

RELATIONSHIP BETWEEN SERVICE QUALITY,  
ACADEMIC QUALITY AND SATISFACTION AMONG STUDENTS  
OF SOUTHERN THAILAND GOVERNMENT UNIVERSITIES:  
THE MODERATING EFFECT OF VALUE

NARUEBAN YAMAQUPTA

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NARUEBAN  
YAMAQUPTA

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By

NARUEBAN YAMAQUPTA

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---

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Nama Penyelia/Penyelia-penyelia  
(Name of Supervisor/Supervisors)

: **Prof. Madya Dr. Filzah Md Isa**

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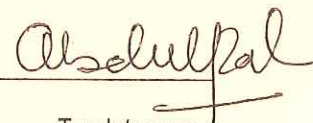


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## ABSTRACT

In the context of higher education institutions, particularly those located in southern Thailand, achieving student satisfaction is imperative for a number of reasons. Firstly, higher education institutions in this region are currently faced with situations that result in decreasing numbers of students. Secondly, competition tends to increase every year from both within and outside the country. Hence, low student satisfaction becomes an essential issue for higher education institutions to resolve. Moreover, in-depth investigation on student satisfaction in this region is under-researched. Past studies have shown that student satisfaction is influenced by a variety of factors, including aspects related to quality and value. Therefore, this study sought to assess the relationship between service quality and academic quality on student satisfaction, and also to gauge the moderating effect of value using a multi-items measurement. Important instruments, such as the SERVPERF and the PERVAL scales, were used in this study. The respondents for this study were students enrolled in ten (10) government universities in the southern region of Thailand. A total of 768 questionnaires were distributed, and only 346 of them were usable. Approximately, 14 hypotheses were developed and tested with multiple regression and hierarchical regression analyses. The results indicated that several dimensions of service quality and academic quality were significantly related to student satisfaction, and the explanation power of the model increased from 25.6% to 33.5% when value moderated the relationship which explained the moderating effect of value. Plausible reasons for the findings were discussed within the context of the study. Both practical and theoretical contributions as well as recommendations for future research were made.

**Keywords:** service quality, academic quality, student satisfaction, value, and higher education in Thailand

## ABSTRAK

Dalam konteks institusi pendidikan tinggi terutamanya yang berada di selatan Thailand, pencapaian kepuasan pelajar adalah sangat penting kerana beberapa sebab. Pertama, institusi pendidikan tinggi di wilayah ini kini sedang menghadapi beberapa situasi yang menyebabkan kemerosotan jumlah pelajar. Kedua, persaingan semakin bertambah pada setiap tahun sama ada dari dalam ataupun luar negara. Sehubungan dengan itu, kepuasan pelajar yang rendah menjadi isu penting untuk diselesaikan oleh institusi pendidikan tinggi. Tambahan pula, terdapat kekurangan dan batasan kajian secara mendalam di wilayah ini. Kajian lepas telah menunjukkan bahawa kepuasan pelajar dipengaruhi oleh pelbagai faktor, termasuk aspek-aspek berkaitan kualiti dan nilai. Justeru, kajian ini bertujuan untuk menilai hubungan antara kualiti perkhidmatan dan kualiti akademik ke atas kepuasan pelajar dan untuk mengukur kesan nilai yang sederhana dengan menggunakan suatu pengukuran pelbagai-item. Instrumen penting seperti skala SERVPERF dan skala PERVAL telah digunakan dalam kajian ini. Responden kajian adalah terdiri daripada pelajar yang mendaftar masuk ke 10 universiti kerajaan di wilayah selatan Thailand. Sejumlah 768 borang soal selidik telah diedarkan dan hanya 346 darinya yang boleh digunakan. Sebanyak 14 hipotesis telah dibangunkan dan diuji dengan menggunakan analisis regresi berbilang dan regresi hierarki. Hasil kajian menunjukkan bahawa beberapa dimensi kualiti perkhidmatan dan kualiti akademik mempunyai hubungan yang signifikan dengan kepuasan pelajar. Manakala kuasa penerangan model telah bertambah daripada 25.6% kepada 33.5% apabila nilai menyederhanakan hubungan-hubungan tersebut, justeru menjelaskan kesan yang diwujudkan oleh nilai. Sebab yang munasabah bagi penemuan ini telah dibincangkan dalam konteks kajian. Sumbangan dari segi praktikal dan teoritikal, serta cadangan untuk kajian masa hadapan juga turut dilakukan.

**Kata kunci:** kualiti perkhidmatan, kualiti akademik, kepuasan pelajar, nilai, dan pendidikan tinggi di Thailand

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.0 Introduction**

This chapter provides an overview of the study. It begins with the background of the study and the overview of Thailand's higher education sector before proceeding onto the problem statement. The problem statement explains the importance of service quality, academic quality, and value on student satisfaction specifically in the higher education sector in Thailand. It also defines research questions and research objectives. It is followed by the significance and scope of the study. Finally, the chapter ends with the structure of this current study.

### **1.1 Background of the Study**

Achieving student satisfaction is the key to survival within higher education in Thailand today. This is because the effect of globalization still strongly exists. This obligates higher education institutions in Thailand and makes them realize that competitors are increasingly aware of the fact that national boundaries no longer exist. Higher education institutions need to be more concerned regarding this competitive environment triggered by various competitors who are pursuing the market place both within and outside the country.

Referring to the 'National Conference: 2009 the year of Thai higher education quality enhancement', The Education Minister, Mr. Jurin Laksanawisit lamented that qualities are important and the important point for the higher education sector in



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## **APPENDICES**

### APPENDIX A

#### Research Questionnaire (English version)

This study investigates your satisfaction with the services provided by the university. By taking about 15 minutes to fill out this questionnaire, you will help the university to evaluate what has been provided to you over the past year. The results from this study will help the university to know how to satisfy you.

#### Ethical concerns

All data collected in this questionnaire is confidential and only to be used for the purpose of data analysis and will not be made to third parties.

Thank you for your cooperation.

There are three parts in this survey.

