationship. In addition, the interrelationship between

academic performance and self-efficacy attitude of the students can also be established in the extant literature.

According to the published literature, the relationship between academic self-efficacy and students' academic performance are well verified (Akomolafe, Ogunmakin & Fasoota, 2013; Brown, Lent & Larkin, 1989; Sharm & Silbereisen, 2007; Zajacova, Lynch & Espenshade, 2005). The influence of academic self-efficacy on academic performance which showed in previous research that the students who have high self-efficacy, also have high capacity in working challenge tasks, solving problem, and adapting themselves in different educational environments, these are indicated as the student's performance (Moustafa & Sudhir, 2013). More finding explained that student with high self-efficacy positively correlates with their learning outcomes, skill improvement, capable in doing on study activities and academic achievement (Zimmerman, 1989; Schunk, 1982).

Specifically, some studies showed the association between students' beliefs about their abilities in an accounting course and their performance in examination. The result showed that the more students' self-efficacy leads to the higher final examination score and the higher of final grade (Christensen, Fogarty & Wallace, 2002).

Self-efficacy also is related to self-motivation and student performance, which would motivate and thrust the students to work actively in self-improvement to achieve goals by their self-motivated belief in their abilities and the learning process to meet achievable goals (Moustafa & Sudhir, 2013). In particular, Schunk (1982) and Wood and Bandura (1989) discover that self-efficacy can significantly be predicted by the students' abilities in achieving goal, manifested by the students' academic performance. Thus, proven performance the students can achieve can help to enhance their motivation to learn which leads to increase their self-efficacy as well (Schunk, 1982; Wood & Bandura, 1989). More explanation can also be found in Christensen et al. (2002) who presented the effect of skills, ability and previous accomplishments on self-efficacy in an accounting course. In other words, the previous accomplishment in accounting and experience in accounting classes can influence to develop students' self-efficacy which can further help to improve student performances.

## 2.10 Summary

Many studies have discovered several factors which are associated with student performance in accounting courses at university level, for instance, intrinsic motivation (Mostafa & Maksy , 2008), and the self-regulatory attributes of self-efficacy (Mooi, 2006). Also, there are research results relating to service quality associated with student assessment as the element to develop teaching performance of instructor in higher education (Adriana, Joan-Lluís, Víctor & Gimenez, 2014). However, from the extant literature reviews, there is a dearth of research that investigate the linkage between students' academic performance and self-efficacy attitude formation , as well as a comparative study between students who attend and not attend tutorial service from the influencing of personal cognitive factor (personal achievement attitude of students) and the environmental variables (service quality of the teaching).

This study underpins on the triadic reciprocal determinism model of social cognitive theory (Bandura, 1989) as the central idea to help put a structure of the research finding.

## CHAPTER 3

### RESEARCH DESIGN AND METHODOLOGY

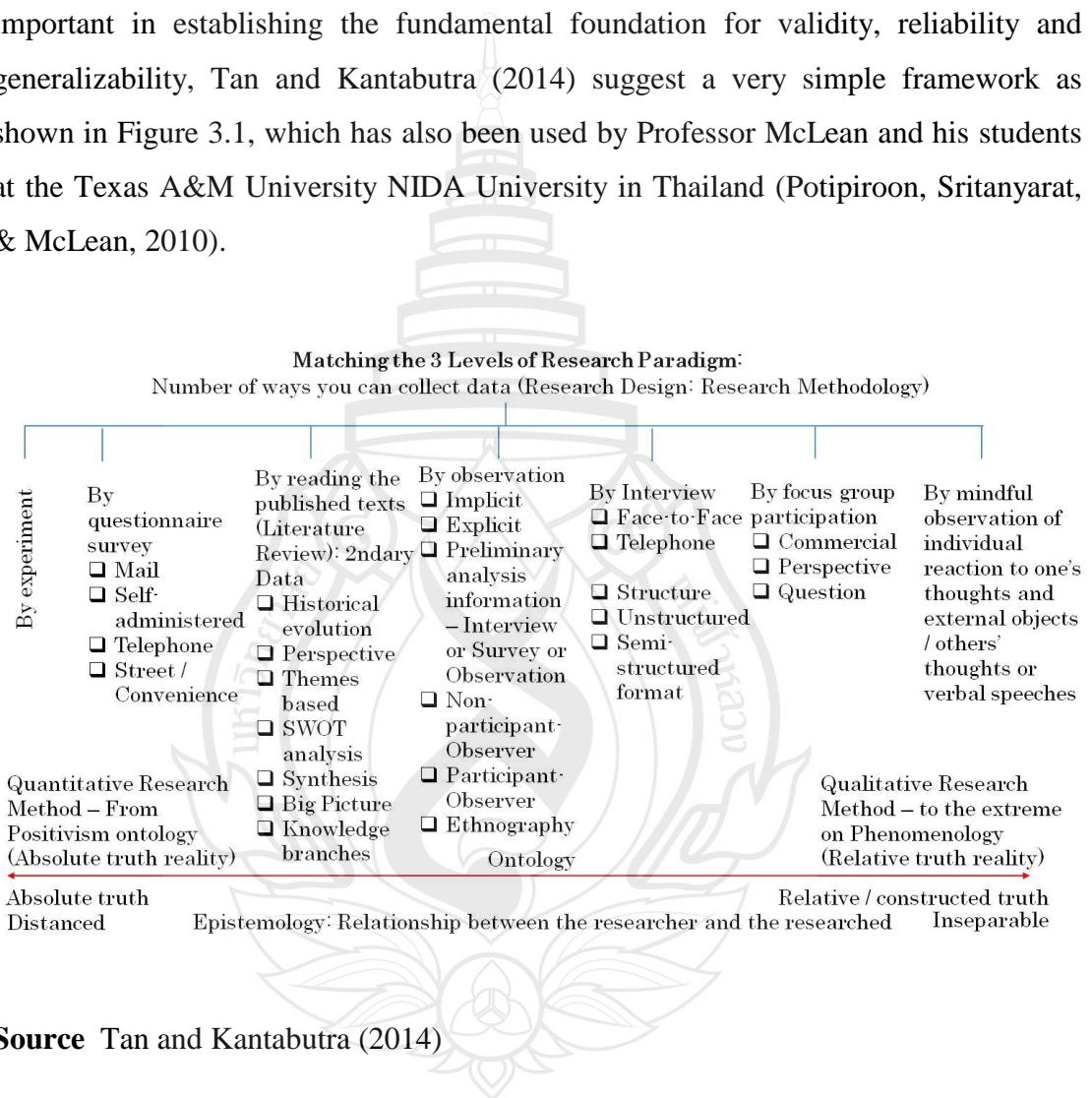
#### 3.1 Introduction

This chapter discusses the chosen research design and methods and justifies how they were selected. This chapter now discusses how the design suits the research objective and the two hypotheses that were raised in Chapter Two, as well as providing a comparative study between the tutored and non-tutored student groups. Section 3.2 justifies the epistemological position taken in the methodology. The specific research design and procedures are discussed in Section 3.3. Section 3.4 narrates the sampling procedure, and Section 3.5 explains how the questionnaires instrument is developed, justified by the reliability coefficients of inter-item reliability analysis.

#### 3.2 Epistemological Position

For any rigorous research, it is important researchers make an attempt to distinguish between the things that get explained (i.e. the phenomena under the research study as revealed in the theoretical conceptual model or the hypotheses raised to be answered) and the things that do the explaining. While the former deals with the explanations of reality in search for the truth of knowledge, the latter deals with the philosophy of knowledge, for instance, as stated in logical empiricism, positivist school of social science, hermeneutics and phenomenology (Bernard, 2013). The latter subject is known as issues of epistemological position of research.

Epistemological position provides a broad-based philosophical guide to help researchers design an appropriate research study approach with an attempt to align between the assumed realities of the phenomenon studied and the methodological procedures, including the interrelationship between the researcher and the researched. To help understand these complex philosophical issues, which are nevertheless very important in establishing the fundamental foundation for validity, reliability and generalizability, Tan and Kantabutra (2014) suggest a very simple framework as shown in Figure 3.1, which has also been used by Professor McLean and his students at the Texas A&M University NIDA University in Thailand (Potipiroon, Sritanyarat, & McLean, 2010).



**Figure 3.1** Research Epistemology

Basically, the world is a world of data world and conceptual world, and conceptually there is this objective, absolute truth of reality versus the subjective, relative truth, as shown in Figure 3.1. Methodologically, for simplicity in illustration, experimentation and questionnaire-based surveys are suitable approaches for

objectivistic epistemology whereas phenomenological or interviews-based approaches are useful to help identify relative truths. In this research, a positivistic paradigm is assumed, which exploits quantitative survey as its data collection method. In this way, the research design also maintains a distanced relationship between the researcher and the researched, through means of survey instrument.

### 3.3 Research Design

Everyday life is often complicated by the so-called interaction effects, i.e. the effects of such factors as gender, education, and idiosyncratic motivational attitudes towards an event such as tutoring or normal class education, and as such, social life is normally considered to be too complicated to undertake an experimentation research approach (Perri & Bellamy, 2012). Even observational research approach, although practical, is difficult to conform to strict research rigor tests and controls of variables, such as in areas of units of interest or attention, the means by which data are created, collected, recorded and made capable of being analyzed, and the analytical procedures used on the data such as partitioning into periods, subgroups or sub-cases, and identification of patterns (Perri & Bellamy, 2012).

As such, the best approach to study the phenomenon of student attitude towards tutoring and non-tutoring at a university context, with accounting subject as a case, including the student's perceived performance and its effect on the student's efficacy attitude, is quantitative survey. In sum, a deductive research design procedure (Tan, 2015) is employed, which can be depicted in the following design sequence:

1. A theoretical problem is formulated in which the research objective states to study the roles played by personal and environmental determinants, characterized by intrinsic motivation and instructor's service quality, toward influencing students' performance and their self-efficacy attitude, within the comparative context between tutoring and without it, by the use of accounting as the subject of focus. This research objective will be addressed by adapting the triadic determinism framework of social cognitive theory.

2. Next, an appropriate sampling candidate and deduction-based research design procedure are introduced.

3. Then, data collected are subjected to exploratory factor and reliability analyses, which provided the necessary robust quality, i.e. content validity, construct validity, and reliability, of the measurement instrument of the variables, as the bases to explain and interpret the statistical evidences on the hypotheses being raised.

4. Lastly, the data analyzed are put into perspectives of the extant literature and in the context of the contributions of this knowledge from the view of research objective.

To be specific, the above research design procedure is deductive in nature which relies on the triadic determinism theory of social cognition to help guide the logical steps in conceptual reasoning.

### 3.4 Sampling

Students in Mae Fah Luang University, Chiang Rai, Thailand were involved in this study. The valid convenience sample size of 227 students, ranging from first-year to the fourth-year students, from two schools, namely the school of management and the school of sinology, was based in the statistical analysis.

The school of management includes Accounting, Business Administration, Tourism Management, Aviation Business Management, Hospitality Industry Management, Economics, and Logistics and Supply Chain Management majors.

The school of sinology is predominantly of Business Chinese major.

These majors have the Accounting course in the program requirement. A sample of 89 from the 227 students who have had experienced in tutoring for accounting subject were asked to complete the section of Service Quality in Tutorial Service, otherwise every student participant was asked to answer all other questions in the survey.

The survey was conducted before the beginning session of a normal class, or conveniently by asking the students from the library, canteens, and other areas around

Mae Fah Luang University. In other words, the data collection location was purposively spread around in order to avoid the unnecessary bias of the student responses. Thus, the sample participants are selected based on their availability to participate but nevertheless the effort is not straightforward as many of those approached do not major in any of the degrees offered by the School of Management and Sinology.

### **3.5 Questionnaire Development, and Reliability and Validity Assessment**

As discussed in Bernard (2013), strict operationism creates knotty philosophical problem to aim to turn abstractions (concepts) into reality by the use of measurement. But since there are many ways to measure the same abstract, the reality of any concept hinges on the reliable device used. Measurement instrument is important as data validity is closely tied to instrument validity. In addition, the survey instrument must be developed to have reliability quality, such as reflected by interobserver (or inter-rater) reliability, test-retest reliability, parallel test forms, or split-half test. To ensure reliability, inter-item consistency test would be used in this research, being concluded in Cronbach's alpha coefficients, to best beyond 0.7 (note that 0.6 is the minimal accepted reliability coefficient for self-developed questionnaire items, at exploratory research level; Bernard, 2013).

The questionnaire development reflects the essence of the social cognitive theory and theory of motivation being adapted to influence student learning attitude and perceived performances. Concept of SERVQUAL would also be incorporated within the triadic reciprocal determinism of the social cognitive theory. This section would therefore not only provide the theoretical backgrounds for the factorized constructs involved in this research but also to present the questionnaire items and their collective reliability measure. The survey instrument designed as such, guided by social cognitive theory and the relevant literature review, is aimed to establish the needed construct validity as a result of the close fit between the construct it supposedly measures and actual observations made with the instrument. This is

further validated by the internal validity of the theoretical conceptual model with is purported to predict the validity of the theory.

Specifically there are numerous key constructs involved which are needed to validate the proposed theoretical conceptual model, for instance, student performance, student self-efficacy attitude, personal achievement attitude as intrinsic motivation factor, and different facets of instructor-driven service quality, for tutoring and normal class room experiences. Within each of these constructs, both tangible and intangible aspects would be discussed, including the creation and communication of information, and the necessitating of the skills needed to perform (Cranney & Dalton, 2012). For instance, in the questionnaire instrument, Instructor illustrates with a multitude of examples to make students understand confidently: which shows the “Assurance” aspect of the service quality in the normal class teaching, Study materials are easy to read and understand: which exhibits the “Tangibles” attributes of the service quality of the normal-class teaching.

Thus, the different facets that make up the instrument of the constructs actually adapt the empirical evidences of the effectiveness of student learning, but being sorted out in the theoretical structure of this research. In the service quality instrument, the objective is to aim to ensnare the key relevant aspects of practices essential for the undergraduates to learn and the scopes of the instructor’s efforts in both norm class room and in tutoring environment.

On the perceived performance aspect, the instrument attempts to be broader than the normally constrained version which assesses the students that are relevant to the subject (Dillon, Reuben, Coats & Hodgkinson, 2007). Specifically, the definition of learning outcomes from Suskie (2009, p. 117), is adopted as a generic guideline for the survey instrumentation development, quoted “Learning outcomes are the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience.” Also, learning outcomes should include performance or with relevancy to reflect fulfilling the performance assessment criteria (Mager, 1962; Marzano, 2009).

Thus, instrument items, for instance, include in this research are Studying this subject contributes to advance my progress at the university: Performance achieved, Studying this subject helps me to enhance my efficiency level of learning: Skills

improved, Studying this subject contributes to increase my ability to work on my future career: Attitude established.

“One aspect of intrinsic motivation is commitment, which can be viewed at two different levels of abstraction: commitment to the goals and commitment to activities associated with goal attainment” (Shah & Kruglanski, 2000). Commitment to the means as “a particularly important determinant of goal commitment” is also stressed in Gollwitzer and Brandstätter (1997). Based on these understanding, the intrinsic motivation instrument towards personal achievement attitude is developed by the use of the following items:

1. I prefer class work that is challenging so I can learn new things.
2. Compared with other students in this class, I expect to do well.
3. It is important for me to learn what is being taught in this class.
4. I want to receive a good grade in this class.
5. I want to graduate with Honors.

In other words, the intrinsic motivation is structured to reflect goals-means (activity as intrinsic motivator) association. Thus, activities such as challenging work assignments and learning what is being taught reflect that the activities’ perceived intrinsically, defined as “the attribution that the students are performing the activities for their own sake or as an end in themselves” (see Deci, 1975; Deci & Ryan, 1985).

Specially, the following Tables 3.1-3.7 list the questionnaire items of the relevant constructs, together with the main references and the inter-item reliability, coefficient represented by Cronbach’s Alpha. The questionnaire items are the outcomes of the exploratory factor analysis which depicts the contents of each of the latent variable. The exploratory factor analysis allows the questionnaire items to be reduced to the level of latent variable. In other words, if the clusters of questionnaire items do reflect different characteristics or dimensions of a construct, the exploratory factor analysis would be able to reflect this reality. Also, the operationalization is guided by the operational definition of the variables which have been discussed in Chapter One. According to Privitera (2014), in doing so it provides the so-called construct validity which is established when the researcher determines that the operational definition for a variable or construct is actually measuring that variable or construct.

**Table 3.1** Personal Context (Personal Subject Background)

Questionnaire Items	Main References	Cronbach's Alpha
1. My study skills are weak compared with others in this class	Pintrich and Degroot (1990)	$\alpha=0.763$
2. My English skills are weak, so I don't understand in the class	Das and Das (2013)	
3. I cannot pass the examination without getting help from other	Tuan, Chin, and Shieh (2005)	
4. I am not familiar with this subject	Self-Developed	
5. When teacher is talking I think of other things and don't really listen to what is being said		
6. I am not confident about understanding this difficult subject concept		
7. When doing assignment of this subject, I give up		
8. When doing assignment of this subject, I prefer to ask other people for the answer rather than think for myself		
9. I find this subject is interesting		

**Table 3.2** Personal Achievement Attitude

Questionnaire Items	Main References	Cronbach's Alpha
1. I prefer class work that is challenging so I can learn new things	Pintrich and Degroot (1990)	$\alpha= 0.828$
2. Compared with other students in this class, I expect to do well	Tuan et al. (2005)	
3. It is important for me to learn what is being taught in this class	Self-Developed	
4. I think I will be able to use what I learn in this class in my future		
5. I want to receive a good grade in this class		
6. I want to graduate with Honors		

**Table 3.3** Learning Environment Stimulation

Questionnaire Items	Main References	Cronbach's Alpha
1. The teacher at the normal class usually has no time for me	Pintrich and Degroot (1990)	$\alpha = 0.794$
2. When I have some difficulty with the understanding of the subject, the teacher at the normal class never shows the efforts to help me promptly	Tuan et al. (2005) Das and Das (2013) Self-Developed	
3. The teacher in normal class does not teach properly		
4. The teacher in normal class give me few assignments or problems to practice		
5. The teacher in normal class put a lot of pressure on me		
6. Many students in class, making me hesitate and afraid to ask the question		
7. Material for this class is hard to read and understand		
8. Study materials in normal class are uninteresting		
9. The contents of the normal class are exciting and challenging		

**Table 3.4** Service Quality (Regular Classroom)

Questionnaire Items	Main References	Cronbach's Alpha
<b>SERVQUAL: Tangible</b>		
1. Study materials are easy to read and understand	Daniel and Beriyuy (2010)	$\alpha = 0.784$
2. Study materials include many problem and solution for me to practice	Das and Das (2013)	
3. Study materials are up-to-date	Parasuraman et al. (1988)	
4. Instructor provides some exercise question papers to help me prepare for examinations		

**Table 3.4** (Continued)

Questionnaire Items	Main References	Cronbach's Alpha
<b>SERVQUAL: Tangible</b>		
5. Classroom equipment are prepared well	Tuan et al. (2005)	
<b>SERVQUAL: Reliability</b>		
1. Instructor always gives me correct and good answer when I ask the question	Self-Developed	$\alpha=0.835$
2. When instructor promises me to do something by a certain time, he/she does so		
3. Instructor can be depended upon to advance my subject knowledge		
4. Instructor gives students the examination guideline		
5. When an examination is coming, Instructor reviews all the important issues for students		
<b>SERVQUAL: Responsiveness</b>		$\alpha=0.912$
1. Instructor has available hours convenient to all students		
2. Instructor always discusses with me to clarify my understanding		
3. Instructor usually shows the efforts to help students immediately		
4. When I have problem, Instructor helps me to solve the problem immediately		
5. Instructor is always willing to help students		
<b>SERVQUAL: Assurance</b>		$\alpha=0.901$
1. Instructor teaches in the easy way that makes me understand the subject clearly		
2. Instructor illustrates with a multitude of examples to make students understand confidently		
3. Instructor make me feel comfortable to ask the question		

**Table 3.4** (Continued)

Questionnaire Items	Main References	Cronbach's Alpha
<b>SERVQUAL: Assurance</b>		
4. The behavior of instructor instill confidence in students		$\alpha=0.900$
5. I feel confident with the instructor being able to advance the subject knowledge		
6. Instructor has strong experience teaching this subject		
<b>SERVQUAL: Empathy</b>		
1. Instructor gives students individual attention		
2. Instructor does not put a lot of pressure on student		
3. Instructor gives students extra care, especially focusing on weakness		
4. Instructor is friendly and reachable		
5. Instructor understands the specific need of students		
6. Instructor gives students personal advice		

**Table 3.5** Service Quality (Tutorial Service)

Questionnaire Items	Main References	Cronbach's Alpha
<b>SERVQUAL: Tangible</b>		
1. Tutorial materials are easy to read and understand	Daniel and Beriyuy (2010)	$\alpha=0.914$
2. Tutorial materials include many problem and solution for me to practice	Das and Das (2013)	
3. Tutorial materials are up-to-date	Parasuraman et al. (1988)	
4. Private tutoring provides some previous years' examinations question papers to help me on the preparation of examinations		

**Table 3.5** (Continued)

Questionnaire Items	Main References	Cronbach's Alpha
<b>SERVQUAL: Tangible</b>		
5. Tutorial service has good equipment i.e. white board, table, and teaching materials	Tuan et al. (2005) Self-Developed	
<b>SERVQUAL: Reliability</b>		
1. Private tutoring helps me to do the examination		$\alpha=0.938$
2. Tutor always gives me correct and good answer when I ask the question		
3. When Tutor promises me to do something by a certain time, he/she does so		
4. Private tutoring can be depended upon to advance my knowledge		
5. Private tutoring provides its services at the time it promises to do so		
6. Tutor always shows more interest to help me advance the subject knowledge than the teacher of normal class		
<b>SERVQUAL: Responsiveness</b>		
1. Tutor usually has time for me		$\alpha=0.947$
2. Tutor always discusses with me to clarify my understanding		
3. When I have problem, tutor helps me to solve the problem immediately		
4. Private tutoring provides convenient way to contact with tutor when I need help		
5. Tutor usually shows the efforts to help me immediately		
6. Tutor is always willing to help students		

**Table 3.5** (Continued)

Questionnaire Items	Main References	Cronbach's Alpha
<b>SERVQUAL: Assurance</b>		
<ol style="list-style-type: none"> <li>1. Tutor teaches in the easy way that makes me understand the subject clearly</li> <li>2. Tutor teaches more than the syllabus of the regular university class</li> <li>3. Tutor uses a variety of teaching methods to make sure students can understand the subject</li> <li>4. Tutor make me feel comfortable to ask the question</li> <li>5. The behavior of tutor instills confidence in students</li> <li>6. I feel confident with the tutorial service being able to advance the subject-knowledge</li> <li>7. I feel confident with the tutorial service being able to get me passing quizzes, mid-term and final exams of the subject</li> </ol>	$\alpha=0.942$	
<b>SERVQUAL: Empathy</b>		
<ol style="list-style-type: none"> <li>1. Tutor gives me extra care, especially focusing on my weakness</li> <li>2. Tutor usually pays attention to individual student</li> <li>3. Tutor is friendly and reachable</li> <li>4. Tutor usually tells me my progress of improvement</li> <li>5. Tutor does not put a lot of pressure on me</li> <li>6. Tutor understands the specific need of students</li> <li>7. Tutor gives students personal advice</li> <li>8. Tutor gradually improves my understand of the subject knowledge</li> </ol>	$\alpha=0.924$	

