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EDG 500 Educational Research and Statistic

Alliance University

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Chapter 11 step by step

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .801 ^a | .641 | .582 | .54818 |

a. Predictors: (Constant), HSGPA

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 3.226 | 1 | 3.226 | 10.735 | .017 ^b |
| | Residual | 1.803 | 6 | .300 | | |
| | Total | 5.029 | 7 | | | |

a. Dependent Variable: CGPA

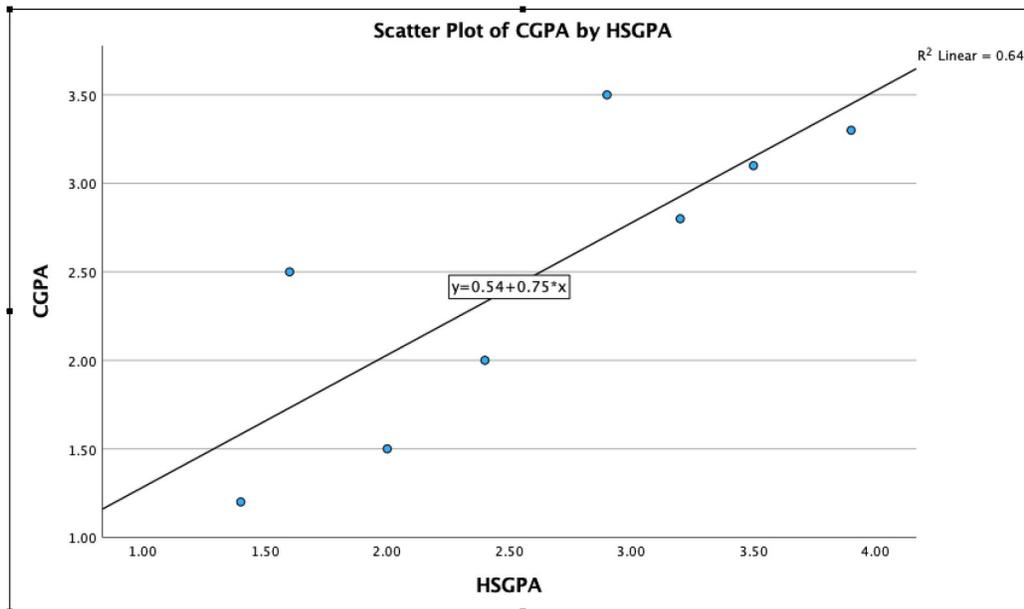
b. Predictors: (Constant), HSGPA

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .537 | .626 | | .858 | .424 |
| | HSGPA | .746 | .228 | .801 | 3.276 | .017 |

a. Dependent Variable: CGPA

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Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .801 ^a | 0.641 | 0.582 | 0.54818 |

a. Predictors: (Constant), HSGPA

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 1190.123 | 1 | 1190.123 | 16.579 | .004 ^b |
| | Residual | 574.277 | 8 | 71.785 | | |
| | Total | 1764.400 | 9 | | | |

a. Dependent Variable: Typing Score

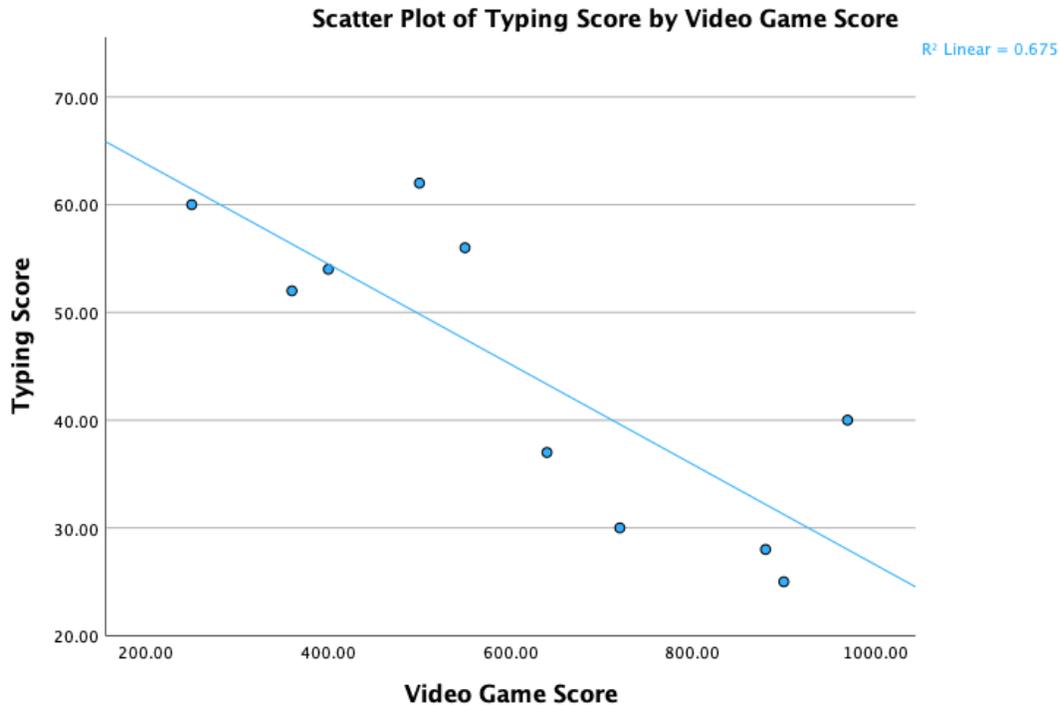
b. Predictors: (Constant), Video Games Scores Average

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|----------------------------|-----------------------------|------------|---------------------------|--------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 73.075 | 7.535 | | 9.698 | 0.000 |
| | Video Games Scores Average | -0.046 | 0.011 | -0.821 | -4.072 | 0.004 |

a. Dependent Variable: Typing Score

b. Predictors: (Constant), Video Games Scores Average



- a. Is the relationship statistically significant? Yes
 - b. Is the relationship direct or inverse? Inverse
 - c. Is the relationship perfect? No
 - d. Is the relationship linear? Yes
 - e. What percentage of the variation in Typing Score is explained by the variation in the Video Game Score Averages? 67.5%
5. Given the regression equation, how many words per minute would a person type who possessed a game score average of 570? For a video game score average of 570, our equation $\text{Typing} = 73.08 + (-0.05 \times 570)$ predicts a person would type 44.58 words per minute.