- Part I: student satisfaction, service quality, academic quality and value
- Part II: your comments and suggestions
- Part III: your personal data

**Part I: Satisfaction, Service Quality, Academic quality and Value**

Please tick (✓) what you think of each statement below

<b>Score</b>	<b>Meaning</b>
<input type="checkbox"/> 1	Strongly disagree / Extremely poor
<input type="checkbox"/> 2	Disagree / Below average
<input type="checkbox"/> 3	Neutral / Average
<input type="checkbox"/> 4	Agree / Above average
<input type="checkbox"/> 5	Strongly agree / Excellent

**Satisfaction**

No.	Items	Perceptions				
		1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
1	I am satisfied with my decision to attend the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	If I had to do it all over again, I would not enroll at the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	My choice to enroll at the university was a wise one.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	I feel bad about my decision to enroll at the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	I think I did the right thing when I decided to enroll at the university.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	I am not happy that I enrolled at the university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Service Quality**

No.	Items	Perceptions				
		1 Extremely poor	2 Below average	3 Average	4 Above average	5 Excellent
7	The institution has up-to-date equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The institution's physical facilities are visually appealing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	The institution's employees are well dressed and appear neat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	The appearance of the physical facilities of the institution is in line with the type of service provided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	When the institution promises to do something by certain time, it does so.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	When I have problems, the institution is sympathetic and reassuring.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	The institution is dependable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	The institution provides its services at the time it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Items	Perceptions				
		1 Extremely poor	2 Below average	3 Average	4 Above average	5 Excellent
	promises to do so.					
15	The institution keeps its records accurately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	The institution does not tell its students exactly when services will be performed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	I do not receive prompt service from the institution's employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Employees of the institution are not always willing to help students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Employees of the institution are too busy to respond to student requests promptly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	I can trust employees of the institution.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	I can feel safe in my transaction with the institution's employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Employees of the institution are polite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	Employees get adequate support from the	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Items	Perceptions				
		1 Extremely poor	2 Below average	3 Average	4 Above average	5 Excellent
	institution to do their jobs well.					
24	The institution does not give me individual attention.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	Employees of the institution do not give me personal attention.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	Employees of the institution do not know what my needs are.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	The institution does not have my best interests at heart.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	The institution does not have operating hours convenient to all their students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Academic quality**

No.	Items	Perceptions				
		1 Extremely poor	2 Below average	3 Average	4 Above average	5 Excellent
29	Engaging skilled lecturers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	Practical skills taught	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	Regular access to teaching staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	Variety of library books and journals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	Easily transferable skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	Reputable degree programme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	Good computing and web facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	The chance that my study fulfills my personal needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37	The appropriateness of requirements for my course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	The chance to develop my abilities and prepare for my career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



No.	Items	Perceptions				
		1 Extremely poor	2 Below average	3 Average	4 Above average	5 Excellent
39	The quality of material emphasized in course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	The usefulness of the module components offered in my career development.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41	The usefulness of the module components in fulfilling my personal needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42	The proportion between theory and practice was adequate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43	The bibliography, documentation and etc. provided were adequate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44	The teaching methods were appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45	The level at which these subjects were discussed was appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46	The extent and distribution of the subjects were correct.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Student value**

No.	Items	Perceptions				
		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
<i>Services and Academic qualities from the university ....</i>						
47	Is one that I would enjoy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48	Would make me want to experience it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49	Is one that I would feel relaxed about experiencing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50	Would make me feel good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51	Would give me pleasure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52	Would help me to feel acceptable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53	Would improve the way I am perceived	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54	Would make a good impression on other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55	Would give me social approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56	Is reasonably priced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Items	Perceptions				
		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
57	Offers value for money	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58	Is a good service for the price	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59	Is economical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60	Has consistent quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61	Is well made	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62	Has an acceptable standard of quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63	Has poor workmanship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64	Would not last a long time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65	Would perform consistently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Part II: Comments and suggestions**

**If you have other inquiries/comments/suggestion for the betterment of your institution, please indicate below:**

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**Part III: Your personal data**

**Gender**       Male       Female

**Age**      \_\_\_\_\_ years

**Year of study**     Freshman     Sophomore     Junior     Senior

**University**      \_\_\_\_\_

*Thank you for your valuable time*

## Research Questionnaire (Thai version)

แบบสอบถาม: ความพึงพอใจของนักศึกษาในภาคใต้ต่อคุณภาพที่มหาวิทยาลัยมอบให้

แบบสอบถามนี้เพื่อประโยชน์ในการพัฒนามหาวิทยาลัยในภาคใต้ของประเทศไทย

เพื่อช่วยให้มหาวิทยาลัยเข้าใจความต้องการของนักศึกษามากขึ้น กรุณาใช้เวลาประมาณ 10 นาทีในการตอบแบบสอบถามนี้ ผลจากการศึกษาจะช่วยให้มหาวิทยาลัยสามารถส่งมอบการบริการที่ดีขึ้นให้  
ได้ตรงกับความต้องการของนักศึกษา แบบสอบถามนี้ไม่สามารถระบุตัวตนของนักศึกษาได้

ขอบคุณสำหรับความร่วมมือ

โปรดแสดงความคิดเห็นโดยการทำเครื่องหมาย  ที่ตรงกับความคิดเห็นของนักศึกษา

หัวข้อ: ความพึงพอใจของนักศึกษา	ระดับความคิดเห็น				
	5 เห็นด้วยอย่างยิ่ง	4 เห็นด้วย	3 เฉย ๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วยอย่างยิ่ง
1. ฉันพึงพอใจที่ตัดสินใจเข้าเรียนที่มหาวิทยาลัยนี้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. หากต้องตัดสินใจใหม่อีกครั้ง ฉันคงไม่สมัครเข้าลงทะเบียน เรียนที่มหาวิทยาลัยนี้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. การเลือกสมัครเข้าเรียนที่มหาวิทยาลัยนี้ เป็นการตัดสินใจที่ ฉลาดและถูกต้อง	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. ฉันรู้สึกแย่ที่ตัดสินใจสมัครเข้าเรียนที่มหาวิทยาลัยนี้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

หัวข้อ: ความพึงพอใจของนักศึกษา	ระดับความคิดเห็น				
	5 เห็นด้วยอย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วยอย่างยิ่ง
5. ฉันคิดว่าฉันทำถูกต้องที่เลือกสมัครเข้าศึกษาที่มหาวิทยาลัยนี้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. ฉันไม่มีความสุขที่เรียนที่มหาวิทยาลัยนี้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

หัวข้อ: คุณภาพการบริการของมหาวิทยาลัย	ระดับความคิดเห็น				
	5 เห็นด้วยอย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วยอย่างยิ่ง
7. มหาวิทยาลัยมีอุปกรณ์เครื่องมืออำนวยความสะดวกที่ทันสมัย	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. สิ่งอำนวยความสะดวกที่มหาวิทยาลัยจัดให้มีความเหมาะสมและเห็นได้ชัดเจน	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. เจ้าหน้าที่ของมหาวิทยาลัยแต่งกายเหมาะสม และสุภาพ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. อุปกรณ์และสิ่งอำนวยความสะดวกที่มหาวิทยาลัยจัดให้อยู่ในสภาพที่พร้อมใช้งาน	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