**Table 3.6** Student Performance

Questionnaire Items	Main References	Cronbach's Alpha
1. Studying this subject contributes to advance my progress at the university	Das and Das (2013)	$\alpha=0.916$
2. Studying this subject helps me to enhance my efficiency level of learning	Pintrich and Degroot (1990)	
3. Studying this subject contributes to increase my ability to work on my future career	Self-Developed	
4. Studying this subject contributes to increase my ability to study on other related subjects		
5. Studying this subject helps to improve my academic skills		
6. I gain more familiarity with this subject		
7. Study in normal class become easier to understand for me		

**Table 3.7** Students' Self-efficacy Attitude

Questionnaire Items	Main References	Cronbach's Alpha
1. I think I am able to do the examination well	Das and Das (2013)	$\alpha=0.947$
2. I think I will get a good grade in this subject	Pintrich and Degroot (1990)	
3. I have positive feeling toward this subject	Self-Developed	
4. I feel more comfortable to study this subjects		
5. I have an easy, good feeling when I take a test of the subject		
6. I think that what I am learning in this class is useful for me		

## CHAPTER 4

### RESULT AND ANALYSIS

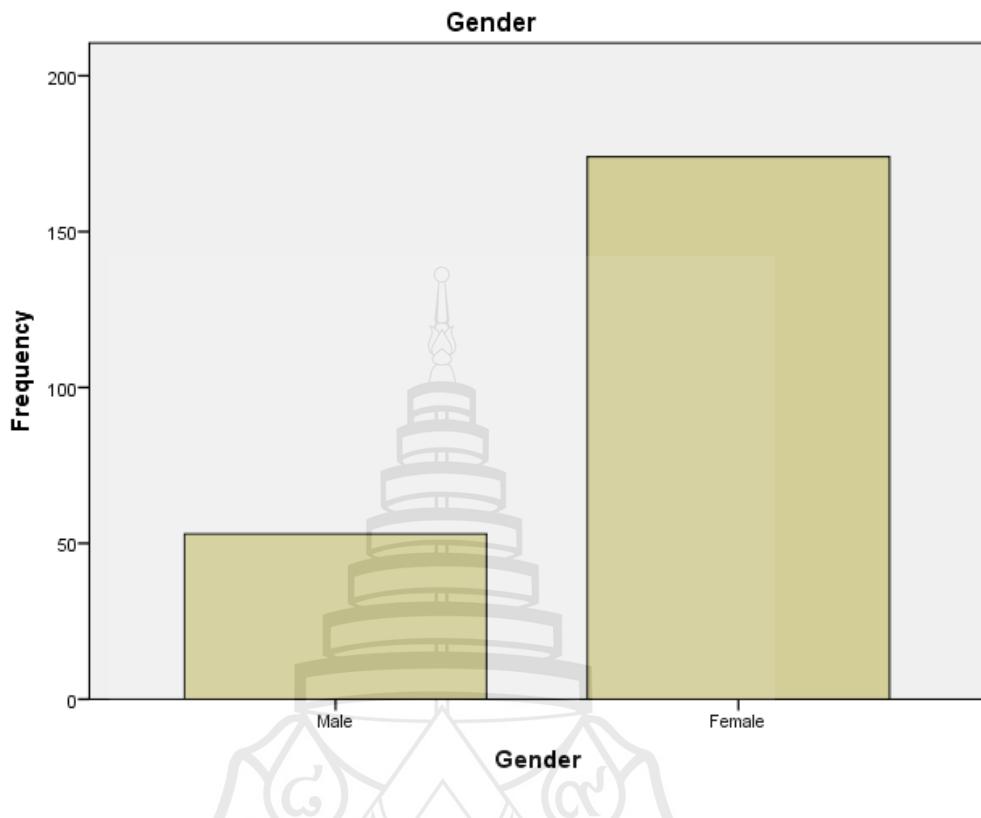
#### 4.1 Introduction

The literature review in Chapter 2 raised the research objective and two hypotheses as well as the tutored and non-tutored comparative context to be addressed, which provides the guidelines for the survey instrument design, as presented in Chapter 3. This chapter provides both descriptive and inferential statistics analysis of the data collected. First, section 4.2 describes the student profiles. Section 4.3 provides a systematic descriptive study of the constructs involved in this research, which provides the background for the next Section 4.4 that examines the hypotheses raised. The comparative tutored and non-tutored study is presented in Section 4.5, and the t-test and ANOVA tests of the demographic variables are discussed in Section 4.6. The statistical analysis was performed by the use of SPSS Version 20, based upon a firm foundation of post-exploratory factor and reliability analyses as already discussed in the methodological section.

#### 4.2 Student Profiles

##### 4.2.1 Descriptive Analysis of Gender Variables

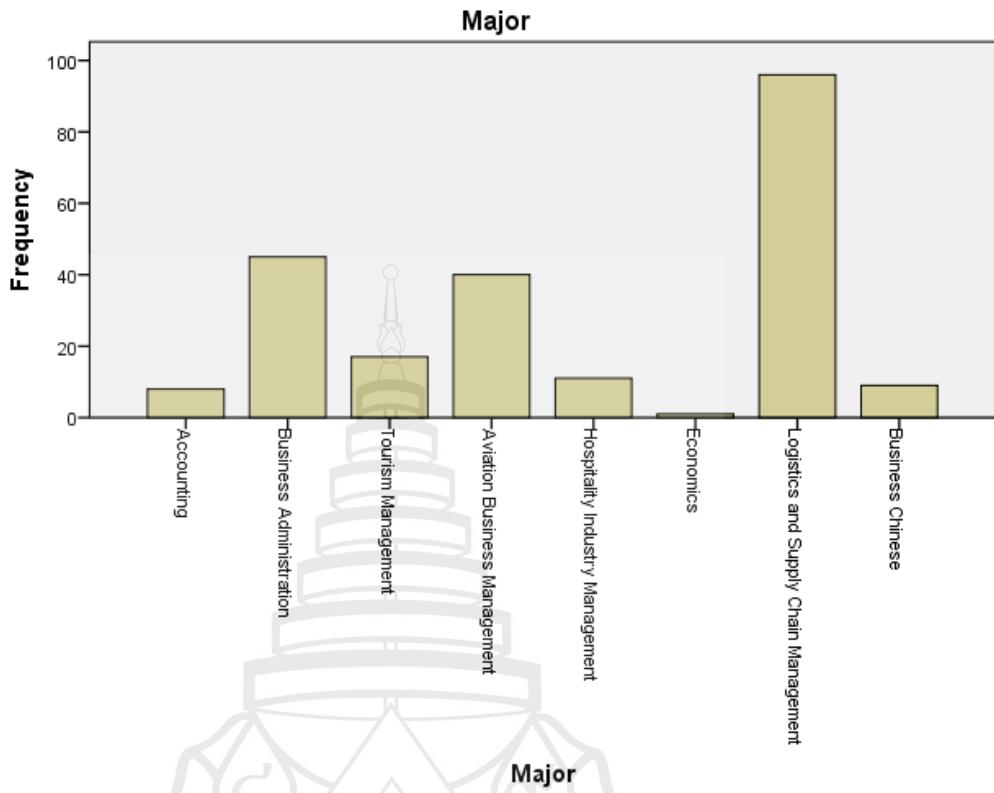
This research involved 227 participants, who are students in Mae Fah Luang University. The descriptive analysis indicated that the majority of the students in this research were females (76.7%), and the rest were male (23.3%) that showed in Figure 4.1.



**Figure 4.1** Gender Profile

#### 4.2.2 Descriptive Analysis of Major Variables

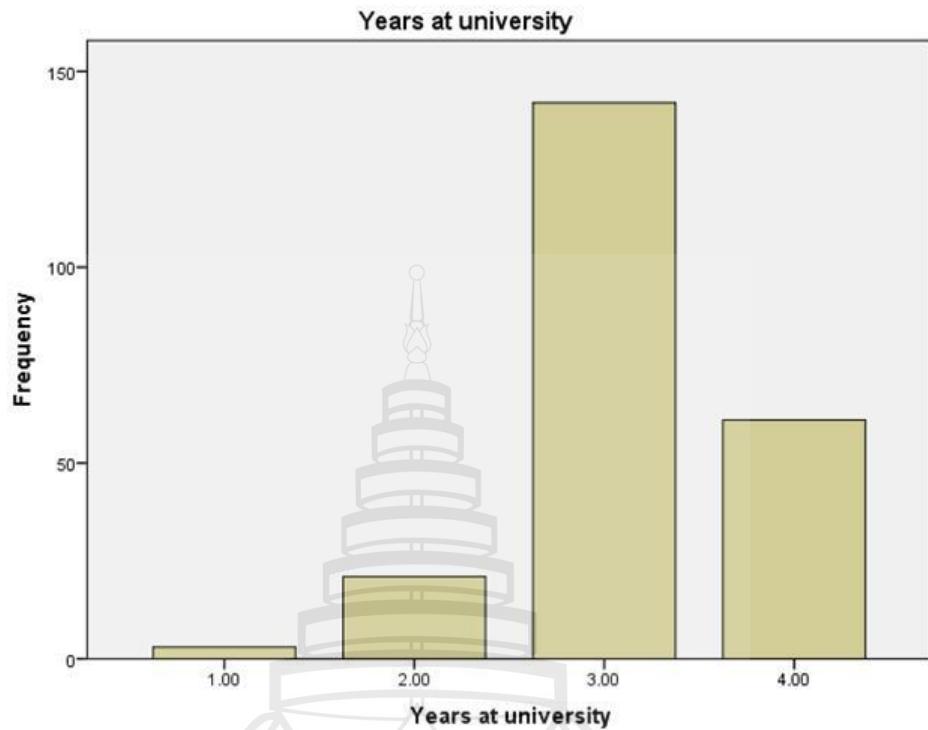
The students chosen for the study were in majority from the two main major schools, namely the school of management and school of sinology, at the university. The students who participated were conveniently sampled, which after the descriptive analysis of the demographic variables in Figure 4.2, it indicated that there were eight majors of studies involved, with 42.3 percent of the students majored in Logistics and Supply Chain Management, followed by 19.8 percent in Business Administration, 17.6 percent in Aviation Business Management, 7.5 percent in Tourism Management, 4.8 percent in Hospitality Industry Management, 4 percent in Business Chinese, 3.5 percent of direct major in Accounting, and 0.4 percent in Economics.



**Figure 4.2** Profiles of the Different Majors

#### 4.2.3 Descriptive Analysis of Years at University Variables

This research involved 227 first-to-fourth year student participants. In Figure 4.3 showed the descriptive analysis at the time of the data collection, majorities of 62.6 percent were the third-year students, followed by the fourth-year students at 26.9 percent, second-year students at 9.3 percent, and rest, as first year students, at 1.3 percent. These students had taken the compulsory accounting subject at the university.



**Figure 4.3** Profiles of the Years at University of the Students

### 4.3 Descriptive Analysis of Constructs

This section presents the descriptive outlooks of the constructs involved in this research. First, the three motivation oriented constructs will be discussed, namely personal context (personal subject background), personal achievement attitude, and perceived learning environment stimulation.

#### 4.3.1 Personal Context (Personal Subject Background)

Personal context, presented in Table 4.1, is a construct that attempts to study the perceptions of the students towards their perceived weaknesses, such as in areas of study skills as compared to others in the class, the deficiency in English skills, the non-familiarity with the subject, the inability to focus and pay attention in a subject, the felt non-confidence in dealing with the subject and its assignments. Thus, to an extent, this construct is an attitudinal schema that skews towards the “negative” aspect

of attitude, rather than on the “positive” aspect of the student attitude as self-achievement attitude in Table 4.2. As a schema, Cross (1999) provides a useful definition, “A schema is a cognitive structure that consists of facts, ideas, and associations organized into a meaningful system of relationships. People have schemata for events, places, procedures, and people, for instance. A person’s schema for a place, such as a college, might include concepts such as location, reputation, the characteristics of the student population, the style of campus architecture, even the location of campus parking lots. Thus, the schema is an organized collection of bits of information that together build the concept of the college for each individual. When someone mentions the college, we know that means, but the image brought to mind may be somewhat different for each individual”. (p. 8).

Nevertheless, as shown in Table 4.1, from a five-Likert scale structure in which “1” represents “Strongly disagree,” and “2” signifies “disagree,” and “3” as “neither disagree nor agree,” and “4” as “Agree,” and “5” as “Strongly agree,” the perceived responses are below “4”, in between the mean of 2.3833 to 3.4097, with wide standard deviation. Thus, although the students’ perceptions towards their context of weaknesses are not so severe, the fact that the standard deviation of more than 1.0 from the mean of around 3.2 to 3.4 would imply that there are still certain percentages of students agree that they are in weak positions as compared to others. In the inferential statistical study it would demonstrate that the students’ schema, in terms of personal context or self-achievement performance, would have predictability influence to student performances and the self-efficacy attitude of the students. Nevertheless, the weaker schema of understanding about the subject that prompts tutoring in the first place could be owed to the novice status of the students toward the subject, as compared to the expert who can quickly grasp new information in useable form because connections to exiting knowledge are already existed. Thus, the fact of the influence of personal context would imply to the teacher that the learning of a novice is labored and could be slow, not because the novice is less intelligent than the expert, but because connections between new information and existing schemata are sparse, for instance, as shown by the perceptions of the students

**Table 4.1** Descriptive Analysis of Personal Context (Personal Subject Background)

Item No.	Questionnaire Statement	Mean	Std. Deviation
PC4	I am not familiar with this subject	3.4097	1.11486
PC1	My study skills are weak compared with others in this class	3.2996	.95850
PC3	I cannot pass the examination without getting help from other	3.2159	1.10994
PC2	My English skills are weak, so I don't understand in the class	3.0352	1.00379
PC9	I find this subject is interesting	2.9471	1.11181
PC8	When doing assignment of this subject, I prefer to ask other people for the answer rather than think for myself	2.8018	1.03068
PC6	I am not confident about understanding this difficult subject concept	2.7841	.99205
PC5	When teacher is talking I think of other things and don't really listen to what is being said	2.7048	1.05013
PC7	When doing assignment of this subject, I give up	2.3833	1.02114

#### 4.3.2 Personal Achievement Attitude

To some extent, personal achievement attitude is a construct that illuminates the potential engagement attitude and efforts of the students, such as towards challenging class works which the students perceive can help them to learn new things and be able to utilize in future classes. Many research efforts in educational fields indicate that personal achievement attitude that drives student engagement or involvement in academic work can lead them to acquire new level and scopes of knowledge and thus improve their general cognitive development (Pascarella & Terenzini, 1991), partly because they really care about what they are learning, or in short, they want to learn (Barkley, 2009), or make meaning of what they are learning (Barkley, 2009). Towards this end, the further research could explore into active learning construct which seems to share similar characteristics, namely as “doing what we think and thinking about what we are doing” (Bonwell & Eison, 1991) or

intending to do – essentially a driving force behind the working principle of personal achievement attitude.

**Table 4.2** Descriptive Analysis of Personal Achievement Attitude

Item No.	Questionnaire Statement	Mean	Std. Deviation
PA5	I want to receive a good grade in this class	3.9824	.97747
PA4	I think I will be able to use what I learn in this class in my future	3.7225	.96284
PA6	I want to graduate with Honors	3.5154	1.20965
PA3	It is important for me to learn what is being taught in this class	3.5022	.91871
PA2	Compared with other students in this class, I expect to do well	3.2291	1.00461
PA1	I prefer class work that is challenging so I can learn new things	3.0352	1.01693

### 4.3.3 Learning Environment Stimulation

As indicated in Table 4.3, learning environment stimulation attempts to reflect how the students perceive towards the normal-class learning environment, such as in aspects of their perceptions over how the teachers at the normal class dedicate in terms of time and the degrees of efforts to the students, including the provision of the types and appropriateness of assignment materials to guide them in the understanding, and the process of facilitation. As the survey instrument asked in this section is designed by the use of “Reversed” questions, and thus, from among the perceptions shown in Table 4.3, the student’s learning environment in normal classroom of the subject of “Accounting” is not negative, towards stressful and deficiency levels, but the conclusion is not homogeneous as the descriptive data show wide ranges of standard deviation. Nevertheless, learning environment stimulation construct has been reported to be an issue in student learning, for instance, in Ratcliff (1995), it is reported that a successful transition to college is related to the quality of classroom life, and by classroom, it is diversified in nature, as shown in the instrument of this

research, but could also involve the communication effort of the instructor. In particular, student motivation and achievement is greater when instructors communicate high expectations for success by providing the students with challenging rather than easy assignments, allowing students to take greater responsibility for their learning, and encouraging various forms of collaborative learning (i.e., peer learning or group learning). In other words, the further research could expand the scopes of the contents and dimensions of the learning environment stimulation, such as including peer learning or group learning factors, as forms of collaborative learning, and the expectations of the instructors, as well as team working spirit of the students.

**Table 4.3** Descriptive Analysis of Learning Environment Stimulation

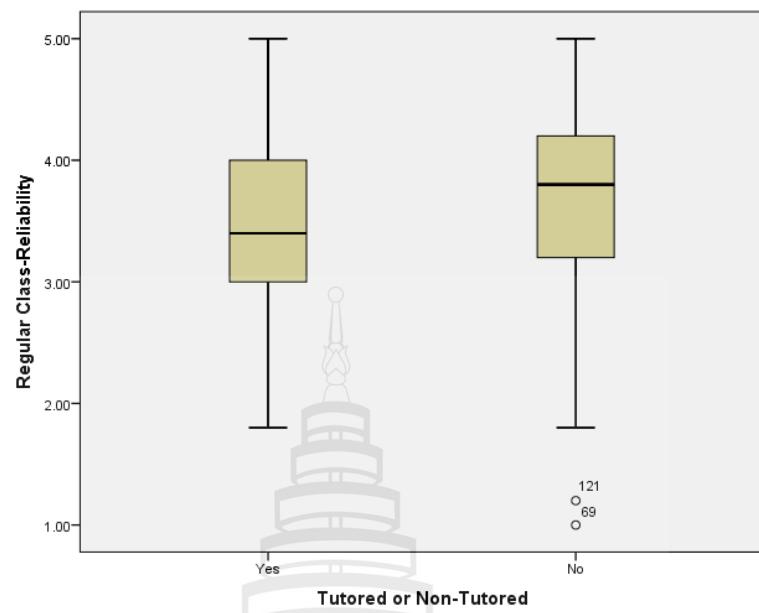
Item No.	Questionnaire Statement	Mean	Std. Deviation
LES6	Many students in class, making me hesitate and afraid to ask the question	3.2643	1.15241
LES9	The contents of the normal class are exciting and challenging	3.0132	.97072
LES7	Material for this class is hard to read and understand	2.9559	.99902
LES8	Study materials in normal class are uninteresting	2.8943	1.03792
LES4	The teacher in normal class give me few assignments or problems to practice	2.5947	.94708
LES3	The teacher in normal class does not teach properly	2.5374	.94174
LES2	When I have some difficulty with the understanding of the subject, the teacher at the normal class never shows the efforts to help me promptly	2.4802	1.03193
LES1	The teacher at the normal class usually has no time for me	2.3348	.88886
LES5	The teacher in normal class put a lot of pressure on me	2.3216	1.01651

What follows provides the descriptive profiles of the construct “service quality” that relates to both the regular class, in Table 4.4 to Table 4.8, and the “tutored” in Table 4.9 to Table 4.15.

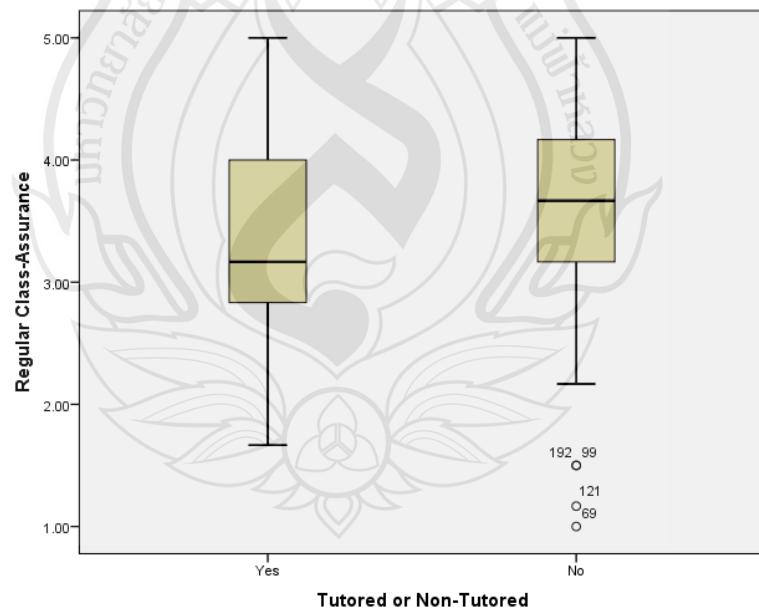
#### **4.3.4 Service Quality of Regular Class and Tutoring Service**

The fact that in the service quality (SERVQUAL) construct of Parasuraman et al. (1988), which explains the crucial aspects of the quality needed in the instruction as a service process of an instructor, namely reflected by the tangible instruction materials quality, the responsive behavior of the teacher in helping the students to attend to their problems, and being empathy in attending to their individual weaknesses and potentialities, the use of SERVQUAL becomes appropriate and thus are adapted for usage, as measurement procedure, in this research. The quality of the instruction services thus sets the stage for effective teaching, which the multivariate regression analysis in the next section would testify to this normative understanding, at relatively high R-squared strengths. Nakinbodee, Tan, Kantabutra, Jongsuriyapart, and Nakeeree (2015) and Teewattanawong, Tan and Jongsuriyapart (2015) further stress that service quality can be considered as part of the so-called “built environment” that will optimize appropriate interactions with the students, in helping them to achieve, i.e. to perform in a class.

