**Sample Testing**

**The Levene Test.**

296 Females have a mean level of disability of 14.18 while 37 males have a mean level of disability of 11.97. The Levene test has a p value of 0.147 indicating the groups did not differ in the way the scores vary in each group. The sig to the right of the degree of freedom p value is 0.045. This is less than 0.05. Therefore, there is a significant difference in level of disability between men and females.t value is 2.016 meaning the p value becomes significant. Females were found to have significantly higher level of disability than men (t = 2.016, p = 0.045).

**The Levene test.**

For the group of 293 females the mean was 31.1809 and for 37 men the mean was 31.3514. The Levene test has a p value of 0.873 indicating the groups did not differ in the way the scores vary in each group. The sig to the right of the degree of freedom p value is 0.870. This is greater than 0.05. Therefore, there is no significant difference in self-esteem scores between males and females.t value -0.164. There is no difference in self-esteem scores between females and males (t = -0.164, p = 0.870).

**The ANOVA**

Herth hope index total score time 1 mean for 14 periods is 37.2857, while herth hope index total score time 2 for 14 periods is 41.5714.

The t value is t (13) = -3.963.there was a significant difference in hope from time 1 to time 2.the p value is p<0.002.the second period recorded a higher hope index of about 5.

**ANOVA.**

The mean score improved from 30.14 to 33.86. This was a significant difference. The t value is -3.05, p<0.0005) there was sig average difference, the p value is 0.009 which is > 0.05 which is significant difference in self-esteem. There is a higher self-esteem in week 4 than baseline in self-esteem (t = -3.05, p = 0.09).

**ANOVA.**

The mean increased from 37.29 to 41.57. This shows a significant difference. T value is -3.96, p<0.0005) there was sig average difference. The  p value is 0.002 which is < 0.05,this shows a sig difference in hope between baseline and week 4.There is a higher hope range in week 4 than baseline t4(t=-3.96,p=0.02)

**ANOVA**

The mean increased from 57.50 to 63.43.t value is -2.21, p<0.0005) there was sig average difference. The p value is 0.046 is < 0.05 this shows a significant difference in social support between baseline and week 4.There is a higher social support range in week 4 than in baseline (t = -2.21, p = 0.046).

**ANOVA**

The mean increased from 647.14 in baseline to 751.43 in week 4.the t value is -2.68,p<0.0005)there was  sig average difference. P value is 0.019 >0.05, this shows a significance difference in self-efficacy. There is a higher self-efficacy in week 4 than baseline (t=-2.68.p=0.19)

**ANOVA**

The mean increased from 486.43 to 649.29. The t value is -3.22, p<0.0005). There was a significant average difference. The p value is 0.007 >0.05; this shows a significant difference in self-efficacy. There is a higher self-efficacy in week 4 than baseline (t=-3.22.p=0.007)

**Independent t test -2**

Paired t tests-2

**Paired sample t test.**

A procedure used to establish whether the average difference between 2 sets of occurrences or observations is zero. Each subject is measured two times, resulting in pairs of observations.

**Independent t test**

This is a procedure that compares the average between 2 unrelated sets on the same dependent variable, therefore establishes whether there is a significant difference between the averages in two unrelated sets.

**References**

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