

**UNIVERSITY OF FORT HARE**

**RESEARCH METHODOLOGY AND STATISTIC 1A**

**IPS 515**

**DEGREE EXAMINATIONS**

**MAY/JUNE**

**2023**

.....  
**Time: 3 hours**

**Subject: IPS 515**

**Marks: 100**

**This paper consists of TEN (10) pages including the cover page**

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**INSTRUCTIONS**

Read every question carefully before answering.

Plan your answers.

Number your answers correctly and clearly

Write neatly and legibly.

Answer all questions.

**SECTION A**  
**Question 1**

**[30]**  
**(6)**

*Section A (Scenario)*

Read the scenario and answer the questions that follows:

Sisanda Mbova, a production manager at Global Oil, is concerned about the levels of withdrawal behaviours among employees in her organisation. Actual, physical and psychological quitting is a common occurrence at Global Oil. The articles that Sisanda has read on withdrawal behaviours frequently mention four variables as the important predictors of withdrawal behaviours i.e., perceived support, autonomy, psychological empowerment, and organisational justice. Given this situation, do the following tasks.

Questions:

- 1.1 Provide one research objective that includes all five variables. (2)
- 1.2 Provide one research question that includes all five variables. (2)
- 1.3 Briefly explain how Ms Mbova will incorporate or ensure **testability** and **confidence** in her study. (2)

**Question 2**

**[9]**

While reviewing literature on withdrawal behaviours, perceived support, autonomy, psychological empowerment, and organisational justice, you came across the references in 2.1, 2.2 and 2.3 below. Write them in correct American Psychological Association (APA) format for your bibliography (negative marking applies; half a point will be deducted for each error).

Questions:

- 2.1 A textbook written by Professor Nolitha Majola and Mr. Patrick Jamjam of the University of Fort Hare and the University of Mpumalanga, respectively, with the title "The theory of employee empowerment". It was published by Protea Press, on location Number 7 Glen Avenue in Umtata in year 2020. (3)
- 2.2 Mrs Amanda Dlangamandla, a senior lecturer in the Department of Business Studies, has collaborated with Professor Asanda Luzipo of the Department of Industrial Psychology, University of Fort League, to publish a paper in the fourth volume, and it appears in the late 2021 second edition of "The Vocational Journal of Human Behaviour in Organisations" from page 23 to 45. It is entitled "The correlates of perceived support, autonomy and psychological empowerment". (3)
- 2.3 A doctoral thesis by Dr Sizwe Brian Lubisi. The title of the thesis is "The effect of perceptions of psychological empowerment, organisational justice and organisation support on withdrawal behaviours among machine operators in a fossil fuel processing plant in Butterworth, Eastern Cape" The dissertation was completed in 2014 at the University of Fort Hare and has never been published. (3)

**Question 3**

**[8]**

- 3.1 You need to conduct sampling for a study you are about to start collecting data for. You have been advised by your manager that the main purpose of the study is to generalise the findings to the entire organisation. Identify an appropriate

sampling technique for this scenario and briefly explain how it works and its advantage and disadvantage. (4)

3.2 Mr Vukani Ntoni, a University of Umtata industrial psychology honours student, intends conducting research at Pure Drinks Makers©, situated in Alice on the factors affecting organisational citizenship behaviour (OCB). Vukani has limited budget and cannot obtain a sampling frame of the target population from the organisation. Identify an appropriate sampling technique for this scenario and explain how it works and its advantage and disadvantage. (4)

**Question 4 [7]**

Ms Noncedo Ngxoli, the production manager at Butterworth Agric Produce, wants to prove that rewards cause an increase in employee performance. She decided to conduct a field experiment in her plant to prove her hypothesis. She designed an experimental study with one experimental group and a control group as indicated in Table 1. Before the beginning of the experiment, the normal compensation rate in the plant was R 20 per unit product produced. For the purposes of the study, compensation of the experimental the control groups were manipulated according to the experimental design principles and guidelines. The observations are reflected in Table 1.