หัวข้อ: คุณภาพการบริการของมหาวิทยาลัย	ระดับความคิดเห็น				
	5 เห็นด้วยอย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วยอย่างยิ่ง
11. เมื่อนักศึกษามีปัญหา มหาวิทยาลัยสามารถแก้ไขปัญหา ของนักศึกษาได้ตามเวลาที่สัญญาไว้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. เมื่อนักศึกษามีปัญหา มหาวิทยาลัยให้ความจริงจังและเห็น อกเห็นใจต่อปัญหานั้น	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. มหาวิทยาลัยเป็นที่พึ่งพาของนักศึกษา	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. การให้บริการของมหาวิทยาลัย เป็นไปตามเวลาที่กำหนด หรือชี้แจงไว้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. มหาวิทยาลัยมีการจัดเก็บข้อมูลต่างๆ ของนักศึกษา อย่างเป็นระบบและถูกต้อง	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. มหาวิทยาลัยไม่มีการกำหนดเวลาเสร็จของงานแต่ละงาน ที่ให้บริการ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

หัวข้อ: คุณภาพการบริการของมหาวิทยาลัย	ระดับความคิดเห็น				
	5 เห็นด้วยอย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วยอย่างยิ่ง
17. นักศึกษาไม่ได้รับการบริการอย่างรวดเร็ว ทันใจจาก เจ้าหน้าที่ของมหาวิทยาลัย	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. เจ้าหน้าที่ของมหาวิทยาลัยไม่มีความเต็มใจให้บริการแก่ นักศึกษา	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. ถึงงานจะยุ่งแค่ไหน เจ้าหน้าที่ที่ให้บริการ ก็พร้อมที่จะ ให้บริการกับนักศึกษาอย่างรวดเร็ว	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. นักศึกษามีความเชื่อมั่นในตัวเจ้าหน้าที่ของมหาวิทยาลัย	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. นักศึกษามีความรู้สึกสบายใจ เมื่อต้องติดต่อกับเจ้าหน้าที่ ของมหาวิทยาลัย	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. เจ้าหน้าที่ของมหาวิทยาลัยมีความสุขภาพ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. การให้บริการของเจ้าหน้าที่ ได้รับการสนับสนุนที่เพียงพอ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



หัวข้อ: คุณภาพการบริการของมหาวิทยาลัย	ระดับความคิดเห็น				
	5 เห็นด้วยอย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วยอย่างยิ่ง
จากมหาวิทยาลัย					
24. มหาวิทยาลัยไม่ใส่ใจต่อนักศึกษาเป็นรายบุคคล	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. เจ้าหน้าที่ของมหาวิทยาลัยไม่ใส่ใจต่อนักศึกษาเป็นรายบุคคล	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. เจ้าหน้าที่ของมหาวิทยาลัยไม่รู้ว่าคุณต้องการของนักศึกษา คืออะไร	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. มหาวิทยาลัยไม่คิดว่าผลประโยชน์ของนักศึกษาเป็นสิ่งสำคัญ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. เวลาการให้บริการของมหาวิทยาลัยไม่มีความเหมาะสม กับนักศึกษา	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

หัวข้อ: คุณภาพการสอนและคุณภาพวิชาการ	ระดับความคิดเห็น				
	5 เห็นด้วยอย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วยอย่างยิ่ง
29. คณาจารย์มีทักษะและความเชี่ยวชาญ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. คณาจารย์มีทักษะในการสอน	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. คณาจารย์เปิดโอกาสให้เข้าถึงได้อย่างสม่ำเสมอ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. หนังสือและวารสารต่างๆ ในห้องสมุดมีความหลากหลาย	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. คณาจารย์มีความสามารถในการถ่ายทอดความรู้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. หลักสูตรที่ศึกษาอยู่มีชื่อเสียง	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. มีคอมพิวเตอร์และอุปกรณ์เชื่อมต่ออินเทอร์เน็ตที่ดี	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. การศึกษาที่นี้เติมเต็มความต้องการของนักศึกษาได้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. เนื้อหาวิชามีความเหมาะสม	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. การศึกษาที่สามารถพัฒนาและเตรียมความพร้อมของ นักศึกษาเพื่อการทำงานต่อไปในอนาคตได้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

หัวข้อ: คุณภาพการสอนและคุณภาพวิชาการ	ระดับความคิดเห็น				
	5 เห็นด้วยอย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วยอย่างยิ่ง
39. สื่อต่างๆที่ใช้ในการเรียนการสอนมีคุณภาพดี	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. เนื้อหาวิชามีประโยชน์ต่อการทำงานในอนาคต	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. เนื้อหาหลักสูตรเติมเต็มความต้องการของนักศึกษา	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. สัดส่วนของเนื้อหาวิชาที่เป็นทฤษฎีกับการปฏิบัติมีความเหมาะสม	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. เอกสารและสื่อที่ใช้เพื่อการเรียนการสอนมีความเพียงพอ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. คุณภาพการสอนของคณาจารย์มีความเหมาะสม	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. คณาจารย์เปิดโอกาสให้ซักถามในชั้นเรียน	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. กรอบเนื้อหาวิชาเป็นไปอย่างถูกต้อง	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

หัวข้อ: คุณค่าที่ได้รับ	ระดับความเห็น				
	5 เห็นด้วย อย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วย อย่างยิ่ง
คุณภาพการบริการและคุณภาพวิชาการที่มหาวิทยาลัยจัดให้.....					
47. ทำให้อันรู้สึกมีความสุข	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. ทำให้อันอยากใช้บริการทุกๆ อย่างที่มีในมหาวิทยาลัย	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. ทำให้อันรู้สึกสบายใจ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. ทำให้อันรู้สึกดี	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. ทำให้อันพึงพอใจ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. เป็นที่ยอมรับได้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. ทำให้อันรู้สึกว่า เป็นคุณภาพที่ดี	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. เป็นคุณภาพที่ทำให้คนภายนอกรู้สึกประทับใจได้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. เป็นที่ยอมรับจากสังคม	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

หัวข้อ: คุณค่าที่ได้รับ	ระดับความเห็น				
	5 เห็นด้วย อย่างยิ่ง	4 เห็นด้วย	3 เฉยๆ	2 ไม่เห็นด้วย	1 ไม่เห็นด้วย อย่างยิ่ง
56. อยู่ในมูลค่าหรือราคาที่เหมาะสม	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. คู่มีค่ากับค่าใช้จ่ายที่เสียไป	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. เหมาะสมกับค่าใช้จ่ายที่เสียไป	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. มีราคาประหยัด	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. เป็นคุณภาพที่คงที่	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61. เป็นคุณภาพที่จัดสรรมาอย่างดี	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62. อยู่ระดับของคุณภาพที่ยอมรับได้	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63. ไม่เป็นมืออาชีพร	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64. ไม่แน่นไม่นอน	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65. เป็นคุณภาพที่คงเส้นคงวา	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

นักศึกษาอยากเสนอแนะหรือร้องเรียนให้มหาวิทยาลัยทำอะไรเพื่อให้นักศึกษาพึงพอใจมากยิ่งขึ้น กรุณาระบุ

