Chapter 4

David Moser

Omega Graduate School

March 2025

Joshua Reichard, DPhil, Ph.D., EdS, CCS

# Introduction

Adjunct faculty have experienced increased levels of work stress in higher education (Varga & Denniston, 2022). This study examined the potential relationship between adjunct faculty’s need for recovery from work and their practice of spiritual rest. This relationship has not received adequate study among adjunct faculty. Studying the potential relationship between these variables could help adjunct faculty mitigate work-related stress.

Work-related stress in the U.S. has been at an all-time high, with nearly 60% reporting negative impacts of stress (APA, 2021). Economic and technological factors, along with the pressures of capitalism, have contributed to employee burnout (Marsh et al., 2022). In higher education, adjunct faculty face additional stress due to low pay, job insecurity, and blurred work-life boundaries (Han et al., 2020). Existing work engagement models, such as the Job-Demands Resources (JD-R) model and Job-Crafting Theory, have not fully accounted for personal resources like spirituality, which research suggests can buffer against burnout. Given the high stress levels among adjunct faculty, integrating spiritual resources into work engagement strategies could provide a valuable tool for resilience and well-being.

The problem was that adjunct faculty in online higher education institutions experience a high need for recovery from work and lack adequate spiritual rest (Varga & Denniston, 2022; Han et al., 2020; Bennet, 2003 ; Walker & McPhail, 2009 ; Chickering, Dalton & Stamm, 2015 ). The purpose of this study examined the relationship between spiritual rest and the need for recovery from work among adjunct faculty in online higher education institutions.

A summary of the data collection process used in the study is provided. Adjunct faculty demographic information, spiritual rest practices, and the degree of need for recovery were made known through the data collection process for correlational testing. The descriptive statistics summarized the data analysis and results, including the means, standard deviations, ranges, distributions, and variances). A summary of the findings addressed the research questions and hypotheses. Statistical procedures were conducted using PSSR (Practical Statistics for Social Research), statistical analysis software developed by Joshua D. Reichard for Omega Graduate School based on the jStat library.

# Deviations in Data Collection and Preparation

There were deviations from the proposed data collection plan. The researcher modified the hypotheses to fit the instrument’s levels of measurement. The original Hypotheses H02, Ha2, H03, and Ha3 were restructured from correlational to quasi-experimental due to the instrument measurement levels. The original Hypotheses H04, Ha4, H06, and Ha6 were eliminated from the study because the instrument did not collect data on faculty retirement status. However, the original Hypothesis H01 and Ha1 have not changed; therefore, the overall study design remained correlational. The hypotheses were restructured to suit the instrument as opposed to fit the resulting data. The original research questions were also revised to align with the restructured hypotheses. ANOVA tests were run to address Hypotheses H02 through H07.

Additional deviations from the proposed data collection plan included using Google Forms instead of Survio to deliver the instrument to participants, and data was collected from October 1, 2024, to December 6, 2024, instead of during the summer months as initially planned. The data collection method was changed from convenience to snowball and purposive sampling. The researcher requested that the study survey be shared with other adjunct faculty to gather more participants. Due to the limited sample size, the researcher included hybrid and in-person course delivery formats in the study rather than excluding these participants as initially planned.

# Results

The target population for this study was adjunct faculty teaching in online higher education institutions within the United States of America. Forty-nine participants completed the survey (see Appendix D) through a snowball sampling method conducted through online social media platforms (e.g., Facebook and LinkedIn). A recruitment flyer (see Appendix C) and an informed consent letter (see Appendix B) were provided to participants through online social media links and emails. Participants were asked six demographic questions concerning age, gender, work status, academic rank, course delivery format, and length of employment.

## Spiritual Rest Sub-scale

After the forty-nine participants consented to participate in the study, the Spiritual Engagement Instrument (SpEI) Rest sub-scale was completed using five questions on a six-point Likert scale ranging from strongly disagree to strongly agree. Spiritual rest sub-scale measured a participant’s commitment to regularly stop work for the purpose of reflecting on the Divine (Roof et al., 2017). Data was collected from October 1, 2024, to December 6, 2024. All participants completed 100% of this instrument.

## Need For Recovery Scale

The same forty-nine participants completed the three-question Need for Recovery (NFR) instrument measured on a five-point Likert scale ranging from never to always. The NFR instrument measured employee exhaustion and the need for recovery from work (Stevens et al., 2019). Data was collected from October 1, 2024, to December 6, 2024. All participants completed 100% of this instrument.

