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**THE INFLUENCE OF SAFETY CLIMATE ON SAFETY
PERFORMANCE: A STUDY ON THE CONTRACTORS OF
MOTOROLA SOLUTIONS, PENANG**



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MASTER OF SCIENCE

UNIVERSITI UTARA MALAYSIA

NOVEMBER 2017

**THE INFLUENCE OF SAFETY CLIMATE ON SAFETY PERFORMANCE: A
STUDY ON THE CONTRACTORS OF MOTOROLA SOLUTIONS, PENANG**



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Thesis Submitted to Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia, in Partial Fulfilment of the Requirement for the Master of
Sciences (Occupational Safety and Health Management)

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**PENGARUH IKLIM KESELAMATAN KE ATAS PRESTASI KESELAMATAN:
KAJIAN TERHADAP KONTRAKTOR-KONTRAKTOR MOTOROLA
SOLUTIONS BHD**

ABSTRAK

Kajian ini bertujuan untuk mengkaji pengaruh iklim keselamatan dan prestasi keselamatan kontraktor yang bekerja di bahagian kompaun pembinaan dan kerja renovasi Motorola Solutions Bhd. Dimensi iklim keselamatan yang telah dikenalpasti untuk kajian ini adalah amalan keselamatan pihak pengurusan, amalan keselamatan pihak penyelia, sikap keselamatan, latihan keselamatan, keselamatan pekerjaan dan pematuhan keselamatan oleh rakan sekerja. 80 borang soal-selidik telah diedarkan kepada pekerja dan staff yang terlibat dengan projek pembinaan di Motorola Solutions Bhd. di Pulau Pinang untuk mengkaji kesedaran dan ilmu mereka akan keselamatan di tempat kerja. Program SPSS versi 19 telah digunakan untuk menganalisa data kuantitatif. Analisis-
analisis yang digunakan untuk kajian ini adalah Ujian kepercayaan, ujian korelasi dan ujian regresi berganda. Ujian korelasi Pearson menunjukkan semua iklim keselamatan yang dikaji dalam penyelidikan ini positif dan memberi impak yang besar terhadap prestasi keselamatan. Namun, ujian regresi membuktikan hanya dua iklim keselamatan yang dikaji amalan keselamatan pihak pengurusan dan amalan keselamatan pihak penyelia memberi impak positif dan korelasi tertinggi dengan komponen-komponen iklim keselamatan dan prestasi keselamatan. Walau bagaimanapun, sikap keselamatan dikenalpasti mempunyai impak yang tidak signifikan dengan prestasi keselamatan dan iklim keselamatan. Akhir sekali, implikasi kajian turut dibincangkan serta cadangan untuk kajian hadapan.

THE INFLUENCE OF SAFETY CLIMATE ON SAFETY PERFORMANCE: A STUDY ON THE CONTRACTORS OF MOTOROLA SOLUTIONS BHD

ABSTRACT

This study aims to determine the influence of safety climate on safety performance of the contractors engaged for renovation works for Motorola Solutions Bhd. The study focussed on the following six dimensions of safety climate, which are management safety practices, supervisor safety practices, safety attitudes, safety training, job safety and co-worker safety practices. It also focussed on two dimensions of safety performance, which are safety compliance and safety participation. 80 sets of questionnaires were distributed to employees of the construction contractors at Motorola Solutions Bhd, Penang to test their perceptions on safety aspects. SPSS software version 19 was used for quantitative data collections. It involves the analysis of descriptive statistics, testing of the reliability, Pearson correlation test and regression test. Pearson correlation testing found a significant positive correlation between almost all dimensions of safety climate and safety performance and its components. Meanwhile, regression test shows that management safety practices and supervisory safety practices have an adverse impact on the safety performance components. Meanwhile, only the safety climate, safety attitude is non-significant on safety performance dimensions based on the analysis. Lastly, implications of the study were discussed as well as provide recommendations for future studies.

ACKNOWLEDGEMENT

In the name of the Almighty, Most Gracious, Most Merciful

Thanks to God in giving me the strength and positivity to complete this working report paper for this Masters in Occupational Safety and Health.

I wish to express my utmost appreciation and thankfulness to my supervisor, Dr. Munauwar Bin Mustafa, who has been a guide, an advisor and a coach to me in many ways over the period of this research paper, from year 2015 to 2017 in the development of this Research Report Paper.

Appreciation also goes to my beloved wife Mrs. Visnukala as well as my beloved children Sanjanaa and Haarish for their sacrifices and supports. Also, not forgetting my mother and my family members in supporting and encouraging me throughout my studies. All your contributions and sacrifices will surely be unforgettable.

Last but not the least, all my colleagues at Motorola Penang, I thank you from the bottom of my heart for your continued support and encouragement.

Finally, I wish this report will be a useful reference for future researchers and for those seeking relevant safety and health guidance.

Thank You

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LIST OF ABBREVIATIONS AND SYMBOLS

Short Forms	Descriptions
ANOVA	Analysis of Variance
DAFWC	Days Away From Work Case
DOSH	Department of Occupational Safety and Health
EHS	Environment, Health and Safety
HIRARC	Hazard Identification, Risk Assessment and Risk Control
JKKP	Jabatan Keselamatan dan Kesihatan Perkerjaan
NIOSH	National Institute of Occupational Safety and Health
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Act 1994
SOCOSO	Pertubuhan Keselamatan Sosial

CHAPTER 1

INTRODUCTION

1.1 Research Background

The assessment of accident rates and injury rates at workplace had been widely done in various industries in identifying the safety performance for many years in terms of frequency of occurrence of accidents and injuries (Wu et al., 2010).

