How do I report the statistical procedures used in the American Psychological Association (APA) guidelines?

Mean = M; Standard Deviation=SD

For example: The mean score on the empathy scale was 130 (SD = 10.12).

Percentage

For example: Approximately half (51%) of the sample were female students.

Correlations

For example: The results show that there is a strong correlation between the Ebel ratings and student ability (r=0.88, p=0.03).

Multiple Linear Regression

For example: A multiple linear regression was used to predict student performance based on UKCAT and interview scores. The UKCAT and interview scores did not predict student performance ($\beta = .12$, $t_{(445)} = 0.1.81$, $p = 0.34$). The UKCAT and the interview scores explain a non-significant of the variance in student scores ($R^2 = 0.01$, $F_{(2, 334)} = 0.99$, $p = 0.56$).

T-Tests

For example: There is a statistically significant difference between the empathy scores and gender ($t_{(345)} = 3.2$, $p = 0.01$), with female students receiving higher scores than male students.

There is no a significant difference in the empathy scores between female (M= 110, SD=11.3) and male (M=110.5, SD=10.5) students ($t_{(345)} = 1.66$, $p = 0.11$).

Analysis of Variance (ANOVA)

For example: There is a statistically significant difference between the empathy scores and years of medical school ($F_{(14, 775)} = 4.98$, $p = 0.04$). A Tukey post-hoc test indicates that there is a statistically significant difference between the empty scores and year 1 (M= 125, p=0.041) and year 2 (M= 120, p=0.00) compared to year 5 (M= 90). There is no a significant difference in the empathy scores for year 3 and year 4 of medical education (p=0.21).

Chi-Square Test

For example: There is no a statistically significant association between gender and the pass/fail decision ($\chi 2_{(1, N = 220)} = 0.44$, $p = 0.21$).

Mann-Whitney U Test

For example: A Mann-Whitney U test shows that female students (Mdn= 110) outperform male students (Mdn= 92) on the empathy scale (U= 44.3, p=0.01).

Kruskal-Wallis H Test

For example: A Kruskal-Wallis H test was performed to explore the empathy scores as students progress through medical education, i.e. year 1 to year 5. There is a statistically significant difference between the empathy scores and years of medical school training ($\chi^2_{(2,}$

$_{N = 24)}$ = 4.21, p = 0.02) with a mean rank empathy score of 20 for year 1, 14 for year 2, 12 for year 3, 10 for year 4 and 9 for year 5. The results of the Bonferroni post hoc test show a significant difference between the empathy score and year 5 of medical school.

Cronbach's Alpha (Reliability of test scores)

The Jefferson Scale of Empathy consisted of 20 items with three subscales. The Perspective Taking subscale consisted of 10 items (Alpha = 0.74), the Compassionate Care subscale consisted of 8 items (Alpha = 0. 70), and the Waking in the Patient's Shoes subscale consisted of 2 items (Alpha= 0.58).

Factor analysis

For example, say you have developed a scale with 22 items to measure a specific construct. These items have been subjected to exploratory factor analysis (EFA), assuming the factor analysis approach is suitable with all 22 items. Considering three factors/components have been emerged from the EFA method, the following tables need to be reported:

Table 1. Principle component analysis of the X scale with communalities of each item (N=xx)

Item	Factor 1	Factor 2	Factor 3	h^2	Mean	SD
1	0.65			0.85	4.8	1.2
2	0.63			0.80	4.3	1.1
3	0.62			0.78	4.6	1.0
4	0.60			0.76	4.9	0.5
5	0.59			0.73	4.7	0.2
6	0.58			0.72	4.6	0.3
7	0.54			0.70	4.2	0.7
8	0.50			0.69	4.1	0.6
9	0.48			0.60	4.0	0.4
10	0.44			0.64	4.8	0.4
11		0.60		0.71	4.9	0.9
12		0.56		0.70	4.7	1.3
13		0.52		0.69	4.1	1.5
14		0.51		0.58	4.0	1.1
15		0.44		0.52	3.9	1.9
16		0.40		0.51	3.0	1.0
17		0.33		0.52	4.1	0.9
18			0.51	0.45	4.9	1.7
19			0.50	0.44	4.0	1.4
20			0.44	0.42	4.8	1.3
21			0.32	0.40	4.7	1.2
22			0.30	0.64	3.9	1.2
% Variance	44.1	17.1	11.2			

Note: Factor loading less than 0.30 were removed

Table 2. Descriptive statistics for the three X factors (N = xx)

	No. Items	Cronbach's alpha	M (SD)	Skewness	Kurtosis
Factor 1	10	0.80	4.1 (1.1)	0.45	0.39
Factor 2	7	0.75	4.0 (0.8)	0.44	0.44
Factor 3	5	0.69	4.5 (1.2)	0.61	0.11

Note: Factors should be named/ labelled. For example, the items that have been loaded in Factor 1 cab be named/labelled as xxx.

Note: All values provided are dummy.