**Table 1**

Groups (Column A)	Treatment (Column B)	Production increase (%) (Column C)
Experimental group 1	?	O <sub>1</sub>
Control group	?	O <sub>2</sub>

Questions:

4. 1 Describe how you would treat the experimental and the control groups. (2)
4. 2 Describe the expected production change in the experimental group and the control group if the experiment is successful. (1)
4. 3 Describe **matching groups** and **randomisation** as the two forms of controlling for “nuisance” variables in experimental designs. (2).
4. 4 Regarding ethical issues in experimental design research, describe any 2 practices that are considered unethical. (2)

**SECTION B [50]**

*Section B scenario:* Asanda Luvuno, an industrial psychologist at Exxo Motor Assembling Plant, is concerned that Work engagement in the engineering department of her plant is below par. Asanda decided to conduct a survey, made up of the Conscientiousness Index (CI), Occupational Stress Scale (OSS), Power Distance Measure (PDS), Egalitarianism Questionnaire (EQ) and the Utrecht Work engagement Scale (UWES). A 5-point *Likert scale* where; 1 = *strongly disagree*; 2 = *disagree*; 3 = *neither disagree nor agree*; 4 = *agree*; 5 = *strongly agree* was used. Work engagement item/reliability analysis results in Table 3 indicated that this measure needed some attention. The item analysis results of the three items of the UWES are presented in Table 2. After cleaning the data, Asanda computed further analyses of the five variables of the study, depicted in Tables 2, 3,4, 5, 6 and 7. Asanda asks for your assistance in presenting the results.

**Question 5****[5]**

Referring to the above scenario, inspect the results in Table 2 and do the tasks that follow.

**Table 2**  
**Descriptive and dispersion (standard deviation) results output**

Variable	Mean	Std dev.	Min	Max
Conscientiousness	4.23	.78	1.00	4.89
Power distance	2.09	.56	2.00	5.00
Egalitarianism	4.52	1.78	1.00	5.00
Stress	1.39	.99	1.00	4.00
Work engagement	4.45	.66	1.00	5.00

Questions:

- 5.1. Present the descriptive results (Mean; Standard deviation) of Conscientiousness in Table 2. (1)
- 5.2. Present the descriptive results (Mean; Standard deviation) of Power distance in Table 2. (1)
- 5.3. Present the descriptive results (Mean; Standard deviation) of Stress in Table 2. (1)
- 5.4. Interpret the minimum value of Power distance in Table 2. (1)
- 5.5. Interpret the maximum value of Work engagement in Table 2. (1)

**Question 6****[9]**

Inspect the results in Table 3 and do the tasks that follow.

**Table 3**  
**Work engagement reliability/item analysis results**

Reliability Statistics		
Cronbach's Alpha Based on		
Cronbach's Alpha	Standardized Items <sup>a</sup>	N of Items
.600	.566	3

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
WE1	3.8349	2.951	.77	.699	.452.
WE2	4.9097	1.751	.78	.787	.453.
WE3	10.222	2.177	.19	.421	.802

Questions:

- 6.1 Present the UWES reliability/internal consistency Cronbach's Alpha result. (1)

- 6.2 Present the Corrected Item-Total Correlation result of item WE1 in Table 3. Make a recommendation of whether this item needs to be deleted or retained. (2)
- 6.3 Present the Corrected Item-Total Correlation result of item WE3 in Table 3. Make a recommendation of whether this item needs to be deleted or retained. (2)
- 6.4 Present the Cronbach's Alpha if Item Deleted for item WE1. Make a recommendation of whether this item needs to be deleted or retained. (2)
- 6.5 Present the Cronbach's Alpha if Item Deleted statistics for item WE3. Make a recommendation of whether this item needs to be deleted or retained. (2)

### Question 7

[15]

Inspect the results in Table 4 and do the tasks that follow.