In many countries, accidents at workplace received big attention as it cost enormously. Thus, the efforts in maintaining a safe work environment is one of the major concerns of almost all companies in the world as accident at workplace is a direct measure of safety performance at workplace (Abdul Wahab et al., 2010; Hee & Ping, 2014). It has been claimed that “the smaller accidents happen in a workplace, the safer the workplace is”. Nevertheless, the claim holds very little truth. The idiom failed to emphasize that minor injuries may also threaten employees’ safety and bring cost to the organizations (Abdul Wahab et al., 2010). Occupational accidents severely deteriorate human capital, and hence give a negative impact on the productivity and competitiveness of countries (Fernandez-Muniz, Montes-Peon, & Vazquez-Ordas, 2009)

The construction industry is one of the leading industries that reports one of the highest workplace accident records. For example, China, one of the rapid growing countries in the past two decades had recorded approximately 46% of its annual injury of all occupational injuries incurred in the construction industry in

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the thesis is for
internal user
only

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APPENDIX A



OTHMAN YEOP ABDULLAH GRADUATE SCHOOL OF BUSINESS UNIVERSITI UTARA MALAYSIA

BORANG KAJI SELIDIK

Terima kasih kerana sudi meluangkan masa untuk menjawab boring soal selidik ini. Soal selidik ini bertujuan untuk mendapatkan pandangan berkaitan prestasi keselamatan di tapak pembinaan dan renovasi di Motorola Solutions Pulau Pinang. Kajian ini merupakan salah satu syarat bagi saya untuk melengkapkan kajian sayan dan memperoleh Ijazah Sarjana Sains (Pengurusan). Kajian ini diselia oleh Dr. Munauwar Bin Mustafa (UUM). Maklum balas tuan/puan amat berguna kepada saya untuk mengkaji tahap prestasi keselamatan di tapak pembinaan Motorola Solutions Pulau Pinang.

Saya memohon kerjasam tuan/puan untuk menjawab soal selidik ini dengan jujur dan iklas. Soal selidik ini mempunyai 47 soalan dan tidak akan mengambil masa lebih dari 10 minit masa tuan/puan. Tiada jawapan betul atau salah. Oleh itu tuan/ puan boleh menjawab mengikut pendapat dan keseuaian anda terhadap kenyataan yang dikemukakan dalam borang ini.

Hasil kajian ini adala sulit dan akan digunakan untuk tujuan penyerlidikan sahaja. Kerjasam tuan/puan dalam kajian soal selidik ini adalah amat dihargai. Kertas soal selidik ini adalah dwibahasa (Bahasa Melayu dan Bahasa Inggeris). Terima Kasih

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**PENGARUH IKLIM KESELAMATAN KE ATAS PRESTASI KESELAMATAN:
KAJIAN TERHADAP KONTRAKTOR DI MOTOROLA SOLUTION, PENANG**

Bahagian A: Demografi Responden

Arahan: Sila tandakan (X) pada petak yang berkenaan

- 1) Umur 20-30 tahun 41-50 tahun
 31-40 tahun > 50 tahun
- 2) Jantina Lelaki Perempuan
- 3) Warganegara Warga
Malaysia Bukan
WargaMalaysia
- 4) Jawatan Pekerja Am Pegawai
Keselamatan/
Penyelia
 Kontraktor Eksekutif
- 5) Syarikat

Bahagian B: Amalan Keselamatan Pihak Pengurusan

Arahan: Sila bulatkan jawapan anda pada skala yang bersesuaian..

1	2	3	4	5
Sangat Tidak Setuju	Tidak Setuju	Tidak Pasti	Setuju	Sangat Setuju

1. Syarikat saya pantas memberikan respon kepada masalah keselamatan	1	2	3	4	5
2. Syarikat saya memberi maklumat tentang keselamatan	1	2	3	4	5
3. Syarikat saya mengadakan mesyuarat tentang keselamatan pekerja secara berkala	1	2	3	4	5
4. Syarikat saya akan menyiasat masalah keselamatan dengan segera	1	2	3	4	5
5. Syarikat saya menjalankan pemeriksaan keselamatan dengan kerap	1	2	3	4	5
6. Syarikat saya menyediakan peralatan keselamatan yang cukup	1	2	3	4	5
7. Syarikat saya sentiasa memaklumkan tentang bahaya kepada pekerja-pekerja	1	2	3	4	5
8. Syarikat saya memberi penekanan kepada keadaan kerja yang selamat	1	2	3	4	5
9. Syarikat saya menyediakan program latihan keselamatan yang mencukupi	1	2	3	4	5

10. Syarikat saya menyediakan peralatan keselamatan yang baik	1	2	3	4	5
11. Syarikat saya melabelkan tanda amaran pada bahan kimia yang berbahaya.	1	2	3	4	5
12. Syarikat saya memberi ganjaran kepada pekerja yang berkerja dengan selamat	1	2	3	4	5

Bahagian C: Amalan Keselamatan Pihak Penyelia

13. Penyelia saya bertindak terhadap cadangan keselamatan oleh pekerja	1	2	3	4	5
14. Penyelia saya menggalakkan tingkah laku yang selamat	1	2	3	4	5
15. Penyelia saya mengambil berat tentang keselamatan pekerja	1	2	3	4	5
16. Penyelia saya memuji tingkah laku kerja yang selamat	1	2	3	4	5
17. Penyelia saya membincangkan isu-isu keselamatan dengan orang lain	1	2	3	4	5
18. Penyelia saya memastikan pekerja dimaklumkan mengenai peraturan keselamatan	1	2	3	4	5
19. Penyelia saya melibatkan pekerja dalam menetapkan matlamat keselamatan	1	2	3	4	5
20. Penyelia saya menguatkuasakan peraturan keselamatan	1	2	3	4	5
21. Penyelia saya sering menyebut bahawa keselamatan adalah sama penting dengan kecekapan	1	2	3	4	5

Bahagian D: Sikap Keselamatan

22. Penggunaan peralatan keselamatan tidak boleh mengurangkan kecederaan dan kemalangan	1	2	3	4	5
23. Prosedur operasi yang selamat tidak boleh mengurangkan kemalangan	1	2	3	4	5
24. Saya melanggar peraturan keselamatan semasa di bawah tekanan kerja	1	2	3	4	5
25. Saya mengabaikan peraturan keselamatan untuk menyelesaikan kerja yang dilakukan	1	2	3	4	5
26. Kemalangan tidak dapat dielakkan ataupun keselamatan pekerja tidak dapat dilindungi	1	2	3	4	5
27. Saya akan mengabaikan prosedur berkerja yang selamat untuk kemudahan saya	1	2	3	4	5
28. Saya menilai kemalangan sebagai nasib malang	1	2	3	4	5
29. Saya tidak suka menerima cadangan keselamatan daripada orang lain	1	2	3	4	5

