ATTITUDES TOWARD THE USE OF CODE SWITCHING AMONG TECHNICAL LECTURERS IN UNIKL MSI

ZURAIDAH MD NOOR

UNIVERSITI UTARA MALAYSIA

2009

ZURAIDAH MD NOOR

THIS MASTERS PROJECT SUBMITTED TO UUM COLLEGE OF ARTS AND SCIENCES,
UNIVERSITI UTARA MALAYSIA IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION
(INSTRUCTIONAL TECHNOLOGY)

UNIVERSITI UTARA MALAYSIA
2009

PERMISSION TO USE

In presenting this thesis in fulfillment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library may make it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or in part, for scholarly purpose may ne granted by my supervisor or, in absence by the Dean of the Graduate School. It is understood taht any copying or publication or use of this thesis or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due regoinition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Request for permission to copy or make other use of materials in this thesis, in whole or in part should be addressed to:

Dean of Research and Postgraduate Studies
College of Arts and Sciences
Universiti Utara Malaysia
06010 Sintok
Kedah Darul Aman.

ABSTRACT

This descriptive study investigates the acceptance and perceptions of UniKL MSI Technical lecturers on the use of code switching in the classroom. Data was gathered by distributing 35 questionnaire using convenient sampling among Technical lecturers. The questionnaires were divided into three parts using Likert Scale. The first part was to access the frequency of using code switching in the classroom, the second part was the attitude towards the use of code switching among Technical lecturers, and the final part was the implications of using code switching in teaching Technical subjects. Apart from the questionnaire, interview sessions with 4 selected respondents were conducted to further substantiate the findings in the questionnaire. The findings suggest that The Technical lecturers consider code switching as an acceptable linguistic behaviour in the classroom. Besides facilitating learning, code switch is also used for giving instruction, to gain feedback, to establish relationship as well as classroom management. Nevertheless, they feel that code switching should be the last resort when teaching and only use it when the situation demands. Code switching is considered as a teaching tool to help the low proficient students to understand the subject matter. At the same time, code switching is seen as hindrance in English language acquisition both to the Technical lecturers as well as the students. All ia all, code switching is acknowledged and acceptable in the context of teaching Technical subjects in UniKL MSI.

ABSTRAK

Kaji selidik ini bertujuan untuk menentukan tahap penerimaan dan pandangan tenaga pengajar teknikal di UniKL MSI terhadap *code switching* di dalam bilik darjah. Data dikumpul dengan mengedar 35 set soalan kaji selidik kepada tenaga pengajar teknikal. Soalan kaji selidik dibahagikan kepada 3 bahagian dan menggunakan Pengukur Likert. Bahagian pertama adalah untuk mengetahui kekerapan penggunaan code switching di dalam bilik darjah, bahagian kedua adalah untuk menilai pandangan tenaga pengajar mengenai penggunaan *code switching* di dalam bilik darjah. Manakala bahagian terakhir pula untuk mengetahui kesan penggunaan *code switching* terhadap pengajaran dan pembelajaran subjek teknikal. Selain daripada soalan kaji selidik, temu duga juga dilakukan bersama 4 tenaga pengajar teknikal untuk mengesahkan lagi data yang diperoleh daripada kaji selidik yang dijalankan. Keputusan kaji selidik dan temu duga mengesahkan bahawa tenaga pengajar teknikal menerima penggunaan *code switching* di dalam bilik darjah mereka. Selain dari penggunaannya sebagai bantuan mengajar, *code switching* juga digunakan semasa memberi arahan, untuk memperoleh respon, membina hubungan di antara pengajar dan pelajar dan untuk pengurusan bilik darjah. Walau bagaimanapun, mereka berpendapat, *code switching* adalah pilihan terakhir apabila mengajar dan hanya digunakan apabila keadaan memerlukannya. *Code switching* juga dianggap sebagai bantuan mengajar untuk pelajar yang mempunyai tahap pemahaman yang rendah. Pada masa yang sama, *code switching* juga dilihat sebagai penghalang bagi pelajar dan juga tenaga pengajar dalam menguasai Bahasa Inggeris. Keseluruhannya,

code switching diiktiraf dan diterima di dalam context pengajaran subjek teknikal di UniKL MSI.

