Table 1. Percent Correct for Each Statistical Test Before and After Decision Tree is Introduced

Statistical Test	All Results	Before Decision Tree Introduced	After Decision Tree Introduced
One Sample T –Test (A)	N = 57 79% Correct	N = 35 77 % Correct	N = 22 82% Correct
Independent Samples T-Test (B)	N = 57 72% Correct	N = 35 54% Correct	N = 22 100% Correct
Paired Samples T-Test (C)	N = 58 41% Correct	N = 22 0% Correct	N = 36 67% Correct
Chi –Square (D)	N =58 69% Correct	N =22 86% Correct	N =36 58% Correct

Table 2. Level of Confidence for Students Answering Correctly and Incorrectly

Statistical Test	Correct Responses			Incorrect Responses		
	Not Confident (%)	Somewhat Confident (%)	Very Confident (%)	Not Confident (%)	Somewhat Confident (%)	Very Confident (%)
One Sample T –Test (A)	0.0	40.0	60.0	8.3	83.3	8.3
Independent Samples T-Test (B)	9.8	46.3	43.9	0.0	68.8	31.3
Paired Samples T-Test (C)	4.2	45.8	50.0	28.1	65.6	6.3
Chi – Square (D)	2.5	60.0	37.5	23.5	29.4	47.1

Table 3. One Sample T-test (A)

	All Results (%) (N=57)	Before Decision Tree Introduced (%) (N=35)	After Decision Tree Introduced (%) (N= 22)
Number of Variables was included/considered	90	83	100
Number of Variables was correct	75	71	82
Scale of Measurement was included/considered	68	57	86
Scale of Measurement was correct	63	57	73
Independent vs Paired samples was included/considered	14	6	27
Independent vs Paired samples was correct	86	94	73
Difference or relationship was included/considered	5	6	5
Difference or relationship was correct	95	94	95

Table 4.   Independent Samples T-test (B)

	All Results (%) (N=57)	Before Decision Tree Introduced (%) (N= 35)	After Decision Tree Introduced (%) (N=22)
Number of Variables was included/considered	95	91	100
Number of Variables was correct	95	91	100
Scale of Measurement was included/considered	88	83	95
Scale of Measurement was correct	70	71	68
Independent vs Paired samples was included/considered	40	26	64
Independent vs Paired samples was correct	33	17	59
Difference or relationship was included/considered	61	49	82
Difference or relationship was correct	51	37	73

Table 5.   Paired Samples T-test (C)

	All Results (%) (N= 58)	Before Decision Tree Introduced (%) (N= 22)	After Decision Tree Introduced (%) (N= 36)
Number of Variables was included/considered	97	95	97
Number of Variables was correct	90	82	94
Scale of Measurement was included/considered	86	91	83
Scale of Measurement was correct	86	91	83
Independent vs Paired samples was included/considered	59	18	83
Independent vs Paired samples was correct	38	0	61
Difference or relationship was included/considered	33	50	22
Difference or relationship was correct	33	50	22

Table 6.   Chi-square (D)

	All Results (%) (N=58)	Before Decision Tree Introduced (%) (N=22)	After Decision Tree Introduced (%) (N=36)
Number of Variables was included/considered	97	91	100
Number of Variables was correct	97	91	100
Scale of Measurement was included/considered	83	64	94
Scale of Measurement was correct	69	64	72
Independent vs Paired samples was included/considered	14	5	19
Independent vs Paired samples was correct	86	95	81
Difference or relationship was included/considered	62	82	50
Difference or relationship was correct	48	73	33

Table 7.   Post Statistical Tree: Inclusion of elements

Trait Considered	Number of responses	Percent of Completed Trees
Number of Variables	57	93%
Scale of Measurement	57	89%
Sample is Independent or Paired	57	54%
Difference or Relationship	57	53%

Table 8. Post Statistical Tree: Test identified with no wrong information

Statistical Test	Number of responses which included test	Percent of Completed Trees that identified test with no wrong information
One Sample T –Test (A)	49	84%
Independent Samples T-Test (B)	43	88%
Paired Samples T-Test (C)	38	76%
Chi –Square (D)	45	82%