Part E: Latihan Keselamatan

30. Program-program latihan keselamatan membantu mengelakkan kemalangan di syarikat saya	1	2	3	4	5
31. Program-program latihan keselamatan di syarikat saya adalah berguna	1	2	3	4	5
32. Program-program latihan keselamatan di syarikat saya adalah berbaloi	1	2	3	4	5

33. Program-program latihan keselamatan di syarikat saya berkaitan dengan kerja saya	1	2	3	4	5
34. Program-program latihan keselamatan di syarikat saya adalah jelas	1	2	3	4	5
35. Program-program latihan keselamatan di syarikat saya adalah baik	1	2	3	4	5
36. Program-program latihan keselamatan di syarikat saya sangat berkesan	1	2	3	4	5

Bahagian F: Keselamatan Tugas

37. Kerja di tapak kerja tidak selamat	1	2	3	4	5
38. Kerja di tapak kerja adalah berisiko	1	2	3	4	5
39. Berkerja di tapak kerja seseorang boleh tercedera dengan mudah	1	2	3	4	5
40. Kerja di tapak kerja tidak sihat	1	2	3	4	5
41. Kerja di tapak kerja adalah berbahaya	1	2	3	4	5
42. Kerja di tapak kerja menakutkan	1	2	3	4	5

Bahagian G: Amalan Keselamatan Rakan Sekerja

43. Rakan sekerja saya mengalakkan orang lain berada dalam keadaan selamat	1	2	3	4	5
44. Rakan sekerja saya mengambil berat tentang keselamatan kerja	1	2	3	4	5

45. Rakan sekerja saya mengambil berat tentang keselamatan orang lain	1	2	3	4	5
46. Rakan sekerja saya ikut peraturan keselamatan	1	2	3	4	5
47. Rakan sekerja saya memastikan kawasan kerja selamat	1	2	3	4	5

Bahagian H: Pematuhan Keselamatan

48. Saya sentiasa ada kesedaran keselamatan di tempat kerja	1	2	3	4	5
49. Saya mematuhi kepada peraturan keselamatan dan prosedur operasi standard	1	2	3	4	5
50. Saya tidak mengabaikan keselamatan, walaupun dalam keadaan tergesa-gesa	1	2	3	4	5
51. Saya memakai peralatan perlindungan peribadi semasa bekerja	1	2	3	4	5
52. Saya yakin dengan kebolehan saya untuk bekerja dengan selamat	1	2	3	4	5

Bahagian I: Penyertaan Keselamatan

53. Saya aktif melibatkan diri dalam menetapkan matlamat keselamatan	1	2	3	4	5
54. Saya secara aktif mempromosi cadangan-cadangan penambahbaikan keselamatan	1	2	3	4	5
55. Saya secara aktif mengambil bahagian dalam mesyuarat keselamatan	1	2	3	4	5

56. Saya secara aktif mengambil bahagian atau membantu rakan sekerja dengan isu yang berkaitan dengan keselamatan semasa taklimat keselamatan	1	2	3	4	5
57. Saya secara aktif mengambil bahagian dalam membuat keputusan keselamatan dengan penyelia saya	1	2	3	4	5



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Terima kasih untuk meluangkan masa anda.

**THE INFLUENCE OF SAFETY CLIMATE ON SAFETY PERFORMANCE:
STUDY ON THE CONTRACTORS OF MOTOROLA SOLUTIONS, PENANG**

Part A: Demography of the Respondent

Instructions: Please tick (X) on the related column.

1) Age	<input type="checkbox"/>	20-30 years old	<input type="checkbox"/>	41-50 years old
	<input type="checkbox"/>	31-40 years old	<input type="checkbox"/>	> 50 years old
2) Gender	<input type="checkbox"/>	Male	<input type="checkbox"/>	Female
3) Nationality	<input type="checkbox"/>	Malaysian	<input type="checkbox"/>	Non-Malaysian
4) Position	<input type="checkbox"/>	General Worker	<input type="checkbox"/>	Safety Officer/ Supervisor
	<input type="checkbox"/>	Contractor	<input type="checkbox"/>	Executive
5) Company	<input type="text"/>			

Instructions: Please rate how much you personally agree or disagree with these statements. Please circle the correct answer.

1	2	3	4	5
Strongly disagree	Disagree	Unsure	Agree	Strongly agree

Part B: Management Safety Practices

1. My company responds quickly to safety concerns	1	2	3	4	5
2. My company provides safety information	1	2	3	4	5
3. My company has a regular job safety meeting	1	2	3	4	5
4. My company investigates safety problems quickly	1	2	3	4	5
5. My company conducts frequent safety inspections	1	2	3	4	5
6. My company provides enough safety equipment's	1	2	3	4	5
7. My company keeps workers informed of the hazards	1	2	3	4	5
8. My company emphasizes safe working conditions	1	2	3	4	5
9. My company provides enough safety training programs	1	2	3	4	5
10. My company provides good safety equipment's	1	2	3	4	5

11. My company label warning signs for hazardous substances	1	2	3	4	5
12. My company rewards safe workers	1	2	3	4	5

Part C: Supervisory Safety Practices

13. My supervisors act on safety suggestions by the workers	1	2	3	4	5
14. My supervisors encourage safe behaviours	1	2	3	4	5
15. My supervisors care about the worker safety	1	2	3	4	5
16. My supervisors praise safe work behaviour	1	2	3	4	5
17. My supervisors discuss safety issues with others	1	2	3	4	5
18. My supervisors keep the workers informed of safety rules	1	2	3	4	5
19. My supervisors involve the workers in setting safety goals	1	2	3	4	5
20. My supervisors enforce safety rules	1	2	3	4	5
21. My supervisors frequently mention safety is as important as efficiency	1	2	3	4	5

Part D: Safety Attitude

22. The use of safety equipment cannot reduce injuries and accidents	1	2	3	4	5
23. Safe operating procedures cannot reduce accidents	1	2	3	4	5
24. I break safety rules when under job pressure	1	2	3	4	5
25. I ignore safety regulations to get the job done	1	2	3	4	5
26. Accidents cannot be avoided nor workers protected in advance	1	2	3	4	5
27. I will ignore safe working procedures for convenience	1	2	3	4	5
28. I put accidents down to bad luck	1	2	3	4	5
29. I don't like to accept safety suggestions from others	1	2	3	4	5

Part E: Safety Training

30. The safety training programs in my company help prevent accidents	1	2	3	4	5
31. The safety training programs in my company are useful	1	2	3	4	5
32. The safety training programs in my company are worthwhile	1	2	3	4	5