ACKNOWLEDGEMENT

First and foremost I would like to thank ALLAh s.w.t. for giving me the strength and will to complete this project paper.

Secondly, I would like to express my gratitude to my supervisor, Dr. Aizan Yaacob for her comments, guidance and advice in the preparation of this project paper.

I would also like to extend my sincere thanks to all UniKL MSI Technical lecturers for providing me information as well as co-operation in collecting the data for my project paper. My gratitude also goes to Nurul Ain and Safura of UniKL MIAT for letting me to adopt their research instrument for this project paper.

Finally, I would like to express my heartfelt gratitude to my family and friends for their in sustaining support.

TABLE OF CONTENTS

PERMISSION TO USE

ABSTRACT ii

ABSTRAK (translation) iii

ACKNOWLEDGEMENT v

TABLE OF CONTENTS vi

LIST OF TABLES ix

CHAPTER I INTRODUCTION 1

1.1 Background of Study 1

1.2 Problem Statement 5

1.3 Research Purpose 11

1.4 Research Objectives 11

1.5 Research Questions 12

CHAPTER II LITERATURE REVIEW 13

2.1 Introduction 13

2.2 What is Code Switching? 13

2.3 Types of Code switching 15

2.4 Reasons for Code Switching 16

2.5 Studies of Attitude Toward Code Switching 20

CHAPTER III METHODOLOGY 24

3.1 Introduction 24

3.2 Research Design 24

3.3 Research Instruments 25

3.4 Research Sample 26

3.5 Data Collection Procedure 27

3.6 Data Analysis 28

CHAPTER IV RESULTS AND DISCUSSION 29

4.1 Introduction 29

4.2 Frequency of Code Switching in the Classroom 29

4.3 Reasons of Using Code Switching in the Classroom 31

4.4 Technical Lecturers' Attitude Toward the Use of Code Switching 35

4.5 The Implications of Using Code Switching in Teaching Technical Subjects 37

CHAPTER V CONCLUSIONS AND RECOMMENDATIONS 41

5.1 Introduction 41

5.2 Conclusions 41

5.3 Recommendations for Future Research 42

REFERENCES 44

APPENDIX A: RESEARCH QUESTIONNAIRE 48

APPENDIX B: SEMI-STRUCTURED INTERVIEW QUESTIONS 52

APPENDIX C: DESCRIPTIVE STATISTIC OUTPUT 53

LIST OF TABLES

Table 3.1:	Interviewees Backgrounds Profile	27
Table 4.1:	Analysis of Variance between Frequency with Age, Gender, Education Level and Teaching Experience	29
Table 4.2:	Item Analysis of Reasons of Using Code Switching in the Classroom (Questionnaire)	31
Table 4.3:	Excerpts of Reasons of Using Code Switching in the Classroom (Interview)	32
Table 4.4:	Analysis of Variance of Attitude Towards the Use of Code Switching	35
Table 4.5:	Descriptive Statistics of Technical Lecturers' Attitudes Towards the Use of Code Switching	36
Table 4.6:	Item Analysis of the Implications of Using Code Switching in Teaching Technical Subjects (Questionnaire)	37
Table 4.7:	Excerpts of the Implications of the Use of Code Switching in Teaching Technical Subjects (Interview)	38

CHAPTER I

Introduction

1.1 Background of Study

Code switching is generally defined as the phenomenon when a bi- or multilingual speaker shifts from one language to another language in the course of a conversation. Bilinguals, who can speak at least two languages, have the ability to code-switch or mix their languages during communication by substituting a word or phrase from one language with a phrase or word from another language. Bilinguals, who can speak at least two languages, have the ability to use elements of both languages when conversing with another bilingual.

