What to include when writing up one-way ANOVA results

1. Remind the reader of the type of test you used and the comparison that was made. The IV and DV do not need to be specifically identified as such but those variables need to be included.

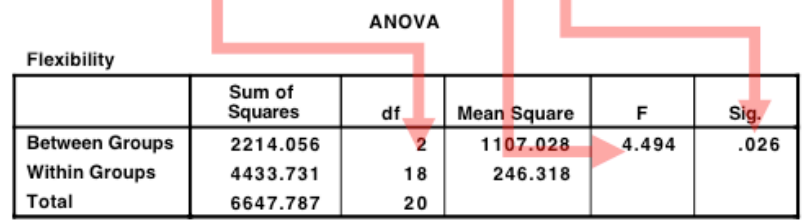
   Example:
   "ANOVA was conducted to compare the effect of exercise on hamstring flexibility. Comparisons were made between no exercise, moderate exercise, and intense exercise groups."

2. Report significant (or non-significant) of the main effects test.

Example:
"There was a significant difference in hamstring flexibility among the types of exercises at the $p < .05$ level for the three groups $F(2,18) = 4.49$, $p = .026$."

Finding the information on your SPSS printout

:
"There was a significant different in hamstring flexibility between the remembered at the $p<.05$ level for the three groups $F(2,18) = 4.49$, $p = .026$."



ANOVA

Flexibility

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2214.056	2	1107.028	4.494	.026
Within Groups	4433.731	18	246.318		
Total	6647.787	20			

Post Hoc Tests

3. Report the results of post hoc analysis ONLY IF THE MAIN EFFECTS RESULTS ARE SIGNIFICANT. Descriptive statistics only need to be reported in post hoc comparisons that are significant. Those comparisons need to include the nature of the difference (i.e., which variable was higher/lower).

   Example:
   "LSD post hoc test results revealed that the no exercise group had significantly lower hamstring flexibility ($M = 34.29$, $SD = 13.22$) compared to the intense exercise group ($M = 58.22$, $SD = 22.64$). There was no significant difference in hamstring flexibility between the moderate exercise group and both the no exercise and the intense exercise groups"

Finding the information on your SPSS printout

"LSD post hoc test results revealed that the no exercise group had significantly lower hamstring flexibility (*M* = 34.29, *SD* = 13.22) compared to the intense exercise group (*M* = 58.22, *SD* = 22.64). There was no significant difference in hamstring flexibility between the moderate exercise group and both the no exercise and the intense exercise groups"

Descriptives

Flexibility

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
None	9	34.2889	13.21935	4.40645	24.1276	44.4502	22.00	63.30
Moderate	6	49.8333	9.73626	3.97481	39.6158	60.0509	38.00	63.10
Intense	6	58.2167	22.63514	9.24076	34.4625	81.9708	33.10	91.90
Total	21	45.5667	18.23155	3.97845	37.2678	53.8656	22.00	91.90

all together now…

"ANOVA was conducted to compare the effect of exercise on hamstring flexibility. Comparisons were made among no exercise, moderate exercise, and intense exercise groups. There was a significant difference in hamstring flexibility among the types of exercises at the $p < .05$ level for the three groups $F(2,18) = 4.49$, $p = .026$. LSD post hoc test results revealed that the no exercise group had significantly lower hamstring flexibility ($M = 34.29$, $SD = 13.22$) compared to the intense exercise group ($M = 58.22$, $SD = 22.64$). There was no significant difference in hamstring flexibility between the moderate exercise group and both the no exercise and the intense exercise groups."