33. The safety training programs in my company apply to my job	1	2	3	4	5
34. The safety training programs in my company are clear	1	2	3	4	5
35. The safety training programs in my company are good	1	2	3	4	5
36. The safety training programs in my company do the work	1	2	3	4	5

Part F: Job Safety

37. Work on site is unsafe	1	2	3	4	5
38. Work on site is risky	1	2	3	4	5
39. Working on site one can easily get hurt	1	2	3	4	5
40. Work on site is unhealthy	1	2	3	4	5
41. Work on site is dangerous	1	2	3	4	5
42. Work on site is scary	1	2	3	4	5

Part G: Co- Workers Safety Practice

43. My co-workers encourage others to be safe	1	2	3	4	5
44. My co-workers care about work safety	1	2	3	4	5
45. My co-workers care about others' safety	1	2	3	4	5
46. My co-workers follow safety rules	1	2	3	4	5
47. My co-workers keep the work area safe	1	2	3	4	5

Part H: Safety Compliance

48. I maintain safety awareness at work	1	2	3	4	5
49. I comply with safety rules and standard operational procedure	1	2	3	4	5
50. I do not neglect safety, even when in a rush.	1	2	3	4	5
51. I wear personal protective equipment at work	1	2	3	4	5
52. I am confident in my ability to work safely	1	2	3	4	5

Part I: Safety Participation

53. I actively participate in setting safety goals	1	2	3	4	5
54. I actively promote safety improvement suggestions	1	2	3	4	5
55. I actively participate in safety meeting	1	2	3	4	5
56. I actively participate or helping coworkers with safety related issues during safety briefing	1	2	3	4	5
57. I actively participate in safety decision making with my supervisor.	1	2	3	4	5



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Thank you for your time.

APPENDIX B

GET

```
FILE='C:\Users\User\Desktop\VINO3.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
RELIABILITY
/VARIABLES=B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12
/SCALE ('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=SCALE
/SUMMARY=TOTAL.
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Reliability

Notes

Output Created		16-OCT-2016 18:20:13
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	Matrix Input	C:\Users\User\Desktop\VINO3.sav
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 for all variables in the procedure.

Syntax	RELIABILITY		
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Scale: ALL VARIABLES

Case Processing Summary

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Cases	Valid	61	100.0
	Excluded ^a	0	.0
	Total	61	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.889	12

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B1	42.7377	24.897	.573	.883
B2	42.7049	23.745	.722	.876
B3	42.8689	22.483	.787	.870
B4	42.7377	22.397	.774	.870
B5	42.9016	23.323	.683	.876
B6	42.6721	24.524	.559	.883
B7	42.7213	23.471	.667	.877
B8	42.7541	25.455	.387	.890
B9	42.8361	22.239	.784	.870
B10	42.7541	24.589	.528	.884
B11	42.8525	25.428	.351	.892
B12	43.2131	19.004	.652	.894

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
46.7049	27.645	5.25783	12

RELIABILITY

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/MODEL=ALPHA

/STATISTICS=SCALE

/SUMMARY=TOTAL.

Reliability

Notes

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	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
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Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	61	100.0
	Excluded ^a	0	.0
	Total	61	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.873	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
C13	31.3279	11.524	.526	.867
C14	31.1639	11.906	.458	.872
C15	31.2131	11.004	.628	.858
C16	31.3770	10.239	.674	.854
C17	31.3607	10.701	.742	.848
C18	31.2295	11.513	.473	.872
C19	31.2459	10.955	.647	.857

C20	31.1803	11.350	.606	.860
C21	31.2131	10.537	.763	.846

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
35.1639	13.806	3.71564	9

RELIABILITY

```

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Reliability

Notes

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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 for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=D22 D23 D24 D25 D26 D27 D28 D29 /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA /STATISTICS=SCALE /SUMMARY=TOTAL.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	61	100.0
	Excluded ^a	0	.0
	Total	61	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.930	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
D22	18.0984	35.457	.727	.923
D23	18.2131	34.970	.768	.920
D24	18.2623	34.930	.817	.916
D25	18.1639	33.673	.909	.908
D26	18.2131	32.870	.873	.911
D27	18.4098	35.879	.806	.917
D28	18.6230	39.805	.604	.931
D29	18.6721	39.757	.566	.933

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.9508	46.448	6.81524	8

RELIABILITY

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Reliability

Notes

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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 for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=E30 E31 E32 E33 E34 E35 E36 /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA /STATISTICS=SCALE /SUMMARY=TOTAL.
Resources	Processor Time	00:00:00.02
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Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	61	100.0
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	Total	61	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.944	7



Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
E30	22.6885	13.085	.874	.931
E31	22.8525	12.528	.900	.927
E32	22.8689	12.483	.831	.934
E33	22.8197	13.117	.862	.932
E34	22.9016	13.057	.749	.941
E35	22.8197	12.717	.775	.939
E36	22.8852	13.170	.731	.942

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
26.6393	17.368	4.16746	7

RELIABILITY

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Reliability

Notes

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Syntax	RELIABILITY	
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Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	61	100.0
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	Total	61	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.860	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
F37	18.9344	7.096	.760	.819
F38	18.9016	6.857	.716	.824
F39	18.8361	7.839	.583	.849
F40	18.9016	6.890	.815	.808
F41	18.8197	7.350	.688	.831
F42	19.2131	7.104	.461	.887

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
22.7213	10.071	3.17349	6

RELIABILITY

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/SUMMARY=TOTAL.