Code switching can occur between sentences (intersentential) or within a single sentence (intrasentential). In intersentential code switching, the language switch is done at sentence boundaries. This is seem most often between fluent bilingual speakers. In intrasentential code switching, the shift is done in the middle of a sentence, with no interruption, hesitations, or pauses indicating a shift. The speaker is usually unaware of the switch (Lipski, 1985). If the latter is considered, the phenomenon is called code-mixing. Contrary to this, if the switch is across sentence boundaries, the phenomenon is considered as code switching (Poplack, 1980).

The contents of the thesis is for internal user only

REFERENCES

Atkinson, D. (1987). The mother tongue in the classroom: a neglected resources?. ELT Journal Vol. 41/4

Auerbach, E. R. (1993). Re-examining English only in the ESL classroom. TESOL Quartely, vol.27, p1-19.

Brown, H.D. (1994). Principles of language learning and teaching. U.S.A: Prentice Hall Regents.

Camilleri, A. (1996). Language values and identities: Code switching in secondary classrooms in Malta. Linguistic and Education V.8 p. 85-103.

Choi, J., & Kuipers, J. (2003). Bilingual practices in a science classroom: Bilingual Hispanic students' ways of constructing school science. Retrieved October 10, 2009, from http://www.gwu.edu/~scale-up/EQRE.doc

Chen, O. T., & Su, H. T. (2009) A Preliminary study of teacher code-switching in secondary English and Science in Malaysia. The online TESL Journal [online], v13 Number 13. Available: http://tesl-ej.org/ej49/a3.html

Cook, V. (1991). Second language learning and language teaching. Great Britain: Edward Arnold.

Duran, L (1994). Towards a better understanding of code switching and interlanguage in bilinguality: Implications for bilingual instructions. The Journal of Educational Issues of Language Minority Students [online], v14 p69-88. Available: http://www.ncbe.gwu.edu/miscpubs/jeilms/vil14/duran.htm.

Ellis, R. (2003). Second language acquisition. Great Britain: Oxford University Press.

Eldridge, J. (1996). An introduction to sociolinguistic. London: Longman.

Flyman-Mattsson, A., & Burenhult, N. (1999). Code-switching in second language teaching of French. Working Papers 47, 59-72.

Gumprez, J. J. (1982). Discourse strategies. Cambridge: Cambridge University Press.

Halliday, M.A.K. (1975). Learning how to mean: Explorations in the Development of Language. London: Edward Arnold.

Harbord, J. (1992). The use of the mother tongue in the classroom. ELT Journal Vol. 46/4.

Heredia, Roberto R. & B. Jeffery M. (1997). Code-switching. Reterived October, 28, 2008 from http://www.tamiu.edu/~rheredia/switch.htm

Holmes, J. (1992). An introduction to sociolinguistics. London: Longman.

Jacobson, R. (1981). The implementation of a bilingual instructional model: The new concurrent approach. In R. V. Padilla (Ed.) Ethnoperspectives in Bilingual Education Research, Vol. 3 Bilingual Education Technology, pp 14-29. Ypsilanti, MI: eastern Michigan University.

Kearsey, John & Sheila Turner. (1999). The value of bilingualism in pupils' understanding of scientific language. International Journal of Science Education. 21(10): 1037-1050.

Larsen, D. (1986). Techniques and principles in English language teaching. Hong Kong: Oxford University Press.

Lin, A. M. Y. (1990). Teaching in two tongues: Language alternation in foreign language classrooms. Research Report No. 3. City Polytechnic of Hong Kong, Department of English.

Lipski, John. (1985). Linguistic Aspects of Spanish-English Language Switching. Arizona: Centre for Latin American Studies.

Littlewood, W. (1981). Communicative language teaching. Great Britain: Cambridge University Press.

Mahadhir, M., & Then, C. O. (2007). Code-switching in the English language classrooms in Kuching secondary schools. Sarawak Museum Journal, Special Issue No. 7 on Social Sciences and Humanities, LXIV(85), 197-219.

Martin, P. W. (1996). Code-switching in the primary classroom: One response to the planned and unplanned language environment in Brunei. Journal of Multilingual and Multicultural Development, 17(2-4), 128-144.

