

One-Way Between-Treatment Groups ANOVA (also called a One-Way Independent Groups ANOVA sometimes)

Sleep researchers have postulated that, in a broad evolutionary sense, sleeping more poorly during periods of perceived environmental threat may have survival value. Previous research has shown that individuals experiencing anxiety or stress exhibit reduced periods of deep sleep and increased periods of light sleep (because one can most easily be aroused by a sound in the environment while in light sleep). An attachment researcher conducted a study to examine the effects of anxious, avoidant, and secure attachment styles on the physiology of sleep. The investigator hypothesized that children with anxious (and perhaps avoidant) attachment styles experience more sleep disturbances than children with secure attachment styles because they feel responsible for monitoring the external environment and regulating the distance between themselves and their caregivers. These children may find it difficult to sleep when their caregivers are physically absent and may develop patterns of light sleep because of the need to be aware of the caregiver's presence at all times. Deep sleep can be experienced as threatening to the attachment bond and thus dangerous to the child. The sleep patterns of 10 secure, 10 anxious, and 10 avoidant 5-7 year old children were monitored. Of primary importance to the attachment researcher was the overall percentage of time that each child spent in deep (delta) sleep. It was hypothesized that children who are insecurely attached to their primary caregivers will spend a lower percentage of time in deep (delta) sleep as compared to their secure counterparts. Following is the average amount of time that each child spent in delta sleep, expressed as a percentage of total sleep times. (For the attachment styles, 1 = secure, 2= anxious, and 3 = avoidant).

Scores for the Attachment Style Groups:

Group1 - Secure: 21, 21, 25, 23, 24, 23, 23, 22, 22, 22

Group 2 - Anxious: 17, 17, 15, 15, 15, 14, 20, 13, 14, 19

Group 3 - Avoidant: 18, 20, 18, 19, 17, 17, 15, 16, 17, 18