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ขอความกรุณาเสนอแนะ

หรือแสดงความคิดเห็น

ข้อมูลส่วนตัว

เพศ

ชาย

หญิง

อายุ

\_\_\_\_\_ ปี

ชั้นปีที่ศึกษาอยู่

ปีที่ 1

ปีที่ 2

ปีที่ 3

ปีที่ 4

มหาวิทยาลัย

ม.สงขลานครินทร์

ม.ทักษิณ

ม.วลัยลักษณ์

ม.นราธิวาสราชนครินทร์

ม.ราชภัฏนครศรีธรรมราช

ม.ราชภัฏสุราษฎร์ธานี

ม.ราชภัฏภูเก็ต

ม.ราชภัฏยะลา

ม.ราชภัฏสงขลา

ม.เทคโนโลยีราชมงคลศรีวิชัย

ขอบคุณสำหรับเวลาอันมีค่า

## APPENDIX B

### STATISTICAL ANALYSIS

#### Appendix B.1: Pilot test

#### Reliability Analysis of Satisfaction

#### Reliability

##### Notes

Output Created		28-SEP-2013 22:19:41
Comments		
Input	Data	C:\Documents and Settings arueban.y\Desktop\Dissertation Data Analysis\pilot test\pilot.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	30
Syntax		RELIABILITY /VARIABLES=sa1 sa2 sa3 sa4 sa5 sa6 /FORMAT=NOLABELS /SCALE(ALPHA)=ALL/MODEL=ALPH A.
Resources	Elapsed Time	0:00:00.00

#### RELIABILITY ANALYSIS - SCALE (ALPHA)

##### Reliability Coefficients

N of Cases = 30.0

N of Items = 6

Alpha = .8949

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

Reliability Analysis of Service Quality

**Reliability**

**Notes**

Output Created		28-SEP-2013 22:19:52
Comments		
Input	Data	C:\Documents and Settings arueban.y\Desktop\Dissertation Data Analysis\pilot test\pilot.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	30
Syntax		RELIABILITY /VARIABLES=sq1 sq2 sq3 sq4 sq5 sq6 sq7 sq8 sq9 sq10 sq11 sq12 sq13 sq14 sq15 sq16 sq17 sq18 sq19 sq20 sq21 sq22 /FORMAT=NOLABELS /SCALE(ALPHA)=ALL/MODEL=ALPH A.
Resources	Elapsed Time	0:00:00.00

RELIABILITY ANALYSIS - SCALE (ALPHA)

Reliability Coefficients

N of Cases = 30.0

N of Items = 22

Alpha = .8292

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*



Reliability Analysis of Academic Quality

**Reliability**

**Notes**

Output Created	28-SEP-2013 22:20:04	
Comments		
Input	Data	C:\Documents and Settings arueban.y\Desktop\Dissertation Data Analysis\pilot test\pilot.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	30
Syntax	RELIABILITY /VARIABLES=aq1 aq2 aq3 aq4 aq5 aq6 aq7 aq8 aq9 aq10 aq11 aq12 aq13 aq14 aq15 aq16 aq17 aq18 /FORMAT=NOLABELS /SCALE(ALPHA)=ALL/MODEL=ALPH A.	
Resources	Elapsed Time	0:00:00.00

RELIABILITY ANALYSIS - SCALE (ALPHA)

Reliability Coefficients

N of Cases = 30.0

N of Items = 18

Alpha = .9156

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

## Reliability Analysis of Value

### Reliability

#### Notes

Output Created		28-SEP-2013 22:20:16
Comments		
Input	Data	C:\Documents and Settings arueban.y\Desktop\Dissertation Data Analysis\pilot test\pilot.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	30
Syntax		RELIABILITY /VARIABLES=v1 v2 v3 v4 v5 v6 v7 v8 v9 v10 v11 v12 v13 v14 v15 v16 v17 v18 v19 /FORMAT=NOLABELS /SCALE(ALPHA)=ALL/MODEL=ALPH A.
Resources	Elapsed Time	0:00:00.00

#### RELIABILITY ANALYSIS - SCALE (ALPHA)

##### Reliability Coefficients

N of Cases = 30.0

N of Items = 19

Alpha = .9438

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

Appendix B.2 Factor Analysis Results of the Variables

Result of the Factor Analysis on Student Satisfaction

## Factor Analysis

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.875
Bartlett's Test of Sphericity	Approx. Chi-Square	1063.131
	df	15
	Sig.	.000

### Communalities

	Initial	Extraction
SA1	1.000	.597
SA2	1.000	.697
SA3	1.000	.667
SA4	1.000	.614
SA5	1.000	.715
SA6	1.000	.527

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.817	63.615	63.615	3.817	63.615	63.615
2	.744	12.402	76.017			
3	.431	7.179	83.196			
4	.404	6.735	89.931			
5	.330	5.496	95.427			
6	.274	4.573	100.000			

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component
	1
SA5	.846
SA2	.835
SA3	.816
SA4	.783
SA1	.773
SA6	.726

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Result of the Factor Analysis on Service Quality

**Factor Analysis**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.880
Bartlett's Test of Sphericity	Approx. Chi-Square	2903.388
	df	153
	Sig.	.000

**Communalities**

	Initial	Extraction
SQ1	1.000	.654
SQ2	1.000	.677
SQ4	1.000	.649
SQ5	1.000	.588
SQ6	1.000	.621
SQ7	1.000	.532
SQ10	1.000	.613
SQ11	1.000	.660
SQ12	1.000	.683
SQ13	1.000	.691
SQ14	1.000	.657
SQ15	1.000	.724
SQ16	1.000	.701
SQ17	1.000	.510
SQ18	1.000	.699
SQ19	1.000	.711
SQ20	1.000	.565
SQ21	1.000	.511

Extraction Method: Principal Component Analysis.

### Total Variance Explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	6.743	37.462	37.462
2	1.984	11.022	48.484
3	1.420	7.889	56.373
4	1.299	7.215	63.588
5	.880	4.890	68.478
6	.732	4.067	72.546
7	.664	3.692	76.237
8	.634	3.520	79.757
9	.537	2.983	82.740
10	.494	2.743	85.483
11	.433	2.407	87.890
12	.425	2.361	90.251
13	.371	2.059	92.311
14	.327	1.819	94.129
15	.303	1.683	95.812
16	.284	1.578	97.390
17	.256	1.420	98.810
18	.214	1.190	100.000

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.743	37.462	37.462	3.507	19.482	19.482
2	1.984	11.022	48.484	3.417	18.986	38.468
3	1.420	7.889	56.373	2.760	15.333	53.801
4	1.299	7.215	63.588	1.762	9.787	63.588
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
SQ14	.729	-.042	-.332	.115
SQ13	.722	.019	-.410	.043
SQ6	.718	-.258	.084	-.179
SQ15	.701	.075	-.472	.069
SQ16	.697	.065	-.453	.072
SQ5	.667	-.305	.145	-.172
SQ17	.654	.074	-.262	-.088
SQ7	.617	-.247	.163	-.254
SQ4	.610	-.487	.148	.138
SQ21	.597	.224	.323	.013
SQ20	.585	.317	.261	-.232
SQ12	.571	.493	-.029	.335
SQ1	.566	-.525	.207	.127
SQ18	.564	.435	.214	-.383
SQ2	.560	-.537	.236	.137
SQ19	.544	.452	.234	-.395
SQ11	.508	.335	.200	.499
SQ10	.204	.213	.395	.608

Extraction Method: Principal Component Analysis.

a. 4 components extracted.



**Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
SQ15	.815	.175	.150	.085
SQ16	.797	.187	.149	.090
SQ13	.772	.249	.169	.072
SQ14	.717	.328	.130	.138
SQ17	.609	.220	.300	.024
SQ2	.122	.801	-.004	.141
SQ1	.148	.785	-6.006E-05	.128
SQ4	.226	.761	.011	.140
SQ5	.253	.652	.313	-.030
SQ6	.337	.624	.343	-.027
SQ7	.206	.586	.374	-.080
SQ19	.173	.043	.821	.074
SQ18	.199	.061	.806	.075
SQ20	.179	.179	.685	.176
SQ21	.153	.279	.525	.367
SQ10	-.087	.098	.016	.772
SQ11	.255	.108	.213	.733
SQ12	.471	-.056	.331	.590

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

**Component Transformation Matrix**

Component	1	2	3	4
1	.625	.562	.479	.254
2	.115	-.751	.532	.373
3	-.765	.347	.393	.374
4	.104	.010	-.577	.810

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

Result of the Factor Analysis on Academic Quality

## Factor Analysis

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.925
Bartlett's Test of Sphericity	Approx. Chi-Square	3074.319
	df	120
	Sig.	.000

### Communalities

	Initial	Extraction
AQ1	1.000	.679
AQ2	1.000	.705
AQ4	1.000	.517
AQ5	1.000	.654
AQ7	1.000	.586
AQ8	1.000	.594
AQ9	1.000	.601
AQ10	1.000	.616
AQ11	1.000	.682
AQ12	1.000	.652
AQ13	1.000	.686
AQ14	1.000	.652
AQ15	1.000	.551
AQ16	1.000	.631
AQ17	1.000	.632
AQ18	1.000	.711

Extraction Method: Principal Component Analysis.

### Total Variance Explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	7.756	48.473	48.473
2	1.221	7.630	56.103
3	1.171	7.322	63.425
4	.911	5.692	69.117
5	.758	4.736	73.853
6	.611	3.819	77.672
7	.530	3.310	80.982
8	.482	3.013	83.995
9	.420	2.624	86.618
10	.375	2.346	88.964
11	.349	2.180	91.144
12	.343	2.146	93.289
13	.295	1.846	95.135
14	.287	1.795	96.930
15	.262	1.640	98.569
16	.229	1.431	100.000

Extraction Method: Principal Component Analysis.

### Total Variance Explained

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.756	48.473	48.473	4.224	26.398	26.398
2	1.221	7.630	56.103	3.037	18.979	45.377
3	1.171	7.322	63.425	2.888	18.048	63.425
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component		
	1	2	3
AQ10	.775	-.116	.047
AQ8	.759	-3.928E-05	-.134
AQ9	.752	-.187	.005
AQ14	.738	-.318	-.081
AQ12	.732	-.340	-.022
AQ18	.731	-.232	.350
AQ13	.729	-.391	-.028
AQ16	.714	.122	.326
AQ15	.708	-.100	-.200
AQ5	.701	.399	.062
AQ11	.682	.055	-.462
AQ2	.676	.481	.127
AQ7	.631	.216	-.377
AQ1	.618	.494	.231
AQ4	.579	.187	-.383
AQ17	.573	-.069	.547

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
AQ13	.758	.322	.087
AQ18	.743	.050	.394
AQ12	.726	.330	.127
AQ14	.700	.386	.114
AQ9	.641	.353	.256
AQ10	.617	.347	.338
AQ17	.572	-.157	.529
AQ11	.310	.752	.142
AQ7	.185	.692	.271
AQ4	.168	.663	.221
AQ15	.500	.517	.187
AQ8	.482	.513	.315
AQ1	.135	.253	.772
AQ2	.157	.366	.739
AQ5	.215	.413	.661
AQ16	.481	.142	.616

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 15 iterations.

**Component Transformation Matrix**

Component	1	2	3
1	.678	.532	.507
2	-.692	.228	.685
3	.249	-.815	.523

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

Result of the Factor Analysis on Value

**Factor Analysis**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.943
Bartlett's Test of Sphericity	Approx. Chi-Square	4384.925
	df	105
	Sig.	.000

**Communalities**

	Initial	Extraction
V1	1.000	.536
V2	1.000	.545
V3	1.000	.620
V4	1.000	.649
V5	1.000	.642
V6	1.000	.610
V7	1.000	.695
V8	1.000	.629
V9	1.000	.582
V10	1.000	.536
V11	1.000	.579
V12	1.000	.588
V14	1.000	.572
V15	1.000	.640
V16	1.000	.621

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.045	60.299	60.299	9.045	60.299	60.299
2	1.439	9.595	69.894			
3	.761	5.071	74.965			
4	.644	4.292	79.257			
5	.518	3.450	82.707			
6	.388	2.586	85.294			
7	.366	2.440	87.734			
8	.332	2.214	89.948			
9	.314	2.091	92.039			
10	.271	1.807	93.846			
11	.231	1.541	95.387			
12	.224	1.490	96.877			
13	.204	1.360	98.238			
14	.140	.935	99.173			
15	.124	.827	100.000			

Extraction Method: Principal Component Analysis.



