# Neuroticism as a predictor for smoking



#### Abstract

To modern people, stress is a common obstacle that they face every day. Neurotic symptoms and smoking, which are the two typical symptoms of stress, might have a significant connection (Eysenck, 1965). In this research, we examined whether one's neuroticism scale has significant relationship with one's smoking behaviour. Furthermore, gender differences in both smoking habits and neuroticism scale have been analysed. A random sample of 64 female and male participants ( $M_{age} = 22$ . 36 years) living in Selly Oak, Birmingham took part in this research. Statistical analyses from completed questionnaires demonstrated the relationship to be non-significant in neuroticism and smoking and gender differences in both smoking and neuroticism. To future research, neuroticism, a categorization of smokers by related features, might enable attempts at smoking cessation.

# Neuroticism as a Predictor of Cigarette Smoking and Individual differences in Smoking: Gender

To modern eyes, it may seem that their daily life is a fight against stress. Stress from work, school, relationship to social life, has been causing great influence on health of modern people negatively. Symptoms of stress not only include physical symptoms such as fatigue or insomnia, but also emotional and behavioural symptoms. Nervousness, a neurotic symptom, and smoking are the typical examples. Although stress is the main cause of all the diseases, symptoms themselves, neurotic symptoms and smoking, may have a significant association (Eysenck, 1965). By this time, numerous studies have been published related to this hypothesis with various results. Some studies examined that there was no evidence that the neurotic grade was related to the amount smoked (Waters, 1971), however, others stated https://assignbuster.com/neuroticism-as-a-predictor-for-smoking/

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that smoking behaviours are correlated with state anxiety and neuroticism (Herrán, 2000).

In this paper, to replicate Water's (1971) study towards smoking and neuroticism, we collected results which included standard questions on smoking behaviours, and also questions about their personality trait based on Eysenck Personality Questionnaire (EPQ) from random female and male samples. Furthermore, gender differences in both smoking habits and neuroticism scale have been analysed.

# Method

#### Sample Description

A random sample of 64 female and male participants (age range from 18 to 52,  $M_{age} = 22$ . 36 years) living in Selly Oak, Birmingham took part in this research. Completed questionnaire included questions on their current smoking habits, personality traits, and gender; age for demographic.

#### Assessment

#### Smoking Habits

In smoking habits questionnaire, after the instruction, specifying age and gender was followed by three options in current smoking behaviour. The three options were – A) I have smoked a Cigarette within the past week, B) I previously smoked cigarette, but not within the past 6 months, and C) I have never smoked a Cigarette.

#### Personality Factor: Neuroticism

Eysenck Personality Questionnaire (EPQ) was used in this study to assess the personality traits of the participant, with the result referred to as the Eysenck's Personality Inventory (EPI) (1968).

#### **Statistical Analyses**

All analyses were performed using a Pearson Chi-square in order to identify whether there is an association between two categorical variables in each hypothesis.

### Results

As their questionnaire results, participants were divided into three groups in their smoking status, two groups in gender, and three groups in neuroticism.

First, participants who chose ' Never smoked' (n = 27, 42. 2%) option, had not smoked for their entire lifetime, participants who chose ' Previously smoked' (n= 15, 23. 4%) had not smoked within the past 6 months, and lastly participants who chose ' Current smoking' (n= 22, 34. 4%) were those who had smoked within the past week. Next, 34 female ( $M_{age} = 21$  years) and 30 male ( $M_{age} = 23$  years) participants were in each gender group. Third, in EPQ, we only coded twelve questions (number 1, 5, 9, 13, 17, 21, 25, 30, 34, 38, 42, 46 in Eysenck (1975)) which refer to neuroticism/stability scale out of total 48 yes/no questions. The neurotic grade (0 to 12) given in this paper is the sum of the affirmative replies to these questions.

Three divided groups calculated by neurotic grades were 'Low (0-4)' (n= 15, 23. 4%), 'Medium (5-8)' (n= 27, 42. 2%), and 'High (9-12)' (n= 22, 34. 4%).