Reliability

Notes

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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 for all variables in the procedure.
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Scale: ALL VARIABLES

Case Processing Summary

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Cases	Valid	61	100.0
	Excluded ^a	0	.0
	Total	61	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.920	5



Item-Total Statistics

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G43	15.0328	5.532	.807	.900
G44	15.0000	5.533	.878	.889
G45	14.9672	5.332	.759	.909
G46	14.8689	5.849	.810	.903
G47	15.0164	4.750	.792	.911

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
18.7213	8.271	2.87594	5

RELIABILITY

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Reliability

Notes

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Syntax	RELIABILITY		
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Scale: ALL VARIABLES

Case Processing Summary

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a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.893	10

Item-Total Statistics

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H49	35.0328	13.866	.636	.883
H50	35.0984	13.590	.556	.888
H51	35.0164	14.050	.560	.887
H52	34.9672	14.999	.396	.896
I53	35.1148	12.903	.711	.877
I54	35.1967	12.827	.700	.878
I55	35.2623	12.897	.714	.877
I56	35.2295	12.680	.838	.868
I57	35.2131	12.704	.686	.879

Scale Statistics

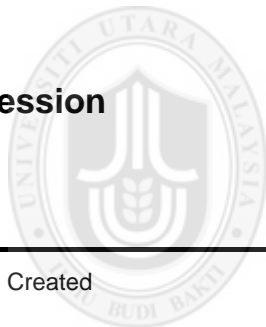
Mean	Variance	Std. Deviation	N of Items
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COMPUTE MeanSP=Mean(H48,H49,H50,H51,H52,I53,I54,I55,I56,I57).
EXECUTE.
COMPUTE MeanMSP=Mean(B1,B2,B3,B4,B5,B6,B7,B8,B9,B10,B11,B12).
EXECUTE.
COMPUTE MeanSSP=Mean(C13,C14,C15,C16,C17,C18,C19,C20,C21).
EXECUTE.
COMPUTE MeanSA=Mean(D22,D23,D24,D25,D26,D27,D28,D29).
EXECUTE.
COMPUTE MeanST=Mean(E30,E31,E32,E33,E34,E35,E36).
EXECUTE.
COMPUTE MeanJS=Mean(F37,F38,F39,F40,F41,F42).
EXECUTE.
COMPUTE MeanWSP=Mean(G43,G44,G45,G46,G47).
EXECUTE.
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  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
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  /DEPENDENT MeanSP
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Regression



UUM

Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

	<p>Cases Used</p> <p>Statistics are based on cases with no missing values for any variable used.</p> <pre> REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT MeanSP /METHOD=ENTER MeanMSP MeanSSP MeanSA MeanST MeanJS MeanWSP /SCATTERPLOT=(*ZRESID ,*ZPRED). </pre>								
<p>Syntax</p>	<p>Resources</p> <table border="0"> <tr> <td data-bbox="579 1086 906 1131">Processor Time</td> <td data-bbox="906 1086 1355 1131">00:00:02.22</td> </tr> <tr> <td data-bbox="579 1153 906 1198">Elapsed Time</td> <td data-bbox="906 1153 1355 1198">00:00:02.17</td> </tr> <tr> <td data-bbox="579 1220 906 1265">Memory Required</td> <td data-bbox="906 1220 1355 1265">4476 bytes</td> </tr> <tr> <td data-bbox="579 1288 906 1426">Additional Memory Required for Residual Plots</td> <td data-bbox="906 1288 1355 1426">200 bytes</td> </tr> </table>	Processor Time	00:00:02.22	Elapsed Time	00:00:02.17	Memory Required	4476 bytes	Additional Memory Required for Residual Plots	200 bytes
Processor Time	00:00:02.22								
Elapsed Time	00:00:02.17								
Memory Required	4476 bytes								
Additional Memory Required for Residual Plots	200 bytes								

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	MeanWSP, MeanJS, MeanSA, MeanSSP, MeanST, MeanMSP ^b		. Enter

a. Dependent Variable: MeanSP

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.874 ^a	.764	.738	.20794

a. Predictors: (Constant), MeanWSP, MeanJS, MeanSA, MeanSSP, MeanST, MeanMSP

b. Dependent Variable: MeanSP

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.555	6	1.259	29.122	.000 ^b
	Residual	2.335	54	.043		
	Total	9.890	60			

a. Dependent Variable: MeanSP

b. Predictors: (Constant), MeanWSP, MeanJS, MeanSA, MeanSSP, MeanST, MeanMSP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.284	.335		.846	.401
	MeanMSP	.227	.124	.245	1.832	.072
	MeanSSP	.393	.123	.400	3.184	.002
	MeanSA	-.061	.038	-.127	-1.574	.121
	MeanST	.145	.075	.213	1.929	.059
	MeanJS	.232	.054	.302	4.318	.000
	MeanWSP	-.020	.085	-.028	-.230	.819