**Component Matrix<sup>a</sup>**

	Component
	1
V1	.732
V2	.738
V3	.788
V4	.805
V5	.801
V6	.781
V7	.834
V8	.793
V9	.763
V10	.732
V11	.761
V12	.767
V14	.756
V15	.800
V16	.788

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

### Appendix B.3 Descriptive Statistics of the Variables

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
COMPUTE sum_sa = (sa1 + sa2 + sa3 + sa4 + sa5 + sa6) / 6 (COMPUTE)	346	1.67	5.00	3.8868	.67682
COMPUTE SQ_dim1 = (sq15 + sq16 + sq13 + sq14 + sq17) / 5 (COMPUTE)	346	1.00	5.00	3.2884	.60981
COMPUTE SQ_dim2 = (sq2 + sq1 + sq4 + sq5 + sq6 + sq7) / 6 (COMPUTE)	346	1.17	5.00	3.4961	.59397
COMPUTE SQ_dim3 = (sq19 + sq18 + sq20 + sq21) / 4 (COMPUTE)	346	1.25	5.00	3.0311	.65961
COMPUTE SQ_dim4 = (sq10 + sq11 + sq12) / 3 (COMPUTE)	346	1.00	5.00	3.1599	.65358
COMPUTE AQ_dim1 = (aq13 + aq18 + aq12 + aq14 + aq9 + aq10 + aq17) / 7 (COMPUTE)	346	2.14	5.00	3.9509	.50983
COMPUTE AQ_dim2 = (aq11 + aq7 + aq4 + aq5 + aq8) / 5 (COMPUTE)	346	1.60	5.00	3.6821	.64026
COMPUTE AQ_dim3 = (aq1 + aq2 + aq5 + aq16) / 4 (COMPUTE)	346	2.50	5.00	4.0665	.47882
COMPUTE Value = (v1 + v2 + v3 + v4 + v5 + v6 + v7 + v8 + v9 + v10 + v11 + v12 + v13 + v14 + v15 + v16 + v... (COMPUTE)	346	1.21	5.00	3.6042	.56081
Valid N (listwise)	346				

## Appendix B.4 Test of Relationship of the Variables

### Correlations

		COMPUTE sum_sa = (sa1 + sa2 + sa3 + sa4 + sa5 + sa6) / 6 (COMPUTE)	COMPUTE SQ_dim1 = (sq15 + sq16 + sq13 + sq14 + sq17) / 5 (COMPUTE)	COMPUTE SQ_dim2 = (sq2 + sq1 + sq4 + sq5 + sq6 + sq7) / 6 (COMPUTE)	COMPUTE SQ_dim3 = (sq19 + sq18 + sq20 + sq21) / 4 (COMPUTE)	COMPUTE SQ_dim4 = (sq10 + sq11 + sq12) / 3 (COMPUTE)	COMPUTE AQ_dim1 = (aq13 + aq18 + aq12 + aq14 + aq9 + aq10 + aq17) / 7 (COMPUTE)	COMPUTE AQ_dim2 = (aq11 + aq7 + aq4 + aq5 + aq8) / 5 (COMPUTE)	COMPUTE AQ_dim3 = (aq1 + aq2 + aq5 + aq16) / 4 (COMPUTE)	COMPUTE Value = (v1 + v2 + v3 + v4 + v5 + v6 + v7 + v8 + v9 + v10 + v11 + v12 + v13 + v14 + v15 + v16 + v... (COMPUTE)
COMPUTE sum_sa = (sa1 + sa2 + sa3 + sa4 + sa5 + sa6) / 6 (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	1 .000 346	.311** .000 346	.422** .000 346	.352** .000 346	.302** .000 346	.309** .000 346	.358** .000 346	.366** .000 346	.534** .000 346
COMPUTE SQ_dim1 = (sq15 + sq16 + sq13 + sq14 + sq17) / 5 (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	.311** .000 346	1 .000 346	.567** .000 346	.492** .000 346	.402** .000 346	.369** .000 346	.417** .000 346	.351** .000 346	.548** .000 346
COMPUTE SQ_dim2 = (sq2 + sq1 + sq4 + sq5 + sq6 + sq7) / 6 (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	.422** .000 346	.567** .000 346	1 .000 346	.428** .000 346	.269** .000 346	.467** .000 346	.647** .000 346	.480** .000 346	.639** .000 346
COMPUTE SQ_dim3 = (sq19 + sq18 + sq20 + sq21) / 4 (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	.352** .000 346	.492** .000 346	.428** .000 346	1 .000 346	.450** .000 346	.347** .000 346	.348** .000 346	.334** .000 346	.478** .000 346
COMPUTE SQ_dim4 = (sq10 + sq11 + sq12) / 3 (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	.302** .000 346	.402** .000 346	.269** .000 346	.450** .000 346	1 .000 346	.138** .010 346	.185** .001 346	.201** .000 346	.280** .000 346
COMPUTE AQ_dim1 = (aq13 + aq18 + aq12 + aq14 + aq9 + aq10 + aq17) / 7 (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	.309** .000 346	.369** .000 346	.467** .000 346	.347** .000 346	.138** .010 346	1 .000 346	.681** .000 346	.664** .000 346	.613** .000 346
COMPUTE AQ_dim2 = (aq11 + aq7 + aq4 + aq5 + aq8) / 5 (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	.358** .000 346	.417** .000 346	.647** .000 346	.348** .000 346	.185** .001 346	.681** .000 346	1 .000 346	.690** .000 346	.649** .000 346
COMPUTE AQ_dim3 = (aq1 + aq2 + aq5 + aq16) / 4 (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	.366** .000 346	.351** .000 346	.480** .000 346	.334** .000 346	.201** .000 346	.664** .000 346	.690** .000 346	1 .000 346	.539** .000 346
COMPUTE Value = (v1 + v2 + v3 + v4 + v5 + v6 + v7 + v8 + v9 + v10 + v11 + v12 + v13 + v14 + v15 + v16 + v... (COMPUTE)	Pearson Correlation Sig. (2-tailed) N	.534** .000 346	.548** .000 346	.639** .000 346	.478** .000 346	.280** .000 346	.613** .000 346	.649** .000 346	.539** .000 346	1 .000 346

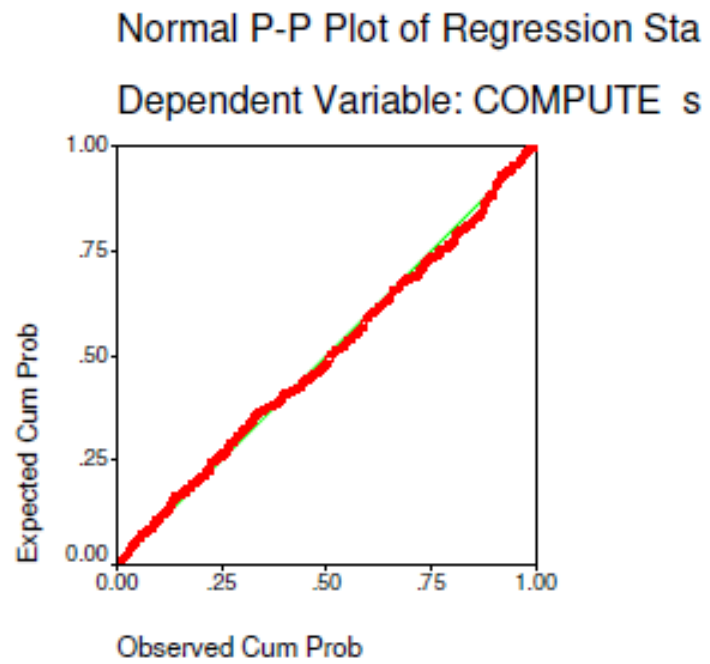
\*\* . Correlation is significant at the 0.01 level (2-tailed).