## Assumptions Tests

Assumption tests were conducted on the spiritual rest sub-scores and the need for recovery scores to test for normality and equal variances. Specific assumptions tests included skewness, kurtosis, Kolmogorov-Smirnov, and Levene’s tests. Tables and graphs were included as appropriate to illustrate the findings.

### Spiritual Rest Sub-scores

The spiritual rest sub-scores were left-skewed with a negative kurtosis, indicating that most values were on the higher end of the scale. The tests for normality were violated, with values concentrated on the higher end, creating a ceiling effect (see Table 2).

#### Skewness and Kurtosis

The spiritual rest sub-score distribution was left-skewed with a negative value (see Table 2). The left tail (smaller values) was longer or fatter than the right tail (larger values). The distribution suggested that the majority of the data were concentrated on the right side of the distribution. In this case, most observations were above the mean, 59% above the mean, with a few small values pulling the mean to the left of the median. This sample had a negative excess kurtosis value (see Table 2). The distribution had lighter tails than a normal distribution. Lighter tails indicate fewer extreme values (outliers) than expected in a normal distribution. Distributions with negative excess kurtosis are known as platykurtic, representing a flatter and broader distribution than normal.

**Table 2**

*Skewness and Kurtosis*

|  |  |
| --- | --- |
| Measure | Value |
| Skewness | -1.15 |
| Excess Kurtosis | -2.67 |

The sample did not visually appear to be normally distributed. This sample had 29 values above the mean and 20 below, supporting the large right-skew distribution.

#### Normality Tests

The Kolmogorov-Smirnov statistic was applied to compare the distribution with a theoretical distribution function, assumed to be normal. The maximum absolute difference is the KS statistic. This statistic assessed the normality of the data. Higher KS values, usually > 0.05, suggested the data deviates from normal distribution. The spiritual rest sub-score KS statistic was > 0.05 (see Table 3), suggesting a significant departure from normality, which aligns with the skewness and flattened tails.

**Table 3**

*Kolmogorov-Smirnov Test*

|  |  |
| --- | --- |
| Statistic | Value |
| KS Statistic | 0.17 |

*Note: Represents a single sample KS test against an assumed normal distribution.*

The spiritual rest sub-scores data violated the normality assumptions. The values were left-skewed and platykurtic, clustered toward higher values with a long, left-tail and fewer extreme outliers. The KS statistic confirmed non-normality.

### Need For Recovery Scores

The need for recovery scores was nearly distributed symmetrically with a slight right skew. The tests for normality were also close to normal, with a mild deviation.

#### Skewness and Kurtosis

The need for recovery was slightly right-skewed (see Table 6). A value close to 0 suggests a symmetric distribution, so the slight right-skew was nearly symmetrical. The need for recovery kurtosis was also negative (see Table 6). The distribution suggested a platykurtic distribution, which is very flat and broad with light tails. The kurtosis value indicates a wide data spread with very few extreme values or outliers.

**Table 6**

*Skewness and Kurtosis*

|  |  |
| --- | --- |
| Measure | Value |
| Skewness | 0.13 |
| Excess Kurtosis | -3.79 |

The distribution was skewed to the right; the right tail (larger values) was longer or fatter than the left tail (smaller values). Generally, this indicated that most of the data concentrated on the distribution’s left side. Most observations tended to be below the mean, with a few large values pulling the mean to the right of the median. However, this sample had 23 values above the mean and 26 values below the mean. The distribution indicated a near-symmetrical distribution, given the small sample size. The sample visually appeared to be close to a normal distribution.

#### Normality Tests

The Kolmogorov-Smirnov statistic was applied to this sample. The KS statistic represented the maximum absolute difference in distribution to support the determination of normal distribution. The need for recovery KS statistic displayed a mild deviation from normality (see Table 7).

**Table 7**

*Kolmogorov-Smirnov Test*

|  |  |
| --- | --- |
| Statistic | Value |
| KS Statistic | 0.1174 |

The need for recovery data wass almost symmetric with minimal skew. The extremely flat shape suggested that the distribution has light tails and fewer extreme values. Based on the SW statistic and the relatively low KS value, the normality assumption mostly held. However, the flatness might have affected statistical tests sensitive to tail behavior, such as the ANOVA, which this study applied to test for differences between groups.