**Table 4**  
**Correlation results output**

Variable	Conscientiousness	Power distance	Egalitarianism	Stress	Work engagement
Conscientiousness	1.00				
Power distance	.657**	1.00			
Egalitarianism	.444*	.342*	1.00		
Stress	-.273*	-.489**	1.00	1.00	
Work engagement	.078	.127	-.335**	-.708**	1.00

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

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

### Questions:

- 7.1 Present a null hypothesis for stress and work engagement and its statistical expression. (2)
- 7.2 Present an alternate hypothesis for stress and work engagement. (1)
- 7.3 Present the bivariate correlation's results for stress and work engagement in terms of the direction, strength and significance in Table 4. (3)
- 7.4 Based on the result in 7.3, which hypothesis do you reject, and which do you accept? (2)
- 7.5 Present the bivariate correlation's results of power distance and work engagement in terms of the direction, strength and significance in Table 4. (3)
- 7.6 Describe any two types of validities and two data analyses methods that you can use to establish each type of validity. (4)

### Question 8

[8]

Inspect the results in Table 5 and do the tasks that follow.

**Table 5**  
**Gender t-test results output**

Variable	t	Sig
Conscientiousness	8.570	.039
Power distance	9.570	.020
Work engagement	.692	.139
Egalitarianism	.512	.189
Stress	12.692	.000

Questions:

- 8.1 Present the null hypothesis for gender mean differences with all the variables of the study in Table 5. (2)
- 8.2 Present one alternate hypothesis containing all the variables of the study in Table 5. (1)
- 8.3 Present the gender groups ttest results in Table 5 for Egalitarianism. Indicate whether the null and the alternate hypotheses are rejected or accepted for this variable. (1½)

Inspect the results in Table 6 and do 8.4 to 8.5.

**Table 6**  
**Race groups ANOVA results output**

Variable	F	Sig
Conscientiousness	7.153	.048
Power distance	1.599	.111
Work engagement	.044	.787
Egalitarianism	6.021	.000
Stress	-5.013	.050

Questions:

- 8.4 Present one null hypothesis for race groups differences containing all the variables of the study in Table 6. (1)
- 8.5 Present the alternate hypothesis with all the variables of the study from Table 6. (1)
- 8.6 Present the race groups ANOVA result for conscientiousness. Indicate whether the null and the alternate hypotheses are rejected or accepted for conscientiousness variable. (1½)

**Question 9**

**[13]**

Ms. Molokwane, a human resource business partner at AMC Engineering has used multiple regression analysis to test the effect of Conscientiousness, Power distance, Stress, Egalitarianism on Work engagement. After data collection and data analysis, the results are presented in Table 7. Inspect the results in Table 7 and do the tasks that follow.

**Table 7**  
**Regression results output**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.734 <sup>a</sup>	.659	.526	8.93323

a. Predictors: (Constant), conscientiousness, power distance, stress, egalitarianism

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.894	1	.894	3.822	.030 <sup>b</sup>
	Residual	7.719	33	.234		
	Total	8.613	34			

a. Dependent Variable: work engagement

b. Predictors: (Constant), (Constant), conscientiousness, power distance, stress, egalitarianism

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.538	4.237		4.375	.000
	Conscientiousness	.160	1.046	.013	.153	.879
	Power distance	-1.252	.783	-.110	-1.599	.111
	Egalitarianism	1.094	.109	.655	9.044	.001
	Stress	-.149	.148	-.859	-11.013	.000

a. Dependent Variable: Work engagement

#### Questions:

- 9.1 Draw the diagram/framework illustrating the relationship among the four independent variable and the dependent variable. (3)
- 9.2 Present the ANOVA regression result in Table 7. (1)
- 9.3 Present the null hypotheses with the four independent variables and dependent variables and statistically (do not state the direction). (2)
- 9.4 Present an alternate hypothesis for the relationship between the independent and the dependent variables (do not state the direction). (1)
- 9.5 Present the R<sup>2</sup> regression result in Table 7. (1)
- 9.6 Use the beta value to identify the independent variable with the highest strength on the dependent variable. (1)
- 9.7 Use the beta value to identify the independent variable with the lowest strength on the dependent variable. (1)
- 9.8 Present the result of the effect of Conscientiousness on Work engagement. Which do you reject and accept between the null and alternate hypothesis? (3)