Appendix B.5 Test of Normality

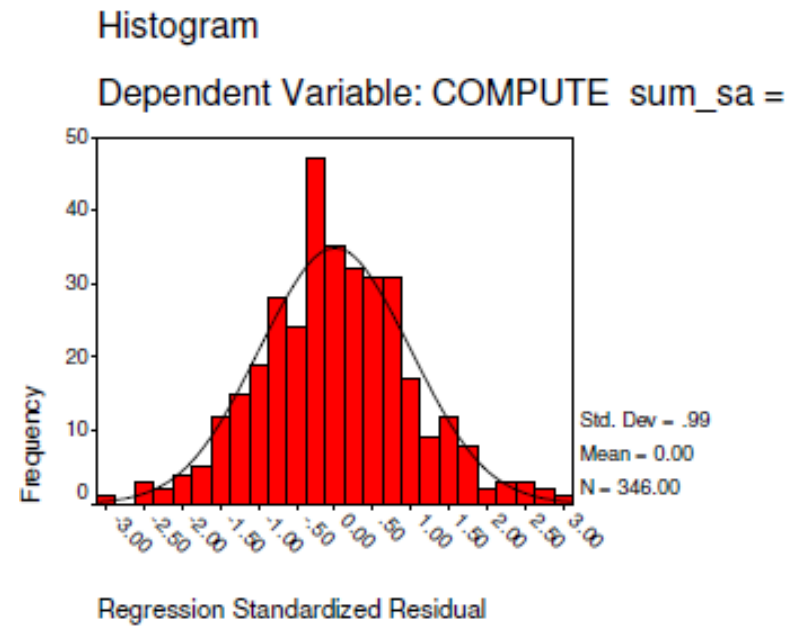
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
COMPUTE sum_sa = (sa1 + sa2 + sa3 + sa4 + sa5 + sa6) / 6 (COMPUTE)	346	1.67	5.00	3.8868	.67682	-.339	.131	-.139	.261
COMPUTE SQ_dim1 = (sq15 + sq16 + sq13 + sq14 + sq17) / 5 (COMPUTE)	346	1.00	5.00	3.2884	.60981	-.357	.131	.645	.261
COMPUTE SQ_dim2 = (sq2 + sq1 + sq4 + sq5 + sq6 + sq7) / 6 (COMPUTE)	346	1.17	5.00	3.4961	.59397	-.351	.131	.388	.261
COMPUTE SQ_dim3 = (sq19 + sq18 + sq20 + sq21) / 4 (COMPUTE)	346	1.25	5.00	3.0311	.65961	-.074	.131	-.042	.261
COMPUTE SQ_dim4 = (sq10 + sq11 + sq12) / 3 (COMPUTE)	346	1.00	5.00	3.1599	.65358	-.090	.131	.509	.261
COMPUTE AQ_dim1 = (aq13 + aq18 + aq12 + aq14 + aq9 + aq10 + aq17) / 7 (COMPUTE)	346	2.14	5.00	3.9509	.50983	-.366	.131	.696	.261
COMPUTE AQ_dim2 = (aq11 + aq7 + aq4 + aq5 + aq8) / 5 (COMPUTE)	346	1.60	5.00	3.6821	.64026	-.436	.131	.484	.261
COMPUTE AQ_dim3 = (aq1 + aq2 + aq5 + aq16) / 4 (COMPUTE)	346	2.50	5.00	4.0665	.47882	.027	.131	.366	.261
COMPUTE Value = (v1 + v2 + v3 + v4 + v5 + v6 + v7 + v8 + v9 + v10 + v11 + v12 + v13 + v14 + v15 + v16 + v...) (COMPUTE)	346	1.21	5.00	3.6042	.56081	-.292	.131	.871	.261
Valid N (listwise)	346								

Appendix B.6 Normality Testing using Normal Probability Plot



Appendix B.7 Histogram of the Regression Residuals



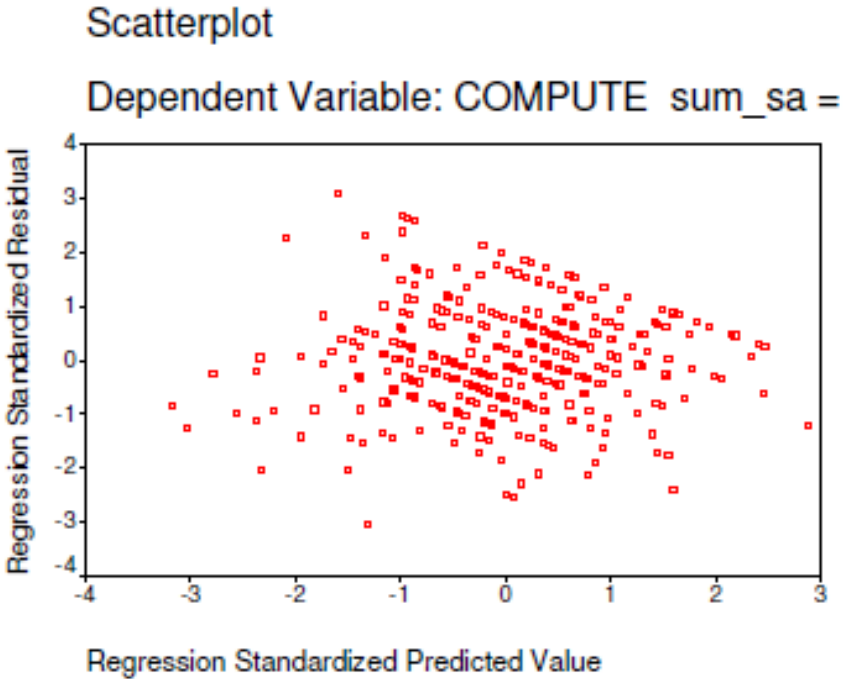
Appendix B.8 Multicollinearity Test

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.933	.297		3.140	.002		
	COMPUTE SQ_dim1 = (sq15 + sq16 + sq13 + sq14 + sq17) / 5 (COMPUTE)	-.101	.067	-.091	-1.509	.132	.548	1.826
	COMPUTE SQ_dim2 = (sq2 + sq1 + sq4 + sq5 + sq6 + sq7) / 6 (COMPUTE)	.161	.076	.142	2.113	.035	.439	2.277
	COMPUTE SQ_dim3 = (sq19 + sq18 + sq20 + sq21) / 4 (COMPUTE)	.068	.058	.066	1.174	.241	.620	1.613
	COMPUTE SQ_dim4 = (sq10 + sq11 + sq12) / 3 (COMPUTE)	.147	.053	.142	2.764	.006	.745	1.343
	COMPUTE AQ_dim1 = (aq13 + aq18 + aq12 + aq14 + aq9 + aq10 + aq17) / 7 (COMPUTE)	-.110	.091	-.083	-1.218	.224	.423	2.362
	COMPUTE AQ_dim2 = (aq11 + aq7 + aq4 + aq5 + aq8) / 5 (COMPUTE)	-.085	.081	-.081	-1.048	.296	.333	3.002
	COMPUTE AQ_dim3 = (aq1 + aq2 + aq5 + aq16) / 4 (COMPUTE)	.214	.094	.152	2.280	.023	.447	2.238
	COMPUTE Value = (v1 + v2 + v3 + v4 + v5 + v6 + v7 + v8 + v9 + v10 + v11 + v12 + v13 + v14 + v15 + v16 + v... (COMPUTE)	.535	.084	.443	6.333	.000	.403	2.481

a. Dependent Variable: COMPUTE sum\_sa = (sa1 + sa2 + sa3 + sa4 + sa5 + sa6) / 6 (COMPUTE)