### Tests for Equal Variances

The Levene test checked for equal variance in the samples. Levene’s test was therefore used to test the null hypothesis that the samples to be compared come from a population with the same variance. If the *p*-value for the Levene test was > 0.05, then the variances were not significantly different from each other, and the homogeneity assumption of the variance was met. Levene’s test was used because it has been very stable against violations of the normal distribution (Creswell & Creswell, 2009). Table 9 showed Levene’s *p*-value was > 0.05; therefore, homogeneous variance could be assumed based on the available sample data. Thus, the null hypothesis was maintained, and there was no difference between the variances of the two groups.

**Table 9**

*Levene’s and F-test*

|  |  |
| --- | --- |
| Normality Statistic | Result |
| Levene’s *F*-Statistic | 0.29 |
| Levene’s *p*-Value | 0.59 |
| F-Test *p*-Value | 0.98 |
| F-Test *F*-Statistic | 1.81 |

Levene’s Test for equal variances was not statistically significant at the (*p* < 0.05) alpha level. The *F*-Test for equal variances was not statistically significant at the (*p* < 0.05) alpha level. In this sample, the *F*-test *p*-value was > 0.05. Thus, the null hypothesis could not be rejected.

## Participant Demographics

Participants were asked six demographic questions concerning age, gender, work status, academic rank, course delivery format, and length of employment. About half of the participants worked part-time at one college, whereas 10% of the participants worked at three or more colleges (see Table 10). Most participants, 77.6%, worked in an online-only environment. Most participants had five or less years of employment as an adjunct faculty.

**Table 10**

*Faculty Demographics*

|  |  |  |
| --- | --- | --- |
| Demographic Variable | *f* | % |
| Work Status |  |  |
| PT at 1 College | 25 | 51.0 |
| PT at 2-3 Colleges | 17 | 34.7 |
| PT at 3+ Colleges | 5 | 10.2 |
| Full Time | 2 | 4.1 |
| Total | 49 | 100.0 |
| Course Delivery Format |  |  |
| Online only | 38 | 77.6 |
| Hybrid | 8 | 16.3 |
| In-Person | 3 | 6.1 |
| Total | 49 | 100.0 |
| Length of Employment |  |  |
| < 5 Years | 27 | 55.1 |
| 5-10 Years | 10 | 20.4 |
| 10-20 Years | 11 | 22.4 |
| 20+ Years | 1 | 2.1 |
| Total | 49 | 100.0 |

## Descriptive Statistics

Data collected through the Google Form survey were analyzed using the PSSR (Practical Statistics for Social Research), statistical analysis software for the SpEI spiritual rest, and the need for recovery. Descriptive statistics were computed for SpEI and NFR to include the mean, median, mode, and standard deviation (see Table 11).

**Table 11**

*Spiritual Rest (SpEI) and Need for Recovery (NFR) Descriptive Statistics*

|  |  |  |  |
| --- | --- | --- | --- |
| Measure | *SpEI* |  | *NFR* |
| n | 49.00 |  | 49.0 |
| Mean (x̄) | 77.08 |  | 61.09 |
| Median | 86.67 |  | 60.0 |
| Mode | 100.0 |  | 66.67 |
| Standard Deviation | 23.98 |  | 17.81 |
| Max | 100.0 |  | 100.0 |
| Min | 16.67 |  | 26.67 |
| Variance | 574.81 |  | 317.32 |

### Spiritual Rest Descriptives

The frequency distribution in the histogram below depicted a high concentration in the 89 to 100 range, which aligned with the skewness tests (see Figure 1). A ceiling effect was observed where nine scores were at the maximum 100 value and 14 scores above 90. The box-and-whisker plot showed a data distribution closer to the upper quartile (see Figure 2).

**Figure 1**

*Spiritual Rest Histogram*

A graph with numbers and a bar

AI-generated content may be incorrect.

**Figure 2**

*Spiritual Rest Box and Whisker Plot*

A diagram of a diagram

AI-generated content may be incorrect.

*Note:* Min: 16.67, Q1: 66.67, Median: 86.67, Q3: 86.67, Max: 100.00

### Need For Recovery Descriptives

The frequency distribution in the histogram below depicts many participants in the middle ranges with fewer extremes (see Figure 3). The box-and-whisker plot shows a concentration around the middle range (see Figure 4).

**Figure 3**

*Need for Recovery Histogram*

A graph with numbers and a bar

AI-generated content may be incorrect.

**Figure 4**

*Need For Recovery Scores Box and Whisker Plot*

A black line with a square

AI-generated content may be incorrect.

