



# Personality Traits and Exercise Motivation Among College Students

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## Abstract

Exercise and its benefits have been studied for a long period of time. Something that has gained interest is identifying what influences individuals to exercise, and if personality has any impact. The purpose of this study was to understand if conscientiousness and neuroticism influenced different exercise motivations. Participants ( $N=97$ , Males= 39, Females= 58) were recruited from academic and athletic clubs at Winona State University. The participants filled out multiple inventories using paper and pencil. This study is looking in particular at the Big Five Inventory (BFI) and Exercise Motivation Inventory-2 (EMI-2). Bivariate correlation analyses were conducted in order to examine the relationship between variables, using SPSS, version 25. Significant positive correlations were found between conscientiousness and ill health avoidance, positive health, and stress management. A significant negative correlation was found between neuroticism and positive health. The results indicate that those who are higher in conscientiousness engage in healthy exercise habits, while those lower in neuroticism may be exercising to improve health. These findings can be useful in identifying personality traits to help motivate individuals to exercise.

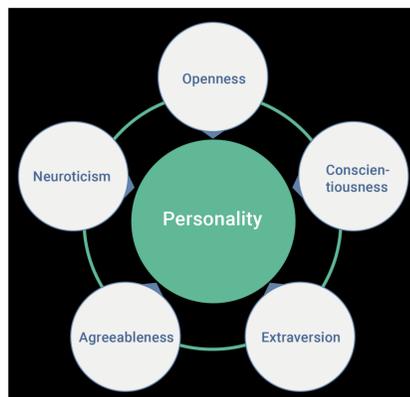
Keywords: conscientiousness, neuroticism, BFI, EMI-2

## Research Questions and Hypotheses

**Research Question:** How do personality traits influence exercise motivations among college students?

**Purpose:** The purpose of this study was to see how personality traits influence exercise motivation.

**Hypotheses:** Those higher in conscientiousness would have a positive relationship with health pressures, ill health avoidance, positive health and stress management. Those higher in neuroticism would have a negative relationship with health pressures, ill health avoidance, positive health, and stress management.



[https://en.wikipedia.org/wiki/Big\\_Five\\_personality\\_traits](https://en.wikipedia.org/wiki/Big_Five_personality_traits)

## Experimental Methods

### Participants.

This study consisted of 97 college students (39 males and 58 females) from three academic and five athletic clubs.

### Procedure.

- Participants were recruited via club participation.
- The participants then completed a series of paper pencil surveys in one session. The following surveys were completed:
  - Demographic form
  - EMI-2
  - BFI
- Data was analyzed using bivariate correlation tests to examine the relationships between the variables.
- The types of motivation observed in the EMI-2 were as follows:
  - Health Pressures
    - To recover from injury, prevent illness in family, and doctor instructed
  - Ill Health Avoidance
    - To avoid illness and disease
  - Positive Health
    - To remain and feel healthy
  - Stress Management
- The types of personality traits observed in the BFI were as follows:
  - Conscientiousness
  - Neuroticism

**Table 1.** Bivariate Correlations

Conscientiousness	Pearson's Correlation	Significance
Health Pressures	$r=.06$	$p=.27$
Ill Health Avoidance	$r=.32$	$p=.001^{**}$
Positive Health	$r=.47$	$p<.001^{**}$
Stress Management	$r=.35$	$p<.001^{**}$

Table 1 displays the relationship among conscientiousness and the following motivating factors.

Note: \* =  $p<.05$  and \*\* =  $p<.01$

**Table 2.** Bivariate Correlations

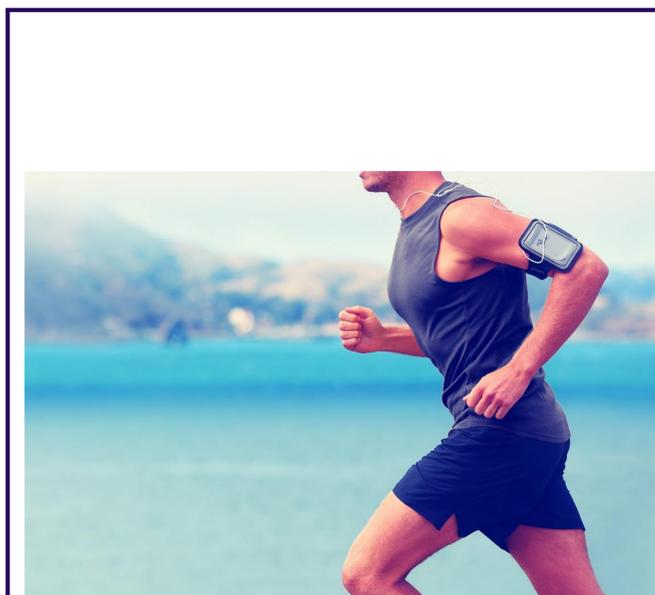
Neuroticism	Pearson's Correlation	Significance
Health Pressures	$r=.04$	$p=.37$
Ill Health Avoidance	$r=-.07$	$p=.27$
Positive Health	$r=-.2$	$p=.03^{*}$
Stress Management	$r=-.1$	$p=.17$

Table 2 displays the relationship among neuroticism and the following motivating factors.

Note: \* =  $p<.05$  and \*\* =  $p<.01$

## Results

- Bivariate correlation analyses were conducted to examine the relationship between personality traits (conscientiousness and neuroticism) and health pressures, ill health avoidance, positive health, and stress management.
- There was a significant relationship between conscientiousness and ill health avoidance ( $r=.32$ ,  $p=.001$ ), positive health ( $r=.47$ ,  $p<.001$ ), and stress management ( $r=.35$ ,  $p<.001$ ).
- There was not a significant relationship between conscientiousness and health pressures ( $r=.06$ ,  $p=.27$ ).
- There was a significant relationship between neuroticism and positive health ( $r=-.2$ ,  $p=.03$ ).
- There was not a significant relationship between neuroticism and health pressures ( $r=.04$ ,  $p=.37$ ), ill health avoidance ( $r=-.07$ ,  $p=.27$ ), and stress management ( $r=-.1$ ,  $p=.17$ ).



<http://oregonsportsnews.com/why-exercise-is-essential-in-the-prevention-of-disease/>

## Discussion and Implications

- Results indicate that those higher in conscientiousness are exercising to improve health, while those higher in neuroticism may be exercising to improve health as well.
- This study supported the hypothesis that individuals with high conscientiousness would have a positive relationship with ill health avoidance, positive health and stress management.
- The findings did not support the hypothesis that individuals with high conscientiousness would have a positive relationship with health pressures.
- The findings did support the hypothesis that individuals with low neuroticism would have a negative relationship with positive health.
- This study did not support the hypothesis that individuals with low neuroticism would have a negative relationship with health pressures, ill health avoidance, and stress management.
- These findings can be used to help individuals recognize personality traits in hope of increasing healthy exercise habits.
- Future research should investigate if exercise motivation and personality traits can be altered for health improvement.

## Acknowledgements

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