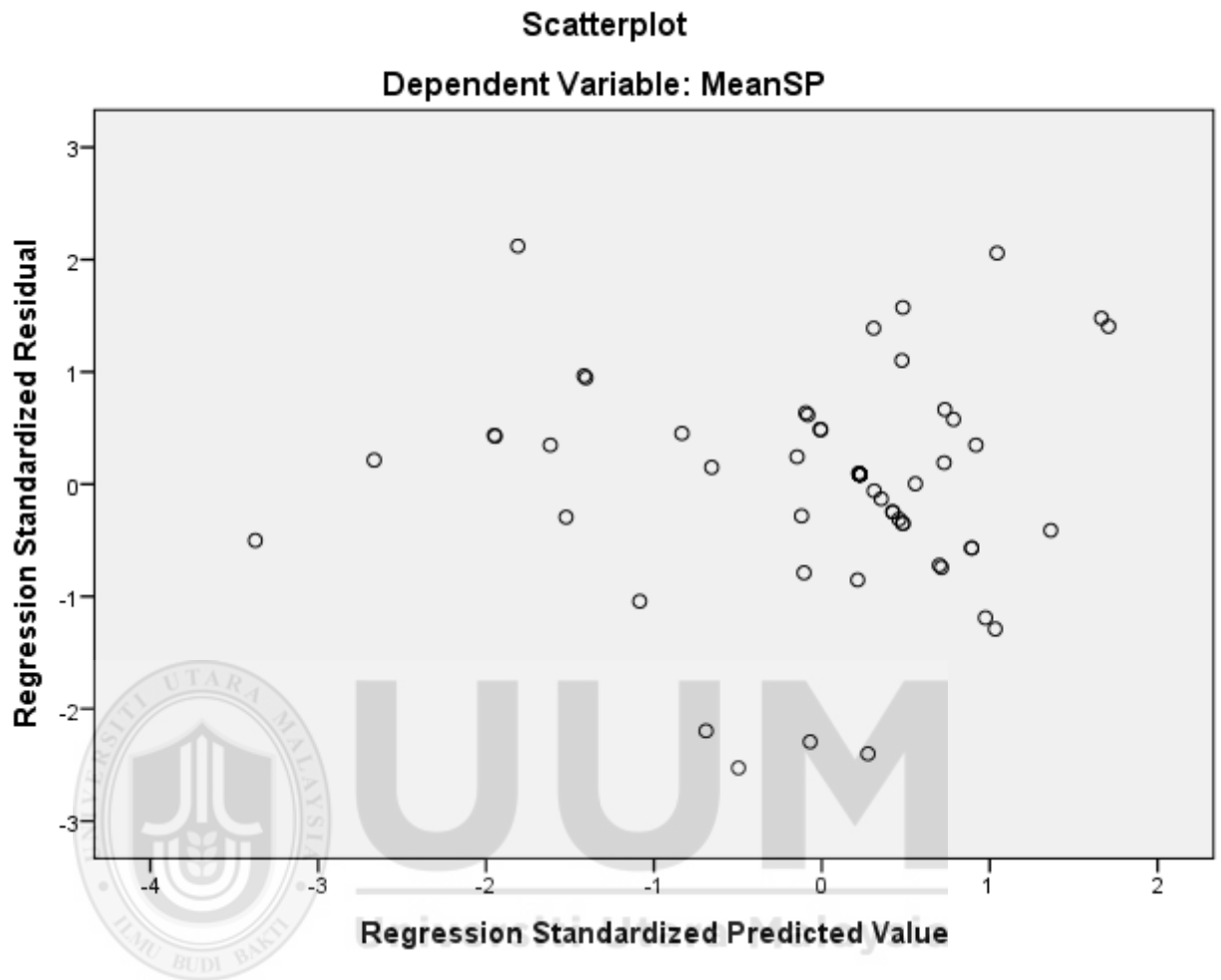
a. Dependent Variable: MeanSP

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.7042	4.5077	3.9016	.35485	61
Residual	-.52543	.44086	.00000	.19727	61
Std. Predicted Value	-3.375	1.708	.000	1.000	61
Std. Residual	-2.527	2.120	.000	.949	61

a. Dependent Variable: MeanSP

Charts



DESCRIPTIVES VARIABLES=MeanSP MeanMSP MeanSSP MeanSA MeanST MeanJS MeanWSP
/STATISTICS=MEAN STDDEV MIN MAX.

Descriptives

Notes

Output Created	16-OCT-2016 19:16:49	
Comments		
Input	Data	C:\Users\User\Desktop\VINO3.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	61
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=MeanSP MeanMSP MeanSSP MeanSA MeanST MeanJS MeanWSP /STATISTICS=MEAN STDDEV MIN MAX.	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
MeanSP	61	2.60	4.80	3.9016	.40599
MeanMSP	61	2.25	4.67	3.8921	.43815
MeanSSP	61	2.89	4.56	3.9071	.41285
MeanSA	61	1.00	4.50	2.6189	.85191
MeanST	61	2.00	4.86	3.8056	.59535
MeanJS	61	2.17	4.67	3.7869	.52891
MeanWSP	61	2.00	4.80	3.7443	.57519
Valid N (listwise)	61				

FREQUENCIES VARIABLES=Umur Jantina Warganegara Jawatan
 /PIECHART FREQ
 /ORDER=ANALYSIS.

Frequencies



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Notes

Output Created	16-OCT-2016 19:25:56	
Comments		
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	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	61

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		<pre> FREQUENCIES VARIABLES=Umur Jantina Warganegara Jawatan /PIECHART FREQ /ORDER=ANALYSIS. </pre>
Resources	Processor Time	00:00:01.66
	Elapsed Time	00:00:01.55

Statistics

		Umur	Jantina	Warganegara	Jawatan
N	Valid	61	61	61	61
	Missing	0	0	0	0

Frequency Table

Umur

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	15	24.6	24.6	24.6
	31-40	36	59.0	59.0	83.6
	41-50	5	8.2	8.2	91.8
	>50	5	8.2	8.2	100.0
	Total	61	100.0	100.0	

Jantina

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lelaki	57	93.4	93.4	93.4
	Perempuan	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Warganegara

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malaysia	43	70.5	70.5	70.5
	Bukan Malaysia	18	29.5	29.5	100.0
	Total	61	100.0	100.0	