*Note:* Min: 26.67, Q1: 46.67, Median: 60.00, Q3: 60, Max: 100.00

# Quantitative Results

Sampling for the study consisted of 49 adjunct faculty from online social media networks. Snowball sampling was conducted by posting the survey and instrument questions to social media network groups for adjunct faculty on LinkedIn and FaceBook. Participants were asked to share the survey with any fellow faculty members. Purposive sampling was conducted to ensure the participants fit the exclusion and inclusion criteria. The selection of 49 participants was based on the sample size calculation in PSSR.

Correlational analyses were conducted to find Spearman’s Rank Correlation utilizing the PSSR (Practical Statistics for Social Research) statistical analysis software. The Spearman’s Rank Correlation was chosen to assess the relationship between spiritual rest and need for recovery scores, as it measures the strength and direction of a monotonic relationship between two variables, even when data are not normally distributed (Creswell & Creswell, 2009). The variables used for analysis were participants’ spiritual rest (SpEI) and the need for recovery scores (NFR).

In addition to the correlational hypothesis, this study created related hypotheses indirectly related to the Research Question using ANOVA testing for differences. Analyses of variance were conducted to find any significant difference between various groupings of adjunct faculty and the variables of spiritual rest and need for recovery scores.

## Results of Spearman’s Rank Procedure

The Spearman’s Rank Correlation Coefficient (ρ) indicated a nonexistent negative relationship between the two variables (see Table 12). The *p*-value was far above the requirement for significance (see Table 12). The *p*-value suggested that there was no evidence to reject the null hypothesis. The effect size (r²) indicated an extremely small effect (see Table 12). The small effect size meant the spiritual rest scores could not explain the variability in need for recovery scores.

The results indicated no statistically significant relationship between spiritual rest and need for recovery. Despite the small negative correlation, the effect size was so minimal that it lacked practical significance.

**Table 12**

*Spearman’s Rank Procedure*

|  |  |
| --- | --- |
| Measure | Value |
| Group 1 (Spiritual Rest Sub-scores) Mean | 77.08 |
| Group 2 (Need for Recovery Scores) Mean | 61.09 |
| Spearman’s Rank (ρ) | -0.02 |
| *p*-Value | 0.9 |
| Effect size (r²) | 0.0004 |

A scatterplot (see Figure 5) illustrated a near-random distribution of points. No discernible pattern or relationship existed between the two variables.

**Figure 5**

*Scatterplot*

A black dotted line with black dots

AI-generated content may be incorrect.

### Hypotheses 1

The null hypothesis could not be rejected. The probability that the relationship between spiritual rest sub-scores and need for recovery scores was not statistically significant at a 95% confidence level (*p* = 0.9). The findings suggested that spiritual rest and need for recovery scores were not significantly correlated. The results indicated that higher or lower spiritual rest scores did not meaningfully predict the need for recovery scores.

## Results of ANOVA Procedures

This section highlights the ANOVA testing procedures conducted with the data to determine variances within and between different groups identified in the demographic questions of the survey.

### Course Delivery Format and Spiritual Rest ANOVA

An ANOVA (Analysis of Variance) procedure was applied to the sample to examine whether a statistically significant difference existed in spiritual rest scores between the means of three unrelated groups. The groups examined were course delivery format online, fully in-person, and hybrid (see Table 13).

**Table 13**

*Dependent Variable Summary by Independent Variable Groups*

|  |  |  |
| --- | --- | --- |
| Group | n | Mean(x̄) |
| #1 - online | 38 | 80.44 |
| #2 - Fully In Person | 3 | 53.33 |
| #3 - Hybrid | 8 | 70.0 |

Table 13 showed that faculty who taught online had the **highest mean score**, followed by hybrid instructors, while fully in-person instructors had the **lowest mean score**.

#### ANOVA Statistics

The *F*-Statistic was not large enough to indicate variability between the groups (see Table 14). The *p*-value was > 0.05, meaning the results were not statistically significant; thus, the null hypothesis could not be rejected. The Omega Squared (ω²) indicated a variance of about 5% in spiritual rest scores, which could be explained by the course delivery format.

**Table 14**

*ANOVA Results Statistics*

|  |  |
| --- | --- |
| Statistic | Value |
| *F*-Statistic | 2.31 |
| *p*-Value | 0.11 |
| Omega Squared (ω²) | 0.05 |
| LSD (post hoc) | 0.11 |

Together, these ANOVA results indicated no significant difference in spiritual rest scores between online, in-person, and hybrid faculty.

