**Assignment 4**

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PSYC 6380: Multivariate Statistics

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**Part 1**

**Questions**

***1***

W = 0.97; *p* = .042

Skewness: 0.07; Kurtosis: -0.83

***2***

Statistic: 58.00; *p* < .001

Experience: Yes; SD = 16.22

Experience: No; SD = 14.22

***3***

**Figure 1**

*Histogram of Resilience Scores*

*Chart, histogram

Description automatically generated*

**Figure 2**

*QQ Plot of Resilience*

*Chart, line chart

Description automatically generated*

***4***

*u* = 2150, *p* < .001

difference in location: 24.00, *95% CIs* [17.00, 30.00]

Inspection of the 95% confidence intervals around the difference in location suggests that the median of all population-level differences in psychological resilience between individuals who encountered a near-death experience versus those who did not may plausibly (but not certainly) range from a difference of 17 points to a difference of 30 points on the 100-point psychological resilience rating scale. Population-level differences outside of this range are theoretically possible but are relatively less probable.

***5***

Mann-Whitney r’ effect size = -0.62

Mann-Whitney z-score = -6.21

The Mann-Whitney r’ conceptually represents a correlation coefficient—the degree of association between psychological resilience and whether people had a near-death experience. In this case, it seems that people who experienced a near-death experience were more likely to be resilient and that people who have not experienced a near-death experience tend to be less psychologically resilient.