Test Data: "Positivity Ratio" Before and After Workshop Testing David Harp Zen and the Art of HarmonicaYogaTM Before (7/5/11 7:30 pm) and After (7/8/11 11 am) Testing Using the "Positivity Ratio Test"

The Positivity Ratio Test was developed by Dr. Barbara Fredrickson to create a way to measure the ratio between the number of positive emotions one has compared to the number of negative emotions one has.

Dr. Fredrickson's work is described in her website, www.positivity ratio.com (the Positivity Ratio Questionnaire is available there, too) and her book "Positivity" provides more detail on her interesting work.

The test consists of 20 questions in the form "What is the most _______ you felt in the past day?"

Ten of the questions feature words indicative of different types of positive emotion (i.e. joyful, or appreciative, or self-assured). Ten questions feature words indicative of negative emotions (i.e. angry, or sad, or fearful).

The subject writes down a number representing the degree to which the emotion described in each question was experienced during the past day, from 0 (not at all) to 4 (Extremely).

The tests were taken anonymously, using "Name of Your Favorite Childhood Pet or First Friend" to identify each student's Before and After Positivity Ratio answer sheets so as to be able to locate and compare each set of Before and After responses.

The numeric responses to the ten negative questions are added, to provide a number from 0 (no negative emotions at all) to 40 (all ten types of negative emotions experienced to an extreme degree). The numeric responses to the ten positive questions are also added.

These results are expressed as a fraction: Sum of Positives divided by Sum of Negatives

Thus if (like "Shep," below) one had a total of 23 positive responses and 10 negative responses, the fraction would be 23/10 and the ration would be 2.3, and if (like "Ginger") one had a total of of 25 positive responses and 19 negative responses, the fraction would be 25/19 and the ration would be 1.316.

The higher the ratio, the more "positive" the test-taker is inferred to be.

The Total Number of Students taking the test at the Beginning of the workshop was 24. One student left due to sickness, two did not complete the "after" test (they left early on the last day).

Of the 21 sets of results, all but one were completely clear (subject "Judy" had multiple "crossouts") as to the responses.

Five subjects had totals for either the total Positive or Total Negative summations that equalled 0. Since these cannot be expressed in ratio form, they are included on the second page with the change in raw numbers noted.

"Standard" (non-zero + or - result) Subjects in order of percentage of change, N = 16.

<u>"Pet's" Name</u>	Before +/-	Ratio	After +/-	Ratio	% After/Before
Shep	23/10	2.3	39/1	39	1696%
Ginger	25/19	1.316	37/3	12.333	937%
Jill	25/7	3.571	30/1	30	840%
Miles	30/6	5	37/1	37	740%
Grover	22/32	.688	32/7	4.571	664%
Pudgy	21/8	2.625	32/2	16	610%
Judy (Cocker Spaniel)	33/14	2.357	28/2	14	594%
Heidi	26/38	.684	31/8	3.875	567%
Paula	12/16	.75	25/9	2.777	370%
Miki	25/7	3.571	35/3	11.666	327%
Andy	24/15	1.6	34/8	4.25	266%
Natalie	32/6	5.333	37/3	12.333	231%
Samantha	30/16	1.875	33/10	3.3	176%
Sheba	33/7	4.712	38/7	5.429	115%
Toby	40/4	10	39/4	9.75	98%
Judy	24/5	4.8	31/9	3.444	72%

Average of After Ratio/Before Ratio = 8303/16 = 518%

Subjects whose total or + or - = 0 at end, change in raw numbers noted, N = 5.

<u>"Pet's" Name</u>	Before +/-	After +/-	Change in +'s	Change in –'s
Wally	34/7	35/0	Up 1	Down 7
Honeybunch	24/1	38/0	Up 14	Down 1
Joey	29/0	39/3	Up 10	Up 3
Marilyn	34/0	39/0	Up 5	
Rusty	22/3	35/0	Up 13	Down 3

Average Change in + and – Raw Scores

For a rough general measure that includes both "Standard" and "Zero Total" subjects, we might look at the average change in raw scores of + and – scores from the before and after tests:

Average Change in Total Positive + Score (Raw Data) from Before to After Test: +7.429

Average Change in Total Negative - Score (Raw Data) from Before to After Test: - 6.666

A Few Comments

The possibility (as shown above) of having a zero for + or – response totals makes comparing ratios difficult! However, from the above examples on this page, it seems clear that the general positivity of these five "Zero Total" subjects improved (higher + scores in the after test, with lower or equal – scores) with the possible exception of Joey, whose + score improved markedly, but whose – score went up as well.

It's also interesting to note that the two subjects whose ratio stayed nearly the same or went down in the after test — Toby from 10 to 9.75, and Judy from 4.8 to 3.444 — were the outliers amongst the group: Toby for his or her perfect starting + score, and Judy for her rise in both + and – scores (similar only to Joey) and her heavy crossing-out. Another outlier, from the raw data if not the ratios, was Judy C.S., whose + score dropped from 33 to 28 while whose – score plunged from 14 to 2.

Again, if this is interesting to you, please visit Dr. Fredrickson's website: www.positivityration.com