Pairwise comparisons for significant differences were used to measure the differences between and within groups (see Table 15). Table 16 represented the differences in spiritual rest scores between and within groups of the three course delivery formats.

**Table 15**

*Pairwise Comparisons for Significant Differences*

|  |  |
| --- | --- |
| Group A | Group B |
| online | Fully In Person |
| Fully In Person | Hybrid |

**Table 16**

*ANOVA Groups Effects*

|  |  |  |
| --- | --- | --- |
| Measure | Within Group Effects | Between Group Effects |
| Sum of Squares | 25069.77 | 2521.31 |
| Mean Square | 544.99 | 1260.67 |
| Degrees of Freedom | 46.0 | 2.0 |

The pairwise analysis showed small variability between groups. Any differences in variability were more likely individual differences rather than between-group differences.

### Course Delivery Format & Need for Recovery ANOVA

An ANOVA (Analysis of Variance) procedure was applied to the sample to examine whether a statistically significant difference in need for recovery scores exists between the means of three unrelated groups. The groups examined were course delivery format online, fully in-person, and hybrid (see Table 17).

**Table 17**

*Dependent Variable Summary by Independent Variable Groups*

|  |  |  |
| --- | --- | --- |
| Group | n | Mean(x̄) |
| #1 - online | 38 | 60.70 |
| #2 - Fully In Person | 3 | 77.78 |
| #3 - Hybrid | 8 | 56.67 |

#### ANOVA Statistics

The *F*-Statistic indicated no variability between the groups (see Table 18). The *p*-value showed that the difference test was not statistically significant; thus, the null hypothesis could not be rejected. The Omega Squared (ω²) indicated a variance of about 2% in the need for recovery scores, which could be explained by the course delivery format.

**Table 18**

*ANOVA Results Statistics*

|  |  |
| --- | --- |
| Statistic | Value |
| *F*-Statistic | 1.61 |
| *p*-Value | 0.21 |
| Omega Squared (ω²) | 0.02 |
| LSD (post hoc) | 0.21 |

Together, these ANOVA results indicated no significant difference in the need for recovery scores between online, in-person, and hybrid faculty.

Pairwise comparisons for significant differences were used to measure the differences between and within groups (see Table 19). Table 20 represented the differences in the need for recovery scores between and within groups of the three course delivery formats.

**Table 19**

*Pairwise Comparisons for Significant Differences*

|  |  |
| --- | --- |
| Group A | Group B |
| online | Fully In Person |
| Fully In Person | Hybrid |

**Table 20**

*ANOVA Groups Effects*

|  |  |  |
| --- | --- | --- |
| Measure | Within Group Effects | Between Group Effects |
| Sum of Squares | 14233.56 | 997.86 |
| Mean Square | 309.43 | 498.93 |
| Degrees of Freedom | 46.0 | 2.0 |

The pairwise analysis showed small variability between groups. Any differences in variability were more likely individual differences rather than between-group differences.

### Length of Employment & Spiritual Rest ANOVA

An Analysis of Variance (ANOVA) procedure was applied to the sample to determine whether a statistically significant difference exists in spiritual rest scores between the means of four unrelated groups. Groups examined were the length of employment by < 5 years, 5-10 years, 10-20 years, and 20+ years (see Table 21).

**Table 21**

*Dependent Variable Summary by Independent Variable Groups*

|  |  |  |
| --- | --- | --- |
| Group | n | Mean(x̄) |
| #1 - < 5 yrs | 27 | 76.67 |
| #2 - 10-20 yrs | 11 | 80.91 |
| #3 - 5-10 yrs | 10 | 74.33 |
| #4 - 20+ Years | 1 | 73.33 |

Faculty with 10–20 years of employment had the highest mean score, while those with 20+ years of employment had the lowest mean score.

#### ANOVA Statistics

The very low *F*-Statistic indicated almost no variability between group means relative to within-group variability (see Table 22). The very high *p*-value did not indicate a statistically significant result. The null hypothesis could not be rejected. The negative Omega Squared (ω²) value confirmed no effect.

**Table 22**

*ANOVA Results Statistics*

|  |  |
| --- | --- |
| Statistic | Value |
| *F*-Statistic | 0.14 |
| *p*-Value | 0.94 |
| Omega Squared (ω²) | -0.06 |
| LSD (post hoc) | 0.94 |

Together, these ANOVA results indicated no significant difference in spiritual rest scores between length of employment among adjunct faculty.