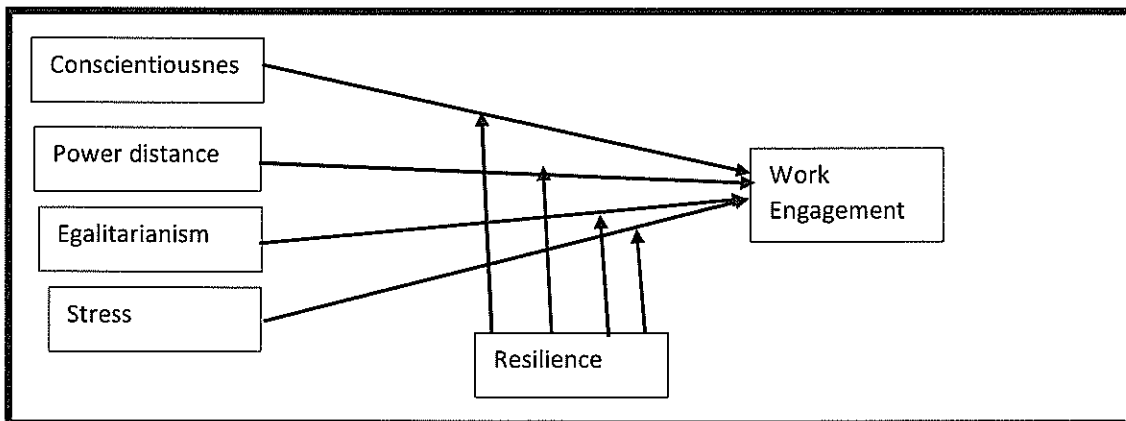
...P.T.O. for SECTION C...

**SECTION C**  
**Question 10**

**20 marks**  
**(11)**

You have been asked to test the moderating effect of Resilience on the impact of Conscientiousness, Power distance, Stress and Egalitarianism on Work engagement, as illustrated in Figure 1. To test the moderating effect of Resilience on the impact of Stress on Work engagement you computed the Interaction term named STRE\_RES. You then conducted the moderation analysis, and the results are presented in Table 8. Inspect the output results in Table 8 below and answer Questions 10.1 to 10.3.

**Figure 1**  
**Moderation feedback results**



**Table 8**  
**Regression results for testing moderation**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.989 <sup>a</sup>	.678	.526	8.93323

a. Predictors: (Constant), conscientiousness, Power distance, Stress, egalitarianism, RES\_WE

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.894	1	.894	3.822	.030 <sup>b</sup>
	Residual	7.719	33	.234		
	Total	8.613	34			

a. Dependent Variable: Intention to stay

b. Predictors: (Constant), conscientiousness, Power distance, Stress, egalitarianism, RES\_WE

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.538	4.237		4.375	.000

1	Conscientiousness	.160	1.046	.013	.153	.879
	Power distance	1.252	.783	.110	1.599	.111
	Stress	1.094	.109	.655	9.044	.001
	Egalitarianism	.149	.148	.859	11.013	.000
	STRE RES	3.127	.022	.456	21.222	.048

