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Family Name					
Given Name/s					
Student Number					
Teaching Period	Semester 1, 2019				

PSY447 – Research Methods and Practice	DURATION	
	Reading Time:	10 minutes
	Writing Time:	180 minutes
INSTRUCTIONS TO CANDIDATES		
<p>Section A: Multiple Choice Questions: Answer ALL (60) questions (30 Marks) Suggested Time: 60 minutes.</p> <p>Section B: Short Answer Questions: Answer 5 of 5 questions (30 Marks) Suggested Time: 60 minutes</p> <p>Section C: Short Essay Questions: Answer 2 of 2 questions (40 Marks) Suggested Time: 60 minutes</p> <p>Please ensure that your name and student number are clearly indicated on your Answer Sheets and at the top of this examination paper.</p> <p>Note that questions ARE NOT of equal value. Read ALL questions carefully.</p>		
EXAM CONDITIONS		
<p><u>You may begin writing from the commencement of the examination session.</u> The reading time indicated above is provided as a guide only.</p>		
This is a RESTRICTED OPEN BOOK examination		
Any calculator is permitted		
One A4 sheet of handwritten single-sided notes permitted		
No dictionaries are permitted		
ADDITIONAL AUTHORISED MATERIALS	EXAMINATION MATERIALS TO BE SUPPLIED	
No additional printed material is permitted	1 x 16 Page Book 1 x 4-Multiple Choice Answer Sheet 6 x Scrap Paper	

**THIS EXAMINATION IS PRINTED
DOUBLE-SIDED.**

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LEFT BLANK.**

Section A
Multiple Choice Questions
Total No of Marks for this section: 30 Marks

This section should be answered on the Answer Sheet provided. Please ensure that your name and student number have been written on the Answer sheet and placed in the completed answer Booklet.

There is **half (.5)** mark for each question. Suggested Time allocation for Section A: 60 mins

Section B
Short Answer Questions
Total No of Marks for this section: 30 Marks

This section should be answered in the Answer Booklet provided.

There are **6 marks** for each question. Suggested Time allocation for Section B: 60 mins

Question 1

Under what conditions should a covariate be included in a model. Provide an example and describe what the researcher may be looking for when conducting the analysis.

Question 2

Why is it important to carefully consider the number and type of variables to be included in a regression model? Explain what may be the consequence of *not* considering this carefully.

Question 3

What is the difference between a Mediation and a Moderator model? Describe the difference in terms of what type of question they allow a researcher to answer.

Question 4

Under what conditions should a researcher consider conducting an MANOVA as opposed to ANOVAs. Describe the advantages.

Question 5

Please read the following research question and (1) briefly describe the design of the study, (2) identify the relevant variables, and (3) state which analyses are most appropriate.

A school counsellor is interested in the effects of three different programs on student wellbeing. Each student will be randomly assigned to one of three treatment groups and complete a baseline measure of self-report wellbeing. At the completion of the 12-week programs students will complete the same measure of self-report wellbeing.

Section C
Short answers - Interpretation of Results
Total No of Marks for this section: 40 Marks

There are **20 marks** for each question. Suggested Time allocation for Section C: 60 mins

Question 1 of 2

(20 Marks)

You have given your research assistant a data set to analyse. The output from this analysis is attached. Your task is to report the results in APA format.

When answering this question, you will need to state what analysis was conducted and interpret the output. Keep in mind there might be materials that your research assistant has not provided you and you need to mention what these other requirements might be.

Ensure you read ALL elements of this analysis, which goes over more than one page

Note: Ethnicity is a dichotomous variable – indicating Indigenous/Non-Indigenous Australian.

Model Summary^c

Model	R	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Sig. F Change	
				R Square Change	F Change	df1		df2
1	.350 ^a	.122	1.48501	.122	8.233	3	177	.000
2	.385 ^b	.148	1.47147	.026	2.636	2	175	.074

a. Predictors: (Constant), Ethnicity, AttitudesCentred, SELFIDENTITYCentred

b. Predictors: (Constant), Ethnicity, AttitudesCentred, SELFIDENTITYCentred, AttitudesC_Ethnicity, selfidentity_Ethnicity

c. Dependent Variable: HelpSeekINTENTION

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.467	3	18.156	8.233	.000 ^b
	Residual	390.331	177	2.205		
	Total	444.798	180			
2	Regression	65.883	5	13.177	6.086	.000 ^c
	Residual	378.915	175	2.165		
	Total	444.798	180			

