Analytical Review: A Case-control Study Of The Environmental Risk Factors For Narcolepsy

Picchioni, D., Hope, C., Harsh, J. (2007) A Case-Control Study of the Environmental Risk Factors for Narcolepsy. Neuroepidemiology, 2007;29:185–192. doi: 10.1159/000111581

The researchers wanted to know some of the environmental risk factors that may impact narcolepsy.

There were a total of 126 participants which included a group of 63 individuals with narcolepsy (Experimental Group) and another group with 63 individuals that did not have narcolepsy (Control Group). All participants met conventional Multiple Sleep Latency Test criteria.

The researchers used multiple types of procedures in this case study.

Infectious Diseases:

A handful of common scientific names were issued to increase the participants recognition of infectious diseases when answering these questions. Things like sinus infections or the flu were overviewed using Likert-type responses because these type of infections or diseases arise with a significantly high frequency.

• Psychological Stressors:

On this portion of the questionnaire the researchers incorporated the Social Readjustment Rating Scale (SRRS). The SRRS covers primary psychological stressors on the degree used in past studies of environmental risk factors for narcolepsy (helps with consistency).

The researchers had 30 psychology undergraduate students from the university of Southern Mississippi on two different instances complete the questionnaire to get a better look at the retest reliability. There were very similar correlations between the first and second time results. Finally a version of the questionnaire was sent to professionals in areas of sleep research, neurology, psychology, immunology, and epidemiology for a overview to address if the results are accurate or not. The researcher then made changes accordingly them was implemented in the case study with its participants.

The data results indicated that out of all the infectious viruses listed on the questionnaire given to the participants, flu viruses and fevers were prone. On this questionnaire, there were a list of things, from changing schools, divorcing a spouse to things like infections/viruses such Tuberculosis and Neuritis. Based on the results, not only do the illnesses affect it, but stressors and age (puberty) also play a vital role in the some of the etiology of narcolepsy.

This case study and the results are certainly helpful in some aspects to get a general consensus, but the searchers could have used a larger initial experiment pool. That being said,

the results that were generated from this study may not be as accurate as they could possibly be, because there needs to be more test subjects and them not all be community locals . There should maybe be more research done as in It's great that the researchers are putting an effort to shine light on environmental risk factors in the etiology of narcolepsy because many people do not know how these two things might go hand in hand.

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