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PERSONALITY AND OTHER FACTORS ASSOCIATED WITH SMOKERS AND NON-SMOKERS

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***“smoking kills more people in New Zealand than the total number killed by drinking alcohol, taking drugs, murder, suicide, road crashes, air crashes, poisoning, drowning, fires, falls, lightening and electrocution”
(Cancer Society of New Zealand, 2001a, Health effects of smoking ¶ 3)***

ABSTRACT

The Eysenck Addiction Scale has not previously been used to measure the addictive nature of cigarette smoking. The purpose of this study was to investigate the utility of the Eysenck Addiction Scale (AS) in differentiating smokers from non-smokers, and to identify the personality factors that distinguish smokers from non-smokers. A further aim was to examine the concordance among different measures of nicotine dependence and to compare this to self-perceived nicotine dependence among cigarette smokers.

A cohort of 120 first year psychology students volunteered to complete a self-report questionnaire including demographic information, smoking behaviour and the Eysenck Personality Questionnaire-Revised (EPQ-R). The Heaviness of Smoking Index and DSM-IV-TR withdrawal criteria were used to assess nicotine dependence. Non-parametric statistics were used to test differences between the personality traits, smoking behaviour, demographic characteristics and nicotine dependence measures.

Daily smokers scored significantly higher on the Addiction Scale of the EPQ-R than non-smokers. Daily smokers also scored higher on the personality dimensions of Psychoticism and Extraversion; however, there were no significant differences between any of the smoking categories on Neuroticism.

There were no significant correlations between the three measures of dependence. It is suggested that the measures evaluate different aspects of nicotine dependence. This finding is consistent with previous research and further highlights the need to develop a level of consistency throughout the field when assessing, treating or researching nicotine dependence.

There were significant differences between smokers who considered themselves nicotine dependent and those who did not consider themselves nicotine dependent on the number of cigarettes smoked per day and their score on the addiction trait. Self perceived nicotine dependence was not correlated with the Heaviness of Smoking Index or the DSM-IV-TR Withdrawal Symptoms.

This initial study suggests that the Addiction Scale is able to distinguish smokers from non-smokers on the addiction trait. It is recommended that the additional scale be calculated when the EPQ-R is administered in order to

gather additional information on the personality factors associated with addiction.

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Chapter One

INTRODUCTION

The recent introduction of the 'Smoke Free Environments Act (2003) has made the public of New Zealand more aware of their right to a smoke-free environment. When the legislation was first mooted there was a general outcry from owners of restaurants and bars that eliminating smoking from their premises would reduce their financial viability, force them to lay off staff and reduce the number of overseas visitors to New Zealand. A year after the introduction of the legislation these dire predictions have proved incorrect and a growing number of non-smokers have returned to these venues. The legislation has resulted in smokers being forced to smoke outside. The socially imposed limitations on smokers, an increased awareness of their being different, and the inconvenience of having to smoke outside, have encouraged a greater number of current smokers to seek help with quitting (Asthma & Respiratory Foundation of New Zealand, 2005). Quit rates among current smokers are extremely low with approximately 2-3% of unassisted smokers succeeding in quitting (Doweiko, 2002).

To assist smokers to quit it would be helpful to establish whether they are dependent and to what degree. It would also be useful to ascertain whether an individual smoker's self-perception of whether they are nicotine dependent is accurate. Assessing whether their self-perceived nicotine dependence is correlated with formal measures of dependence would give us this information. The literature appears to suggest that various measures of nicotine dependence have little concordance because they measure different aspects of dependence. While a smoker may indicate that they are nicotine dependent there is research to suggest that some individuals rate of consumption would not account for their dependence. In this case the treatment options for different individuals would need to be modified, as the influences on the continuation of smoking may be more psychological, social or emotional in nature. An accurate description of

the relevant maintaining factors is necessary to implement the correct treatment options and to increase the chances of success.

In order to receive the necessary support to assist with cessation it is important to understand the factors that influence smoking initiation and maintenance. One of the ways to do this is to investigate the factors that differentiate smokers from non-smokers. One hypothesis is that these two groups differ on personality variables particularly the addiction trait as measured by the Eysenck Personality Questionnaire – Revised (EPQ-R; Eysenck & Eysenck, 1991). Following a review of the literature it appears that the EPQ-R Addiction Scale (AS) has not been used to measure the addiction trait in cigarette smokers.

Because personality is considered to be reasonably stable throughout an individual's lifetime, the elucidation of particular personality factors that are more prevalent in smokers may help to predict those individuals who are more at risk of becoming nicotine dependent. The resulting data could assist smoking prevention programmes to focus on those individuals who are most at risk of transitioning from smoking experimentation to regular smoking, in order to reduce the number of individuals who smoke. Understanding the personality variables that help to maintain smoking would also provide a guide to individualised treatment options. The introduction of focused smoking prevention programmes would be financially cost effective as well as reducing the numerous personal and financial costs associated with regular smoking. With the lack of success around smoking cessation it would appear to be much more effective to focus on prevention rather than treatment.

The Current Study

The primary goal of this study was to investigate the utility of the Eysenck Addiction Scale in differentiating smokers from non-smokers. No previous studies were found in which the AS scale had been used to investigate the relationship between smokers and non-smokers. It was hypothesised that smokers would score higher on the Addiction Scale than non-smokers, as has been found for other substances.

A second goal was to identify the relationship between smoking status and the personality traits of extraversion, neuroticism and psychoticism as

measured by the EPQ-R. It was expected that smokers would score higher on all three personality scales. A further goal was to examine the concordance between different measures of nicotine dependence. Previous research indicates that the relationship between various smoking measures is minimal.

The final goal was to compare self-perceived nicotine dependence to established measures of nicotine dependence. Self-perceived nicotine dependence is infrequently investigated and the proposed outcomes of this relationship were unclear.

Overview

The following chapter reviews the literature on the current state of cigarette smoking within New Zealand and compares the findings to the rest of the world. Chapter Three looks at defining smoking and nicotine dependence, and reviews the research on both dependent and non-dependent smokers. A final section summarises the various models of dependence and a number of nicotine dependence measures. Chapter Four looks at personality and focuses in particular on the model of personality developed by Hans Eysenck and his subsequent development of the Eysenck Personality Questionnaire. Chapter Five will investigate the relationship between personality and smoking.