An examination into the descriptive distribution of the students’ overall perceptions towards the quality of the teaching in regular classes, it is shown



**Figure 4.4** Box Plot Comparisons between the Tutored and Non-Tutored towards the Reliability Aspect of the Regular Class



**Figure 4.5** Box Plot Comparisons between the Tutored and Non-Tutored towards the Assurance Aspect of the Regular Class

**Table 4.4** Descriptive Analysis of Tangibles Dimension (Regular Class)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
RC-T4	Instructor provides some exercise question papers to help me prepare for examinations	3.5507	.91731
RC-T5	Classroom equipment are prepared well	3.5419	.89332
RC-T3	Study materials are up-to-date	3.1894	.89456
RC-T1	Study materials are easy to read and understand	3.1278	.87567
RC-T2	Study materials include many problem and solution for me to practice	3.0264	.98178

**Table 4.5** Descriptive Analysis of Reliability Dimension (Regular Class)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
RC-Rel5	When an examination is coming, Instructor reviews all the important issues for students	3.8106	.95671
RC-Rel3	Instructor can be depended upon to advance my subject knowledge	3.6916	.90821
RC-Rel4	Instructor gives students the examination guideline	3.4978	1.04065
RC-Rel2	When instructor promises me to do something by a certain time, he/she does so	3.4670	.88873
RC-Rel1	Instructor always gives me correct and good answer when I ask the question	3.4405	.97751

**Table 4.6** Descriptive Analysis of Responsiveness Dimension (Regular Class)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
RC-Res5	Instructor is always willing to help students	3.7445	.94349
RC-Res2	Instructor always discusses with me to clarify my understanding	3.4581	.89332
RC-Res3	Instructor usually shows the efforts to help students immediately	3.3921	.84693
RC-Res1	Instructor has available hours convenient to all students	3.3040	.85711
RC-Res4	When I have problem, Instructor helps me to solve the problem immediately	3.2555	.90520

**Table 4.7** Descriptive Analysis of Assurance Dimension (Regular Class)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
RC-A6	Instructor has strong experience teaching this subject	3.8458	.96304
RC-A5	I feel confident with the instructor being able to advance the subject knowledge	3.6960	.95479
RC-A4	The behavior of instructor instill confidence in students	3.6916	.91307
RC-A2	Instructor illustrates with a multitude of examples to make students understand confidently	3.3700	.93344
RC-A1	Instructor teaches in the easy way that makes me understand the subject clearly	3.2819	.92161
RC-A3	Instructor make me feel comfortable to ask the question	3.2687	.98351

**Table 4.8** Descriptive Analysis of Empathy Dimension (Regular Class)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
RC-E4	Instructor is friendly and reachable	3.5198	1.01898
RC-E2	Instructor does not put a lot of pressure on student	3.3260	1.00854
RC-E5	Instructor understands the specific need of students	3.2467	.96895
RC-E6	Instructor gives students personal advice	3.1938	.98545
RC-E3	Instructor gives students extra care, especially focusing on weakness	3.1410	.98997
RC-E1	Instructor gives students individual attention	3.0352	1.06372

**Table 4.9** Descriptive Analysis of Service Quality in Regular Class

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
Regular Class-Reliability	3.5815	.76390
Regular Class -Assurance	3.5257	.79217
Regular Class -Responsiveness	3.4308	.76095
Regular Class -Tangibles	3.2872	.66410
Regular Class -Empathy	3.2438	.80287

**Table 4.10** Descriptive Analysis of Tangibles Dimension (Tutoring Service)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
TS-T2	Tutorial materials include many problem and solution for me to practice	3.6813	.95311
TS-T4	Private tutoring provides some previous years' examinations question papers to help me on the preparation of examinations	3.6703	.89511
TS-T3	Tutorial materials are up-to-date	3.5385	.87315
TS-T1	Tutorial materials are easy to read and understand	3.5385	1.01443
TS-T5	Tutorial service has good equipment i.e. white board, table, and teaching materials	3.4725	.97000

**Table 4.11** Descriptive Analysis of Reliability Dimension (Tutoring Service)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
TS-Rel4	Private tutoring can be depended upon to advance my knowledge	3.8901	.86217
TS-Rel6	Tutor always shows more interest to help me advance the subject knowledge than the teacher of normal class	3.8000	.87666
TS-Rel2	Tutor always gives me correct and good answer when I ask the question	3.7582	.91093
TS-Rel1	Private tutoring helps me to do the examination	3.6284	1.00073
TS-Rel5	Private tutoring provides its services at the time it promises to do so	3.6264	.82527
TS-Rel3	When Tutor promises me to do something by a certain time, he/she does so	3.6264	.85177

**Table 4.12** Descriptive Analysis of Responsiveness Dimension (Tutoring Service)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
TS-Res6	Tutor is always willing to help students	3.7912	.87580
TS-Res2	Tutor always discusses with me to clarify my understanding	3.7143	.89797
TS-Res4	Private tutoring provides convenient way to contact with tutor when I need help	3.6374	.96051
TS-Res5	Tutor usually shows the efforts to help me immediately	3.6067	.86100
TS-Res3	When I have problem, tutor helps me to solve the problem immediately	3.6044	.94138
TS-Res1	Tutor usually has time for me	3.4505	.96912

**Table 4.13** Descriptive Analysis of Assurance Dimension (Tutoring Service)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
TS-A6	I feel confident with the tutorial service being able to advance the subject-knowledge	3.8778	.84571
TS-A4	Tutor make me feel comfortable to ask the question	3.8571	.85077
TS-A3	Tutor uses a variety of teaching methods to make sure students can understand the subject	3.8242	.87678
TS-A1	Tutor teaches in the easy way that makes me understand the subject clearly	3.7912	.87580
TS-A7	I feel confident with the tutorial service being able to get me passing quizzes, mid-term and final exams of the subject	3.7473	.82453
TS-A5	The behavior of tutor instills confidence in students	3.6374	.80989
TS-A2	Tutor teaches more than the syllabus of the regular university class	3.5165	.84804

**Table 4.14** Descriptive Analysis of Empathy Dimension (Tutoring Service)

<b>Item No.</b>	<b>Questionnaire Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
TS-E3	Tutor is friendly and reachable	3.8333	.83800
TS-E8	Tutor gradually improves my understand of the subject knowledge	3.7253	.90757
TS-E6	Tutor understands the specific need of students	3.6556	.86325
TS-E5	Tutor does not put a lot of pressure on me	3.5934	.95427
TS-E2	Tutor usually pays attention to individual student	3.5495	.95759
TS-E7	Tutor gives students personal advice	3.5385	.98102
TS-E4	Tutor usually tells me my progress of improvement	3.4835	.80778
TS-E1	Tutor gives me extra care, especially focusing on my weakness	3.4505	.945591

**Table 4.15** Descriptive Analysis of Service Quality in Tutoring Service

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
Tutoring Service-Assurance	3.7499	.70042
Tutoring Service -Reliability	3.7381	.75324
Tutoring Service -Responsiveness	3.6366	.81041
Tutoring Service -Empathy	3.6030	.72303
Tutoring Service -Tangibles	3.5802	.79557

### 4.3.6 Student Performance

The performances of the students, tutored or non-tutored, are measured not only the perceptions of how the students perform in the subject matter of interest, but most importantly in their opinions towards their ability to work in future career, at mean of 3.8062 (standard deviation of 0.88115), and the ability to study on other

related subjects, at mean of 3.8018 (standard deviation of 0.90250), and in general, to advance the student progress at the university, at mean of 3.7445, and to improve their academic studies, at mean of 3.6740, enhancing efficiency level of learning, at mean of 3.6344, and to make the subjects easier to study for the students, at mean of 3.540.

**Table 4.16** Descriptive Analysis of Student performance

Item No.	Questionnaire Statement	Mean	Std. Deviation
SP3	Studying this subject contributes to increase my ability to work on my future career	3.8062	.88115
SP4	Studying this subject contributes to increase my ability to study on other related subjects	3.8018	.90250
SP1	Studying this subject contributes to advance my progress at the university	3.7445	.898537
SP5	Studying this subject helps to improve my academic skills	3.6740	.94043
SP2	Studying this subject helps me to enhance my efficiency level of learning	3.6344	.91847
SP7	Study in normal class become easier to understand for me	3.5400	.95790
SP6	I gain more familiarity with this subject	3.4009	1.01867

#### 4.3.7 Students' Self-Efficacy Attitude

Students' self-efficacy attitude is represented by the students' attitude towards the subject in focus, such as in confidence that the students will get a good grade, and be able to take the examination of the subject well, by being at ease with the subject, have positive feeling towards it and be comfortable with this subject. In other words, the students have built up the beliefs, feelings, and thoughts regarding to their own capabilities to perform the task of handling the subject of interest, which is "Accounting" in this case, which lead to their actions and performance (Bandura, 1997), as defined in Chapter One. As shown in Table 4.17, the mean value distribution is depicted by the mean in the range from the lowest at 3.2731 for feeling

comfortable with the subject, to 3.4141 in the perceived ability to obtain good grade, at 3.6239 in the usefulness of the learning of the subject.

**Table 4.17** Descriptive Analysis of Students' Self-Efficacy Attitude

Item No.	Questionnaire Statement	Mean	Std. Deviation
SA6	I think that what I am learning in this class is useful for me	3.6239	.98213
SA2	I think I will get a good grade in this subject	3.4141	1.01553
SA1	I think I am able to do the examination well	3.4097	.96142
SA5	I have an easy, good feeling when I take a test of the subject	3.3304	1.00929
SA3	I have positive feeling toward this subject	3.3260	.98186
SA4	I feel more comfortable to study this subjects	3.2731	1.00676

#### 4.4 Inferential Statistics Analysis

In this section hypotheses H1, H2 and H3 are addressed.

Hypothesis 1 (H1) states that personal factors, in terms of personal context (personal subject background), personal achievement attitude and learning environment stimulation, are influenced by the teaching service quality of the regular classroom.

Hypothesis 2 (H2) states that the success of the students, tutored or non-tutored, needs the simultaneous working of the individual motivation attitude, characterized by both personal and situational aspects of motivation, and the quality of the teaching represented by empathy, responsiveness, reliability, assurance and the tangibles.

Hypothesis 3 (H3) states that self-efficacy attitude of the students, whether tutored or non-tutored, needs the simultaneous working of the individual motivation attitude, characterized by both personal and situational aspects of motivation, and the

quality of the teaching represented by empathy, responsiveness, reliability, assurance and the tangibles, and the perceived student performance.

For both tutored and non-tutored, students' perceptions towards the learning environment stimulation, i.e. the time and the prompt efforts provided by the teacher in assisting the students to understand the subject, as well as the sorts of assignments of the regular class that are able to make the students better understand the subject confidently, including the tangible qualities of the regular class that are presented to be exciting and challenging, are significantly influenced, on the negative direction, by the assurance and empathy aspects of the teaching service quality. The degree of the influence is determined to be 38.7 per cents of the variance of the learning environment stimulation. In other others, the inherent weaknesses of the teaching quality of the regular class, in both assurance and empathy, have projected the students to perceive the learning environment in negative view. Thus, to improve the personal perceptions towards the learning environment that is capable to stimulate the learning of the students, teaching service quality of the regular class, in aspect of assurance and the empathy of the teachers, must be significantly improved.

**Table 4.18** Teaching Service Quality of the Regular Class Predicting Student's Perception towards Learning Environment Stimulation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.622 <sup>a</sup>	.387	.373	.48683

**Note.** a. Predictor: (Constant), Regular Class-Empathy, Regular Class-Tangibles, Regular Class-Reliability, Regular Class-Assurance, Regular Class-Responsiveness  
b. Dependent Variable: Learning Environment Stimulation

**Table 4.19** F-test for Learning Environment Stimulation as Dependent Variable

Model	Sum of Squares	df	Mean Square	F	Sig.
<b>Regression</b>	33.109	5	6.622	27.940	.000 <sup>b</sup>
<b>Residual</b>	52.377	221	.237		
<b>Total</b>	<b>85.485</b>	<b>226</b>			

**Note.** a. Dependent Variable: Learning Environment Stimulation  
 b. Predictor: (Constant), Regular Class-Empathy, Regular Class-Tangibles, Regular Class-Reliability, Regular Class-Assurance, Regular Class-Responsiveness

**Table 4.20** T-test for Learning Environment Stimulation as Dependent Variable

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	SD	Beta	t	Sig.
1 (Constant)	4.672	.178		26.183	.000
Regular Class-Tangibles	-.107	.068	-.116	-1.581	.115
Regular Class-Reliability	-.061	.074	-.076	-.826	.410
Regular Class-Responsiveness	-.109	.083	-.135	-1.312	.191
Regular Class-Assurance	-.176	.078	-.227	-2.250	.025
Regular Class-Empathy	-.121	.062	-.159	-1.957	.052

**Note.** a. Dependent Variable: Learning Environment Stimulation

In addition, as revealed in Table 4.21, the variance of the students' personal achievement attitude, i.e. in preferring class work that is challenging as the students can learn new things, and students expecting to do well in the subject and be able to use what are learned for future classes and performances, at 25.5 per cents, can be explained by the reliability aspect (at Beta 0.3227) and empathy (Beta at 0.271) of the teaching service quality of the regular class. This implies that teacher has to made attempt to deliver what is promised and provide reliable teaching and learning experiences so that the students can depend on the teacher to help them advance the

subject knowledge, including provide personal care to do not cause unnecessary stresses and pressures beyond the control of the students, as in doing so it helps to develop and improve goal-oriented attitude of the students which give them the necessary extra psychological push to exert more efforts to improve their grades in the subject.

**Table 4.21** Teaching Service Quality of the Regular Class Predicting Students' Personal Achievement Attitude

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.505 <sup>a</sup>	.255	.238	.64966

**Note.** a. Predictor: (Constant), Regular Class-Empathy, Regular Class-Tangibles, Regular Class-Reliability, Regular Class-Assurance, Regular Class-Responsiveness  
b. Dependent Variable: Personal Achievement Attitude

**Table 4.22** F-test for Personal Achievement Attitude as Dependent Variable

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	31.973	5	6.395	15.151	.000 <sup>b</sup>
Residual	93.276	221	.422		
<b>Total</b>	<b>125.249</b>	<b>226</b>			

**Note.** a. Dependent Variable: Personal Achievement Attitude  
b. Predictor: (Constant), Regular Class-Empathy, Regular Class-Tangibles, Regular Class-Reliability, Regular Class-Assurance, Regular Class-Responsiveness

**Table 4.23** T-test for Personal Achievement Attitude as Dependent Variable

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	SD	Beta	t	Sig.
1 (Constant)	1.570	.238		6.594	.000
Regular Class-Tangibles	.135	.091	.121	1.493	.137
Regular Class-Reliability	.221	.099	.227	2.243	.026
Regular Class-Responsiveness	.041	.111	.042	.373	.710
Regular Class-Assurance	-.075	.105	-.080	-.721	.472
Regular Class-Empathy	.251	.083	.271	3.035	.003

**Note.** a. Dependent Variable: Personal Achievement Attitude

Nevertheless, in the same hypothesis 1 (H1), the correlation strength, at negative direction, between personal context (personal subject background) and the different facets of the regular class's teaching service quality, is very weak. The negative correlation, however, can be explained, for instance, that the students tend to give up when doing assignment for the subject, when the teaching service qualities, in aspects of reliability (correlation coefficient at  $-0.178^{**}$ ) and empathy (at correlation coefficient at  $0.172^{**}$ ) are weak, from the perceptions of the students, i.e. the students cannot rely on the teachers to help them understand the subject well.

**Table 4.24** Correlations Analysis between Personal Context and Regular Class's Teaching Service Quality

	Personal Context
Personal Achievement Attitude	-.344**
Learning Environment Stimulation	.338**
Service Quality of Regular Class-Tangibles	-.182**
Service Quality of Regular Class-Reliability	-.158**
Service Quality of Regular Class-Responsiveness	-.120
Service Quality of Regular Class-Assurance	-.178**
Service Quality of Regular Class-Empathy	-.172**

**Note.** \*\* Significant at 0.01 level, 2-tailed.

In view of H2, based on the correlations background of the predictors, presented in Table 4.25, multivariate regression analysis is concluded in Tables 4.26-4.28, which shows that the dominant, significant predictors to influence student performances in tutored environment are the personal achievement attitude of the students (at Beta of 0.279) and the responsiveness quality nature of the tutoring teacher, at Beta of 0.294.

In other words, the success of the students in the tutored subject needs the simultaneous working of the individual goal-oriented attitude and the responsive services of the tutoring teacher. While the former is the motive of learning which provides the driving force to engage with the tutoring, the success of the students would also need the tutors to have the time for the students and to show prompt responsive commitment to help the students to clarify the concepts, go through the problems solving steps by steps, in adaptable and empathic ways possible. In doing so it ensures the students turn goal-oriented motive (Nicholls, 1989) into actual mastery of the subject (Ames, 1992), i.e. student performances. Thus, hypothesis 2 (H2) is supported, for tutored context.

**Table 4.25** Identifying the Predictors for Student Performance in Tutored Environment

	Student Performance
Personal Achievement Attitude	0.617**
Learning Environment Stimulation	-0.278**
Service Quality of Regular Class-Tangibles	0.455**
Service Quality of Regular Class-Reliability	0.616**
Service Quality of Regular Class-Responsiveness	0.583**
Service Quality of Regular Class-Assurance	0.529**
Service Quality of Regular Class-Empathy	0.449**
Service Quality of Tutorial Service-Tangibles	0.454**
Service Quality of Tutorial Service-Reliability	0.530**
Service Quality of Tutorial Service-Responsiveness	0.613**
Service Quality of Tutorial Service-Assurance	0.517**
Service Quality of Tutorial Service-Empathy	0.492**

**Note.** \*\* Significant at 0.01 level, 2-tailed.

**Table 4.26** Predicting Student Performance (Tutored Students)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.773 <sup>a</sup>	.598	.535	.51584

**Note**

- a. Predictor: (Constant), Tutorial Service-Empathy, Learning Environment Stimulation, Personal Achievement Attitude, Regular Class-Empathy, Tutorial Service-Tangibles, Regular Class-Tangibles, Regular Class-Reliability, Regular Class-Assurance, Tutorial Service-Assurance, Tutorial Service-Responsiveness, Regular Class-Responsiveness, Tutorial Service-Reliability
- b. Dependent Variable: Student Performance

**Table 4.27** F-test for Student Performance as Dependent Variable (Tutored Students)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	30.086	12	2.507	9.422	.000 <sup>b</sup>
Residual	20.223	76	.266		
<b>Total</b>	<b>50.308</b>	<b>88</b>			

**Note**

- a. Dependent Variable: Student Performance
- b. Predictor: (Constant), Tutorial Service-Empathy, Learning Environment Stimulation, Personal Achievement Attitude, Regular Class-Empathy, Tutorial Service-Tangibles, Regular Class-Tangibles, Regular Class-Reliability, Regular Class-Assurance, Tutorial Service-Assurance, Tutorial Service-Responsiveness, Regular Class-Responsiveness, Tutorial Service-Reliability

**Table 4.28** T-test for Student Performance as Dependent Variable (Tutored Students)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	SD	Beta	t	Sig.
1 (Constant)	.379	.640		.592	.556
Personal Achievement Attitude	.289	.105	.279	2.758	.007
Learning Environment					
Stimulation	-.046	.121	-.034	-.376	.708
Regular Class-Tangibles	-.132	.143	-.111	-.924	.358
Regular Class-Reliability	.224	.140	.207	1.601	.114
Regular Class-Responsiveness	.177	.175	.168	1.011	.315
Regular Class-Assurance	.100	.138	.099	.722	.472
Regular Class-Empathy	-.094	.115	-.100	-.821	.414
Tutorial Service-Tangibles	.042	.127	.044	.329	.743
Tutorial Service-Reliability	-.025	.171	-.025	1.147	.884
Tutorial Service-Responsiveness					
	.277	.138	.294	2.002	.049
Tutorial Service-Assurance	.150	.165	.139	.912	.365
Tutorial Service-Empathy	-.053	.133	-.050	-.395	.694

**Note.** a. Dependent Variable: Student Performance

For the non-tutored students, the similar socio-cognitive mechanisms are in working, as for the tutored students, but the focus of the dominant predictor is shifting to the “Assurance” aspect of the teaching service quality, which is a built learning environment, at Beta of 0.347, and the same self-achievement attitude at Beta of 0.439, in explaining the variance of student performance, for 56.7 percent. Thus, for the non-tutored students, it is important the instructors possess strong experiences in teaching the subject, i.e. by giving varieties of illustrations and guidance to make the students understand the subject easily and confidently, so that the students can have the confidence that the instructors are able to help the students to advance their subject knowledge. The results of the multivariate regression analysis are provided in Table 4.30 to Table 4.32, in which Table 4.29 serves as the choices of the predictors in the determination. Thus, hypothesis 2 (H2) is also supported for the non-tutored context.

**Table 4.29** Identifying the Predictors for Student Performance through Correlation Analysis (Non-Tutored)

	<b>Student Performance</b>
Personal Context	-0.370**
Personal achievement attitude	0.616**
Learning Environment Stimulation	-0.425**
Service Quality of Regular Class-Tangibles	0.447**
Service Quality of Regular Class-Reliability	0.552**
Service Quality of Regular Class-Responsiveness	0.5554**
Service Quality of Regular Class-Assurance	0.604**
Service Quality of Regular Class-Empathy	0.538**

**Note.** \*\* Significant at 0.01 level, 2-tailed.

**Table 4.30** Model Summary for Student Performance (Non-Tutored)

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
<b>1</b>	.753 <sup>a</sup>	.567	.540	.56692

**Note.** a. Predictor: (Constant), Learning Environment Stimulation, Personal Achievement Attitude, Regular Class-Tangibles, Personal Context, Regular Class-Empathy, Regular Class-Reliability, Regular Class-Responsiveness, Regular Class-Assurance  
b. Dependent Variable: Student Performance

**Table 4.31** F-test for Student Performance as Dependent Variable (Non-Tutored)

Model	Sum of Squares	df	Mean Square	F	Sig.
<b>Regression</b>	54.255	8	6.782	21.101	.000 <sup>b</sup>
<b>Residual</b>	41.461	129	.321		
<b>Total</b>	<b>95.716</b>	<b>137</b>			

**Note.** a. Dependent Variable: Student Performance  
 b. Predictor: (Constant), Learning Environment Stimulation, Personal Achievement Attitude, Regular Class-Tangibles, Personal Context, Regular Class-Empathy, Regular Class-Reliability, Regular Class-Responsiveness, Regular Class-Assurance

**Table 4.32** T-test for Student Performance as Dependent Variable (Non-Tutored)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	SD	Beta	t	Sig.
1 (Constant)	-.336	.683		-.492	.624
Personal Context	-.080	.092	-.060	-.870	.386
Personal Achievement					
Attitude	.488	.078	.439	6.280	.000
Learning Environment					
Stimulation	.154	.109	.119	1.413	.160
Regular Class-Tangibles	.037	.096	.030	.383	.703
Regular Class-Reliability	.011	.114	.010	.093	.926
Regular Class-					
Responsiveness	.143	.119	.135	1.201	.232
Regular Class-Assurance	.364	.128	.347	2.853	.005
Regular Class-Empathy	.043	.099	.041	.433	.666

**Note.** a. Dependent Variable: Student Performance

Hypothesis 3 (H3) states that self-efficacy attitude of the students, whether tutored or non-tutored, needs the simultaneous working of the individual motivation attitude, characterized by both personal and situational aspects of motivation, and the quality of the teaching represented by empathy, responsiveness, reliability, assurance

and the tangibles, and the perceived student performance. Hypothesis 3 (H3) is supported for both tutored and non-tutored contexts, and the statistical evidences are presented as follows.

First the tutored case is addressed, reflected in Tables 4.33 to 4.36; then, the non-tutored case is examined, with the results presented in Tables 4.37 to 4.40.

As shown in Table 4.31, students, of the tutored groups, build the self-efficacy attitude to learn if they have shown to be successful in their past academic pursuits, at 63.2 percent of the variance, demonstrated by the 0.665 of the BETA weight on student performance., and personal self-achievement attitude at Beta of 0.192 and the tangibles quality of the tutoring teaching service quality at Beta of 0.232.Thus, to the tutored students, not only the self-achievement attitude is important, but the tangible quality of the exercise question papers and the study materials to help progressing to examination are considered important, i.e. reflected by the varieties of problems and the solution suggestions for the problems.

Self-achievement attitude narrates the personal attitude towards the challenge that aims to excel not only in the classes but for the intrinsic purpose that the students can learn from the process as well as for the extrinsic rewarding outcome in terms of grade and performances in the class, and graduation with honors. Other researchers also point out that although self-achievement attitude of facing up to the challenges is important, other supporting mechanisms such as the assurance and responsiveness qualities provided by the teachers are important, because the challenging tasks at hand could be perceived as difficult so as to destroy the willingness to try (McKeachie, 1994, p. 354), and thus, the teachers must demonstrate the “assurance of knowledge and adaptability” capability to design the materials and facilitate the classes, for instance, in accordance with the principle of the “zone of proximal development” (Vygotsky, 1978) in that concepts and ideas are provided just slightly above the current level of development of the students, which allows the students to perceive their learning is productive, and thus to perform and to gain the self-efficacy attitude for continuity purposes.