Martin, P. W. (1999). Encounters of a bilingual kind: Interactional practices in primary classroom in Brunei. International Journal of Education Development, 19, 127-140.

Mattsson, A. & Burenhult-Mattsson, N. (1999). Code-switching in second language teaching of French. Working papers 47:59-72.

Muthusamy, P. (2005). Communicative functions and reasons for code switching: A Malaysian perspective. Retrieved: November 2009 from http://www.crisaps.org/newsletter/summer2009/Muthusamy.doc.

Nilep, C. (2006). "Code Switching" in sociocultural linguistics. Colorado Research in Linguistic. June 2006. Vol.19, 1-22.

Omar, Asmah Haji. (1993). Language and society in Malaysia. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Pascasio, E. (2002). The Filipino bilingual from a sociolinguistic perspective. A paper presented at the International Conference on Applied Linguistics and Language Education: Theory and Practice, Manila, December 9-11, 2002.

Poplack, S. (1980). "Sometimes I'll start a sentence in English y termino en espanol: Towards a typology code-switcching": Linguistic, 18, 581-616.

Richards, J. C., & Rodgers, T. R. (1986). Approaches and methods in language teaching: a descriptive and analysis. Cambridge: Cambridge University Press.

Romaine, S. (1995). Bilingualism. Great Britain: Blackwell.

Seidlitz, L. M. (2003). Functions of code switching in classes of German as a foreign language. Unpublished doctoral dissertation, University of Texas, Austin.

Sert, O. (2005). The Functions of code switching in ELT classrooms. The Internet TESL Journal [online]. Available:http://iteslj.org/Articles/Sert-CodeSwitching.html.

Shohamy, E and Selinger, H.W. (1989). Second language research methods. Great Britain: Oxford University Press.

Skiba, R. (1997). Code switching as a countenance of language interference. The online TESL Journal [online]. Available: http://www.aitech.ac.jp/~iteslj/Articles/Skiba-codeswitching.html

Trudgill, P. (2000). Sociolinguistics. London: Penguin.

Vizconde, C. J. (2006). Attitudes of student teachers towards the use of English as Language of Instruction for science and Mathematics in the Philippines. The Internet TESL Journal, 1(3). Retrieved: July 2009 from http://iteslj.org/

Yang, M. (2004). A study of code-switching in Chinese EFL classrooms: A pragmatic approach. Sino-US English Teaching, 1(10), 43-49.

Zabrodskaja, A. (2007). Russian-Estonian code-switching in the university. Arizona Working papers in SLA & Teaching, 14, 123-139.

Zazkis, Rina. (2000). Using code switching as a tool for learning Mathematical language. For the learning of mathematics: an international journal of mathematical education. 20(3): 38-43.

Zentella, Ana Celia. (1997). Growing up bilingual. Maiden, MA: Blackwell.

Zheng, L. (2009). Living in two worlds code-switching amongst bilingual Chinese-Australian children. Australian Review of Applied Linguistics, 32(1), 5.1-5.18. DOI: 10.2104/aral0905.

RESEARCH ON ATTITUDES TOWARDS THE USE OF CODE SWITCHING AMONG TECHNICAL LECTURERS/INSTRUCTORS IN UniKL MSI

Dear Lecturers/Instructors,

Thank you in advance for participating in this questionnaire.

Before proceeding, the definition below will be helpful:

Code switching refers to alternating between one or more languages such as from English to Bahasa Malaysia during teaching.

Section A: Personal Information

1. Age: _____

2. Gender: ☐ Male ☐ Female

3. Race: ☐ Malay ☐ Chinese ☐ Indian
   ☐ Others: _____

4. First Language: ☐ Bahasa Malaysia ☐ English

5. Education: ☐ SPM ☐ STPM ☐ Certificate ☐ Diploma
   ☐ Bachelor ☐ Master ☐ PHD

6. Subject(s) taught
   1. _____
   2. _____
   3. _____

7. Teaching experience ☐ 1-2 years ☐ 3-4 years ☐ 5-7 years ☐ More than 7 years.

Section B: The use of code switching in the classroom

2. Frequency of code switching in the classroom.

Please indicate the scale of the following statements. (Circle the number)

