Pearson’s R was originally proposed for analyzing this hypothesis. In Table 6, individuals who endorsed enough items on the ACE questionnaire are classified as having experienced ACE vs. non-ACEs. Pearson’s R was conducted, and the analysis did not indicate a statistically significant relationship between ACE and type of pain (n = 372, Pearson Correlation = 0.089). This indicates that there is no relationship between ACE and the type of pain.

|  |  |  |  |
| --- | --- | --- | --- |
| Table 6 |  |  |  |
| *Pearson's r for ACE and Type of Chronic Pain Diagnose* | | | |
|  |  | ACE Yes‎/No | Current Pain Diagnosed |
| ACE Yes‎/No | Pearson Correlation | 1 | 0.088 |
|  | Sig. (2-tailed) |  | 0.089 |
|  | N | 372 | 372 |
| Current Pain Diagnosed | Pearson Correlation | 0.088 | 1 |
|  | Sig. (2-tailed) | 0.089 |  |
|  | N | 372 | 372 |
|  |  |  |  |

The findings between the groups were statistically significant. In a post-hoc analysis, scores were calculated for the opioid group (M = 37.46, SD = 18.044) and the marijuana and opioid group (M = 50.93, SD = 24.89) at a significance level of.003, while the marijuana group was not clinically significant (M = 44.95, SD = 29.50). The opioid and marijuana groups reported less symptom severity than the opioid-only group.

Table 12

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *ANOVA: Severity of Negative side effects and Preferred Pain Control Method* | | | | | |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 6261.48 | 2 | 3130.74 | 6.051 | 0.003 |
| Within Groups | 80197.24 | 155 | 517.40 |  |  |
| Total | 86458.72 | 157 |  |  |  |

Table 13

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Multiple Comparisons: Severity of Negative side effects and Preferred Pain Control Method* | | | | | | |
| Tukey HSD |  |  |  |  |  |  |
| Preferred Pain Control Method | Preferred Pain Control Method | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|  |  |  |  |  | Lower Bound | Upper Bound |
| Marijuana | Opioids | 7.49 | 5.76 | 0.40 | -6.14 | 21.11 |
|  | Marijuana and Opioids | -5.98 | 5.80 | 0.56 | -19.69 | 7.74 |
| Opioids | Marijuana | -7.49 | 5.76 | 0.40 | -21.11 | 6.14 |
|  | Marijuana and Opioids | -13.461\* | 3.87 | 0.00 | -22.63 | -4.29 |
| Marijuana and Opioids | Marijuana | 5.98 | 5.80 | 0.56 | -7.74 | 19.69 |
|  | Opioids | 13.461\* | 3.87 | 0.00 | 4.29 | 22.63 |
| \* The mean difference is significant at the 0.05 level. | | | | | | |

The Kruskal–Wallis test was used in its place, resulting in statistically significant findings. The test showed that the number of ACEs affects the pain control method employed (H3(2) = 16.411, n = 372 p <.001; Table 16, Table 17, & Table 18). Individuals who experienced more ACEs preferred to use marijuana (Mdn = 6.00) and marijuana and opioids (Mdn = 4.00) over opioids alone (Mdn = 0.00).

Table 15

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Hypothesis Test Summary* | | | | |
|  | Null Hypothesis | Test | Sig.a,b | Decision |
|  | The distribution of ACE Total is the same across categories of Preferred Pain Control Method | Independent-Samples Kruskal-Wallis Test | <0.001 | Reject the null hypothesis. |
| a The significance level is .050. | | | | |
| b Asymptotic significance is displayed. | | | | |

Table 16

|  |  |  |  |
| --- | --- | --- | --- |
| Independent-Samples Kruskal-Wallis Test Summary | | | |
| Total N | 372 |  |  |
| Test Statistic | 16.411 a |  |  |
| Degree Of Freedom | 2 |  |  |
| Asymptotic Sig.(2-sided test) | 0 |  |  |
| a The test statistic is adjusted for ties. |  |  |  |

Table 17

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Pairwise Comparisons of Preferred Pain Control Method* | | | | | |
| Sample 1-Sample 2 | Test Statistic | Std. Error | Std. Test Statistic | Sig. | Adj. Sig.a |
| Opioids-Marijuana and Opioids | -31.658 | 12.748 | -2.483 | 0.013 | 0.039 |
| Opioids-Marijuana | 53.992 | 13.974 | 3.864 | 0 | 0 |
| Marijuana and Opioids-Marijuana | 22.334 | 15.299 | 1.46 | 0.144 | 0.433 |
| Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. | | | | | |

The results of the Kruskal–Wallis test were statistically significant in Table 20, Table 21, and Table 22. The test showed that overall vigilance is affected by the pain control method (H4(2) = 12.88, n = 372 p <.002). Individuals who reported more vigilance preferred opioids (Mdn = 44.00) to marijuana (Mdn = 39.00). Hence, the opioid group was more vigilant about pain than the marijuana group as in Table 23.

Table 22

|  |  |
| --- | --- |
| Independent-Samples Kruskal-Wallis Test Summary | |
| Total N | 372 |
| Test Statistic | 12.888a |
| Degree Of Freedom | 2 |
| Asymptotic Sig.(2-sided test) | 0.002 |
| a The test statistic is adjusted for ties. | |

Table 23

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Pairwise Comparisons of Preferred Pain Control Method* | | | | | |
| Sample 1-Sample 2 | Test Statistic | Std. Error | Std. Test Statistic | Sig. | Adj. Sig.a |
| Marijuana-Marijuana and Opioids | -20.92 | 15.63 | -1.34 | 0.18 | 0.542 |
| Marijuana-Opioids | -49.08 | 14.27 | -3.44 | 0.00 | 0.002 |
| Marijuana and Opioids-Opioids | 28.16 | 13.02 | 2.16 | 0.03 | 0.092 |
| Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. | | | | | |
| Asymptotic significances (2-sided tests) are displayed. The significance level is .050. | | | | | |
| a Significance values have been adjusted by the Bonferroni correction for multiple tests. | | | | | |