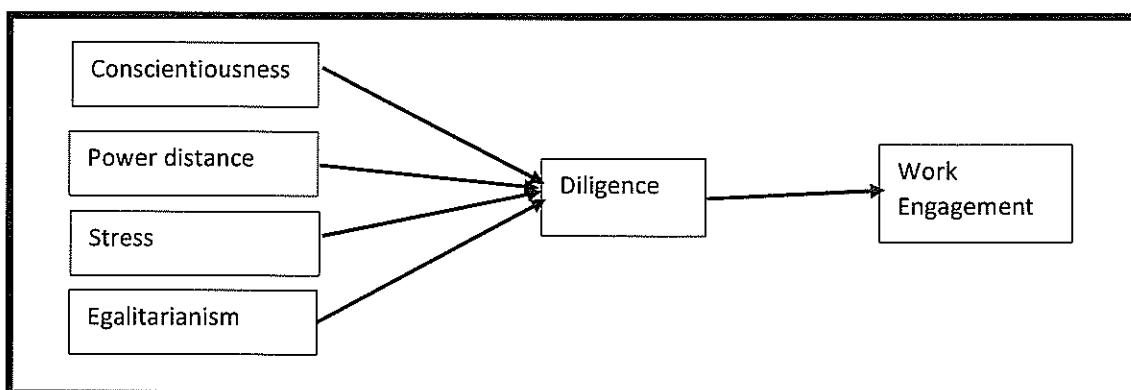
a. Dependent Variable: Work engagement

### Questions:

- 10.1 Present the moderation effect results of Resilience on the impact of Stress on Work engagement. (1)
- 10.2 Do you reject or accept the null hypothesis? (1)
- 10.3 Do you reject or accept the alternate hypothesis? (1)

Furthermore, you wanted to test the mediating effect of Diligence on the impact of Conscientiousness, Power distance, Stress and Egalitarianism on Work engagement as illustrated on Figure 2. Inspect the output results in Table 9 below and answer Questions 10.4 to 10.5. If mediation is substantiated, is it full or partial?

**Figure 2**  
**Moderation framework**



**Table 9**  
**Regression results for testing mediation**

### Step 1 model

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.352	.428		3.161	.003
	Conscientiousness	.160	1.046	.013	.153	.098
	Power distance	-1.252	.783	-.110	-1.599	.111
	Stress	-1.094	.109	-.655	-9.044	.001
	Egalitarianism	.149	.148	.859	20.002	.000

a. Dependent Variable: Work engagement

### Step 2 model

Coefficients <sup>a</sup>						
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Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	1.352	.428		3.161	.003
	Conscientiousness	.160	1.046	.013	.153	.879
	Power distance	-1.252	.783	-.110	-1.599	.111
	Stress	-1.094	.109	-.655	-9.044	.000
	Egalitarianism	.149	.148	.859	11.013	.000

a. Dependent Variable: Diligence

### Step 3 model

Model		Coefficients <sup>a</sup>				
		Unstandardized		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	1.352	.428		3.161	.003
	Conscientiousness	.160	1.046	.013	.153	.879
	Power distance	-1.252	.783	-.110	-.599	.006
	Stress	-1.094	.109	-.643	7.047	.001
	Egalitarianism	.149	.148	.859	2.013	.456
	Diligence	1.094	.109	.655	9.044	.000

a. Dependent Variable: Work engagement

### Questions:

- 10.4 Present the result of the mediation effect of Diligence on the impact of Conscientiousness on Work engagement and indicate whether you reject or accept the null hypotheses and the alternate hypothesis. (3)
- 10.5 Present the mediation effect result of Diligence on the impact of Egalitarianism on Work engagement and indicate whether you reject or accept the null and the alternate hypotheses. (5)

### Question 11

[8]

*Scenario:* You have been asked to conduct qualitative research for your study. Do the following tasks.

- 11.1 Briefly explain the two types of **reliability** in working with qualitative data. (2)
- 11.2 Briefly explain the two types of **validity** in dealing with qualitative data. (2)
- 11.3 Briefly explain any **two methods** that you can use to analysis and present qualitative data. (4)

End of paper.

*"Good luck"*

P.T.O. for the addendum...

## **Addendum**

### **1. Presenting measures of central tendency (mean) and dispersion (standard deviation)**

#### **Guidelines**

Mean: presented according to the Likert scale used as follows:

- 1 = strongly disagree (low perception of ... (the variable).
- 2 = disagree (below average perception of ... (the variable).
- 3 = neither disagree nor agree (average perception of ... (the variable) ...
- 4 = agree (above average perception of ... (the variable).
- 5 = strongly agree (high perception of ... (the variable).

#### **Example**

##### **Table 1**

##### **Descriptive results of the variables of the study**

##### **Mean and std dev.**

1. The descriptive results indicate that in general, the participants of the study have above average perceptions/levels of employee empowerment (Mean = 3.95, std dev = .539).

##### **Maximum and minimum values**

1. A minimum value of 2.67 was observed for employee empowerment, indicating that at least one participant neither agreed nor disagreed (2.67 is closest to 3) with employee empowerment.
2. A maximum value of 5.00 was observed for employee empowerment, indicating that at least one participant strongly agrees with employee empowerment.