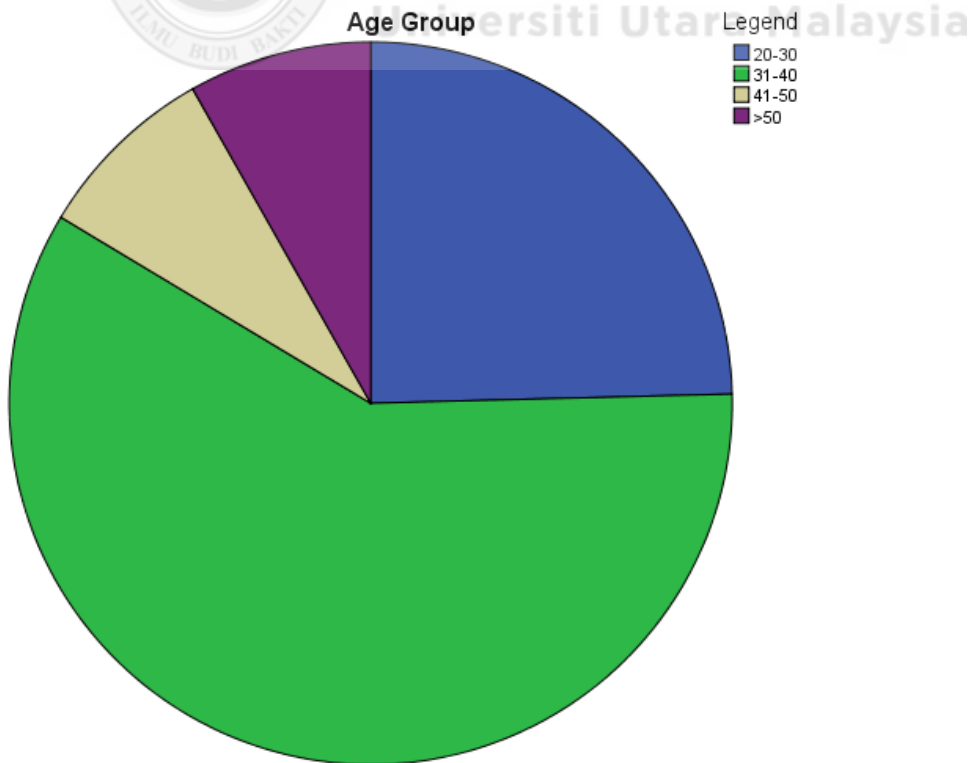
Jawatan

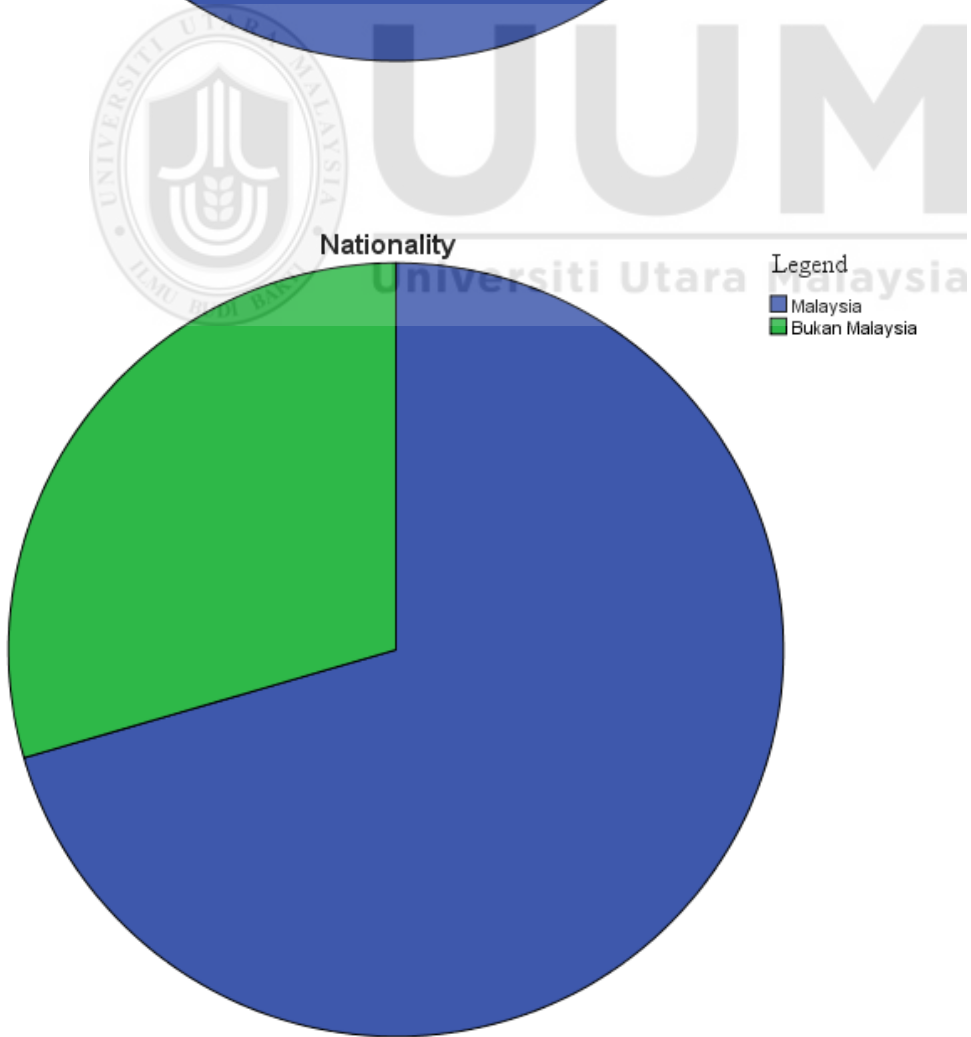
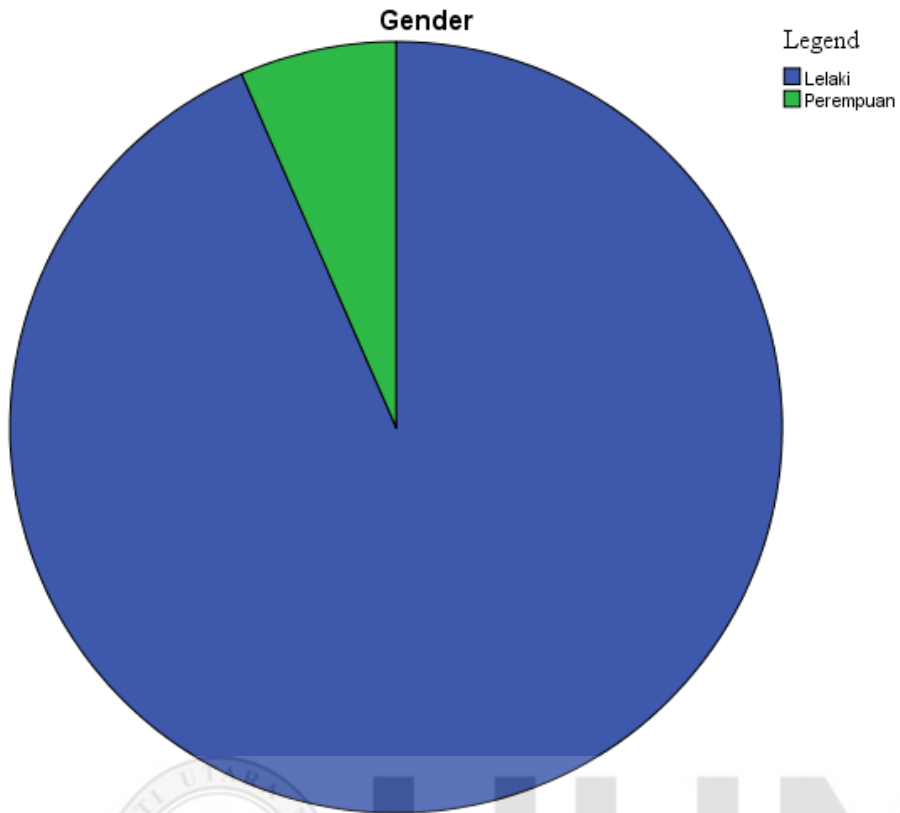
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Pekerja Am	24	39.3	39.3	39.3
Pegawai Keselamatan/Penyelia	1	1.6	1.6	41.0
Kontraktor	28	45.9	45.9	86.9
Eksekutif	8	13.1	13.1	100.0
Total	61	100.0	100.0	