In addition to the goal-oriented self-achievement attitude that explains the variance of self-efficacy attitude formation, the other similar but different variable is personal context which explains the perceived weakness of the students and a need to

rely on the help of others in order to improve the understanding of the subject. In other words, the motive for the engaging in tutoring is partly guided by what the students want to know, as a result of the reality of self-context.

**Table 4.33** Identifying the Predictors for Students' Self-Efficacy for Tutored Students

	Students' self-efficacy Attitude
Personal Achievement Attitude	0.554**
Service Quality of Regular Classroom-Tangibles	0.353**
Service Quality of Regular Classroom-Reliability	0.417**
Service Quality of Regular Classroom-Responsiveness	0.426**
Service Quality of Regular Classroom-Assurance	0.461**
Service Quality of Regular Classroom-Empathy	0.351**
Service Quality of Tutorial Service-Tangibles	0.417**
Service Quality of Tutorial Service -Reliability	0.384**
Service Quality of Tutorial Service -Responsiveness	0.499**
Service Quality of Tutorial Service -Assurance	0.432**
Service Quality of Tutorial Service -Empathy	0.391*
Student Performance	0.754**

**Note.** \*\* Significant at 0.01 level, 2-tailed.

**Table 4.34** Model Summary for Students' Self-efficacy Attitude (Tutored Students)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795 <sup>a</sup>	.632	.573	.57118

**Note.** a. Predictor: (Constant), Student Performance, Regular Class-Empathy, Tutorial Service-Empathy, Regular Class-Tangibles, Tutorial Service Tangibles, Personal Achievement Attitude, Regular Class-Reliability, Regular Class-Assurance, Tutorial Service-Assurance, Tutorial Service-Responsiveness, Regular Class-Responsiveness, Tutorial Service-Reliability  
b. Dependent Variable: Students' Self-Efficacy Attitude

**Table 4.35** F-test for Students' Self-efficacy Attitude as Dependent Variable (Tutored Students)

Model	Sum of Squares	df	Mean Square	F	Sig.
<b>Regression</b>	42.508	12	3.542	10.858	.000 <sup>b</sup>
<b>Residual</b>	24.794	76	326		
<b>Total</b>	<b>67.303</b>	<b>88</b>			

**Note.** a. Dependent Variable: Students' Self-Efficacy Attitude  
 b. Predictor: (Constant), Student Performance, Regular Class-Empathy, Tutorial Service-Empathy, Regular Class-Tangibles, Tutorial Service Tangibles, Personal Achievement Attitude, Regular Class-Reliability, Regular Class-Assurance, Tutorial Service-Assurance, Tutorial Service-Responsiveness, Regular Class-Responsiveness, Tutorial Service-Reliability

**Table 4.36** T-test for Students' Self-efficacy Attitude as Dependent Variable (Tutored Students)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	SD	Beta	t	Sig.
1 (Constant)	-.021	.419		-.050	.960
Personal Achievement Attitude	.230	.121	.192	1.895	.062
Regular Class-Tangibles	-.015	.155	-.011	-.099	.922
Regular Class-Reliability	-.183	.153	-.147	-1.198	.235
Regular Class-Responsiveness	-.082	.192	-.067	-.429	.669
Regular Class-Assurance	.244	.150	.210	1.629	.107
Regular Class-Empathy	-.120	.127	-.110	-.944	.348
Tutorial Service-Tangibles	.257	.140	.232	1.829	.071
Tutorial Service-Reliability	-.279	.189	-.241	-1.474	.145
Tutorial Service-Responsiveness	.052	.156	.048	.336	.738
Tutorial Service-Assurance	.113	.183	.091	.619	.538
Tutorial Service-Empathy	-.027	.148	-.022	-.181	.857
Student Performance	.770	.127	.665	6.065	.000

**Note.** a. Dependent Variable: Students' Self-Efficacy Attitude

As to the non-tutored students, students build self-efficacy attitude by the supports of the “Assurance” and “Responsiveness” of the teaching service quality, at Beta of 0.240 and -0.207, respectively, student performance at Beta 0.487, and the motivational thrusts of personal achievement attitude at Beta of 0.245 and personal context at Beta of -0.188. Personal context is situational aspect of the student motivation, which reflects how the students perceive whether they are familiar or not with the subject, that their study skills are weak when compared with other students in the class, and, for instance, the difficulty of the subject or its assignment which prompts the students to lose confidence. These predictors, socio-cognitive in nature, can explain 70.2 percent of the variance of the self-efficacy of the students. Similarly, Table 4.37 forms the knowledge about which predictors to be incorporated in the analysis of multivariate regression analysis which the results are presented in Tables 4.38 to 4.40.

**Table 4.37** Identifying the Predictors for Student s' Self-efficacy Attitude through Correlation Analysis (Non-Tutored)

	Students' self-efficacy Attitude
Personal Context	-0.501**
Personal Achievement Attitude	0.657**
Learning Environment Stimulation	-0.379**
Service Quality of Regular Class-Tangibles	0.388**
Service Quality of Regular Class-Reliability	0.479**
Service Quality of Regular Class-Responsiveness	0.413**
Service Quality of Regular Class-Assurance	0.543**
Service Quality of Regular Class-Empathy	0.505**
Student Performance	0.766**

**Note.** \*\* Significant at 0.01 level (2-tailed)

**Table 4.38** Model Summary for Students' Self-efficacy Attitude (Non-Tutored)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.838 <sup>a</sup>	.702	.681	.50707

**Note.** a. Predictor: (Constant), Student Performance, Personal Context, Regular Class-Tangibles, Learning Environment Stimulation, Personal Achievement Attitude, Regular Class-Empathy, Regular Class-Reliability, Regular Class-Responsiveness, Regular Class-Assurance  
b. Dependent Variable: Students' Self-Efficacy Attitude

**Table 4.39** F-test for Students' Self-efficacy Attitude as Dependent Variable (Non-Tutored)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	77.368	9	8.596	33.433	.000 <sup>b</sup>
Residual	32.912	128	.257		
Total	110.280	137			

**Note.** a. Dependent Variable: Students' Self-Efficacy Attitude  
b. Predictor: (Constant), Student Performance, Personal Context, Regular Class-Tangibles, Learning Environment Stimulation, Personal Achievement Attitude, Regular Class-Empathy, Regular Class-Reliability, Regular Class-Responsiveness, Regular Class-Assurance

**Table 4.40** T-test for Students' Self-efficacy Attitude as Dependent Variable (Non-Tutored)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	SD	Beta	t	Sig.
1 (Constant)	.260	.611		.425	.672
Personal Context	-.269	.083	-.188	-3.253	.001
Personal Achievement Attitude	.292	.079	.245	3.680	.000
Learning Environment					
Stimulation	.124	.098	.089	1.257	.211
Regular Class-Tangibles	-.007	.086	-.005	-.076	.940
Regular Class-Reliability	.003	.102	.003	.033	.974
Regular Class-Responsiveness	-.237	.107	-.207	-2.207	.029
Regular Class-Assurance	.271	.118	.240	2.296	.023
Regular Class-Empathy	.139	.089	.124	1.563	.121
Student Performance	.523	.079	.487	6.644	.000

**Note.** a. Dependent Variable: Students' Self-Efficacy Attitude

## 4.5 Tutored or Non-Tutored

This section uses t-test to study the significant role of tutored students or non-tutored students in their perceived differences towards the different aspects of their motivational attitude as well as the quality of the regular classroom of the subject of interest. The t-test results, presented in Table 4.41 and 4.42, indicate that although these two groups show no significant differences in the motivational attitudes, i.e. personal achievement attitude and the situational aspect of personal context and learning environment stimulation, those of tutored do have lower level of agreeableness towards the reliability and assurance aspects of the classroom quality. In other words, the students who engage in the tutoring are motivated by the deficiency in the ways the instructors guide about problems solving, and the dependency to guide on the examination, to review the important concepts of the subject, and enable the students to advance their subject knowledge, and also by their lower level of confidence over the instructors over the subject material provided and their knowledge.

**Table 4.41** Differences between Tutored and Non-Tutored Students

	Tutoring Experienced	N	Mean	Std. Deviation	Std. Error Mean
Personal Context	Yes	89	2.9226	.59868	.06346
	No	138	2.9734	.62474	.05318
Personal Achievement Attitude	Yes	89	3.5543	.73201	.07759
	No	138	3.4614	.75274	.06408
Learning Environment Stimulation	Yes	89	2.7328	.56500	.05989
	No	138	2.6965	.64685	.05506
Regular Class-Tangibles	Yes	89	3.2225	.63707	.06753
	No	138	3.3290	.67997	.05788
Regular Class-Reliability	Yes	89	3.4090	.70059	.07426
	No	138	3.6928	.78458	.06679
Regular Class- Responsiveness	Yes	89	3.3303	.71611	.07591
	No	138	3.4957	.78423	.06676
Regular Class-Assurance	Yes	89	3.3408	.75458	.07999
	No	138	3.6449	.79557	.06772
Regular Class-Empathy	Yes	89	3.1742	.80596	.08543
	No	138	3.2886	.80058	.06815
Student Performance	Yes	89	3.6747	.75610	.08015
	No	138	3.6627	.83589	.07116
Students' Self-efficacy Attitude	Yes	89	3.5056	.87453	.09270
	No	138	3.3249	.89726	.07638

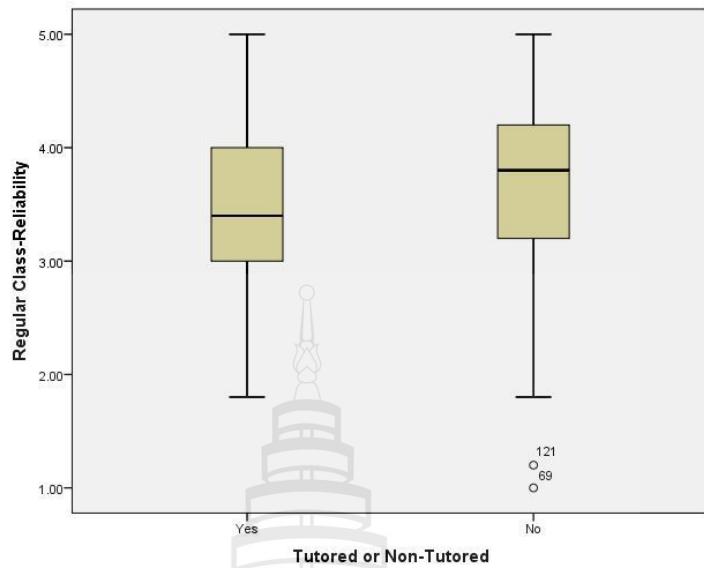
**Table 4.42** T-test Result of the Difference between Tutored and Non-Tutored Student

		F	Sig.	t	df	Sig. (2-tailed)
Personal Context	Equal variances assumed	.072	.789	-.608	225	.544
	Equal variances not assumed			-.614	193.654	.540
Personal Achievement Attitude	Equal variances assumed	.163	.686	.918	225	.360
	Equal variances not assumed			.924	191.689	.357
Learning Environment Stimulation	Equal variances assumed	1.481	.225	.434	225	.665
	Equal variances not assumed			.447	205.386	.655

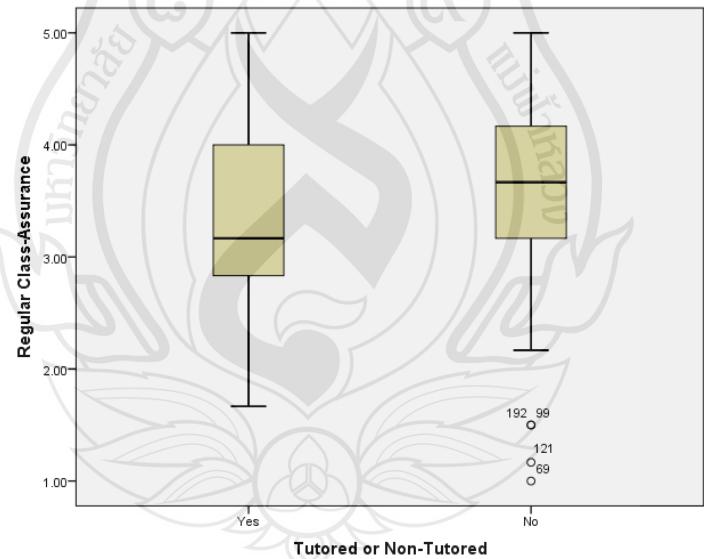
**Table 4.42** (Continued)

		<b>F</b>	<b>Sig</b>	<b>t</b>	<b>df</b>	<b>Sig. (2-tailed)</b>
Regular Class-Tangibles	Equal variances assumed	.005	.944	-1.181	225	.239
	Equal variances not assumed					
Regular Class-Reliability	Equal variances assumed	.820	.365	-2.773	225	.006
	Equal variances not assumed					
Regular Class-Responsiveness	Equal variances assumed	.013	.911	-1.604	225	.110
	Equal variances not assumed					
Regular Class-Assurance	Equal variances assumed	.034	.854	-.2869	225	.005
	Equal variances not assumed					
Regular Class-Empathy	Equal variances assumed	.006	.929	-1.049	225	.295
	Equal variances not assumed					
Student Performance	Equal variances assumed	.471	.493	.110	225	.913
	Equal variances not assumed					
Students' Self-efficacy Attitude	Equal variances assumed	.000	.987	1.496	225	.136
	Equal variances not assumed					

To better visualize the distribution of the significant differences between the tutored and the non-tutored on “Reliability” and “Assurance” aspects, the box plot comparisons are presented, in Figure 4.6 and Figure 4.7.



**Figure 4.6** Box Plot Comparing Regular Class Reliability for Tutored and Non-Tutored



**Figure 4.7** Box Plot Comparing Regular Class Assurance for Tutored and Non-Tutored

## 4.6 Concluding Demographic Variable Analysis

For demographic variables, the t-tests and ANOVA tests, presented in Tables 4.43 to 4.50, show that gender and year at university do not play a significant role in causing differences in student's performance, student's self-efficacy attitude, and perceptions over intrinsic motivation and the different facets of teaching service quality. The student major, through ANOVA tests, show significant differences in causing differences in personal achievement attitude, learning environment stimulation, teaching service quality, and also student performance.

**Table 4.43** The Comparative Means Distribution of Motivational and Teaching Service Quality across Gender

	Gender	N	Mean	SD	Std. Error
Personal Context	Male	53	2.9266	.59793	.08213
	Female	174	2.9617	.62004	.04701
Personal Achievement Attitude	Male	53	3.4245	.71951	.09883
	Female	174	3.5201	.75248	.05705
Learning Environment Stimulation	Male	53	2.6247	.64650	.08880
	Female	174	2.7369	.60461	.04584
RC-Tangible	Male	53	3.2491	.59083	.08116
	Female	174	3.2989	.68603	.05201
RC-Reliability	Male	53	3.6679	.81989	.11262
	Female	174	3.5552	.74652	.05659
RC-Responsiveness	Male	53	3.4981	.78115	.10730
	Female	174	3.4103	.75579	.05730
RC-Assurance	Male	53	3.6352	.78722	.10813
	Female	174	3.4923	.79292	.06011
RC-Empathy	Male	53	3.3082	.83565	.11908
	Female	174	3.2241	.78392	.05943
Student Performance	Male	53	3.7116	.83565	.11479
	Female	174	3.6539	.79592	.06034
Students' Self-efficacy Attitude	Male	53	3.3962	.82316	.11307
	Female	174	3.3956	.91276	.06920

**Table 4.44** T-Test Result of Motivational and Teaching Service Quality Variables across Gender

Levene's Test for Equality of Variances						
		F	Sig	t	df	Sig. (2- tailed)
Personal Context	Equal variances assumed	.032	.858	-.363	225	.717
	Equal variances not assumed					
Personal Achievement Attitude	Equal variances assumed	.086	.770	-.818	225	.414
	Equal variances not assumed					
Leaning Environment Stimulation	Equal variances assumed	.931	.336	-	225	.246
	Equal variances not assumed					
Regular Class-Tangibles	Equal variances assumed	2.714	.101	-.477	225	.634
	Equal variances not assumed					
Regular Class-Reliability	Equal variances assumed	.512	.475	.941	225	.348
	Equal variances not assumed					
Regular Class-Responsive-ness	Equal variances assumed	.010	.922	.734	225	.463
	Equal variances not assumed					
Regular Class-Assurance	Equal variances assumed	.242	.623	1.150	225	.251
	Equal variances not assumed					
Regular Class-Empathy	Equal variances assumed	.843	.359	.666	225	.506
	Equal variances not assumed					
Student Performance	Equal variances assumed	.011	.915	.456	225	.649
	Equal variances not assumed					
Students' Self-efficacy Attitude	Equal variances assumed	1.270	.261	.005	225	.996
	Equal variances not assumed					

**Table 4.45** Comparative Means Distribution of Motivational and Teaching Service Quality across Years at University

		<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error</b>
Personal Context	First-year	3	3.2593	.78042	.45058
	Second-year	21	2.9471	.51952	.11337
	Third-year	142	2.9280	.59316	.04978
	Fourth-year	61	3.0000	.68823	.08812
	Total	227	2.9535	.61382	.04074
Personal Achievement Attitude	First-year	3	3.7222	.67358	.38889
	Second-year	21	3.2778	.87771	.19153
	Third-year	142	3.4941	.73213	.06144
	Fourth-year	61	3.5710	.72868	.09330
	Total	227	3.4979	.74445	.04941
Learning Environment Stimulation	First-year	3	3.0000	.40062	.23130
	Second-year	21	2.8677	.55846	.12187
	Third-year	142	2.6768	.65713	.05515
	Fourth-year	61	2.7213	.53388	.06836
	Total	227	2.7107	.61502	.04082
RC-Tangible	First-year	3	3.2000	.52915	.30551
	Second-year	21	3.1429	.78011	.17023
	Third-year	142	3.3296	.69167	.05804
	Fourth-year	61	3.2426	.55751	.07138
	Total	227	3.2872	.66410	.04408
RC-Reliability	First-year	3	3.5333	.61101	.35277
	Second-year	21	3.3238	.76805	1.6760
	Third-year	142	3.6000	.84283	.07073
	Fourth-year	61	3.6295	.54140	0.6932
	Total	227	3.5815	.76390	.05070
RC-Responsiveness	First-year	3	3.5333	.50332	.29059
	Second-year	21	3.2381	.74463	.16249
	Third-year	142	3.3944	.81648	.06852
	Fourth-year	61	3.5770	.61871	.07922
	Total	227	3.4308	.76095	.05051
RC-Assurance	First-year	3	3.5000	.50000	.28868
	Second-year	21	3.3333	.73598	.16060
	Third-year	142	3.5023	.85997	.07217
	Fourth-year	61	3.6475	.63836	.08173
	Total	227	3.5257	.79217	.05258
RC-Empathy	First-year	3	2.8889	.34694	.20031
	Second-year	21	2.9921	.65717	.14341
	Third-year	142	3.2371	.84480	.07089
	Fourth-year	61	3.3634	.74815	.09579
	Total	227	3.2438	.80287	.05329

**Table 4.45** (Continued)

		<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error</b>
Student Performance	First-year	3	4.1032	.22123	.12773
	Second-year	21	3.6655	.91018	.19862
	Third-year	142	3.6650	.83937	.07044
	Fourth-year	61	3.6522	.70059	.08970
	Total	227	3.6674	.80386	.05335
Students' Self-efficacy Attitude	First-year	3	3.7778	.69389	.40062
	Second-year	21	3.4762	.88394	.19289
	Third-year	142	3.3709	.94331	.07916
	Fourth-year	61	3.4071	.78145	.10005
	Total	227	3.3957	.89087	.05913

**Table 4.46** Levene's test for Homogeneity of Years at University

	<b>Levene Statistic</b>	<b>df1</b>	<b>df2</b>	<b>Sig.</b>
Personal Context	.719	3	223	.542
Personal Achievement Attitude	.551	3	223	.648
Learning Environment				
Stimulation	1.181	3	223	.318
RC-Tangible	1.857	3	223	.138
RC-Reliability	3.467	3	223	.017
RC-Responsiveness	1.937	3	223	.125
RC-Assurance	2.449	3	223	.064
RC-Empathy	1.671	3	223	.174
Student Performance	1.478	3	223	.221
Students' Self-efficacy Attitude	.680	3	223	.565

**Table 4.47** ANOVA Test of Motivational and Teaching Service Quality Variables across Years at University

		Sum of Squares	df	Mean Square	F	Sig.
Personal Context	Between Groups	.505	3	.168	.444	.722
	Within Groups	84.646	223	.380		
	Total	85.151	226			
Personal Achievement Attitude	Between Groups	1.497	3	.499	.899	.442
	Within Groups	123.752	223	.555		
	Total	125.249	226			
Learning Environment Stimulation	Between Groups	.939	3	.313	.825	.481
	Within Groups	84.547	223	.379		
	Total	85.485	226			
RC-Tangible	Between Groups	.837	3	.279	.629	.597
	Within Groups	98.836	223	.443		
	Total	99.673	226			
RC-Reliability	Between Groups	1.591	3	.530	.907	.438
	Within Groups	130.292	223	.584		
	Total	131.882	226			
RC-Responsiveness	Between Groups	2.305	3	.768	1.33	.265
	Within Groups	128.560	223	.577		
	Total	130.864	226			
RC-Assurance	Between Groups	1.762	3	.587	.935	.424
	Within Groups	140.060	223	.628		
	Total	141.822	226			
RC-Empathy	Between Groups	2.587	3	.862	1.34	.261
	Within Groups	143.091	223	.642		
	Total	145.679	226			
Student Performance	Between Groups	.585	3	.195	.299	.826
	Within Groups	145.455	223	.652		
	Total	146.040	226			
Students' Self-efficacy Attitude	Between Groups	.669	3	.223	.278	.841
	Within Groups	178.697	223	.801		
	Total	179.366	226			

The ANOVA test results, across majors, shown in Tables 4.48 to 4.50, show that there are significant differences across the majorities of the variables discussed in this research, except personal context and the self-efficacy attitude of the students show no significant differences.