		Always	**Often**	**Sometimes**	**Rarely**	**Never**
a.	I use English for teaching.	**5**	**4**	**3**	**2**	**1**
b.	I use Bahasa Malaysia for teaching.	**5**	**4**	**3**	**2**	**1**
c.	I code switch from English to Bahasa Malaysia.	**5**	**4**	**3**	**2**	**1**

3. Reasons of using code switching in the classroom

Please indicate the scale of the following statements. (Circle the number)

		Extremely Agree	**Agree**	**Uncertain**	**Disagree**	**Extremely Disagree**
a.	I only use English when using technical terms.	**5**	**4**	**3**	**2**	**1**
b.	I only use English when introducing new technical terms.	**5**	**4**	**3**	**2**	**1**
c.	I only use English when I feel I'm being observed.	**5**	**4**	**3**	**2**	**1**
d.	I only use Bahasa Malaysia when using technical terms.	**5**	**4**	**3**	**2**	**1**
e.	I only use Bahasa Malaysia when introducing new technical terms.	**5**	**4**	**3**	**2**	**1**
f.	I only use Bahasa Malaysia when my students are confused.	**5**	**4**	**3**	**2**	**1**

Other reasons for CS:

_____

Section C: Attitude towards the use of code switching

4. My attitude towards the use of code switching.

Please indicate the scale of the following statements. (Circle the number)

		Extremely Agree	**Agree**	**Uncertain**	**Disagree**	**Extremely Disagree**
a.	Code switching is important in teaching any subject.	**5**	**4**	**3**	**2**	**1**
b.	Code switching is important in teaching technical subject.	**5**	**4**	**3**	**2**	**1**
c.	Code switching is necessary in Malaysian context.	**5**	**4**	**3**	**2**	**1**
d.	Code switching can be planned in teaching.	**5**	**4**	**3**	**2**	**1**
e.	Code switching ease up teaching method.	**5**	**4**	**3**	**2**	**1**
f.	Code switching wastes time in the classroom.	**5**	**4**	**3**	**2**	**1**
g.	Code switching is considered as interference while teaching technical subject.	**5**	**4**	**3**	**2**	**1**
h.	Code switching is the last resolution in teaching.	**5**	**4**	**3**	**2**	**1**
i.	Code switching should be avoided.	**5**	**4**	**3**	**2**	**1**

Section D: Implications of using code switching in teaching the Technical subjects

5. The implications of using code switching in teaching the Technical subjects.

Please indicate the scale of the following statements. (Circle the number)

		Extremely Agree	**Agree**	**Uncertain**	**Disagree**	**Extremely Disagree**
a.	I teach better when I code switch.	**5**	**4**	**3**	**2**	**1**
b.	Code switch saves time in teaching.	**5**	**4**	**3**	**2**	**1**
c.	Code switch simplifies teaching.	**5**	**4**	**3**	**2**	**1**
d.	Students understand better when I code switch.	**5**	**4**	**3**	**2**	**1**
e.	Students give positive feedback (participation, results, etc.) when I code switch.	**5**	**4**	**3**	**2**	**1**
f.	Students still get confused when I code switch.	**5**	**4**	**3**	**2**	**1**
g.	Code switching does not promote English speaking environment in UniKL MSI.	**5**	**4**	**3**	**2**	**1**
h.	I'm being asked to code switch by my students.	**5**	**4**	**3**	**2**	**1**
i.	Students become fully depending on code switching for better understanding.	**5**	**4**	**3**	**2**	**1**

- *Thank you* –

SEMI-STRUCTURED INTERVIEW

Date: _____

Time: _____

Venue: _____

Questions:

