Extracting Numbers from Test of Knowledge Results

Event Profile

First Name	JOHN
Last Name	AGENT
Primary County	Lone Star
Additional County	.
Additional County	.
Additional County	.
Additional County	.
Additional County	.
Additional County	.
Type of Plan	Outcome
State Goal	Goal 2 (Agriculture, Natural Resources, Economic and Environmental Education)
TExAS Plan Number	.
TExAS Task Number	.
Type of Event	Group educational event
Event Title	HATCHING CHICKS HALLSBURG PRE & POST
Event Date	21-NOV-2024
Economic Benefit an Explicit Go	No
CEUs Offered	CEUs not offered
Partial Cost Recovery Event	No
Zip Code Where the Event Occurred	76710
Scan Form ID	40728
Batch number assigned by OD	62983
Surveys Returned	35
Total Attendance	48
Survey Response Rate	72.9%

The first page of your output is standard for most results sent by the Office of Data and Accountability (ODA). It contains a profile of your event built mostly with information from your cover sheet. ODA adds the calculation of a **response rate** by comparing the **number of surveys returned** versus **attendance**. You may want to report these three pieces of information.

In this example, 35 survey forms were processed while attendance was listed as 48 on the cover sheet, for a response rate of 72.9%. The number of pre-test surveys are used as a basis for calculating response rate since they usually have a higher quantity than the number of post-tests.

********** OVERALL TEST SCORE COMPARISON **********

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pre Test Score	35	40	100	79.43	16.793
Post Test Score	48	30	100	87.50	16.822
Valid N (listwise)	0				

Percent Change in Mean Scores

		Pct_Chg
a	Percent Change is 1	10.2

Percent Change = ((Post_Mean - Pre_Mean) / Pre_Mean) * 100

		Count	Column Valid N %
Pre Test Score	100	5	14.3%
	90	10	28.6%
	80	10	28.6%
	70	5	14.3%
	60	1	2.9%
	50	1	2.9%
	40	3	8.6%
Post Test Score	100	24	50.0%
	90	8	16.7%
	80	6	12.5%
	70	5	10.4%
	60	2	4.2%
	50	2	4.2%
	30	1	2.1%

The first table (highlighted in blue) shows the mean test score of the pre and post-test. In this example, the mean pre-test score was 79.43 and the mean post-test score was 87.50.

Percent change in the mean scores (highlighted in red) is also calculated for you using the following formula:

Percent Change = ((Post Mean - Pre Mean) / Pre Mean) * 100

In this example, there was a 10.2% increase in the mean post-test score over the mean pre-test score.

The last frequency table (highlighted in green) shows the distribution of pre-test and post-test scores. In this example, 5 participants (14.3%) scored a perfect 100% in the pre-test. That increased to 24 participants (50.0%) on the post-test.

********** SUMMARY OF ANSWERS TO QUESTIONS **********

*** denotes correct answer**

		test			
		Pre		Post	
		Count	Column Valid N %	Count	Column Valid N %
Q1: How long does it take for chicks to hatch?	30 days	1	2.9%	0	0.0%
	21 days *	30	85.7%	46	95.8%
	No Answer	4	11.4%	2	4.2%
Q2: What temperature do we keep the eggs?	100 degrees *	26	74.3%	39	81.3%
	150 degrees	4	11.4%	6	12.5%
	65 degrees	0	0.0%	1	2.1%
	50 degrees	1	2.9%	0	0.0%
	No Answer	4	11.4%	2	4.2%
Q3: What do we use to keep our eggs warm?	Chicken	1	2.9%	0	0.0%
	Incubator *	30	85.7%	46	95.8%
	No Answer	4	11.4%	2	4.2%
Q4: How many eggs can a chicken lay in a year?	100	9	25.7%	2	4.2%
	250 *	18	51.4%	37	77.1%
	10	0	0.0%	3	6.3%
	500	3	8.6%	4	8.3%
	No Answer	5	14.3%	2	4.2%
Q5: Will eggs from a grocery store hatch?	Yes	0	0.0%	1	2.1%
	No *	31	88.6%	46	95.8%
	No Answer	4	11.4%	1	2.1%
Q6: Where do eggs come from?	Store	2	5.7%	0	0.0%
	Pigs	0	0.0%	1	2.1%
	Chickens *	33	94.3%	46	95.8%
	No Answer	0	0.0%	1	2.1%
Q7: What is a female chicken called?	Girl	1	2.9%	2	4.2%
	Female	1	2.9%	0	0.0%
	Hen *	33	94.3%	45	93.8%
	No Answer	0	0.0%	1	2.1%
Q8: What is a male chicken called?	Rooster *	34	97.1%	42	87.5%
	Boy	1	2.9%	1	2.1%
	Male	0	0.0%	4	8.3%
	No Answer	0	0.0%	1	2.1%
Q9: What are things we have to do/have to hatch eggs?	Keep them warm	14	40.0%	9	18.8%
	Turn the eggs	7	20.0%	5	10.4%
	Have water for humidity	2	5.7%	2	4.2%
	All of the above *	12	34.3%	31	64.6%
	No Answer	0	0.0%	1	2.1%
Q10: Are all the chickens the same?	Yes	0	0.0%	1	2.1%
	No *	31	88.6%	42	87.5%
	Maybe	3	8.6%	2	4.2%
	I dont Know	1	2.9%	2	4.2%
	No Answer	0	0.0%	1	2.1%

The table above shows the frequency counts of selected answer choices for each question, pre vs. post. Questions marked with an asterisk (“*”) at the end of an answer choice indicates the correct answer. This table is useful for 1) highlighting positive results of individual test questions and 2) program improvement (i.e., identifying specific topics the program may need to be addressed more effectively).

Looking at Question 5, for example, 31 participants (88.6%) selected the correct answer choice in the pre-test. This increased to 46 participants (95.8%) in the post-test. That is a 7.2 percentage point increase in participants answering correctly after the program (post). Percentage point is the absolute (arithmetic) difference between the post and pre. This is the proper way to report change in percentages. Reporting percent change in percentages is not appropriate.

Sample Statements in Reporting Results:

Overall:

As a result of this experiential learning program, there was an overall 10.2% increase in knowledge among program participants, as a group, about caring for and hatching chicken eggs, as measured by the pre-post multiple-choice test. On almost every topic covered by the program, a greater percentage of participants answered the corresponding test question correctly after the program. A large majority of participants (roughly nine of ten) answered 7 of 10 questions correctly on the post test.

Individual Topics:

The program was particularly successful in increasing knowledge among participants on 1) the specific things that need to be done to hatch chicks and 2) how many eggs a hen can lay in a year (30.3 and 25.7 percent point increase respectively).