

Past Papers

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



FINAL – Lecture last week
COMMUNITY

﴿ وَإِن تَتَوَلَّوْا يَسْتَبَدِلْ قَوْمًا غَيْرَكُمْ ثُمَّ لَا يَكُونُوا أَمْثَلَكُمْ ﴾

اللهم استعملنا ولا تستبدلنا

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First we will start with (19) past Qs

Then, (0) Book's Qs

and finally, (0) test bank Qs

(all Qs will be by default past unless it
is written to be test bank)

a Japanese organisation held a research to study the variation in baby birth weights, the data collected gave a mean of 3.3 kg and a standard deviation of 200 grams. answer the following questions:

17. What is the coefficient of variance?

- a) Good, it's 165%
- b) Bad, it's 165%
- c) Bad it's 130%
- d) Bad it's 60.6%
- e) Good it's 6.06%

Answers : E

18. What is the variance?

- a) .04 kg²
- b) 40 kg²
- c) 400 kg²
- d) 40000 kg²
- e) 20000 kg²

Answers : A

Referred to the previous slide:

19. What is the probability that a baby would weigh between 2.7 and 3.9?

- a) 99.7%
- b) 75%
- c) 68%
- d) 98.7%
- e) 77.6%

Answer : A

20. What is the probability that a baby would weigh more than 3.8?

- a) .99379
- b) .00621
- c) .99180
- d) .0082
- e) .97982

Answer : B

21. What is the probability that a baby would weigh up to 120 grams above the mean?

- a) .72907
- b) .73237
- c) .74537
- d) .75175
- e) .72575

Answer : E

15) Chi-square can be used to answer a research question when:

- a. The independent variable is interval, and the independent variable is ordinal
- b. The independent variable is nominal, and the independent variable is ration.
- c. Both variables are nominal
- d. The independent variable is continuous, and the independent variable is nominal.
- e. Both variables are ratio

Answer : C

Q51: A researcher calculated the value of chi-square to be = 6.35. If df = 2, and alpha = .10 , Use this section of chi-square critical value table to pick the correct statement of the followings:

r	$P(X \leq x)$							
	0.010	0.025	0.050	0.100	0.900	0.950	0.975	0.990
	$\chi^2_{0.99}(r)$	$\chi^2_{0.975}(r)$	$\chi^2_{0.95}(r)$	$\chi^2_{0.90}(r)$	$\chi^2_{0.10}(r)$	$\chi^2_{0.05}(r)$	$\chi^2_{0.025}(r)$	$\chi^2_{0.01}(r)$
1	0.000	0.001	0.004	0.016	2.706	3.841	5.024	6.635
2	0.020	0.051	0.103	0.211	4.605	5.991	7.378	9.210
3	0.115	0.216	0.352	0.584	6.251	7.815	9.348	11.34
4	0.297	0.484	0.711	1.064	7.779	9.488	11.14	13.28
5	0.554	0.831	1.145	1.610	9.236	11.07	12.83	15.09
6	0.872	1.237	1.635	2.204	10.64	12.59	14.45	16.81
7	1.239	1.690	2.167	2.833	12.02	14.07	16.01	18.48
8	1.646	2.180	2.733	3.490	13.36	15.51	17.54	20.09
9	2.088	2.700	3.325	4.168	14.68	16.92	19.02	21.67
10	2.558	3.247	3.940	4.865	15.99	18.31	20.48	23.21

- Critical value of chi-square is greater than calculated value of chi-square. Thus, reject null
- Given these data, the researcher is unable to decide whether there is a statistically significant association.
- Critical value of chi-square is smaller than calculated value of chi-square. Thus, keep null hypothesis.
- Critical value of chi-square is smaller than calculated value of chi-square. Thus, reject null hypothesis.
- Critical value of chi-square is greater than calculated value of chi-square. Thus, keep null hypothesis.

Answer :D

Q32: A researcher provided her sample results regarding family monthly income in the form of a 5-number summary as follows: [JD 275, JD 375, JD 475, JD 675, JD 1225] , the results of this sample can be described as?

- a. Standardized
- b. symmetric
- c. Normally distributed
- d. skewed to the right
- e. Skewed to the left.