### **2. Presenting reliability results (Cronbach's Alpha)**

#### **Guidelines**

1. Sekaran and Bougie (2020) provide guidelines for reporting Cronbach's Alpha ( $\alpha$ ):
  - about .5 is poor/unacceptable
  - $\alpha > .6$  is usable
  - $\alpha > .7$  is acceptable
  - $\alpha > .8$  is good
2. Corrected Item-Total Correlation = above 0.3 is good but  $< .3$  is unacceptable
3. Cronbach's Alpha if Item Deleted = does Cronbach's Alpha increase  $\alpha$  if item deleted (candidate for deletion) or does Cronbach's Alpha decrease if item deleted (needs to be retained)?

#### **Example**

##### **Example Cronbach's Alpha presentation**

1. A Cronbach's Alpha of .721 was observed for (the) Employee Empowerment (Questionnaire/Scale), indicating acceptable reliability/internal consistency.

##### **Example Cronbach Corrected-Item-Corrected Correlation**

1. Corrected Item-Total Statistics indicate that EEQ1 item is stable ( $r > .3$ ), and this item should be retained.
2. Corrected Item-Total Statistics indicate that EEQ2 item is compromised ( $r < .3$ ) and this item is recommended for deletion.

##### **Example Cronbach Alpha-if-Item-deleted**

1. Deleting item EEQ1 would result in a decrease in Cronbach Alpha from 0.721 to .567. This item should be retained.
2. Deleting item EEQ2 would result in an increase in Cronbach Alpha from 0.721 to .750. This item should be deletion.

### Further examples of Cronbach's Alpha presentation

1. A Cronbach Alpha of .882 was observed for Perceived Equity, indicating good reliability.
2. The job enrichment subscale consisted of 4 items ( $\alpha = .664$ ), the Work-Family Conflict subscale consisted of 10 items ( $\alpha = .813$ ), and the intention to leave subscale consisted of 2 items ( $\alpha = .523$ ), indicating questionable, good and poor reliabilities, respectively.
3. Cronbach's alphas for the 12 academic and 13 social self-efficacy items were .80 and .68, indicating excellent and questionable reliabilities, respectively.
4. The stress inventory was found to be highly reliable ( $\alpha = .86$ ).
5. The stress inventory was found to have excellent reliability ( $\alpha = .96$ ).

### 3. Presenting correlations

#### Guidelines

#### 1. Presenting the strengths of correlations

Guilford's guidelines for presenting the strength of correlations.

Correlation	Interpretation
<.20	= Slight relationship
.20-.40	= Low correlation or small relationship
.40-.70	= Moderate correlation, substantial relationship
.70-.90	= High correlation/relationship
> .90	= Very high dependable correlation

#### 2. Values to report: direction (negative or positive), strength of the correlation (r) and significance level ( $p < 0.05$ ).

#### Example:

1. Job satisfaction and intention to leave have a negative, significant and substantial relationship ( $r = -.703, p < .05$ )
2. Perceived equity and intention to leave have a negative, significant and low relationship ( $r = -.384, p < .05$ )
3. Work-Family Conflict and intention to leave have a positive, non-significant and slight relationship ( $r = .037, p > .05$ )
4. Job enrichment and intention to leave have a negative, significant and substantial relationship ( $r = -.426, p < .05$ )

### 4. Presenting t-test results

#### Guidelines

1. **Sig (p) < .05** = there are significant differences
2. Statistics to report: F-value and its significance level (p).

#### Alternative table (better presented)

#### Examples: Gender mean differences

1. There are no significant differences between females and males on employee empowerment ( $F = 2.062, p > .05$ ).
2. There are no significant differences between females and males on OCB ( $F = .573, p > .05$ ).

3. There are significant differences between females and males on organisational commitment ( $F = 6.570, p < .05$ ).

## 5. Presenting ANOVA results

### Guidelines

1. **Sig (p) < .05** = there are significant differences
2. Statistics to report: F-value and its significance level (p).