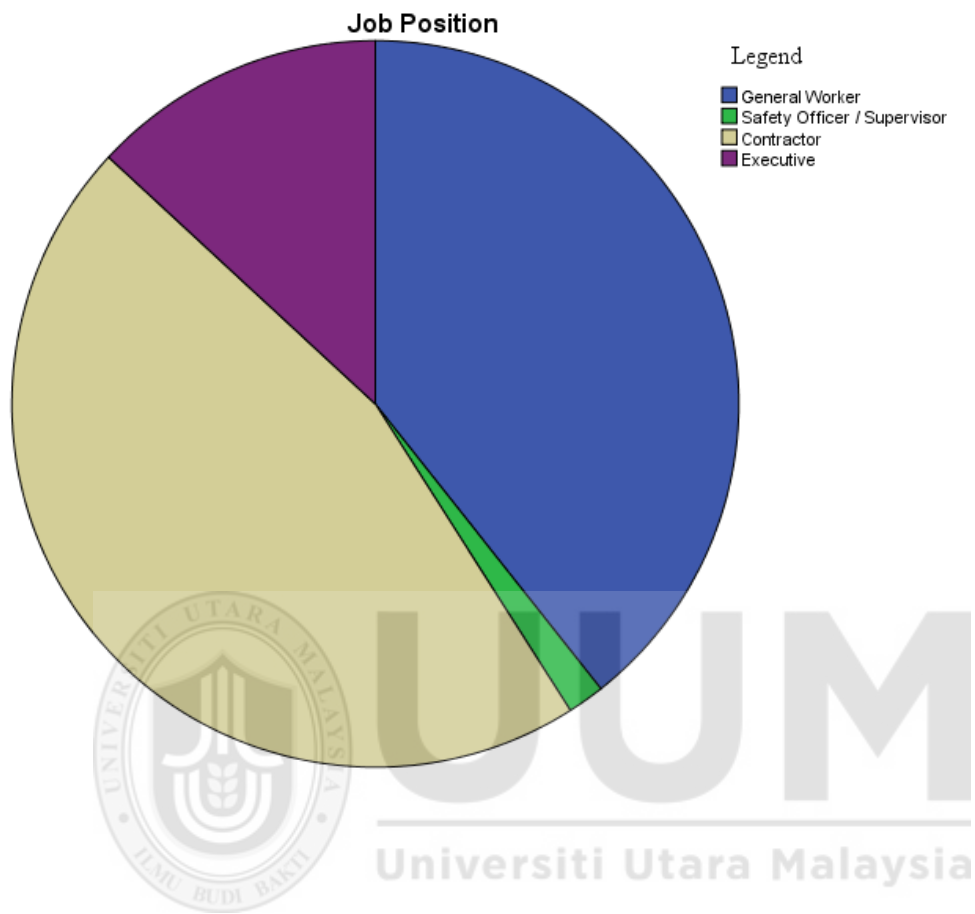
Pie Chart



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CORRELATIONS

/VARIABLES=MeanSP MeanMSP MeanSSP MeanSA MeanST MeanJS MeanWSP
 /PRINT=TWOTAIL NOSIG
 /STATISTICS DESCRIPTIVES
 /MISSING=PAIRWISE.

Correlations

Notes

Output Created	16-OCT-2016 19:29:52	
Comments		
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	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	61
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.

Syntax				CORRELATIONS
				/VARIABLES=MeanSP MeanMSP MeanSSP MeanSA MeanST MeanJS MeanWSP
				/PRINT=TWOTAIL NOSIG
				/STATISTICS DESCRIPTIVES
				/MISSING=PAIRWISE.
Resources		Processor Time		00:00:00.02
		Elapsed Time		00:00:00.02

Descriptive Statistics

	Mean	Std. Deviation	N
MeanSP	3.9016	.40599	61
MeanMSP	3.8921	.43815	61
MeanSSP	3.9071	.41285	61
MeanSA	2.6189	.85191	61
MeanST	3.8056	.59535	61
MeanJS	3.7869	.52891	61
MeanWSP	3.7443	.57519	61

Correlations

		MeanSP	MeanMSP	MeanSSP	MeanSA	MeanST	MeanJS
MeanSP	Pearson Correlation	1	.739**	.777**	-.250	.689**	.374**
	Sig. (2-tailed)		.000	.000	.052	.000	.003
	N	61	61	61	61	61	61
MeanMSP	Pearson Correlation	.739**	1	.830**	-.033	.731**	.068
	Sig. (2-tailed)	.000		.000	.804	.000	.603
	N	61	61	61	61	61	61
MeanSSP	Pearson Correlation	.777**	.830**	1	-.108	.696**	.100
	Sig. (2-tailed)	.000	.000		.409	.000	.443
	N	61	61	61	61	61	61
MeanSA	Pearson Correlation	-.250	-.033	-.108	1	-.224	-.122
	Sig. (2-tailed)	.052	.804	.409		.082	.350
	N	61	61	61	61	61	61
MeanST	Pearson Correlation	.689**	.731**	.696**	-.224	1	.033
	Sig. (2-tailed)	.000	.000	.000	.082		.803
	N	61	61	61	61	61	61
MeanJS	Pearson Correlation	.374**	.068	.100	-.122	.033	1
	Sig. (2-tailed)	.003	.603	.443	.350	.803	

N		61	61	61	61	61	61
MeanWSP	Pearson Correlation	.681**	.647**	.667**	-.455**	.703**	.252*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.050
N		61	61	61	61	61	61

Correlations

		MeanWSP
MeanSP	Pearson Correlation	.681**
	Sig. (2-tailed)	.000
	N	61
MeanMSP	Pearson Correlation	.647**
	Sig. (2-tailed)	.000
	N	61
MeanSSP	Pearson Correlation	.667**
	Sig. (2-tailed)	.000
	N	61
MeanSA	Pearson Correlation	-.455**
	Sig. (2-tailed)	.000
	N	61
MeanST	Pearson Correlation	.703**
	Sig. (2-tailed)	.000
	N	61

MeanJS	Pearson Correlation	.252*
	Sig. (2-tailed)	.050
	N	61
MeanWSP	Pearson Correlation	1
	Sig. (2-tailed)	
	N	61

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

* . Correlation is significant at the 0.05 level (2-tailed).



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