Pairwise comparisons for significant differences were used to measure the differences between and within groups. Table 25 represented the differences in spiritual rest scores between and within the groups of the length of employment among adjunct faculty. The pairwise analysis showed very small variability between groups. Any differences in variability were more likely to result from individual differences. This result aligned with the low *F*-statistic.

**Table 25**

*ANOVA Groups Effects*

|  |  |  |
| --- | --- | --- |
| Measure | Within Group Effects | Between Group Effects |
| Sum of Squares | 27335.74 | 255.34 |
| Mean Square | 607.46 | 85.11 |
| Degrees of Freedom | 45.0 | 3.0 |

### Length of Employment & Need for Recovery ANOVA

An ANOVA (Analysis of Variance) procedure was applied to the sample to examine whether a statistically significant difference exists between the means of four unrelated length of employment groups. The groups examined were < 5 years, 5-10 years, 10-20 years, and 20+ years of employment (see Table 26).

**Table 26**

*Dependent Variable Summary by Independent Variable Groups*

|  |  |  |
| --- | --- | --- |
| Group | n | Mean(x̄) |
| #1 - < 5 yrs | 27 | 62.72 |
| #2 - 5-10 yrs | 10 | 55.33 |
| #3 - 10-20 yrs | 11 | 64.24 |
| #4 - 20+ Years | 1 | 40.0 |

Table 26 showed that faculty with 10-20 years of employment had the highest mean score.

#### ANOVA Statistics

The *F*-Statistic was not large enough to indicate strong variability but suggested only small differences between the groups (see Table 27). The *p*-value indicated no statistically significant difference between the groups. Thus, the null hypothesis could not be rejected.

**Table 27**

*ANOVA Results Statistics*

|  |  |
| --- | --- |
| Statistic | Value |
| *F*-Statistic | 1.0 |
| *p*-Value | 0.4 |
| Omega Squared (ω²) | 0.0003 |
| LSD (post hoc) | 0.4 |

Pairwise comparisons for significant differences were used to measure the differences between and within groups (see Table 28).

**Table 28**

*Pairwise Comparisons for Significant Differences*

|  |  |
| --- | --- |
| Group A | Group B |
| < 5 yrs | 20+ Years |
| 10-20 yrs | 20+ Years |
| 5-10 yrs | 20+ Years |

The between-group variability indicated differences between the length of employment groups (see Table 29). The within-group variability indicated high individual differences within each group.

**Table 29**

*ANOVA Groups Effects*

|  |  |  |
| --- | --- | --- |
| Measure | Within Group Effects | Between Group Effects |
| Sum of Squares | 14274.54 | 956.88 |
| Mean Square | 317.21 | 318.96 |
| Degrees of Freedom | 45.0 | 3.0 |

The pairwise analysis showed a non-significant result since the within-group variability is much larger than the between-group variability.

### Current Work Status & Spiritual Rest ANOVA

An ANOVA (Analysis of Variance) procedure was applied to the sample to examine whether a statistically significant difference existed between the means of four unrelated groups of current work status among adjunct faculty (see Table 30).

**Table 30**

*Dependent Variable Summary by Independent Variable Groups*

|  |  |  |
| --- | --- | --- |
| Group | n | Mean(x̄) |
| #1 - PT @ 2-3 | 17 | 74.12 |
| #2 - PT @ 1 | 25 | 78.53 |
| #3 - PT @ 3+ | 5 | 72.67 |
| #4 - Full time | 2 | 95.0 |

Table 30 showed the highest mean for full-time work status, though this was likely due to the low number of full-time participants. The remaining three groups showed similar mean scores.

#### ANOVA Statistics

The *F*-Statistic suggested low variability between the groups (see Table 31). The *p*-value was > 0.05, meaning the results were not statistically significant. Thus, the null hypothesis could not be rejected. The negative Omega Squared (ω²) indicated that work status did not explain variance in spiritual rest among the groups.

**Table 31**

*ANOVA Results Statistics*

|  |  |
| --- | --- |
| Statistic | Value |
| *F*-Statistic | 0.53 |
| *p*-Value | 0.66 |
| Omega Squared (ω²) | -0.03 |
| LSD (post hoc) | 0.66 |

These ANOVA results indicated no significant difference in spiritual rest scores between current work status among adjunct faculty.