**Table 4.48** Comparative Means Distribution of Motivational and Teaching Service Quality across Majors

		<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error</b>
Personal Context	Accounting	8	2.7361	.54736	.19352
	Business Administration	45	2.8938	.68492	.10210
	Tourism Management	17	3.1699	.48768	.11828
	Aviation Business Management	40	3.0333	.52249	.08261
	Hospitality Industry Management	11	2.9798	.67736	.20423
	Economics	1	2.6667	.	.
	Logistics and Supply Chain	96	2.9282	.62042	.06332
	Business Chinese	9	2.9506	.79565	.26522
	Total	227	2.9535	.61382	.04074
Personal Achievement Attitude	Accounting	8	3.9375	.75560	.26715
	Business Administration	45	3.6074	.70367	.10490
	Tourism Management	17	3.2843	.73069	1.7722
	Aviation Business Management	40	3.2292	.74982	.11856
	Hospitality Industry Management	11	3.6212	.82358	.24832
	Economics	1	3.1667	.	.
	Logistics and Supply Chain	96	3.6493	.66512	.06788
	Business Chinese	9	2.4259	.44962	.14987
	Total	227	3.4978	.74445	.04941
Learning Environment Stimulation	Accounting	8	2.3889	.62573	.22123
	Business Administration	45	2.8864	.59482	.08867
	Tourism Management	17	2.8431	.42321	.10264
	Aviation Business Management	40	3.0250	.49785	.07872
	Hospitality Industry Management	11	2.5051	.32722	.09866
	Economics	1	2.6667	.	.
	Logistics and Supply Chain	96	2.5012	.64507	.06584
	Business Chinese	9	2.9630	.53863	.17954
	Total	227	2.7107	.61502	.04082
RC-Tangible	Accounting	8	3.4750	.70051	2.4767
	Business Administration	45	3.2000	.71478	.10655
	Tourism Management	17	3.1647	.51592	.12513
	Aviation Business Management	40	3.0850	.68221	.10787
	Hospitality Industry Management	11	3.4364	.54272	.16364
	Economics	1	3.0000	.	.
	Logistics and Supply Chain	96	3.4583	.60449	.06170
	Business Chinese	9	2.7111	.79443	.26481
	Total	227	3.2872	.66410	.04408
RC-Reliability	Accounting	8	3.6000	.40000	.14142
	Business Administration	45	3.3467	.77741	.11589
	Tourism Management	17	3.8118	.61429	.14899
	Aviation Business Management	40	3.2100	.71890	.11367

**Table 4.48** (Continued)

		<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error</b>
RC- Reliability	Hospitality Industry	11	3.9455	.43901	.13237
	Management				
	Economics	1	2.6000	.	.
	Logistics and Supply Chain	96	3.8688	.67797	.06920
	Business Chinese	9	2.5556	.67659	.22553
	Total	227	3.5815	.76390	.05070
RC- Responsive ness	Accounting	8	3.9250	.60415	.21360
	Business Administration	45	3.2933	.73435	.10947
	Tourism Management	17	3.2706	.39333	.09540
	Aviation Business Management	40	3.0250	.81673	.12914
	Hospitality Industry	11	3.8000	.73212	.22074
	Management				
	Economics	1	2.4000	.	.
	Logistics and Supply Chain	96	3.6854	.66157	.06752
	Business Chinese	9	2.7333	.87750	.29250
	Total	227	3.4308	.76095	.05051
RC- Assurance	Accounting	8	3.7500	.82616	.29209
	Business Administration	45	3.2593	.78218	.11660
	Tourism Management	17	3.6471	.45599	.11059
	Aviation Business Management	40	3.1125	.75238	.11896
	Hospitality Industry	11	3.8939	.48461	.14612
	Management				
	Economics	1	2.6667	.	.
	Logistics and Supply Chain	96	3.8212	.72598	.07409
	Business Chinese	9	2.7593	.84620	.28207
	Total	227	3.5257	.79217	.05258
RC-Empathy	Accounting	8	3.8542	.80887	.28598
	Business Administration	45	3.0333	.67101	.10003
	Tourism Management	17	3.2255	.54308	.13172
	Aviation Business Management	40	2.7708	.95682	.15129
	Hospitality Industry	11	3.7121	.46602	.14051
	Management				
	Economics	1	2.1667	.	.
	Logistics and Supply Chain	96	3.5347	.66002	.06736
	Business Chinese	9	2.3333	.72648	.24216
	Total	227	3.2438	.80287	.05329
Student Performance	Accounting	8	4.1161	.72837	.25752
	Business Administration	45	3.5677	.82577	.12310
	Tourism Management	17	3.5896	.71935	.17447
	Aviation Business Management	40	3.4387	.76164	.12043
	Hospitality Industry	11	3.4589	.66130	.19939
	Management				
	Economics	1	3.8333	.	.
	Logistics and Supply Chain	96	3.8958	.70328	.07178
	Business Chinese	9	2.7302	1.2442	.41475
	Total	227	3.6674	.80386	.05335

**Table 4.48** (Continued)

		<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error</b>
Students'	Accounting	8	3.5208	.70394	.24888
Self-efficacy	Business Administration	45	3.4037	.93236	.13899
Attitude	Tourism Management	17	3.2941	.94746	.22979
	Aviation Business Management	40	3.1833	.85718	.13553
	Hospitality Industry	11	3.2576	.62077	.18717
	Management	1	3.3333	.	.
	Economics	96	3.5677	.86976	.08877
	Logistics and Supply Chain	9	2.7222	1.0992	.36641
	Business Chinese	227	3.3957	.89087	.05913
	Total				

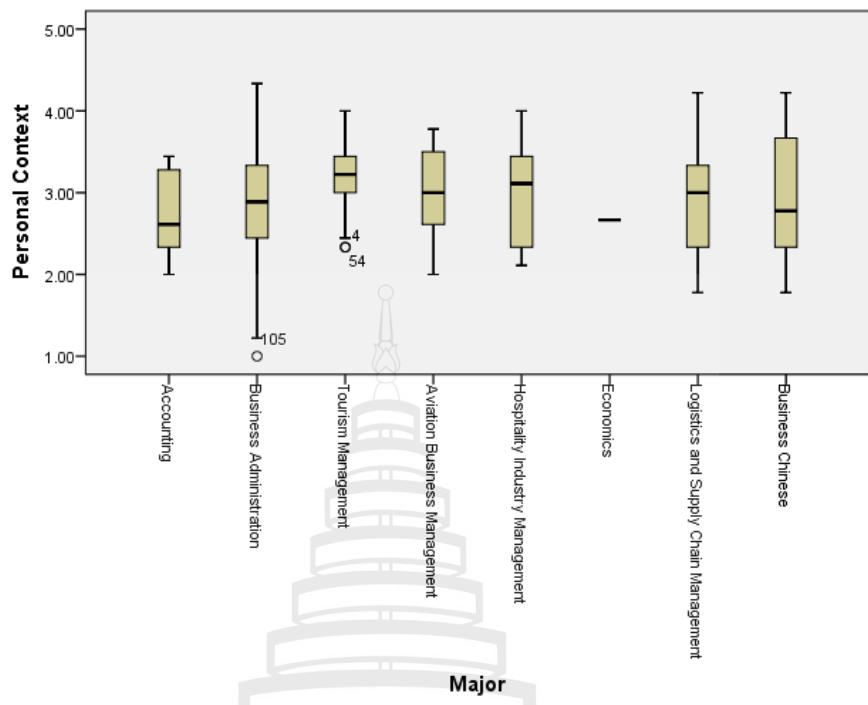
**Table 4.49** Levene's test for Homogeneity of Majors

	<b>Levene Statistic</b>	<b>df1</b>	<b>df2</b>	<b>Sig.</b>
Personal Context	.996	6	219	.429
Personal Achievement Attitude	.942	6	219	.466
Learning Environment				
Stimulation	2.353	6	219	.032
RC-Tangible	.713	6	219	.640
RC-Reliability	.968	6	219	.448
RC-Responsiveness	1.257	6	219	.279
RC-Assurance	1.266	6	219	.274
RC-Empathy	3.375	6	219	.003
Student Performance	1.571	6	219	.157
Students' Self-efficacy				
Attitude	.919	6	219	.482

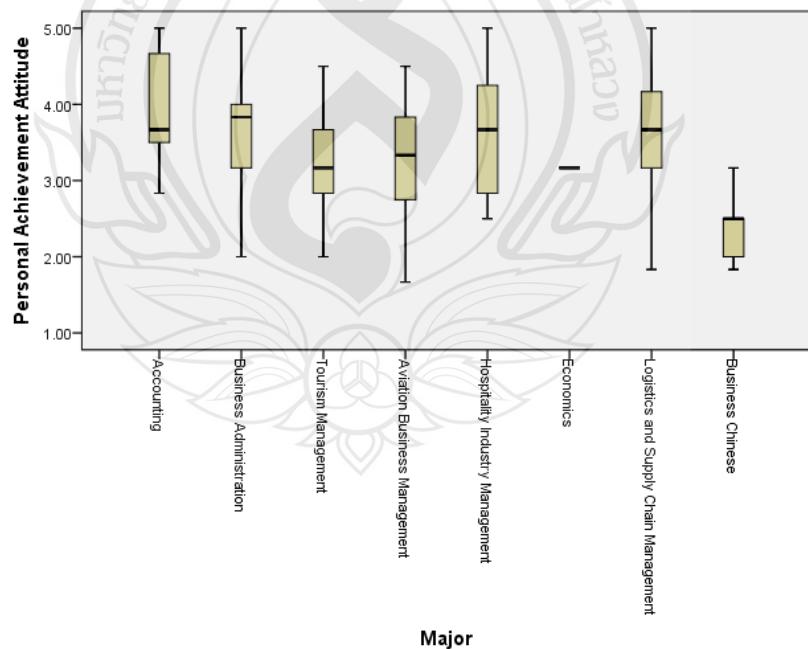
**Table 4.50** ANOVA Test of Motivational and Teaching Service Quality Variables across Majors

		Sum of Squares	df	Mean Square	F	Sig.
Personal Context	Between Groups	1.741	7	.249	.65	.712
	Within Groups	83.410	219	.381	3	
	Total	85.151	226			
Personal Achievement Attitude	Between Groups	18.570	7	2.653	5.4	.000
	Within Groups	106.679	219	.487	46	
	Total	125.249	226			
Learning Environment Stimulation	Between Groups	11.723	7	1.675	4.9	.000
	Within Groups	73.763	219	.337	72	
	Total	85.485	226			
RC-Tangible	Between Groups	8.640	7	1.234	2.9	.005
	Within Groups	91.033	219	.416	70	
	Total	99.673	226			
RC-Reliability	Between Groups	28.721	7	4.103	8.7	.000
	Within Groups	103.161	219	.471	10	
	Total	131.882	226			
RC-Responsiveness	Between Groups	22.991	7	3.284	6.6	.000
	Within Groups	107.873	219	.493	68	
	Total	130.864	226			
RC-Assurance	Between Groups	26.575	7	3.796	7.2	.000
	Within Groups	115.247	219	.526	14	
	Total	141.822	226			
RC-Empathy	Between Groups	33.086	7	4.727	9.1	.000
	Within Groups	112.593	219	.514	93	
	Total	145.679	226			
Student Performance	Between Groups	17.674	7	2.525	4.3	.000
	Within Groups	128.366	219	.586	07	
	Total	146.040	226			
Student's Self-Efficacy Attitude	Between Groups	9.244	7	1.321	1.7	.110
	Within Groups	170.122	219	.777	00	
	Total	179.366	226			

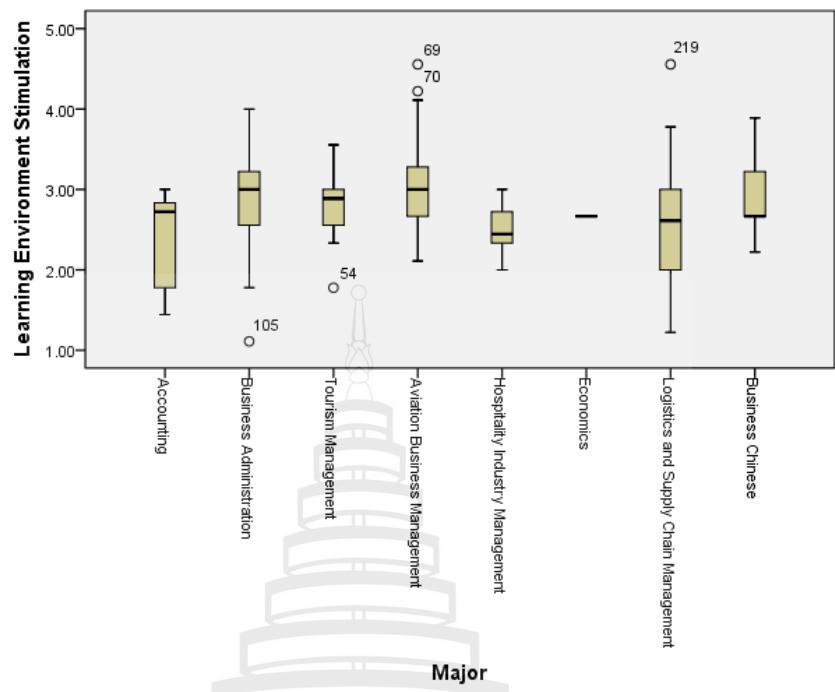
For better visualization of the significant or insignificant differences of the motivational and service quality variables involved across the different majors of the students, the box plots presentations are provided, in Figures 4.8 to 4.17



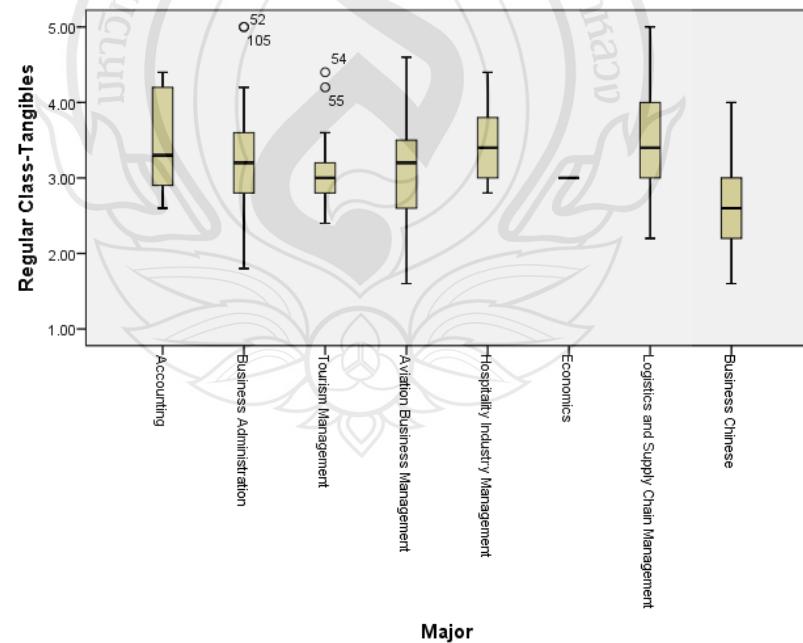
**Figure 4.8** Box Plot Comparing Personal Context across Different Majors



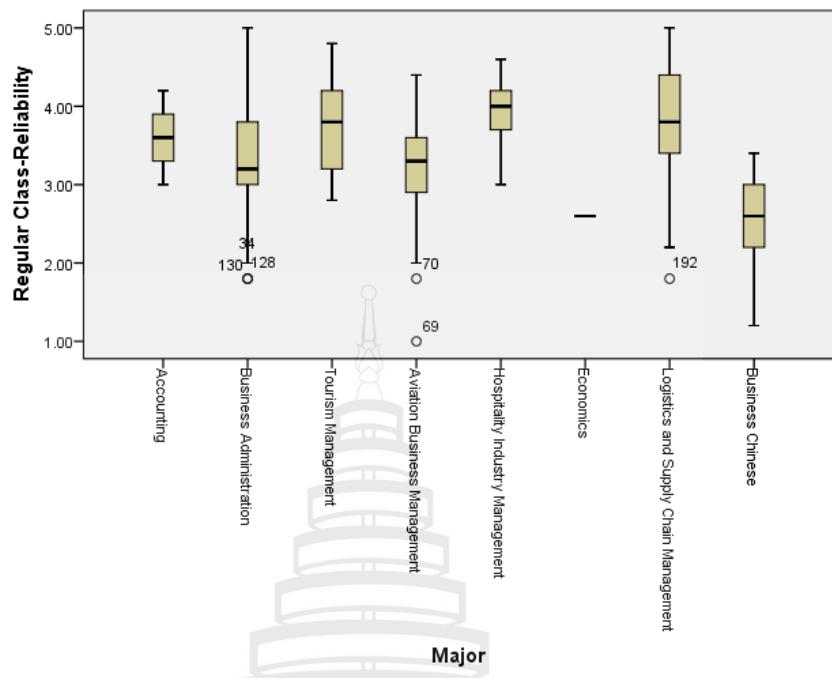
**Figure 4.9** Box Plot Comparing Personal Achievement Attitude across Different Majors



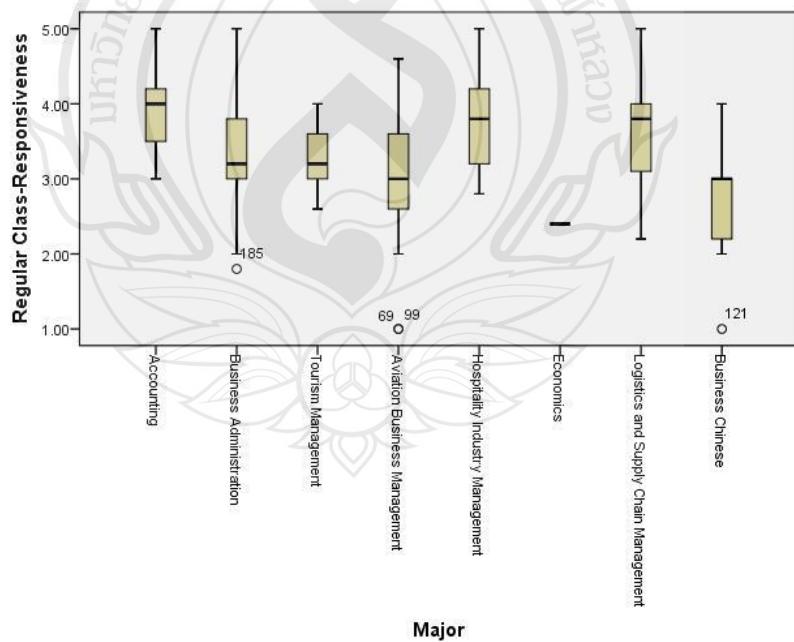
**Figure 4.10** Box Plot Comparing Learning Environment Stimulation across Different Majors



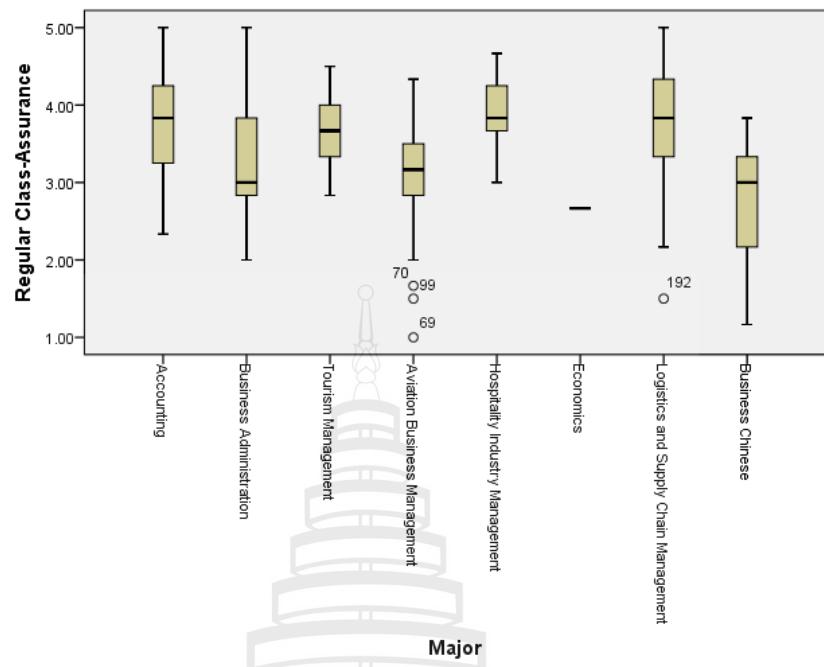
**Figure 4.11** Box Plot Comparing Tangibles of Regular Class across Different Majors



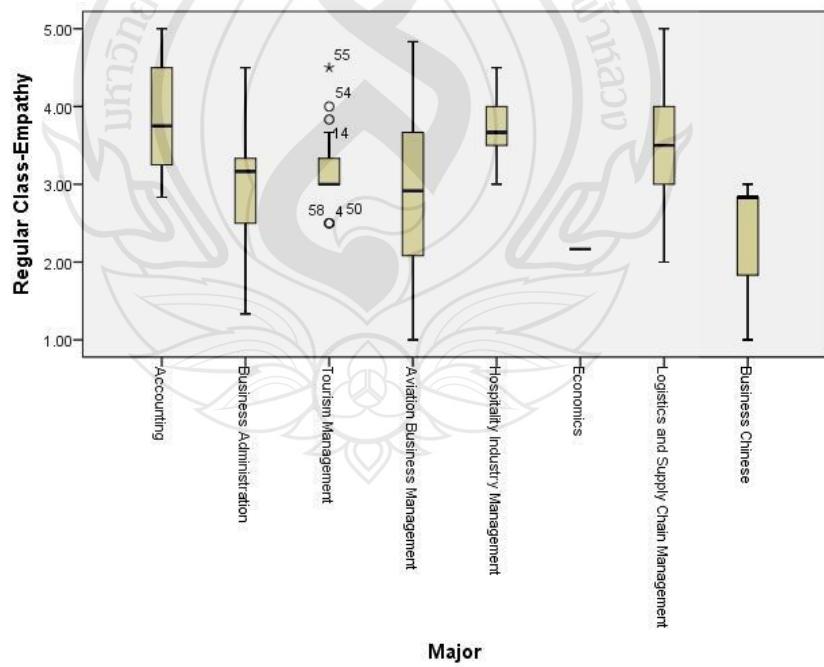
**Figure 4.12** Box Plot Comparing Reliability of Regular Class across Different Majors



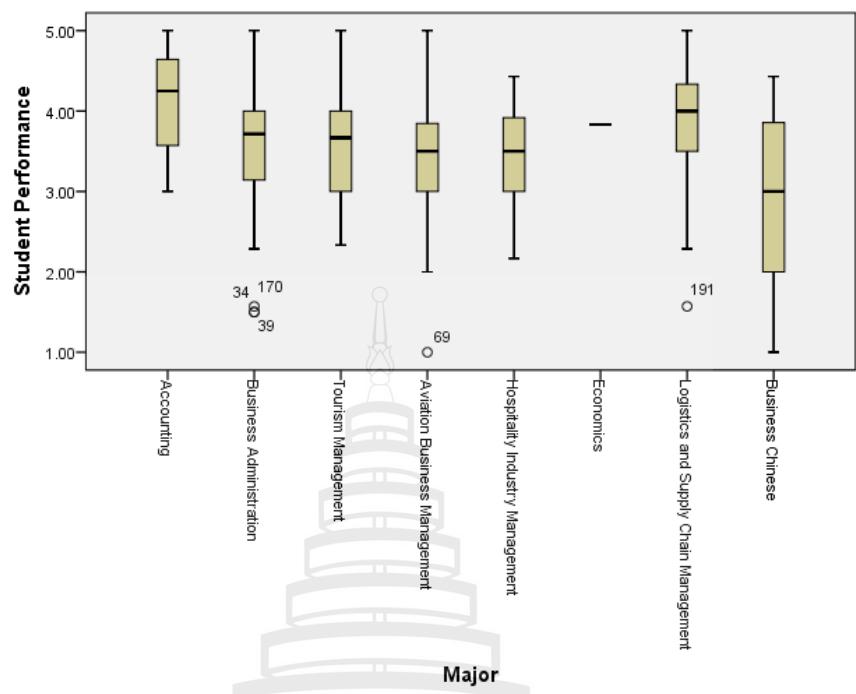
**Figure 4.13** Box Plot Comparing Responsiveness of Regular Class across Different Majors



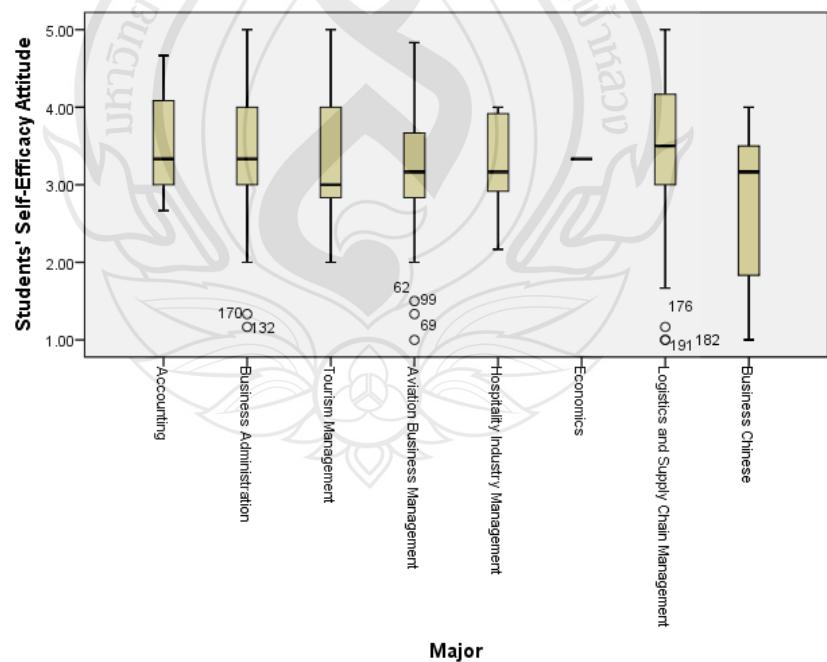
**Figure 4.14** Box Plot Comparing Assurance of Regular Class across Different Majors



**Figure 4.15** Box Plot Comparing Empathy of Regular Class across Different Majors



**Figure 4.16** Box Plot Comparing Student Performance across Different Majors



**Figure 4.17** Box Plot Comparing Student-Self Efficacy Attitude across Different Majors

## CHAPTER 5

### CONCLUSION AND IMPLICATIONS

#### 5.1 Introduction

Studies of the extant literature show that there is a scanty effort in establishing the linkage between the personal motivation and the service quality of the teaching, both in normal class and from the tutoring efforts, to influence student learning performance and the self-efficacy achievement attitude of the students. The central idea of this research is thus to exploit robustly validated platform of the triadic reciprocal determinism model of social cognitive theory in order to put a structure of the research finding.