1. How old are you?

2. What is your highest academic qualification?

3. Which section do you belong to?

4. How long have you been teaching (overall/in UniKL MSI)?

5. How many subjects do you teach in UniKL MSI this semester?

6. Do you code switch when you are teaching?

7. How often do you code switch in the classroom?

8. Why do you code switch?

9. Personally, what is your opinion on the use of code switching in teaching?

10. Do you think that code switching affect the teaching and learning process in your classroom?

11. What are other benefits or problems that might arise when you use of code switch in your teaching?

SPSS OUTPUT

```
DESCRIPTIVES VARIABLES=a3 b3 c3 d3 e3 f3   /STATISTICS=MEAN STDDEV MIN
MAX SKEWNESS.
```

Descriptives

Notes

Output Created		20-Nov-2009 11:52:42
Comments		
Input	Data	C:\Documents and Settings\user\Desktop\Project paper.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	35
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=a3 b3 c3 d3 e3 f3 /STATISTICS=MEAN STDDEV MIN MAX SKEWNESS.
Resources	Processor Time	0:00:00.015
	Elapsed Time	0:00:00.015

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
a3	35	0	5	3.74	1.245	-1.225	.398
b3	35	0	5	3.66	1.259	-1.081	.398
c3	35	0	5	2.43	1.267	.308	.398
d3	35	0	3	1.94	.725	-.403	.398
e3	35	.00	4.00	2.1714	1.01419	.175	.398
f3	35	.00	5.00	4.0571	.99832	-2.189	.398
Valid N (listwise)	35						

```
FREQUENCIES VARIABLES=a3 b3 c3 d3 e3 f3   /STATISTICS=STDDEV MINIMUM
MAXIMUM MEAN   /PIECHART PERCENT   /ORDER=ANALYSIS.
```

Frequencies

Notes

Output Created		20-Nov-2009 11:54:50
Comments		
Input	Data	C:\Documents and Settings\user\Desktop\Project paper.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	35
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.

Syntax		FREQUENCIES VARIABLES=a3 b3 c3 d3 e3 f3 /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN /PIECHART PERCENT /ORDER=ANALYSIS.
Resources	Processor Time	0:00:04.047
	Elapsed Time	0:00:04.594

Statistics

		a3	b3	c3	d3	e3	f3
N	Valid	35	35	35	35	35	35
	Missing	0	0	0	0	0	0
Mean		3.74	3.66	2.43	1.94	2.1714	4.0571
Std. Deviation		1.245	1.259	1.267	.725	1.01419	.99832
Minimum		0	0	0	0	.00	.00
Maximum		5	5	5	3	4.00	5.00

Frequency Table

a3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no response	1	2.9	2.9	2.9
	Extremely Disagree	1	2.9	2.9	5.7
	Disagree	4	11.4	11.4	17.1
	Uncertain	4	11.4	11.4	28.6
	Agree	15	42.9	42.9	71.4
	Extremely Agree	10	28.6	28.6	100.0
	Total	35	100.0	100.0	

b3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no response	1	2.9	2.9	2.9
	Extremely Disagree	1	2.9	2.9	5.7
	Disagree	5	14.3	14.3	20.0
	Uncertain	4	11.4	11.4	31.4
	Agree	15	42.9	42.9	74.3
	Extremely Agree	9	25.7	25.7	100.0
	Total	35	100.0	100.0	

c3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	1	2.9	2.9	2.9
	Extremely Disagree	8	22.9	22.9	25.7
	Disagree	11	31.4	31.4	57.1
	Uncertain	7	20.0	20.0	77.1
	Agree	6	17.1	17.1	94.3
	Extremely Agree	2	5.7	5.7	100.0
	Total	35	100.0	100.0	

d3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	1	2.9	2.9	2.9
	Extremely Disagree	7	20.0	20.0	22.9
	Disagree	20	57.1	57.1	80.0