a. Dependent Variable: HelpSeekINTENTION

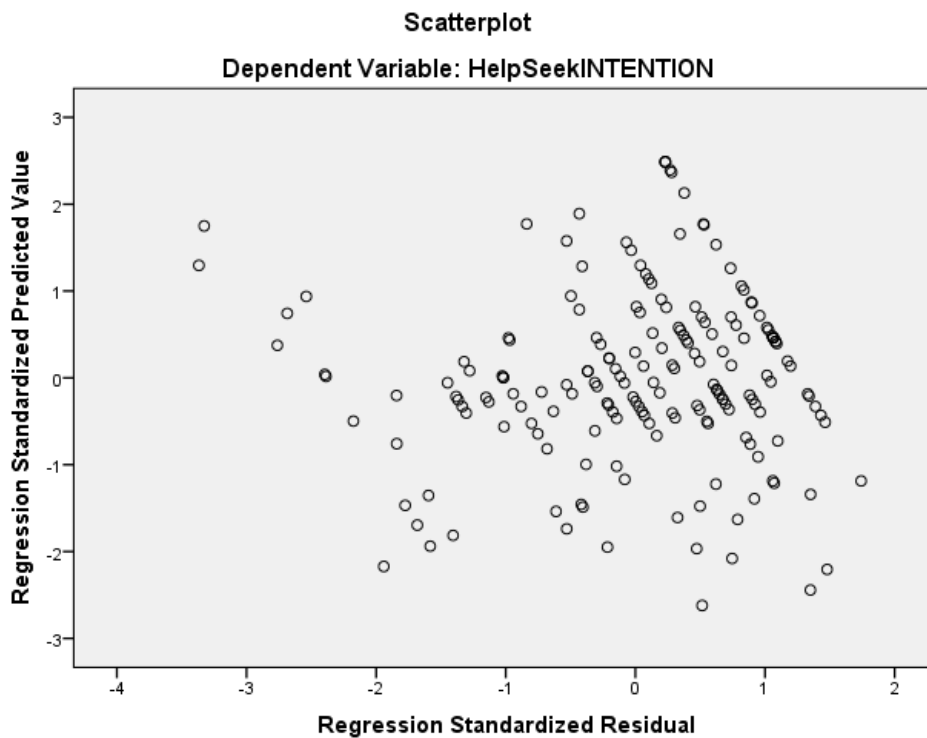
b. Predictors: (Constant), Ethnicity, AttitudesCentred, SELFIDENTITYCentred

c. Predictors: (Constant), Ethnicity, AttitudesCentred, SELFIDENTITYCentred, AttitudesC_Ethnicity, selfidentity_Ethnicity

Coefficients^a

Model	Unstandardized		Standardized		t	Sig.	Correlations		
	B	Std. Error	Beta				Zero-order	Partial	Part
1 (Constant)	5.054	.432			11.689	.000			
AttitudesCentred	.318	.082	.273		3.875	.000	.276	.280	.273
SELFIDENTITYCentred	.210	.069	.214		3.033	.003	.218	.222	.214
Ethnicity	.062	.244	.018		.253	.801	.031	.019	.018
2 (Constant)	5.010	.429			11.681	.000			
AttitudesCentred	-.035	.347	-.030		-.100	.921	.276	-.008	-.007
SELFIDENTITYCentred	-.317	.306	-.323		-1.037	.301	.218	-.078	-.072
Ethnicity	.082	.242	.024		.339	.735	.031	.026	.024
AttitudesC_Ethnicity	.212	.192	.328		1.106	.270	.286	.083	.077
selfidentity_Ethnicity	.302	.167	.560		1.808	.072	.236	.135	.126

a. Dependent Variable: HelpSeekINTENTION



Question 2 of 2**(20 Marks)**

You have given your research assistant a data set to analyse. The output from this analysis is attached. Your task is to report the results in APA format.

When answering this question, you will need to state what analysis was conducted and interpret the output. Keep in mind there might be materials that your research assistant has not provided you and you need to mention what these other requirements might be.

Ensure you read ALL elements of this analysis, which goes over more than one page

Between-Subjects Factors

		Value Label	N
Group	.00	Placebo	12
	1.00	Low alcohol	12
	2.00	High alcohol	12

Descriptive Statistics

Dependent Variable: Driving_errors

Group	Mean	Std. Deviation	N
.00	5.83	2.69	12
1.00	6.16	2.32	12
2.00	10.25	3.04	12
Total	7.41	3.32	36

Tests of Between-Subjects Effects

Dependent Variable: Driving_errors

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	294.697 ^a	3	98.232	34.148	.000	.762
Intercept	1035.760	1	1035.760	360.058	.000	.918
Experience	149.531	1	149.531	51.981	.000	.619
Group	136.334	2	68.167	23.697	.000	.597
Error	92.053	32	2.877			
Total	2367.000	36				
Corrected Total	386.750	35				

a. R Squared = .762 (Adjusted R Squared = .740)

Estimates

Dependent Variable: Driving_errors

Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
.00	5.383 ^a	.494	4.377	6.388
1.00	6.828 ^a	.498	5.813	7.843
2.00	10.039 ^a	.490	9.040	11.038

a. Covariates appearing in the model are evaluated at the following values: Experience = 14.1389.

Pairwise Comparisons

Dependent Variable: Driving_errors

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
.00	1.00	-1.445*	.709	.050	-2.890	.000
	2.00	-4.657*	.693	.000	-6.069	-3.244
1.00	.00	1.445*	.709	.050	.000	2.890
	2.00	-3.211*	.703	.000	-4.643	-1.779
2.00	.00	4.657*	.693	.000	3.244	6.069
	1.00	3.211*	.703	.000	1.779	4.643

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).