Pairwise comparisons for significant differences were used to measure the differences between and within groups (see Table 32). The individual differences within groups were much greater than the differences between groups. The *p*-value did not show a significant difference.

**Table 32**

*ANOVA Groups Effects*

|  |  |  |
| --- | --- | --- |
| Measure | Within Group Effects | Between Group Effects |
| Sum of Squares | 26649.35 | 941.73 |
| Mean Square | 592.21 | 313.91 |
| Degrees of Freedom | 45.0 | 3.0 |

### Current Work Status & Need for Recovery ANOVA

An ANOVA (Analysis of Variance) procedure was applied to the sample to examine whether a statistically significant difference exists between the means of four unrelated groups of current work status among adjunct faculty (see Table 33).

**Table 33**

*Dependent Variable Summary by Independent Variable Groups*

|  |  |  |
| --- | --- | --- |
| Group | n | Mean(x̄) |
| #1 - PT at 2-3 | 17 | 65.88 |
| #2 - PT at 1 | 25 | 58.93 |
| #3 - PT at 3+ | 5 | 57.33 |
| #4 - Full time | 2 | 56.67 |

Table 33 showed that faculty who worked part-time at 2-3 universities had the highest mean score, and those who worked full-time had the lowest mean score.

#### ANOVA Statistics

The *F*-Statistic indicated no variability between the groups (see Table 34). The *p*-value was > 0.05, meaning the results were not statistically significant. Thus, the null hypothesis could not be rejected. The negative Omega Squared (ω²) value confirmed no effect.

**Table 34**

*ANOVA Results Statistics*

|  |  |
| --- | --- |
| Statistic | Value |
| F-Statistic | 0.63 |
| p-Value | 0.60 |
| Omega Squared (ω²) | -0.02 |
| LSD (post hoc) | 0.60 |

Together, these ANOVA results indicated no significant difference in the need for recovery scores between current work status among adjunct faculty.

Table 20 represented the differences in the need for recovery scores between and within groups of the four current work statuses.

**Table 35**

*ANOVA Groups Effects*

|  |  |  |
| --- | --- | --- |
| Measure | Within Group Effects | Between Group Effects |
| Sum of Squares | 14614.99 | 616.43 |
| Mean Square | 324.78 | 205.48 |
| Degrees of Freedom | 45.0 | 3.0 |

The pairwise analysis showed some variability between groups but not enough to explain significant differences in the need for recovery scores among the current work status groups for adjunct faculty.

# Findings

This quantitative correlational study examined the relationship between spiritual rest and the need for recovery from work among adjunct faculty members. The literature showed that adjunct faculty experienced work stress, which results in exhaustion, burnout, and turnover intention (Varga & Denniston, 2022). Little research has examined adjunct faculty’s practice of spiritual rest and the potential relationship with recovery from work (de Diego-Cordero et al., 2021).

## Research Question 1

This study’s research question stated: what relationship exists, if any, between spiritual rest and the need for recovery from work among adjunct faculty in online higher education institutions? Based on the collected data, the probability that the relationship between spiritual rest and the need for recovery scores was not statistically significant at a 95% confidence level (*p* = 0.9). The null hypothesis H01 could not be rejected.

### Findings Related to ANOVA Tests

ANOVA (Analysis of Variance) procedures were applied to the sample to examine whether a statistically significant difference exists between various groups within the data. Regarding spiritual rest and course delivery groups, a *p*-value greater than the alpha level (0.05) indicated insufficient evidence to reject the null hypothesis and suggested no statistically significant difference between the group means. A moderate (1-3) *F*-Statistic suggested some differences between group means, but these were not strong. A small (0.01 - 0.06) Omega-Squared (ω²) statistic indicated a small effect size and suggested the independent variable explains only a small portion of the variance in the dependent variable. The null hypothesis H02 could not be rejected.

Regarding the need for recovery and course delivery groups, a *p*-value > 0.05 indicated insufficient evidence to reject the null hypothesis and suggested no statistically significant difference between the group means. A moderate (1-3) *F*-Statistic suggested some differences between group means, but these were not strong. A small (0.01 - 0.06) Omega-Squared (ω²) statistic indicated a small effect size and suggested the independent variable might only explain a small portion of the variance in the dependent variable. The null hypothesis H03 could not be rejected.