Appendix B.9 Test of Linearity, Homoscedasticity and the Independence of Errors





Appendix B.10 Hierarchical Multiple Regression Evaluating the Interaction Effects of Value with Service Quality and Academic Quality on Student Satisfaction

**Regression**

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	AQ3, SQ4, SQ1, SQ3, SQ2, AQ1, AQ2	.	Enter
2	VALUE <sup>a</sup>	.	Enter
3	COMPUTE sq3xv = sq3 * value (COMPUTE E), COMPUTE sq4xv = sq4 * value (COMPUTE E), COMPUTE aq2xv = aq2 * value (COMPUTE E), COMPUTE sq1xv = sq1 * value (COMPUTE E),	.	Enter

sq1 * value (COMPUTE E), COMPUTE sq2xv = sq2 * value (COMPUTE E), COMPUTE aq1xv = aq1 * value (COMPUTE E), COMPUTE aq3xv = aq3 * value (COMPUTE E)	.	Enter
---	---	-------

- a. All requested variables entered.
- b. Dependent Variable: SATISFAC

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.506 <sup>a</sup>	.256	.241	.58981
2	.579 <sup>b</sup>	.335	.319	.55840
3	.597 <sup>c</sup>	.357	.328	.55499

**Model Summary**

Model	Change Statistics				
	R Square Change	F Change	df1	df2	Sig. F Change
1	.256	16.613	7	338	.000
2	.079	40.107	1	337	.000
3	.022	1.592	7	330	.137

a. Predictors: (Constant), AQ3, SQ4, SQ1, SQ3, SQ2, AQ1, AQ2

b. Predictors: (Constant), AQ3, SQ4, SQ1, SQ3, SQ2, AQ1, AQ2, VALUE

c. Predictors: (Constant), AQ3, SQ4, SQ1, SQ3, SQ2, AQ1, AQ2, VALUE, COMPUTE sq3xv = sq3 \* value (COMPUTE), COMPUTE sq4xv = sq4 \* value (COMPUTE), COMPUTE aq2xv = aq2 \* value (COMPUTE), COMPUTE sq1xv = sq1 \* value (COMPUTE), COMPUTE sq2xv = sq2 \* value (COMPUTE), COMPUTE aq1xv = aq1 \* value (COMPUTE), COMPUTE aq3xv = aq3 \* value (COMPUTE)

ANOVA<sup>d</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.455	7	5.779	16.613	.000 <sup>a</sup>
	Residual	117.584	338	.348		
	Total	158.039	345			
2	Regression	52.960	8	6.620	21.231	.000 <sup>b</sup>
	Residual	105.078	337	.312		
	Total	158.039	345			
3	Regression	56.393	15	3.760	12.206	.000 <sup>c</sup>
	Residual	101.645	330	.308		
	Total	158.039	345			

a. Predictors: (Constant), AQ3, SQ4, SQ1, SQ3, SQ2, AQ1, AQ2

b. Predictors: (Constant), AQ3, SQ4, SQ1, SQ3, SQ2, AQ1, AQ2, VALUE

c. Predictors: (Constant), AQ3, SQ4, SQ1, SQ3, SQ2, AQ1, AQ2, VALUE, COMPUTE sq3xv = sq3 \* value (COMPUTE), COMPUTE sq4xv = sq4 \* value (COMPUTE), COMPUTE aq2xv = aq2 \* value (COMPUTE), COMPUTE sq1xv = sq1 \* value (COMPUTE), COMPUTE sq2xv = sq2 \* value (COMPUTE), COMPUTE aq1xv = aq1 \* value (COMPUTE), COMPUTE aq3xv = aq3 \* value (COMPUTE)

d. Dependent Variable: SATISFAC

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.011	.314		3.223	.001
	SQ1	-.019	.069	-.017	-.278	.781
	SQ2	.278	.078	.244	3.545	.000
	SQ3	.126	.060	.123	2.091	.037
	SQ4	.156	.056	.150	2.765	.006
	AQ1	.034	.093	.026	.367	.714
	AQ2	.009	.084	.009	.108	.914
	AQ3	.228	.099	.161	2.295	.022
2	(Constant)	.933	.297		3.140	.002
	SQ1	-.101	.067	-.091	-1.509	.132
	SQ2	.161	.076	.142	2.113	.035
	SQ3	.068	.058	.066	1.174	.241
	SQ4	.147	.053	.142	2.764	.006
	AQ1	-.110	.091	-.083	-1.218	.224
	AQ2	-.085	.081	-.081	-1.048	.296
	AQ3	.214	.094	.152	2.280	.023
	VALUE	.535	.084	.443	6.333	.000
	3	(Constant)	-3.835	1.749		-2.193
SQ1		.040	.460	.036	.087	.931
SQ2		.642	.463	.563	1.387	.166
SQ3		-.338	.350	-.329	-.965	.335
SQ4		.108	.322	.104	.336	.737
AQ1		.445	.551	.335	.809	.419
AQ2		-1.162	.501	-1.099	-2.317	.021
AQ3		1.597	.595	1.130	2.684	.008
VALUE		1.891	.490	1.567	3.857	.000
COMPUTE sq1xv = sq1 * value (COMPUTE)		-.042	.127	-.219	-.332	.740
COMPUTE sq2xv = sq2 * value (COMPUTE)		-.143	.130	-.772	-1.107	.269
COMPUTE sq3xv = sq3 * value (COMPUTE)		.119	.096	.621	1.240	.216
COMPUTE sq4xv = sq4 * value (COMPUTE)		.007	.086	.036	.084	.933
COMPUTE aq1xv = aq1 * value (COMPUTE)		-.161	.159	-.862	-1.013	.312
COMPUTE aq2xv = aq2 * value (COMPUTE)		.306	.141	1.773	2.163	.031
COMPUTE aq3xv = aq3 * value (COMPUTE)		-.381	.165	-2.007	-2.305	.022

a. Dependent Variable: SATISFAC