1. There are significant differences among different race groups on employee empowerment ( $F = 21.367, p < .05$ ).
2. There are no significant differences among different race groups on OCB ( $F = .787, p > .05$ ).
3. There are no significant differences among different race groups on organisational commitment ( $F = .642, p > .05$ ).

## 6. Presenting regression results

### Guidelines

1. Model summary – report  $R^2$  (multiply it by 10 to determine percentage of variance by IVs on the DV)
2. Model significance – report F value and its Sig value for model fit.
3. Coefficients (hypotheses)
  - **Sig (p) > .05** = IV has significant effect on DV; ( $p > .05$ , no significant effect
  - Statistics to report: t-value and its significance level (p).
4. Beta values – highest indicate the IV with the highest influence on the DV, etc., with the smallest indicating the least influence on the DV.

### Examples

#### Model summary/model validity/fit

4.  $R^2$  result indicates that EE, OC and Work-Family Conflict explain 58.1% of variance on OCB.

#### Model validity

5. Regression ANOVA result indicates that the model is significant and valid ( $F = 22.96, p < .05$ )

#### Coefficients (Hypotheses testing)

6. Employee empowerment has a positive significant effect on OCB ( $t = 2.605, p < .05$ ).
7. Organisational commitment has a positive significant effect on OCB ( $t = 2.810, p < .05$ ).
8. Work-Family Conflict has a negative nonsignificant effect on OCB ( $t = .660, p > .05$ ).

#### Beta

9. OC has the largest effect on OCB (Beta = .433)
10. EE has the second largest effect on OCB (Beta = .401)
11. Work-Family Conflict has the lowest effect on OCB (Beta = .063)

## 7. Presenting MODERATION regression results

### Guidelines mediation regression

1. Coefficients (hypotheses)
  - **Sig (p) > .05** of the **INTERACTION EFFECT** (obtained by multiplying the IV by the mediator, i.e., computing) has significant effect on DV; ( $p > .05$ , no significant effect)
  - Statistics to report: t-value and its significance level (p).

**Presentation:** The interaction effect of perceived intelligence and gender is significant ( $t = 2.177$ ;  $p < .05$ ), meaning that gender does moderate the effect of perceived intelligence on likelihood to date.

## 8. Presenting mediation regression results

### Guidelines mediation regression

2. Coefficients (hypotheses)
  - **Sig (p) > .05** of the following 3 steps
    1. The effect of the IV on the mediator (must be significant)
    2. The effect of the IV on the dependent variable (must be significant)
    3. The effect of the IV and the mediator in the same model on the DV (also)

### **Presentations:**

#### **Hypothesis: job satisfaction mediates the effect of perceived equity on intention to leave**

In model 1, perceived equity has a positive effect on job satisfaction ( $t = .343$ ;  $p < .05$ ); in model 2 perceived equity has a negative effect on intention to leave ( $t = 0.270$ ;  $p < .05$ ); and in model 3 containing both job satisfaction and perceived equity as independent variables with intention to leave as a dependent variable, both variables have a significant effect on intention to leave. This result implies that job satisfaction mediates the effect of perceived equity on intention to leave.

### **Different types of mediation:**

To establish mediation the following conditions must hold: perceived justice, Work-Family Conflict, and job enrichment must affect job satisfaction in model 1; perceived justice, Work-Family Conflict, and job enrichment must be shown to have an impact on employees' intention to leave in model 2; and job satisfaction must affect employees' intention to leave in model 3 (while controlling for perceived justice, Work-Family Conflict, and job enrichment). If these conditions all hold in the predicted direction, then the effect of perceived justice, Work-Family Conflict, and job enrichment must be less in model 3 than in model 2.

#### *Partial mediation*

Is established if perceived justice, Work-Family Conflict, and job enrichment still affect intention to leave in model 3.

#### *Full mediation*

Holds if perceived justice, Work-Family Conflict, and job enrichment have no effect on intention to leave (in other words, the effect of these variables on intention to leave is no longer significant) when the effect of job satisfaction is controlled for (model 3).