	Uncertain	7	20.0	20.0	100.0
	Total	35	100.0	100.0	

e3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	1	2.9	2.9	2.9
	Extremely Disagree	8	22.9	22.9	25.7
	Disagree	14	40.0	40.0	65.7
	Uncertain	8	22.9	22.9	88.6
	Agree	4	11.4	11.4	100.0
	Total	35	100.0	100.0	

f3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	1	2.9	2.9	2.9
	Disagree	1	2.9	2.9	5.7
	Uncertain	3	8.6	8.6	14.3
	Agree	19	54.3	54.3	68.6
	Extremely Agree	11	31.4	31.4	100.0
	Total	35	100.0	100.0	

```
UNIANOVA frequency BY Age Gender Education Experience
/METHOD=SSTYPE(3)   /INTERCEPT=INCLUDE   /CRITERIA=ALPHA(0.05)
/DESIGN=Age Gender Education Experience Age*Gender Age*Education
Age*Experience Gender*Education Gender*Experience Education*Exper
ience Age*Gender*Education Age*Gender*Experience
Age*Education*Experience Gender*Education*Experience
Age*Gender*Education*Experience. p{color:0;font-family:Monospaced;font-
size:14pt;font-style:normal;font-weight:normal;text-decoration:none}
ONEWAY Age Gender Education Experience BY frequency   /MISSING
ANALYSIS.
```

Oneway

Notes

Output Created		20-Nov-2009 12:02:09
Comments		
Input	Data	C:\Documents and Settings\user\Desktop\Project paper.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	35
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY Age Gender Education Experience BY frequency /MISSING ANALYSIS.
Resources	Processor Time	0:00:00.015
	Elapsed Time	0:00:00.015

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	6.329	5	1.266	.891	.500
	Within Groups	41.214	29	1.421		
	Total	47.543	34			
Gender	Between Groups	.540	5	.108	.427	.826
	Within Groups	7.345	29	.253		

	Total	7.886	34			
Education	Between Groups	3.814	5	.763	.822	.544
	Within Groups	26.929	29	.929		
	Total	30.743	34			
Experience	Between Groups	3.279	5	.656	.493	.779
	Within Groups	38.607	29	1.331		
	Total	41.886	34			

```
COMPUTE attitude=SUM(a4,i4). EXECUTE. COMPUTE
attitude=a4+b4+c4+d4+e4+f4+g4+h4+i4. EXECUTE. ONEWAY Age Gender
Education Experience BY attitude   /MISSING ANALYSIS.
```

Oneway

Notes

Output Created		20-Nov-2009 12:06:28
Comments		
Input	Data	C:\Documents and Settings\user\Desktop\Project paper.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	35
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY Age Gender Education Experience BY attitude /MISSING ANALYSIS.

Resources	Processor Time	0:00:00.016
	Elapsed Time	0:00:00.031

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	18.281	12	1.523	1.145	.376
	Within Groups	29.262	22	1.330		
	Total	47.543	34			
Gender	Between Groups	2.457	12	.205	.830	.621
	Within Groups	5.429	22	.247		
	Total	7.886	34			
Education	Between Groups	9.302	12	.775	.795	.651
	Within Groups	21.440	22	.975		
	Total	30.743	34			
Experience	Between Groups	11.088	12	.924	.660	.770
	Within Groups	30.798	22	1.400		
	Total	41.886	34			

```
FREQUENCIES VARIABLES=a5 b5 c5 d5 e5 f5 g5 h5 i5   /STATISTICS=STDDEV
MINIMUM MAXIMUM MEAN   /PIECHART PERCENT   /ORDER=ANALYSIS.
```

Frequencies

Notes

Output Created		20-Nov-2009 12:07:52
Comments		
Input	Data	C:\Documents and Settings\user\Desktop\Project paper.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	35
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=a5 b5 c5 d5 e5 f5 g5 h5 i5 /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN /PIECHART PERCENT /ORDER=ANALYSIS.
Resources	Processor Time	0:00:04.203
	Elapsed Time	0:00:04.625

Statistics

		a5	b5	c5	d5	e5	f5	g5	h5	i5
N	Valid	35	35	35	35	35	35	35	35	35
	Missing	0	0	0	0	0	0	0	0	0
Mean		3.5143	3.2000	3.4571	4.0286	3.8571	2.2000	3.2571	3.2571	3.6000
Std. Deviation		1.31443	1.36769	1.19663	1.20014	1.26358	1.05161	1.44187	1.37932	1.31059
Minimum		.00	.00	.00	.00	.00	.00	.00	.00	.00
Maximum		5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00