Regarding spiritual rest and the length of employment groups, a *p*-value greater than the alpha level (0.05) indicated insufficient evidence to reject the null hypothesis and suggested no statistically significant difference between the group means. A low (< 1) *F*-Statistic suggested little evidence that the group means were different. There was no significant difference in spiritual rest scores based on length of employment. The negative Omega-Squared (ω²) statistics indicated that length of employment explained virtually none of the variability in spiritual rest scores. The null hypothesis H04 could not be rejected.

Regarding the need for recovery and the length of employment groups, a *p*-value greater than the alpha level (0.05) indicated insufficient evidence to reject the null hypothesis and suggested no statistically significant difference between the group means. A moderate (1-3) *F*-Statistic suggested some differences between group means, but these were not strong. A small Omega-Squared (ω²) statistic indicated a small effect size and suggested that the independent variable explains only a small portion of the variance in the dependent variable. The null hypothesis H05 could not be rejected.

Regarding spiritual rest and the current work status groups, a *p*-value greater than the alpha level (0.05) indicated insufficient evidence to reject the null hypothesis. It suggested no statistically significant difference between the group means. A low (< 1) F-Statistic suggested little evidence that the group means differ. The null hypothesis H06 could not be rejected.

Regarding the need for recovery and the length of employment groups, a *p*-value greater than the alpha level (0.05) indicated insufficient evidence to reject the null hypothesis. It suggested that no statistically significant difference existed between the group means. A low (< 1) *F*-Statistic suggested little evidence that the group means differ. The null hypothesis H07 could not be rejected.

# Reliability and Validity

The Spiritual Engagement Instrument (SpEI) measured spiritual engagement across four dimensions: worship, meditation, fasting, and rest. It utilized a six-point Likert scale and could be used alongside other social constructs, such as job satisfaction or leadership behaviors (Roof et al., 2017). The instrument demonstrated high reliability, with Cronbach’s alpha values of 0.96, collectively explaining 85.24% of the variance (Roof et al., 2017).

The Need for Recovery Scale (NFR), developed by Stevens et al. (2019), has been a validated short-form version of the Danish NFR Scale designed to reduce response burden while maintaining accuracy. The short-form consisted of three items assessing post-work exhaustion, social disengagement, and recovery time. It demonstrated excellent reliability, with an Intraclass Correlation Coefficient (ICC) of 0.88, equivalent to a Cronbach’s alpha score, and an ICC Responsiveness score of 0.80. The short-form NFR was scored on a five-point Likert scale (Stevens et al., 2019).

# Summary

Data collected for the study provided means to answer the research question and hypothesis. The relationship between spiritual rest and the need for recovery from work among adjunct faculty was correlated. The correlated data were used to determine if a significant relationship existed between adjunct faculty members’ practice of spiritual rest and their need for recovery from work.

The sample for the study consisted of 49 adjunct faculty members. The data did not provide statistical evidence of a significant correlation between adjunct faculty members’ practice of spiritual rest and their need for recovery from work. Though the data could not reject the null hypothesis, additional considerations can be made for future research into adjunct faculty’s need for recovery from work. The findings, interpretations, conclusion, limitations, recommendations, and implications for adjunct faculty’s need for recovery on the study have been provided in Chapter 5.

**References**

Creswell, D., & Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods* (3rd ed.). Sage.

de Diego-Cordero, R., Zurrón Pérez, M. P., Vargas-Martínez, A. M., Lucchetti, G., & Vega-Escaño, J. (2021). The effectiveness of spiritual interventions in the workplace for work-related health outcomes: A systematic review and meta-analysis. *Journal of Nursing Management, 29*(6), 1703–1712. <https://doi.org/10.1111/jonm.13315>

Reichard, J. (2024). *Practical Statistics for Social Research (PSSR)*. Omega Graduate School. <https://stats.ogs.edu/>

Roof, R. A., Bocarnea, M. C., & Winston, B. E. (2017). The spiritual engagement instrument. *Asian Journal of Business Ethics*, *6*(2), 215–232. <https://doi.org/10.1007/s13520-017-0073-y>

Stevens, M. L., Crowley, P., Garde, A. H., Mortensen, O. S., Nygård, C.-H., & Holtermann, A. (2019). Validation of a short-form version of the Danish need for recovery scale against the full scale. *International Journal of Environmental Research and Public Health*, *16*(13), Article 13. <https://doi.org/10.3390/ijerph16132334>

Varga, M. A., & Denniston, N. J. (2022). Engagement in recovery experiences from work among postsecondary full-time online faculty. *The Journal of Educators Online*, *19*(1), 148–160. <https://doi.org/10.9743/JEO.2022.19.1.2>