Specifically, the triadic reciprocal determinism, originated by Bandura (1997), rooted in social cognitive theory, states the mutual interactive relationships of personal cognitive and environmental variables, and behaviors (i.e. student behaviors). In this research, personal cognitive factor is represented by the intrinsic achievement oriented motivation of the students. The environmental variables are the different attributes of the service quality of the teaching, both for normal class and tutoring environment. The service quality adopts the generic five domains of the SERVQUAL instrument which has been proven to have robustly high reliability and construct validity. Nevertheless, to have the right content or substantive validity, literature of the student learning in undergraduate environment would be critically studied and synthesized, and exploited.

This research stresses only on the uni-dimensional causative and consequential nature of the reciprocal causation determinism framework. In addition, the behavioral consequential domain of the student behavior is studied rather than the behavior itself. It is also acknowledged that the personal-environmental-behavioral triadic reciprocal

structure is known to represent the causative relationship between thought, affect and action. For instance, cognitive expectation and the perceived influence of the environment are known to give shape and direction to behavior and the student performance outcome. The student performance outcome takes on a broader approach in definition than the subject-focused version, and thus can be guided to reflect the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience (Suskie, 2009). Also, learning outcomes should include performance or with relevancy to reflect fulfilling the performance assessment criteria (Mager, 1962; Marzano, 2009).

Methodologically, this research underpins on a positivistic epistemological position which relies on quantitative-based survey method in the data collection. The research design is deductive in nature which exploits the theoretical repertoire of the extant multidisciplinary subject literature in the construction of the theoretical, conceptual model. The survey, based on 227 undergraduate students, and the 89 students (within the 227) that have had attended the tutoring service for Accounting Subject at the university, reflects no significant differences for tutored and non-tutored students on student performance and student attitude towards self-efficacy achievement orientation. Perceptions over intrinsic motivation and the different facets of teaching service quality also, in the t-test, show no significant differences.

Specifically, this chapter provides the conclusion and points of implication of this research to aspects or domains of theories and practices. Issues of further research and limitations would also be addressed.

## 5.2 Concluding the Research Objective

The purpose of this research is to study the roles played by the personal and situational aspects of motivation as well as the teaching quality factor which adapts the SERVQUAL (Service Quality) concept of Parasuraman et al. (1988), towards performances and self-efficacy attitude of the students, within the comparative context between tutoring and without it, by the use of “Accounting” as the subject of

focus, and by focusing on only the students who have had attended the basic “Accounting” subject at Mae Fah Luang University.

The proposed triadic reciprocal determinism model of social cognitive theory for describing the student learning performance and attitude phenomenon, being predicted by personal intrinsic motivation factor and the teaching service quality, is statistically validated, by the use of multivariate regression.

Every educational situation is uniquely different, from course to course, and from students to students. In addition, different students bring to the class with different expectations, motivations and attitudes, which the identification of these significant factors that drive and improve student performances as well as their self-efficacy attitudes, can help the instructors and the university administrators to better use the teaching and the motivational resources of the students to effect change to the students, positively.

Further research and implications for teachers and relevant stakeholders would be addressed in this Chapter as well. The further research could expand the scopes of the survey to include variables that include the expertise level of the teacher, as “assurance” aspect of service quality has been shown to be important factor in making students perceive to perform better. This is important, as although college teachers are normally capable in their discipline, there are times when people teach courses that are on the edge of their area of expertise, and thus, may affect not only the time required to generate problems and exercises (i.e be responsive), but also the level of risk they are ready to take when choosing a teaching strategy, which thus influences the perceived “assurance” from the views of the students.

The variables such as empathy or other domains of the instructor’s teaching service quality that are not revealed in the final model may be limited by the inadequacy of the literature review, or otherwise, qualitative interview-based in-depth studies could be designed to help enrich the detailed understanding of each of the variables. For instance, according to Fink (2013), empathic quality could include domains of “integration” (p. 84), which aims to forge the connections (similarities and interactions) that the students should recognize and make among the ideas within the course, as part of the empathic approach to help the students understand new concepts

easily, and other empathic issues may include attending to the interests, values and feelings of the students.

In addition, the other limitation, although revealed at post-data analysis stage, is important which relates to the current states of perceptions of the students which in general fall below the “4” of the five Likert scale, which may prompt the model to be validated within the given teaching service quality context. In other words, if the sampling population is expanded, such as to include various well-known universities in Thailand, as different religions still share the same tutoring culture, the final structure of the model that explains the tutored or non-tutored situations, even on the same subject matter, could be significantly different. And thus, various factors that have not been shown to be significant would be obvious in the other service quality contexts. For instance, on the tangible aspect, many research have proven that curricular innovation can equip the students with a rich learning experience (Kolar, Muraleetharan, Mooney & Vieux, 2000) and thus this could alter the states of motivational factors that are addressed in this research, and thus changes the structure of the interrelationship, both in levels and scopes, to influencing students' perceived performance and their self-efficacy attitude.

In other words, this research clearly shows that there are ample spaces of opportunities and creativities which one can further conceive in areas of social cognitive fields, as demonstrated by the triadic reciprocal mechanisms of the social cognitive theory advocated by Bandura (1989). The cognitive motivational factors shown to be important by the results of this research are, in particular, self-achievement attitude and personal context that provides the evaluative and cognitive assessments to their personal context that involves the subject which dictates the attitudinal direction of the students. This implies also directly to the students as well who are concerned in learning about a topic or enhancing their skills in a domain should not only rely on the social atmosphere and the built service quality environment i.e. of the tutored, but should show motivated behaviors, such as choice of the activity, effort, persistence, and achievement.

Note that the outcome of this research also shows that there exists certain pattern of relationship among the different aspects of the cognitive motivation factor, for instance, as shown in Table 5.1, the negative correlation between self-achievement

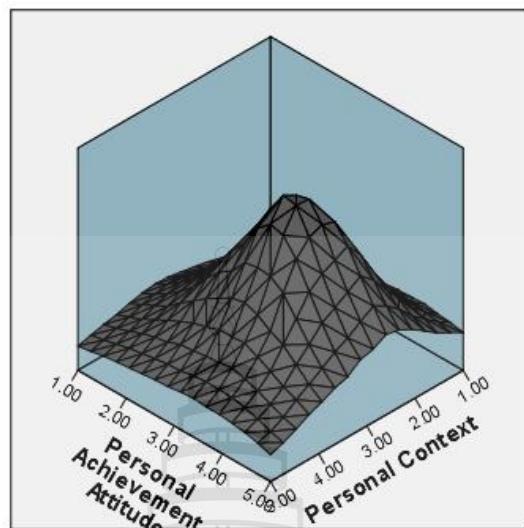
attitude and situational contexts, i.e., personal context or stressful environment stimulation shows that orientation or attitude does significantly influence the perceived environment. Thus, perceptions over social learning environment and the cognitive nature of the students are interrelated, and mutually cross influencing each other, and should not be ignored, and this also matches with the original intention of Bandura (1989), in terms of reciprocity of the social cognitive variables.

**Table 5.1** Correlation between the Different Aspects of Motivation

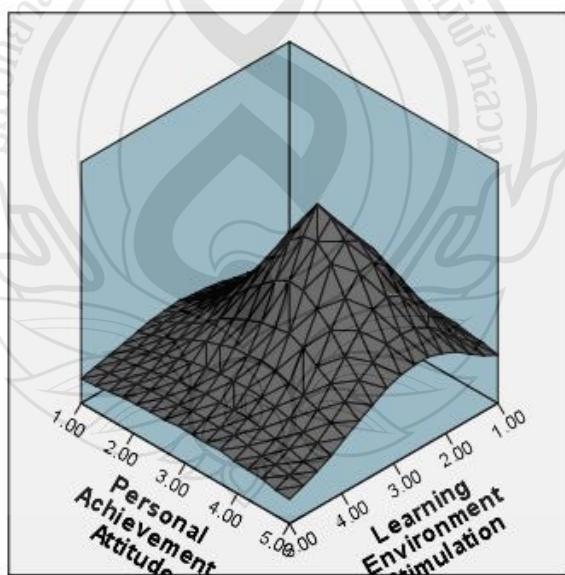
		Personal Context	Personal Achievement Attitude	Learning Environment Stimulation
<b>Personal Context</b>	Pearson Correlation	1	-.344**	.338**
	Sig. (2-tailed)		.000	.000
	N	227	227	227
<b>Personal Achievement Attitude</b>	Pearson Correlation	-.344**	1	-.351**
	Sig. (2-tailed)	.000		.000
	N	227	227	227
<b>Learning Environment Stimulation</b>	Pearson Correlation	.338**	-.351**	1
	Sig. (2-tailed)	.000	.000	
	N	227	227	227

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

For visual illustration purpose, the negative correlations structure between personal achievement attitude and other situational aspects of cognitive factors are presented in the density plots, in Figure 5.1 and Figure 5.2.



**Figure 5.1** Density Plots Showing the Negative Correlation between Personal Context and Personal Achievement Attitude



**Figure 5.2** Density Plots Showing the Negative Correlation between Learning Environment Stimulation and Personal Achievement Attitude

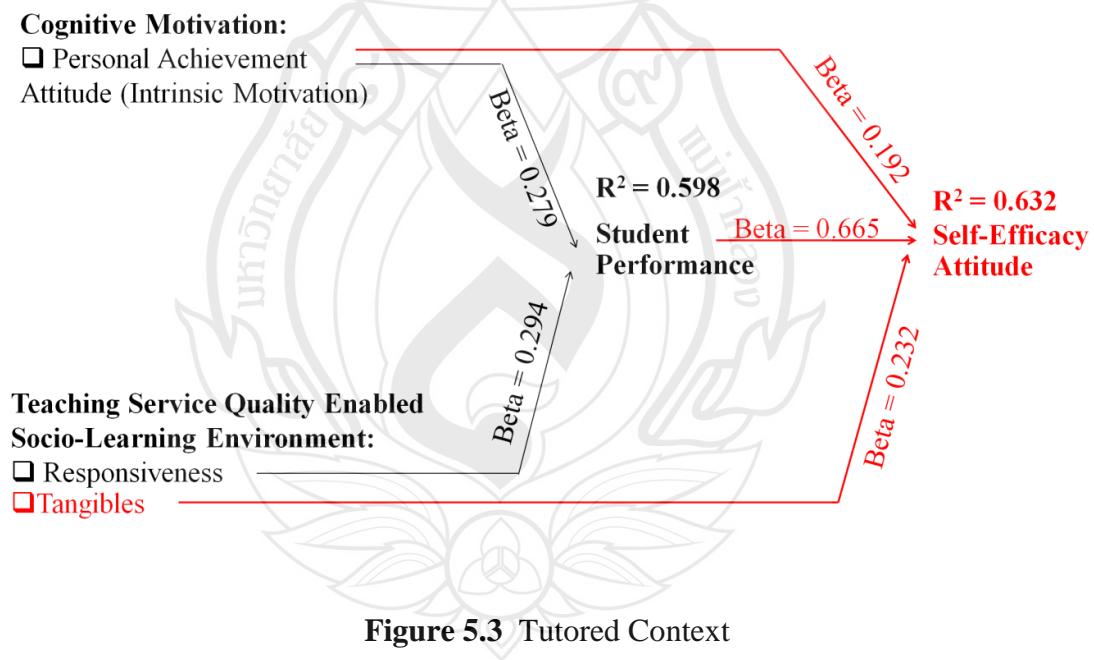
Thus, in sum, although this research studies the students' perceived performances and self-efficacy attitude in tutored and non-tutored classroom environments, by the use of only one subject known as "Accounting," it can be inferred, from the theoretical and analytical argument perspectives, successful institutions should recognize that sustained emphasis on students' cognitive and social development is foundational to their learning, persistence and completion. In other words, according to Bridglall, (2013), high achieving institutions do not leave learning to chance but should actively engage in the conceptualization, implementation and evaluation of activities (i.e. reflected by the different facets of the instruction service qualities, as empathy, responsiveness, reliability, tangibles, and assurance) that promote student learning. To be specific, this can take the form of assessing students' skills in particular domains; placing them in appropriate courses; and providing assistance that enables them to learn and develop, including offering constructive feedback and monitoring their progress, particularly in their freshman year. Additionally, successful institutions not only assess, on a continuing basis, the impact of their teaching practices (i.e. SERVICE QUALITY) on student learning, but also should recognize that performance is self-reinforcing, which this research proves that the higher the performance of the students, the better they feel confident that they can do much better in the future, for different subjects, and thus this research provides a structured look to enable the students to become more agile in dealing with diversity and uncertainties, as intended by self-efficacy.

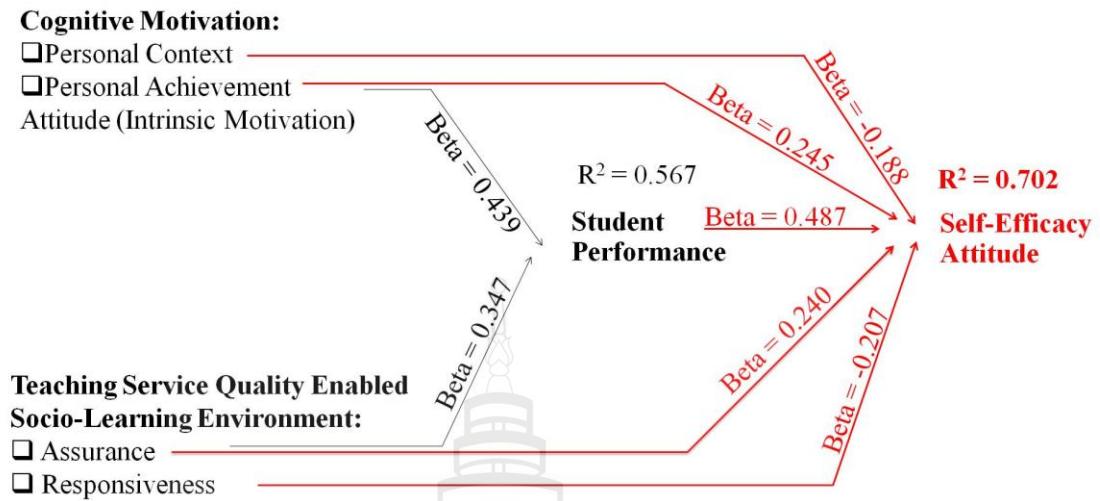
### **5.3 Concluding the Hypotheses**

In sum, the triadic reciprocal determinism conceptual model of social cognitive theory suggested in this research is supported, which describes the roles of both cognitive motivation and socio-learning environment in influencing the performances and self-efficacy attitude of the students. Thus, teachers should not neglect that, apart from their treatment-oriented efforts to mend the weaknesses of the students through teaching service quality, for instance, they should actively attempt to arouse the working of the intrinsic motivation, i.e., the self-achievement regulated

agency, of the students. This is important as this intrinsic motivational virtue of the student, no doubt, can determine how the student can cope with adversity of the learning environment, and allow them to focus without determent. Thus, this research provides the social cognitive driving forces of the student learning.

The self-achievement regulated agency is characterized, for instance, by the students preferring class works that are challenging so that they can learn new things, and thus this personal achievement attitude further motivates the students towards performance which then strengthens the self-efficacy attitude needed for further educational pursuits. Figures 5.3 and 5.4 present the evidences to support H2 and H3, which indicates that the triadic reciprocal determinism of social cognitive theory applies to tutored and non-tutored, respectively, although with minor differences in the types of variables that deal with the domains of teaching service quality.





**Figure 5.4** Non-Tutored Context

Specifically, the tutoring context indicates the significant roles of responsiveness and the tangible aspects of the tutoring, which clearly shows that the students perceive that the tutoring teacher has the time for the students, and that the students perceive the tutoring materials are easier to read and understand and also include many problems and solutions for the students to digest and learn.

Strikingly important, as revealed from the validated models presented in Figures 5.3 and 5.4, is the development of students' self-efficacy attitude, which implies that the students gradually build their aspirations and levels of interest in academic pursuits (Abd-Elmotaleb & Saha, 2013) and beliefs in their capabilities to learn and perform at designated levels (Bandura, 1995). In addition, the built classroom environment represented by the service quality of teaching, represented by, for instance, "Assurance," "Responsiveness," and "Tangibles," are important determinants. Built service environment can provide a conducive environment for "engaging students in learning", and through communicating with students, by using "questioning and discussion techniques", and "assessment in instruction", by establishing "a culture for learning", "managing classroom procedures", "creating an environment of respect and rapport", and "managing student behaviors" (Ferguson & Danielson, 2014), students can gain the confidence and interests to

pursue and thus to improve on their understanding on the subject, and thus to excel in the classwork.

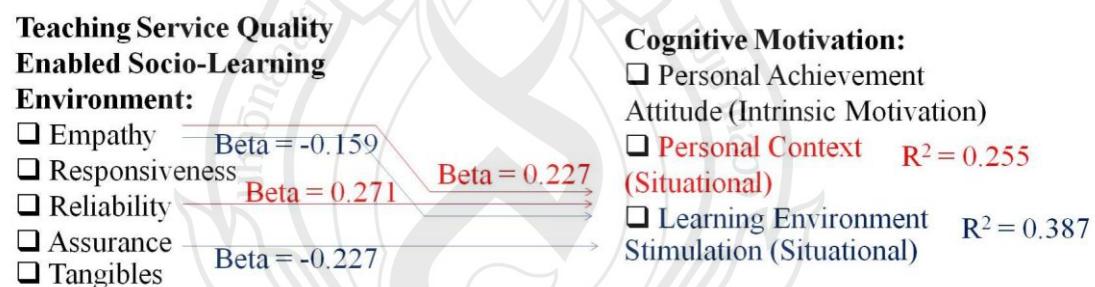
For non-tutored students, “Assurance”, at Beta of 0.240 which ensures the knowledge base of the teacher so that the teacher can effectively pass the knowledge on to the students, (Abd-Elmotaleb & Saha, 2013), plays a significant role. For instance, practically, the teacher should ensure they continue to learn and upgrade their competencies so that, in the eyes of the students, the learning becomes plausible, fruitful, and confident. That is how self-efficacy attitude is developed, as revealed by this research. This research thus should make the teacher to be more aware of the necessity to service in quality manner, while not ignoring the individual potential i.e. motivation, as well as the overall learning environment.

In addition, as shown in Figure 5.5, for both tutored and non-tutored, students’ perceptions towards the learning environment stimulation, i.e. the time and the prompt efforts provided by the teacher in assisting the students to understand the subject, as well as the sorts of assignments of the regular class that are able to make the students better understand the subject confidently, including the tangible qualities of the regular class that are presented to be exciting and challenging, are significantly influenced, on the negative direction, by the assurance and empathy aspects of the teaching service quality. The degree of the influence is determined to be 38.7 per cents of the variance of the learning environment stimulation. In other others, the inherent weaknesses of the teaching quality of the regular class, in both assurance and empathy, have projected the students to perceive the learning environment in negative view. Thus, to improve the personal perceptions towards the learning environment that is capable to stimulate the learning of the students, teaching service quality of the regular class, in aspect of assurance and the empathy of the teachers, must be significantly improved.

Also, the variance of the students’ personal achievement attitude, i.e. in preferring class work that is challenging as the students can learn new things, and students expecting to do well in the subject and be able to use what are learned for future classes and performances, at 25.5 per cents, can be explained by the reliability aspect (at Beta 0.3227) and empathy (Beta at 0.271) of the teaching service quality of the regular class. This implies that teacher has to made attempt to deliver what is

promised and provide reliable teaching and learning experiences so that the students can depend on the teacher to help them advance the subject knowledge, including provide personal care to do not cause unnecessary stresses and pressures beyond the control of the students, as in doing so it helps to develop and improve goal-oriented attitude of the students which give them the necessary extra psychological push to exert more efforts to improve their grades in the subject.

Nevertheless, the correlation strength, at negative direction, between personal context (personal subject background) and the different facets of the regular class's teaching service quality, is very weak. The negative correlation, however, can be explained, for instance, that the students tend to give up when doing assignment for the subject, when the teaching service qualities, in aspects of reliability and empathy are weak, from the perceptions of the students, i.e. the students cannot rely on the teachers to help them understand the subject well, and perceive the teachers do not give them sufficient personal attention.



**Figure 5.5** Relationship between Regular Class's Teaching Service Quality and Personal Factors

In sum, this research provides a significant contribution towards the topics and the research issues, both theoretically and practically. Theoretically, this research reinforces the important role of psychological field which states the social environment as perceived by the individual, manifested here through the quality services provided by both normal-class teachers and the tutoring teachers. In addition, the important role played by the motivational factors and service quality-driven

environment stresses the practicality of social cognitive theory which concerns how the students make sense of the service providers and themselves.

#### **5.4 Concluding Tutored and Non-Tutored**

The tutored or non-tutored student groups as the main comparative variable of this research are to be concluded here. The t-test results indicate that although these two groups show no significant differences in the motivational attitudes, i.e. personal achievement attitude and the situational aspect of personal context and learning environment stimulation, those of tutored do have lower level of agreeableness towards the reliability and assurance aspects of the classroom quality. In other words, the students who engage in the tutoring are motivated by the deficiency in the ways the instructors guide about problems solving, and the dependency to guide on the examination, to review the important concepts of the subject, and enable the students to advance their subject knowledge, and also by their lower level of confidence over the instructors over the subject material provided and their knowledge.