Frequency Table

a5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	5.7	5.7	5.7
	Extremely Disagree	1	2.9	2.9	8.6

	Disagree	4	11.4	11.4	20.0
	Uncertain	4	11.4	11.4	31.4
	Agree	18	51.4	51.4	82.9
	Extremely Agree	6	17.1	17.1	100.0
	Total	35	100.0	100.0	

b5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	5.7	5.7	5.7
	Extremely Disagree	1	2.9	2.9	8.6
	Disagree	8	22.9	22.9	31.4
	Uncertain	7	20.0	20.0	51.4
	Agree	11	31.4	31.4	82.9
	Extremely Agree	6	17.1	17.1	100.0
	Total	35	100.0	100.0	

c5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	5.7	5.7	5.7
	Disagree	5	14.3	14.3	20.0
	Uncertain	4	11.4	11.4	31.4
	Agree	21	60.0	60.0	91.4
	Extremely Agree	3	8.6	8.6	100.0
	Total	35	100.0	100.0	

d5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	5.7	5.7	5.7
	Disagree	1	2.9	2.9	8.6
	Uncertain	1	2.9	2.9	11.4
	Agree	19	54.3	54.3	65.7
	Extremely Agree	12	34.3	34.3	100.0
	Total	35	100.0	100.0	

e5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	5.7	5.7	5.7
	Disagree	2	5.7	5.7	11.4
	Uncertain	4	11.4	11.4	22.9
	Agree	16	45.7	45.7	68.6
	Extremely Agree	11	31.4	31.4	100.0
	Total	35	100.0	100.0	

f5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	5.7	5.7	5.7
	Extremely Disagree	7	20.0	20.0	25.7
	Disagree	11	31.4	31.4	57.1
	Uncertain	12	34.3	34.3	91.4
	Agree	3	8.6	8.6	100.0
	Total	35	100.0	100.0	

g5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	5.7	5.7	5.7
	Extremely Disagree	2	5.7	5.7	11.4
	Disagree	6	17.1	17.1	28.6
	Uncertain	8	22.9	22.9	51.4
	Agree	9	25.7	25.7	77.1
	Extremely Agree	8	22.9	22.9	100.0
	Total	35	100.0	100.0	

h5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No resposnse	2	5.7	5.7	5.7
	Extremely Disagree	3	8.6	8.6	14.3
	Disagree	4	11.4	11.4	25.7
	Uncertain	5	14.3	14.3	40.0
	Agree	17	48.6	48.6	88.6
	Extremely Agree	4	11.4	11.4	100.0
	Total	35	100.0	100.0	

i5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	5.7	5.7	5.7
	Extremely Disagree	1	2.9	2.9	8.6
	Disagree	2	5.7	5.7	14.3
	Uncertain	7	20.0	20.0	34.3

Agree	15	42.9	42.9	77.1
Extremely Agree	8	22.9	22.9	100.0
Total	35	100.0	100.0	

```
DESCRIPTIVES VARIABLES=a4 b4 c4 d4 e4 f4 g4 h4 i4   /STATISTICS=MEAN
STDDEV MIN MAX.
```

Descriptives

Notes

Output Created		25-Nov-2009 02:30:10
Comments		
Input	Data	C:\Documents and Settings\user\Desktop\Project paper.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	35
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=a4 b4 c4 d4 e4 f4 g4 h4 i4 /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	0:00:00.015
	Elapsed Time	0:00:00.017

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
a4	35	2.00	5.00	3.6571	.83817
b4	35	2.00	5.00	3.9714	.85700
c4	35	2.00	5.00	3.6571	.90563
d4	35	.00	5.00	3.0857	1.19734
e4	35	.00	5.00	3.6286	1.08697
f4	35	1.00	5.00	2.4857	1.14716
g4	35	1.00	5.00	2.6000	1.09006
h4	35	1.00	5.00	3.3143	1.18251
i4	35	1.00	5.00	2.4286	1.19523
Valid N (listwise)	35				