Answer : D

Q15: In a normally-distributed population, _____% of values are located between 2.5 standard deviations away from the mean in either side?

a. 99.9

b. 95

c. 68

d. 99.7

e. 99

Answer : E

Q7: Which of the following statements is correct regarding measures of central tendency?

- a. Mean is more sensitive to extreme values than median.
- b. Mean, median, and mode are always different regardless of normality.
- c. Median is the same as Q1
- d. A sample can only have one mode
- e. Mean, median, and mode are always the same regardless of normality.

Answer : A

Q24: What is the probability distribution table that should be used to predict the value of a discrete random variable which can assume a value between 0 and infinity?

- a. **Binomial** distribution table
- b. Normal distribution table
- c. Poisson distribution table tabs
- d. Student's t test distribution table
- e. Pearson's Chi-square distribution table

Answer : C

Q30: A researcher studied the association between gender (male or female) and marital status (single, married, divorced, or widow) using Chi-square, the degrees of freedom in this test equal?

a.5

b.4

c.3

d.1

e.2

Answer : C

Q3: The best decision given the following SPSS chi-square output of the relationship between age group (young adult, mid-age adult, older adult) and depression (depressed or not depressed) is to:

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.821 ^a	2	.244
Likelihood Ratio	2.815	2	.245
Linear-by-Linear Association	.832	1	.362
N of Valid Cases	606		

- a. Reject null hypothesis.
- b. There is a statistically significant association between age group and depression.
- c. keep null hypothesis
- d. Accept alternative hypothesis
- e. Missing data.

Answer : C

13. A researcher wanted to see if a growth improvement supplement actually improved the growth of a group of children with growth hormone insufficiency. The supplement was given for a duration of five years then the heights of these children were measured to see if their average was similar to normal height average at their age. The collected data were studied by a T test. What is the degree of freedom of this test ?

- a) 111
- b) 57
- c) 56
- d) 54
- e) 55

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
pdi	56	104.1250	12.58435	1.68165

Answer :E

12. A researcher wanted to study the difference in prevalence of smoking between males and females in a certain population. He used a chi square test to analyse the data as shown in the picture to the side. The degree of freedom in his test is :

- a) 1
- b) 171
- c) 161
- d) 332
- e) 2

		Gender		Total
		Male	Female	
Do you smoke cigarettes?	Nonsmoker	149	148	297
	Past smoker	13	24	37

Answer : A

41. In the previous question, if the researcher's alpha was .01, what's the right statement?

- a) He's 95% confident that there's a statistically significant evidence that the drug is effective
- b) He's 95% confident that there's a statistically significant evidence that the drug is not effective
- c) He should reject null hypothesis
- d) He's 99% confident that the drug is not effective
- e) He's 99% confident that the drug is effective.

Answer : D

46. What's the p value in the picture to the side?

- a) 1.68165
- b) 2.453
- c) 0.00
- d) 7.4951
- e) .017

	N	Mean	Std. Deviation	Std. Error Mean
pdi	56	104.1250	12.58435	1.68165

	Test Value = 100					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
pdi	2.453	55	.017	4.12500	.7549	7.4951

Answer : E

40. A pharmaceutical company asked its researcher to conduct a research to see the effectiveness of a certain drug. The results of the study gave a χ^2_{calc} of 2.03 , if you knew that the degree of freedom is 1, what's the right statement?
- a) Keep null hypothesis
 - b) He's 95% confident that there is a statistically significant evidence that the drug is effective
 - c) He's 99% confident that there is a statistically significant evidence that the drug is not effective (alpha .05)
 - d) Reject null hypothesis
 - e) The drug is effective and should be taken to the next level of trial

Answer : A

44. Which statement regarding reliability is correct?

- a) reliability is increased by increasing sample items
- b) The ability to generalise results is a part of reliability
- c) Stability resembles how much the instrument items are measuring the same attribute
- d) Equivalence is the extent to which scores are similar on two separate administrations of the same instrument
- e) A reliability coefficient of .86 indicates that 86% of variability in test scores is due to error and 14% due to true differences between examinees.

Answer : A

For any feedback, scan the code or click on it.



Corrections from previous versions:

Versions	Question #	Before Correction	After Correction
V1 → V2			
V2 → V3			