#### **5.5 Concluding Roles of Demographics Variables**

Students, whether tutored or non-tutored, of different gender and years at the university do not play a significant role in causing differences in student's performance, student's self-efficacy attitude, and perceptions over intrinsic motivation and the different facets of teaching service quality. On the other hand, the different majors of the students do show significant differences in causing differences in personal achievement attitude, learning environment stimulation, teaching service quality, and also student's performance, which provide a note of implication to further research in an attempt to study in-depth the student perceptions of the different majors, and through cross comparative research studies, many further insights can be gained.

## 5.6 Implication for Theory

The research finding here, although provides robust empirical validation to the triadic reciprocal determinism of social cognitive theory, owed to Bandura (1997), has shown to provide expansive scopes of contributions in areas of teaching and learning, by extending to other knowledge disciplines. An obvious one is environmental psychology which provides further knowledge to study the interrelationships between the different aspects of environment and the student efforts, cognition and behavior (Bechtel & Churchman, 2002). Concept of environmental psychological theory can be traced to concept of psychophysics, coined and pioneered by Fechner (1860) in the Elements.

Fundamentally, and ontologically, what is stressed in Fechner (1860) is the integration of physiology and psychology, and the objective and subjective factors. By referring to the context of this research, service quality attributable to the teaching as well as the learning social environment would provide the stimulating forces to influence students' behaviors and their performances. Thus, the teachers and the university could actively build conducive the right service context and learning environment so as to develop the attitudes, knowledge and skills of the students to cope with the requirements of learning and education.

The significant weight of service quality, both for normal class and for tutoring environment, in influencing students' performance and attitudes, should be able to suggest a moral behavioral set to guide action and cognitive development of the teachers. Thus, moral or ethics based theories could be exploited, to help the teachers to learn the effectiveness of their own beliefs and frames of actions towards contributing to the performance levels of the students. The moral works of teaching can be referred to Sanger and Osguthorpe (2013).

In addition, service quality context and structure of the interrelationships of the service quality attributes also provide a structural framework to allow the teachers' professional know-how to have a directional basis to ground their decisions and understandings. In other words, the service oriented roles as evidenced in this research can provide some of the empirical richness to further help refine the

understanding and further research efforts towards contributing to the subjective educational theory. “Subjective educational theory reflects the teacher’s personal answer to the questions: how should I deal with this particular situation? and why should I do it that way? using or applying one’s subjective educational theory thus demands first of all a process of judgment and deliberation, an interpretative reading of the situation before deciding on which approach may be most appropriate” (Kelchtermans, 2013).

The built service environment can provide a conducive environment for “engaging students in learning”, and through communicating with students, by using “questioning and discussion techniques”, and “assessment in instruction”, and by “establishing a culture for learning”, “managing classroom procedures”, “creating an environment of respect and rapport”, and “managing student behaviors” (cf. Ferguson & Danielson, 2014), students can gain the confidence and interests to pursue and thus to improve on their understanding on the subject, and thus to excel in the classwork. Favorable built service environment can also be implied to induce general social support (Lee & Smith, 1999; Lee, Smith, Perry & Smylie, 1999) and to instill a “sense of community” (Shouse, 1996).

Further implication lies in the field of educational psychology (Seligman & Csikszentmihalyi, 2000), which this research contributes through socio-cognitive mechanisms in improving the student performance and self-efficacy attitude. For instance, although treatment oriented focus has been successful (i.e. seen by the need of the teaching service quality in influencing students’ attitudes and performances as exhibited in this research), in that it can be used to fix what is broken, but it lacks sustainability in quantum leaping the overall standards of education at the university levels. In other words, the build service environment has to be enabled by the simultaneous working of the motivation of the students, i.e. represented by self-achievement attitude, personal context and learning environment stimulation.

## 5.7 Implication for Practice

This research provides practical implications to help the teachers better able to develop the necessary effective environment to develop students' attitudes, knowledge and skills needed for performances. This is especially important for newcomer teachers, and due to the teacher's unfamiliarity with the teaching and student-learning environment, it could be very difficult for the newcomer teachers to take the right stances (Husu, 2002; 2003). In other words, this research provides a structured analytics framework to enable the teachers to be equipped with an insightful discriminating and normative skills and knowledge to help them develop better teaching and learning plans and practical exercises needed (Hostetler, 1997).

In addition, this research also shed light towards certain behavioral standards of the teaching profession. According to Tiri, Husu, and Kansanen (1999), rules and standards, although they are subjected to changes, are nevertheless needed to help build teachers' professional character in their practical knowing. In addition, standards such as teaching's service quality also stimulate the "ethics of intention" (Weber, 1978, pp.212-215) in that the teachers can then better design and attempt the teaching and learning activities to aim for the better performance of the students as well as building their self-efficacy achievement attitudes.

Also, the teachers should not neglect that, apart from their treatment oriented efforts to mend the weaknesses of the students, for instance, they should actively attempt to arouse the working of the intrinsic motivation of the students. This is important as this intrinsic motivational virtue of the student, no doubt, can determine how the student can cope with adversity of the learning environment, and allow them to focus without determent. Thus, this research provides the social cognitive driving forces of the student learning.

The aspect of service quality attributable to the teachers, i.e. assurance (which ensures the knowledge base of the teacher so that the teacher can effectively pass the knowledge on to the students, Abd-Elmotaleb & Saha, 2013), is important. For instance, practically, the teacher should ensure they continue to learn and upgrade their competencies so that, in the eyes of the students, the learning becomes plausible,

fruitful, and confident. That is how self-efficacy attitude is developed, as revealed by this research. This research thus should make the teacher to be more aware of the necessity to service in quality manner, while not ignoring the individual potential i.e. motivation, as well as the overall learning environment.

Further research should exploit the research finding to design and conceptualize the tasks needed for an effective teaching, such as “Anticipating student challenges, strengths, interests and capabilities, and background knowledge – to understand the student’s motivation and capability about the subject background, creating and adapting resources for instruction that support particular subject strategies or to address particular student questions, misconceptions, or challenges with content, developing questions, activities, tasks, and problems to elicit student thinking, doing the work that will be demanded of the students as part of the intended curriculum” (Phelps, Weren, Croft & Gitomer, 2014; Thomas, Kerri & Robert, 2014)

## 5.8 Limitations

Due to the convenient sampling approach, the post-data analysis indicates the limitations which lie in the imbalance between the numbers of student participants between the different years of study at the university, which make the ANOVA analysis interpretation cautionary. Nevertheless, the R-squared of the multivariate regression analysis for the overall students that explains the triadic determinism model of the social cognitive theory is high, and this high internal validity provides a broad-based generalizability for the students, tutored and non-tutored, at the university. However, the results have to be taken cautiously.

## 5.9 Future Research

This research focuses one-sided aspect, either from the personal motivation or from the influence of the instructor’s role in delivering quality teaching. The future research should extend to incorporate the relational issue (i.e. the student-teaching relationship) and the cooperative spirit of the students toward the lecturers.

Further research should actively survey into the extant literature for “learning environment construct”, holistically, which, for instance, could include the relational environment of the students and the teachers. The essence is that, “if the teachers can bring diverse students together to learn together, to work together, skillfully and effectively for a common educational or learning objective cause, it would lift them up and has them moving in the same direction with an impact on learning, achievement, and result” (Schley & Schratz, 2011). Some preliminary evidence along this direction for teacher colleagues can be found in Hargreaves and Shirley (2009).

Further research should also incorporate the theory of planned behavior (Ajzen, 1991). A favorable classroom environment, as implied by this research, is linked to the teacher attitude towards the students as well as the materials provided which can equip the students with some degree of control towards their favor. Thus it is justifiable to examine how the theory of planned behavior can help further enrich the understanding of the research extended from the outcomes of this research.

Further research could thus take on a longitudinal research design to study how self-efficacy is built, and delivers the impact on the amount of effort and persistency the students in putting up to achieve goals (Bandura, 1997).

The different majors of the students do show significant differences in causing differences in personal achievement attitude, learning environment stimulation, teaching service quality, and also student’s performance, which provide a note of implication to further research in an attempt to study in-depth the student perceptions of the different majors, and through cross comparative research studies, many further insights can be gained.

A large, faint watermark of the university crest is centered on the page. The crest features a central torch with a flame, surrounded by a circular border containing the text 'มหาวิทยาลัยราชภัฏเชียงใหม่' in Thai script. Above the torch is a tiered stupa. The entire watermark is rendered in a light gray or white color.

## REFERENCES

## REFERENCES

Abd-Elmotaleb, M. & Saha, S. K. (2013). The role of academic self-efficacy as a mediator variable between perceived academic climate and academic performance. *Journal of Education and Learning*, 2(3), 117-129.

Adriana, M. R., Joan-Lluís, C., Víctor , M. & Gimenez, G. (2014). Teaching performance: Determinants of the student assessment. *Academia Revista Latinoamericana de Administración*, 27(3), 402 - 418.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.

Akomolafe, M. J., Ogunmakin, A. O. & Fasoota, G. M. (2013). The role of academic self-efficacy, academic motivation and academic self-concept in predicting secondary school students' academic performance. *Journal of Educational and Social Research*, 3(2), 335-342.

Alves, H. & Raposo, M. (2007). Conceptual model of student satisfaction in higher education. *Total Quality Management*, 18(5), 571-588.

Ames, C. (1992). Goals, structures and student Motivation. *Journal of Educational Psychology*, 84, 261-271.

Atheeyaman, A. (1997). Linking student satisfaction and service quality perceptions: The case of university education. *European Journal of Marketing*, 31(7), 528-540.

Atkinson, J. W. & Feather, N. T. (1966). *A theory of achievement motivation*. New York: Wiley.

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

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

Bandura, A. (1995). Exercise of personal and collective efficacy. In A. Bandura, *Self-Efficacy in Changing Societies* (pp. 1-45). New York: Cambridge University Press.

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

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-25.

Bandura, A. (2005). The evolution of social cognitive theory. In K. G. Smith & M. A. Hitt, *Great Minds in Management* (pp. 9-35). New York: Oxford University.

Bandura, A. & Bussey, K. (2004). On broadening the cognitive, motivational, and sociostructural scope of theorizing about gender development and functioning: A reply to martin, ruble, and szkrybalo. *Psychological Bulletin*, 130, 691-701.

Barkley, E. F. (2009). *Teachers talk: Perspectives on student engagement*. Retrieved December 9, 2015, from [http://web.me.com/elizabethbarkley/Student\\_Engagement\\_Techniques/Teachers\\_Talk.html](http://web.me.com/elizabethbarkley/Student_Engagement_Techniques/Teachers_Talk.html)

Bechtel, R. B. & Churchman, A. (2002). *Handbook of environmental psychology*. New York, NY: Wiley.

Beck, R. C. (2004). *Motivation: Theories and principles*. USA: Pearson Education.

Bernard, H. R. (2013). *Social research methods*. Thousand Oaks, California: Sage Publication.

Biggs, J. & Tang, C. (2011). *Teaching for quality learning at university*. England: Open University Press.

Bloom, B. S. (1976). *Human characteristics and school learning*. New York, NY: McGraw-Hill.

Bonwell, C. C. & Eison, J. A. (1991). Active learning: Creating excitement in the classroom. Washington, DC: School of Education and Human Development, George Washington University.

Borko, H., Jacobs, J., Eiteljorg, E. & Pittman, M. E. (2008). Video as a tool for fostering productive discussions in mathematics professional development. *Teaching and Teacher Education*, 24(2), 417-436.

Bragg, S. M. (2010). *Accounting Best Practices*. Wiley.

Bray, M. (1999). *The shadow education system: Private tutoring and its implications for planners*. Paris: UNESCO International Institute for Educational Planning.

Bray, M. & Lykins, C. (2012). Shadow education: Private supplementary tutoring and its implications for policy makers in Asia. *CERC Monograph Series in Comparative and International Education and Development*. Philippines: Asian Development Bank.

Bridglall, B. L. (2013). *Teaching and learning in higher education*. United Kingdom: Lexington Books.

Brown, S. D., Lent, R. D. & Larkin, K. C. (1989). Self-efficacy as moderator of scholastic aptitude-academic performance relationship. *Journal of Vocational Behavior*, 35, 64-75.

Carr, P. & Wu, L. (2004). Time-changed Levy processes and option pricing. *Journal of Financial Economics*, 71, 113-141.

Cheng, Y. C. & Tam, M. (1997). Multi-models of quality in education. *Quality Assurance in Education*, 5(1), 22-31.

Christensen, T. E., Fogarty, T. J. & Wallace, W. A. (2002). The association between the directional accuracy of self-efficacy and accounting course performance. *Issues in Accounting Education*, 17(1), 1-26.

Clandinin, D. J. (2013). Personal practical knowledge: A study of teacher's classroom images. In C. J. Craig, P. C. Meijer, & J. Broeckmans, *From the teacher thinking to teachers and teaching: The evolution of a research community: advances in research on teaching* (Vol. 19, pp. 67-95). London: CPI Group (UK) Ltd.

Cochran-Smith, M. & Lytle, S. (1991). Research on teaching and teacher research: The issues that divide. *Educational Researcher*, 19(2), 2-10.

Cohen, D. K. & Ball, D. L. (1996). Reform by the book: What is – or might be – the role of curriculum materials in teacher learning and instructional reform? *Educational Researcher*, 25(9), 6-8.

Cohen, P. A., Kulik, J. A. & Kulik, C. L. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal*, 237-248.

Cranney, J., & Dalton, H. (2012). Chapter five: Optimizing adaptive student behaviors. In J. E. Groccia, M. A. Alsudairi, & W. Buskist, *Handbook of college and university teaching, A global perspective* (pp. 60-76). London, United Kingdom: SAGE Publications Ltd.

Creswell, J. W. (2003). *Research design: Qualitative and quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.

Cross, K. (1999). *Learning is about making connections, cross paper 3*. CA: League for Innovation in the Community College.

Daniel, C. N. & Beriyuy, L. P. (2010). *Using the SERVQUAL model to assess service quality and customer satisfaction*, Master's Thesis, School of Busines, Umea University.

Danish, R., Malik, M. & Usman, A. (2010). The impact of service quality on students' satisfaction in higher education institutes of punjab. *Journal of Management Research*, 2(2), 1-11.

Das, G. C. & Das, R. (2013). An empirical view on private tutoring in school mathematics of Kamrup district. *International Journal of Scientific and Research Publications*, 3(5). 1-8.

Dashiell, J. F. (1925). A quantitative demonstration of animal drive. *Journal of Comparative and Physiological Psychology*, 5, 205-208.

De Le Torre Cruz, M. & Arias, P. (2007). Comparative analysis of expectancies of efficacy in in-service and prospective teachers. *Teaching and Teacher Education*, 23, 641-652.

Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum.

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

Dewey, J. (1902). The educational situation: As concerns the elementary school. *Journal of Curriculum Studies*, 34(3), 387-403.

Dewey, J. (1904). The relation of theory to practice in education. In R. D. Archambault, *John Dewey on Education* (p. Chicago). Chicago: University of Chicago Press.

Dewey, K. (1934). *Art as experience*. New York: Capricorn Books.

Dillon, C. R., Reuben, C., Coats, M. & Hodgkinson, L. (2007). Learning outcomes and their assessment: Putting open university pedagogical practices under the microscope. In S. Frankland, *Enhancing teaching and learning through assessment: Deriving an appropriate model* (pp. 280-289). Dordrecht, Netherlands: Springer.

Doran, B. M., Bouillon, M. L. & Smith, C. G. (1991). Determinants of student performance in accounting principles I and II. *Issues in Accounting Education*, 1, 74-84.

Dorph, R., Shields, P., Tiffany-Morales, J., Hartry, A. & McCaffrey, T. (2011). *High hopes – few opportunities: The status of elementary science education in California*. Sacramento, CA: The Center for the Future of Teaching and Learning at WestEd.

Elbaz-Luwisch, F. & Orland-Barak, L. (2013). From teacher knowledge to teacher learning in community: Transformations of theory and practice. In C. J. Craig, P. C. Meijer, & J. Broeckmans, *From the teacher thinking to teachers and teaching: The evaluation of a research community: Advances in research on teaching* (Vol. 19, pp. 97-113). London: CPI Group (UK) Ltd.

Eskew, R. K. & Ramsay, A. L. (1988). Some determinants of student performance in the first college-level financial accounting course. *The Accounting Review*, 63(1), 137-147.

Fechner, G. T. (1860). *Elemente der psychophysik*. Leipzig: Breitkopf und Härtel, 2, p. 559

Ferguson, R. F. & Danielson, C. (2014). How framework for teaching and tripod 7Cs evidence distinguish key components of effective teaching. In T. J. Kane, K. A. Kerr & R. C. Pianta, *Designing teacher evaluation systems: New guidance from the measures of effective teaching projects* (pp. 98-133). San Francisco, CA: Jossey-Bass.

Fink, L. D. (2013). Creating significant learning experiences. *An Integrated Approach to Designing Colledge Courses*. USA: Jossey-Bass.

Gage, N. L. (1978). *The scientific basis of the art of teaching*. New York: Teachers College Press.

Gay, G. (2000). *Culturally Responsive Teaching*. New York: Teachers College Press.

Gollwitzer, P. M. & Brandstätter, V. (1997). Implementation intentions and effective goal pursuit. *Journal of Personality and Social Psychology*, 73, 186–199.

Grossman, P. L. (1990). *The making of a teacher: Teacher knowledge and teacher education*. New York: Teachers College Press.

Gul, F. A. & Fong, C. C. (1993). Predicting success for introductory accounting students: Some further Hong Kong evidence. *Accounting Education*, 2(1), 33-42.

Guney, Y. (2009). Exogenous and endogenous factors influencing students' performance in undergraduate accounting modules. *Accounting Education: An International Journal*, 18(1), 51-73.

Hargreaves, A. & Shirley, D. (2009). *The fourth way: The inspiring future for educational change*. Thousand Oaks, CA: Corwin Press.

Hartmann, S. (2007). The informal market of education in Egypt, private tutoring and its implications. *Department of Anthropology and African Studies*, 88.

Hashweh, M. (2013). Pedagogical content knowledge: Twenty-five years later. In C. J. Craig, P. C. Meijer & J. Broeckmans, *From the teacher thinking to teachers and teaching: The evolution of a research community: Advances in research on teaching* (Vol. 19, pp. 115-140). London: CPI Group (UK) Ltd.

Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.

Heyneman, S. P. (2011). The growing international commercial market for educational goods and services. *International Journal of Educational Development*, 21, 345-359.

Hill, M. & Epps, K. (2010). The impact of physical classroom environment on student satisfaction and student evaluation of teaching in the university environment. *Academy of Educational Leadership Journal*, 14(4), 65-79.

Hostetler, K. D. (1997). *Ethical judgments in teaching*. Boston, MA: Allyn and Bacon/Longman.

Hou, H. T., Chang, K. E. & Sung, Y. T. (2008). Analysis of problem-solving based online asynchronous discussion pattern. *Educational Technology & Society*, 11(1), 17-28.

Howard, T. C. & Aleman, G. R. (2008). Teacher capacity for diverse learners: What do teachers need to know? In C. S. Marilyn, F. N. Sharon, D. J. McIntyre, & K. E. Demers, *Handbook of Research on Teacher Education* (pp. 157-174). Oxon: Routledge.

Hull, C. L. (1943). *Principles of behavior*. New York: Appleton-Century-Crofts.

Husu, J. (2002). Navigating through the pedagogical practice – Teachers' epistemological stance towards pupils. In C. Sugrue, & C. Day, *Developing Teachers and Teaching Practice: International Research Perspectives* (pp. 58-72). London: Routledge.

Husu, J. (2003). Real world pedagogical ethics – Mission impossible? *Teacher Development*, 7(2), 311-326.

Jurasaite-Harbison, E. & Rex, L. A. (2010). School cultures as contexts for informal teacher learning. *Teaching and Teacher Education*, 26(92), 267-277.

Kelchtermans, G. (2013). Who I am in how I teach is the message: Self-understanding vulnerability, and reflection. In C. J. Craig, P. C. Meijer & J. Broeckmans, *From Teacher Thinking to Teachers and Teaching: The Evolution of a Research Community: Advances in Research on Teaching* (Vol. 19, pp. 379-401). Bingley, UK: Emerald Group Publishing Limited.

Kenney, M. (1987). Inexact sciences: Professional education and the development of expertise. In E. Z. Rothkopf, *Review of Research in Education* (Vol. 14, pp. 133-167). Washington, DC: American Educational Research Association.

Kessels, J. & Korthagen, F. (1996). The relationship between theory and practice: Back to the classic. *Educational Researcher*, 25(3), 17-22.

Khalaila, R. (2015). The relationship between academic self-concept, intrinsic motivation, test anxiety, and academic achievement among nursing student. mediating and moderating effects. *Nurse Education Today*, 35, 432-438.

Kitchroen, K. (2004, May-August). Literature review: Service quality in educational institutions. *ABAC Journal*, 24(2), 14-25.

Koh, M. Y. & Koh, H. C. (1999). The determinants of performance in an accounting degree programme. *Accounting Education*, 8(2), 13-29.

Kolar, R. L., Muraleetharan, K. K., Mooney, M. A. & Vieux, B. E. (2000). Sooner city - Design across the curriculum. *Journal of Engineering Education*, 89(1), 89-87.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.

Kolb, D. A. & Fry, R. (1975). *Toward an applied theory of experiential learning*. New York: John Wiley & Sons.

Kruglanski, A. W. (1975). The endogenous-exogenous partition in attribution theory. *Psychological Review*, 82, 387-406.

Laerd. (2015). *How to structure the research limitations section of your dissertation*. Retrieved October 14, 2015, from <http://dissertation.laerd.com>

Lee, V. E. & Smith, J. B. (1999). Social support and achievement for young adolescents in Chicago: The role of school academic press. *American Educational Research Journal*, 36(1), 907-945.

Lee, V. E., Smith, J. B., Perry, T. E. & Smylie, M. A. (1999). Social support, academic press, and student achievement: A view from the middle grades in Chicago. *Consortium on Chicago School Research*.

Leinhardt, G. & Greno, J. G. (1986). The cognitive skill of teaching. *Journal of Educational Psychology*, 78(2), 76-95.

Leinhardt, G., McCarthy, Y. K. & Merriman, J. (1995). Integrating professional knowledge: The theory of practice and the practice of theory. *Learning and Instruction*, 5, 401-408.

Lewin, K. (1935). *A dynamic theory of personality: Selected papers*. New York: McGraw-Hill.

Liu, O. (2012). Does cram schooling matter? who goes to cram school?. *International Journal of Educational Development*, 32(1), 46-52.

Locke, L. F., Spirduso, W. W., & Silverman, S. J. (2000). *Proposals that work: A guide for planning disserations and grant proposals*. Thousand Oaks, CA: Sage.

Ma, L. (1999). *Knowing and teaching elementary mathematics: Teachers' understanding of fundamental mathematics in China and the United States*. Mahway, NJ: Erlbaum.

Mager, R. F. (1962). *Preparing objectives for programmed instruction*. Palo Alto, CA: Fearon.

Marshall, D. H., McManus, W. W. & Viele, D. F. (2002). *Accounting: What the numbers mean*. USA: McGraw-Hill.

Marzano, R. J. (2009). *Designing and teaching learning goals and objectives*. Bloomington, IN: Marzano Research Laboratory.

McKeachie, W. J. (1994). *Teaching tips: Strategies, research and theory for college and university teachers*. Lexington, MA: D.C. Health.

Mooi, T. L. (2006). Self-efficacy and student performance in an Accounting course. *Journal of Financial Reporting & Accounting*, 4(1), 129-146.

Mostafa , M. & Maksy , L. Z. (2008). Factors associated with student performance in advanced performance in advanced An empirical study in a public university. *Accounting Research Journal*, 21(1), 16 - 32.