Table 1. Smoking habits and neuroticism scale

Neuroticism Scale	п	Smoking Status: % of <i>n</i>		
Never	Previou s	Current		
Low (0-4)	15	37. 0	26. 7	4. 5
Medium (5-8)	27	33. 3	53. 3	45. 5
High (9-12)	22	29. 6	20. 0	50. 0
Total	64	42. 2	23. 4	34. 4

 $\chi^2$  = . 9188 (df = 4), p = . 057

#### Neuroticism as a Predictor of Cigarette Smoking

Results of cigarette smoking behaviour, with neuroticism as the independent variable and the indicator variable (smoking habits) as dependent variable revealed that neuroticism was not significantly associated with whether the participants are never, previous, or current smoker as shown in Table 1. To be specific, according to Table 1, 37 % within smoking (Cigarette) behaviour, never smoker, of the participants showed ' Low' in neuroticism scale, whereas 53. 3 % within smoking (Cigarette) behaviour, previous smoker, of the participants showed ' Medium' in neuroticism scale which had a slight difference towards the percentage within smoking (Cigarette) behaviour, current smoker, of the participants showed ' High'(50 %), which if the former had a smaller percentage than the latter, smoking would have a direct proportional to neuroticism scale. Moreover, the results of the chi-square also showed no significant association between neuroticism scale and current smoking status ( $\chi^2$  (4) = . 9188, p = . 057).

#### Individual differences in Smoking: Gender

Among the participants, more women were never smokers (15. 6% men versus 26. 6% women), whereas more men were current smokers (21. 9% men versus 12. 5% women). Gender differences among the previous smokers were small compared to other two groups (9. 4% men versus 14. 1% women). The differences were insignificant, showing that the association between gender and smoking habits is statistically non-significant ( $\chi^2$  (2) = 3. 816, p = . 148)

#### Gender differences in Neuroticism

Although, more women scored ' High' on neuroticism scale than men (41. 2% women versus 26. 7% men; percentage within Gender), more men scored ' Low' and ' Medium' on neuroticism scale than women (26. 7% men versus 20. 6% women and 46. 7% men versus 38. 2% women; percentage within Gender). Neuroticism analysis by gender showed the relationship to be insignificant ( $\chi^2$  (2) = 1. 496, p = . 473).

#### Discussion

In the current research, statistical analyses from completed questionnaires demonstrated the relationship to be non-significant in neuroticism and smoking and gender differences in both smoking and neuroticism.

The present finding, that there is an insignificant correlation between the neurotic grade and one's smoking behaviour, is in the same line with the conclusions of Water (1971), however, is in strife with the conclusions of Eastwood and Trevelyan (1971). Our results may have been affected by our lack of participants. The present data are based on a random 64 people on a voluntary basis of rather smaller numbers and with a narrow age range. Also, in our smoking questionnaire, there was a gap between the second option, previous smoker who had not smoke within the last 6 months, and the third option, current smoker, who had smoke within the past week. Participants who had smoke within the span of less than 6 months and more than the past week were included as previous smokers. However, the limitation toward non-delicate smoking habit questionnaire is minor because according to other studies, the options in smoking habits were more not sophisticated; non-smokers and smokers (Terracciano, 2004). Result of neurotic grade and smoking habits had a minor difference to significant relationship; neuroticism scale seemed to vary in direct proportion to the participants' current smoking status, therefore, various age range and sufficient number of participants are the factors that might have influenced the results to significant connection.

To further research, neuroticism, a categorization of smokers by related features, might enable attempts at smoking cessation to be specific for each https://assignbuster.com/neuroticism-as-a-predictor-for-smoking/ individual. The use of index of neuroticism might be value in assessing the effectiveness of different methods of preventing smoking and seems worth further investigation.

To summarize, a standard questionnaires were completed by 64 individuals selected at random, asked about smoking habits and included questions from which a grade for neuroticism was obtained. The result demonstrated that, there is no evidence that the smokers are more neurotic than nonsmokers, and there was no statistically significance between gender differences in both smoking habits and neuroticism scale.

## Reference

Gorman, 1968

B. Gorman

Social desirability factors and the Eysenck Personality Inventory

Journal of Psychology, 69 (1968), pp. 75-83