Moustafa, A. E. & Sudhir, K. S. (2013). The role of academic self-efficacy as a mediator variable between perceived academic climate and academic performance. *Journal of Education and Learning*, 2(3), 117-129.

Nakinbodee, S., Tan, C. C., Kantabutra, S., Jongsuriyapart, C. & Nakeeree, P. (2015). A critical look into customer satisfaction at a conferencing setting by situating within social environmental psychology: A case with Mae Fah Luang University's wanason conferencing service. *International Journal of Business, Management & Social Sciences*, 4(998-102).

National Board for Professional Teaching Standards. (2001). *Report on issues referred to the working groups by the equal opportunity coordinating committee (EOCC)*. VA: Arlington.

Neisser, U. (1976). *Cognition and reality: Principles and implications of cognitive psychology*. San Francisco: Freeman.

Nenty, H. J. (2009). Writing a quantitative research thesis. *International Journal of Education Science*, 1(1), 19-32.

Nicholls, J. G. (1989). Achievement motivation: Conceptions of ability, subjective experience, task choice and performance. *Psychological Review*, 91, 328-346.

Oldfield, B. M. & Baron, S. (2000). Student perceptions of service quality in a UK university business and management faculty. *Quality Assurance in Education*, 8(2), 85-95.

Oliver, R. L. (1997). *Satisfaction: A behavioural perspective on the consumer*. New York: McGraw Hill.

Papageorgiou, K. & Halabi, A. K. (2014). Factors contributing toward student performance in a distance education Accounting degree. *Meditari Accounting Research*, 22(2), 211-223.

Parasuraman, A., Zeithaml, V. & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1).

Pascarella, E. T. & Terenzini, P. T. (1991). How college affects students. *Findings and Insights from Twenty Years of Research*. San Francisco: Jossey-Bass.

Perri, G. & Bellamy, C. (2012). Principles of methodology. *Research Design in Social Science*. London: SAGE Publications Ltd.

Petruzzellis, L. & Romanazzi, S. (2010). Educational value: How students choose university. *International Journal of Educational Management*, (24), 12-40.

Phelps, G., Weren, B. H., Croft, A. & Gitomer, D. H. (2014). Developing content knowledge for teaching assessments for the measures of effective teaching study. *ETS Research Report Series*, 2, 1-92.

Pintrich, R. R. & Degroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 33-40.

Pittman, T. S. & Heller, J. F. (1987). Social motivation. *Annual Review of Psychology*, 38, 461-489.

Poe, H. P., Tan, C. C. & Jongsuriyapart, C. (2015). A study of student satisfaction of service quality in Mae Fah Luang University: An empirical study through adapted SERVQUAL. *International Journal of Business, Management & Social Science*, 9(I), 172-177.

Potipiroon, W., Sritanyarat, D. & McLean, G. N. (2010). Epistemology in Thailand: How do we know what we know in HROD? *Resource and Organization Development*, 2(2), 5-26.

Powell, M. A. (1997). *Academic tutoring and mentoring: A literature review*. Sacramento, CA: California Research Bureau.

Privitera, G. J. (2014). *Research methods for the behavioral sciences*. United Kingdom: SAGE Publications Ltd.

Ratcliff, J. L. (1995). *Realizing the potential: Improving postsecondary teaching, learning, and assessment (National report of the national center on postsecondary teaching, learning and assessment)*. University Park, PA: National Center on Postsecondary Teaching, Learning, and Assessment.

Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*, 44, 159-175.

Richardson, V. (2001). *Handbook of research on teaching*. Washington, DC: AERA.

Ryan, R. M. & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.

Ryan, R. M., Sheldon, K. M., Kasser, T. & Deci, E. L. (1996). All goals are not created equal. In P. M. Gollwitzer & J. A. Bargh, *The psychology of action: Linking cognition and motivation to behavior* (pp. 7-26). New York: Guilford Press.

Sanger, M. N. & Osguthorpe, R. D. (2013). Modeling as moral education: Documenting, analyzing, and addressing a central belief of preservice teachers. *Teaching and Teacher Education*, 29(1), 167-176.

Sansone, C. & Harackiewicz, J. M. (2000). *Intrinsic and extrinsic motivation: The search for optimal motivation and performance*. San Diego, California: Academic Press.

Sato, K. & Kleinsasser, R. C. (2004). Beliefs, practices, and interactions in a Japanese high school english department. *Teaching and Teacher Education*, 20(8), 797-816.

Schley, W. & Schratz, M. (2011). Developing leaders, building networks, changing schools through system leadership. *International Handbook of Leadership for Learning*, 25, 267-295.

Schon, D. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.

Schultz, S. & Pecheone, R. L. (2014). Assessing quality teaching in science. In T. J. Kane, K. A. Kerr & R. C. Pianta, *Designing teacher evaluation systems: New guidance from the measures of effective teaching projects* (pp. 444-483). San Francisco, CA: Jossey-Bass.

Schunk, D. H. (1982). The effects of effort attribution feedback on children's perceived self-efficacy and achievement. *Journal of Educational Psychology*, 74, 548-556.

Schussler, D. L., Poole, I. R., Whitlock, T. W. & Evertson, C. M. (2007). Layers and links: Learning to juggle 'one more thing' in the classroom. *Teaching and Teacher Education*, 23(5), 572-585.

Sekaran, U. (2000). *Research methods for business*. USA: John Wiley.

Seligman, M. & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.

Shah, J. Y. & Kruglanski, A. W. (2000). The structure and substance of intrinsic motivation. In C. Sansone & J. M. Harackiewicz, *Intrinsic and extrinsic motivation: The search for optimal motivation and performance*. New York: Academic Press.

Sharm, D. & Silbereisen, R. K. (2007). Revisiting an era in Germany from the perspective of adolescents in mother-headed single-parent families. *International Journal of Psychology*, 42(1), 46-58.

Shouse, R. C. (1996). Academic press and sense of community: Conflict, congruence, and implications for student achievement. *Social Psychology of Education*, 1(1), 47-68.

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.

Silova, Iveta, & Kazimzade, E. (2006). "Azerbaijan". In Silova, Iveta, V. Bediene, & M. Bray, *Education in a hidden marketplace: Monitoring of private tutoring*. New York: Open Society Institute.

Skinner, B. F. (1938). *The behavior of organisms*. New York: Appleton-Century-Crofts.

Skinner, B. F. (1953). *Science and human behavior*. New York: Macmillan.

Stajkovic, A. D. & Luthans, F. (1998). Social cognition theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamics*, 26(4), 62-74.

Suskie, L. (2009). *Assessing student learning: A common sense guide*. San Francisco, CA: Jossey-Bass.

Tan, C. C. (2015). Deductive-inductive approach to business research. *Advanced Lecture Series*. School of Management, Mae Fah Luang University.

Tan, C. C. & Kantabutra, S. (2014). A critical literature review in conceptualizing a structural framework to position buddhist inquiry paradigms. *MFU Connexion Journal of Humanities and Social Sciences*, 3(2), 65-92.

Teewattanawong , P., Tan, C. C. & Jongsuriyapart, C. (2015). Intercepting resource-based view and market-positioning approaches in studying university student satisfaction level: A case with Mae Fah Luang university. *International Journal of Business, Management & Social Sciences*, 9(I), 92-97.

Thomas, K. J., Kerri, K. & Robert, P. (2014). *Designing teacher evaluation systems: New guidance from the measures of effective teaching project*. Jossey-Bass.

Thorndike, E. L. (1898). Animal intelligence: An experimental study of the associative processes in animals. *Psychological Review Monograph Supplements*, 2(4), 8.

Tiri, K., Husu, J. & Kansanen, P. (1999). The epistemological stance between the knower and the known. *Teaching and Teacher Education*, 15, 911-922.

Toulmin, S. (1953). *The philosophy of science – An introduction*. London: Hutchinson.

Tuan, H., Chin, C. C. & Shieh, S. H. (2005). The development of a questionnaire to measure students' motivation towards science learnin. *International Journal of Science Education*, 27(6), 639-654.

United Nations Development Program (UNPD). (2007). *Educational transformations in Armenia: National human development report 2006*. Yerevan: UNDP.

Vescio, V., Ross, D. & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80-91.

Vygotsky, L. S. (1978). Mind in Society. *The development of higher psychological process*. Cambridge, MA: Harvard University Press.

Watson, J. B. (1908). Imitation in monkeys. *Psychological Bulletin*, 5, 169-178.

Weber, M. (1978). Politics as a vocation. In W. G. Runciman & M. Weber, *Selections in translation* (pp. 212-225). Cambridge, MA: Cambridge University Press.

Wittrock, M. (1986). *Handbook of research on teaching*. New York: Macmillan.

Wood , R. & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. *Journal of Personality and Social Psychology*, 56, 407-415.

Yinger, R. J. (1977). A study of teacher planning: Description and theory development using ethnographic and ingormation processing methods. *Unpublished Doctoral Dissertation*. Michigan State University: East Lansing.

Yusuf, A. (2002). Inter-relationship among academic performance, academic achievement and learning outcomes. *Journal of Curriculum and Instruction, 1*, 87-96.

Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education, 46*(6), 677-706. Retrieved October 26, 2015, from Research in Higher Education: <http://dx.doi.org/10.1007/s11162-004-4139-z>

Zammuto, R. F., Keaveney, S. M. & O'Connor, E. J. (1996). Rethinking student services: Assessing and improving service quality. *Journal of Marketing in Higher Education, 7*(1), 45-69.

Zeithaml, V., Bitner, M. & Gremler, D. (2009). *Service marketing: Integrating customer focus across the firm* (5th Ed.). New York: McGraw Hill international.

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*(3), 329-339.



**APPENDIX**

## APPENDIX

### QUESTIONNAIRE

Dear kind participant,

I am Anchittha Nanan (Gib), a Master student in Business Administration, with major in Entrepreneurial management program in School of Management at Mae Fah Luang University, Chiang Rai, Thailand

I would like to thank you sincerely for your participation in this survey. This survey is a part of the research for my thesis, to attempt to understand **Intrinsic and Extrinsic Motivation factors and Relationship with Academic Performance Influencing Student to Attend Tutorial Service in Higher Education.**

This survey includes six parts and it will only take about 15-20 minutes. It is important that no any question is skipped, as your answers are very important to provide insights to help improve tutoring business and to better deliver better service for students. Thank you for your kind participation.

Sincerely,

Anchittha Nanan (Gib)

Contact: Tel: 0869114953

E-mail: [anchitthananan@hotmail.com](mailto:anchitthananan@hotmail.com)

Supervisor: Dr.Chai Ching Tan

E-mail: [drcctan@yahoo.com](mailto:drcctan@yahoo.com)

Senior Lecturer, Mae Fah Luang University

### Part I: General Information

1. Have you ever attended tutorial service in higher education before, please tick (✓) the appropriate answer:

1) Yes

2) No

\*If you answer **NO**, please skip part IV (ถ้าค่าตอบของคุณคือไม่ ไม่ต้องทำส่วนที่ 4 )

### Part II: Intrinsic and Extrinsic Motivation

Please indicate your response to the following items by “circling” one of the numbers, which have the following meaning that best describe yourself and your experiences;

**1 = Strongly Disagree; 2 = Disagree; 3 = Neither Agree nor Disagree; 4 = Agree; 5 = Strongly Agree**

Please answer the following questionnaire items carefully, **thinking about what can influencing you to attend tutorial service.**

\*Note: Each questionnaire statement refers to the **Accounting** Subject and **Accounting** Class

Intrinsic Motivation Factors	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Personal Context:</b>					
1. My study skills are weak compared with others in this class (-)	1	2	3	4	5
2. My English skills are weak, so I don't understand in the class (-)	1	2	3	4	5
3. I cannot pass the examination without getting help from other (-)	1	2	3	4	5
4. I am not familiar with this subject (-)	1	2	3	4	5

5. When teacher is talking, I think of other things and don't really listen to what is being said (-)	1	2	3	4	5
6. I am not confident about understanding this difficult subject concept (-)	1	2	3	4	5
7. When doing assignment of this subject, I give up (-)	1	2	3	4	5
8. When doing assignment of this subject, I prefer to ask other people for the answer rather than think for myself (-)	1	2	3	4	5
9. I find this subject is interesting	1	2	3	4	5
<b>Personal achievement attitude:</b>					
1. I prefer class work that is challenging so I can learn new things	1	2	3	4	5
2. Compared with other students in this class, I expect to do well	1	2	3	4	5
3. It is important for me to learn what is being taught in this class	1	2	3	4	5
4. I think I will be able to use what I learn in this class in my future	1	2	3	4	5
5. I want to receive a good grade in this class	1	2	3	4	5
6. I want to graduate with Honors	1	2	3	4	5

Extrinsic Motivation Factors	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Learning Environment</b>					
<b>Stimulation:</b>					
1. The teacher at the normal class usually has no time for me (-)	1	2	3	4	5
2. When I have some difficulty with the understanding of the subject, the teacher at the normal class always shows the efforts to help me promptly	1	2	3	4	5
3. The teacher in normal class always teaches properly	1	2	3	4	5
4. The teacher in normal class give me few assignments or problems to practice*	1	2	3	4	5
5. The teacher in normal class puts a lot of pressure on me (-)	1	2	3	4	5
6. Many students in class, making me hesitate and afraid to ask the question (-)	1	2	3	4	5
7. Material for this class is hard to read and understand (-)	1	2	3	4	5
8. Study materials in normal class are uninteresting (-)	1	2	3	4	5
9. The contents of the normal class are exciting and challenging	1	2	3	4	5

Part III: Service Quality (Regular Classroom)

Please answer the following questionnaire items carefully, **thinking about how you think and perceive about regular classroom in the university.**

<b>Service Quality (Regular Classroom)</b>	Strongly	Disagree	Neither	Agree	Strongly
	Disagree	Agree nor Disagree	Agree	Agree	
<b>Tangibles:</b>					
1. Study materials are easy to read and understand	1	2	3	4	5
2. Study materials include many problem and solution for me to practice	1	2	3	4	5
3. Study materials are up-to-date	1	2	3	4	5
4. Instructor provides some exercise question papers to help me prepare for examinations	1	2	3	4	5
5. Classroom equipment are prepared well	1	2	3	4	5
<b>Reliability:</b>					
1. Instructor always gives me correct and good answer when I ask the question	1	2	3	4	5
2. When instructor promises me to do something by a certain time, he/she does so	1	2	3	4	5
3. Instructor can be depended upon to advance my subject knowledge	1	2	3	4	5
4. Instructor gives students the examination guideline	1	2	3	4	5
5. When an examination is coming, Instructor reviews all the important issues for students	1	2	3	4	5

<b>Responsiveness:</b>					
1. Instructor has available hours convenient to all students	1            2            3            4            5				
2. Instructor always discusses with me to clarify my understanding	1            2            3            4            5				
3. Instructor usually shows the efforts to help students immediately	1            2            3            4            5				
4. When I have problem, Instructor helps me to solve the problem immediately	1            2            3            4            5				
5. Instructor is always willing to help students	1            2            3            4            5				
<b>Assurance:</b>					
1. Instructor teaches in the easy way that makes me understand the subject clearly	1            2            3            4            5				
2. Instructor illustrates with a multitude of examples to make students understand confidently	1            2            3            4            5				
3. Instructor make me feel comfortable to ask the question	1            2            3            4            5				
4. The behavior of instructor instill confidence in students	1            2            3            4            5				
5. I feel confident with the instructor being able to advance the subject knowledge	1            2            3            4            5				
6. Instructor has strong experience teaching this subject	1            2            3            4            5				

<b>Empathy:</b>		1	2	3	4	5
1.	Instructor gives students individual attention	1	2	3	4	5
2.	Instructor does not put a lot of pressure on student	1	2	3	4	5
3.	Instructor gives students extra care, especially focusing on weakness	1	2	3	4	5
4.	Instructor is friendly and reachable	1	2	3	4	5
5.	Instructor understands the specific need of students	1	2	3	4	5
6.	Instructor gives students personal advice	1	2	3	4	5

#### Part IV: Service Quality (Tutorial Service)

Please answer the following questionnaire items carefully, **thinking about how you think and perceive about Tutorial Service.**

\*Note: For students who **have experienced in tutorial service only**

<b>Service Quality (Tutorial Service)</b>	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Tangibles:</b>					
1. Tutorial materials are easy to read and understand	1	2	3	4	5
2. Tutorial materials include many problem and solution for me to practice	1	2	3	4	5
3. Tutorial materials are up-to-date	1	2	3	4	5
4. Private tutoring provides some previous years' examinations question papers to help me on the preparation of examinations	1	2	3	4	5

5. Tutorial service has good equipment i.e. white board, table, and teaching materials	1	2	3	4	5
<b>Reliability:</b>					
1. Private tutoring helps me to do the examination	1	2	3	4	5
2. Tutor always gives me correct and good answer when I ask the question	1	2	3	4	5
3. When Tutor promises me to do something by a certain time, he/she does so	1	2	3	4	5
4. Private tutoring can be depended upon to advance my knowledge	1	2	3	4	5
5. Private tutoring provides its services at the time it promises to do so	1	2	3	4	5
6. Tutor always shows more interest to help me advance the subject knowledge than the teacher of normal class	1	2	3	4	5
<b>Responsiveness:</b>					
1. Tutor usually has time for me	1	2	3	4	5
2. Tutor always discusses with me to clarify my understanding	1	2	3	4	5
3. When I have problem, tutor helps me to solve the problem immediately	1	2	3	4	5

4. Private tutoring provides convenient way to contact with tutor when I need help	1	2	3	4	5
5. Tutor usually shows the efforts to help me immediately	1	2	3	4	5
6. Tutor is always willing to help students	1	2	3	4	5
<b>Assurance:</b>					
1. Tutor teaches in the easy way that makes me understand the subject clearly	1	2	3	4	5
2. Tutor teaches more than the syllabus of the regular university class	1	2	3	4	5
3. Tutor uses a variety of teaching methods to make sure students can understand the subject	1	2	3	4	5
4. Tutor make me feel comfortable to ask the question	1	2	3	4	5
5. The behavior of tutor instills confidence in students	1	2	3	4	5
6. I feel confident with the tutorial service being able to advance the subject-knowledge	1	2	3	4	5
7. I feel confident with the tutorial service being able to get me passing quizzes, mid-term and final exams of the subject	1	2	3	4	5
<b>Empathy:</b>					
1. Tutor gives me extra care, especially focusing on my weakness	1	2	3	4	5

2. Tutor usually pays attention to individual student	1	2	3	4	5
3. Tutor is friendly and reachable	1	2	3	4	5
4. Tutor usually tells me my progress of improvement	1	2	3	4	5
5. Tutor does not put a lot of pressure on me	1	2	3	4	5
6. Tutor understands the specific need of students	1	2	3	4	5
7. Tutor gives students personal advice	1	2	3	4	5
8. Tutor gradually improves my understand of the subject knowledge	1	2	3	4	5

#### Part V: Performance and Attitude

Please answer the following questionnaire items carefully, **thinking about what are your performance and attitude after studying this course.**

Performance & Attitude	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Student Performance:</b>					
1. Studying this subject contributes to advance my progress at the university	1	2	3	4	5
2. Studying this subject helps me to enhance my efficiency level of learning	1	2	3	4	5
3. Studying this subject contributes to increase my ability to work on my future career	1	2	3	4	5

4. Studying this subject contributes to increase my ability to study on other related subjects	1	2	3	4	5
5. Studying this subject helps to improve my academic skills	1	2	3	4	5
6. I gain more familiarity with this subject	1	2	3	4	5
7. Study in normal class become easier to understand for me  <b>*(For students who have experienced in tutorial service only)</b>	1	2	3	4	5
<b>Students' Self-efficacy Attitude:</b>					
1. I think I am able to do the examination well	1	2	3	4	5
2. I think I will get a good grade in this subject	1	2	3	4	5
3. I have positive feeling toward this subject	1	2	3	4	5
4. I feel more comfortable to study this subjects	1	2	3	4	5
5. I have an easy, good feeling when I take a test of the subject	1	2	3	4	5
6. I think that what I am learning in this class is useful for me	1	2	3	4	5

**Part VI: Personal Information**

Please Tick (✓) the most suitable answers about yourself

**1. Gender**

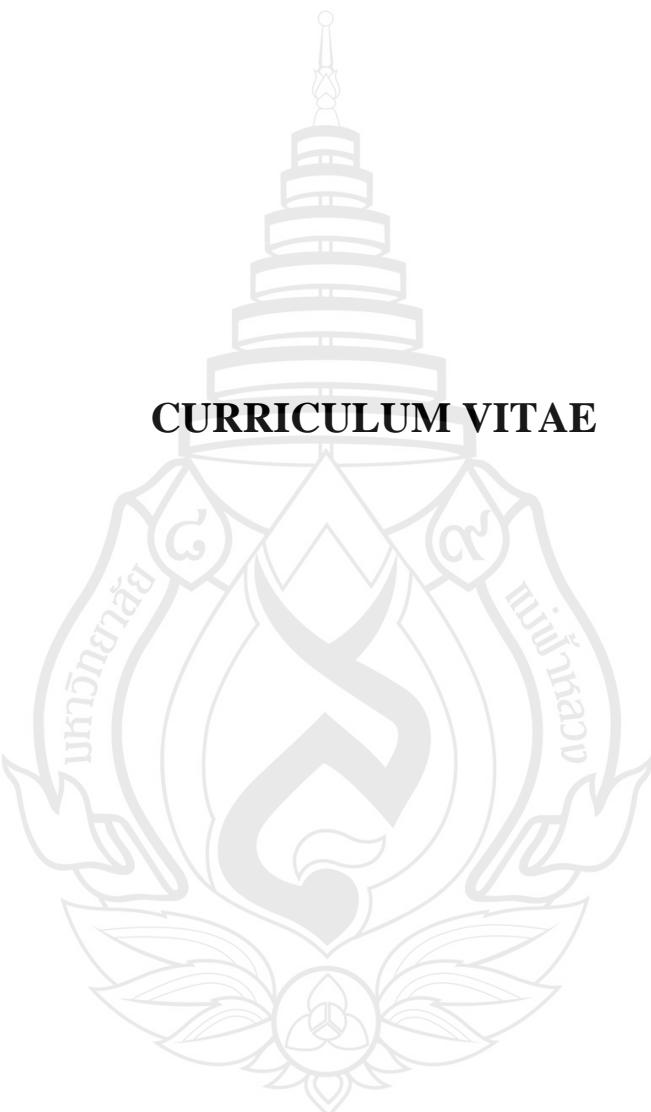
1)  Male      2)  Female     

**2. Major**

1)  Accounting  
2)  Business Administration  
3)  Tourism Management  
4)  Aviation Business Management  
5)  Hospitality Industry Management  
6)  Economics  
7)  Logistics and Supply Chain  
8)  Business Chinese

**3. Years at University**

1)  First year student      2)  Second year student  
3)  Third year student      4)  Forth year student



# CURRICULUM VITAE

## CURRICULUM VITAE

**NAME**

Miss Anchittha Nanan

**DATE OF BIRTH**

13 August 1992

**ADDRESS**

308 Moo.4 Wiangpangkham Sub-district,  
Maesai district, Chiang Rai, 57130,  
Thailand.

**EDUCATIONAL BACKGROUND**

2013

Bachelor of Business Administration  
Business Administration  
Mae Fah Luang University

**WORK EXPERIENCE**

2014-2015

Teaching Assistant  
School of Management, Mae Fah Luang  
University, Chiang Rai, Thailand.