

Abstract

One's walking or gait can be an indicator of one's behavior. This conveys a lot of information about one's personality. One of the most widely accepted and deeply studied personality models indicate that there are five personality traits, such as Conscientiousness, Agreeableness, Neuroticism, Openness to Experience and Extraversion. Researchers have shown that self-reported measures of personality can be readily obtained and can be useful predictors of one's behavior and personality. The different types of personality have been shown to be related to both self-reported and performance-based measures of physical and motor functions, such as a walking task. Given the importance of identifying one's personality, the relationship of different gait-related measures to the personality traits and the differentiated findings reported by various research groups, it is important to carry out a deeper investigation to explore the connectivity between gait measures and personality. In my research, I have used Force Sensitive Resistor impregnated in the shoe insole to record one's gait event, such as heel strike that was subsequently used to compute various gait-related indices. Specifically, here we have extracted information on one's walking speed, stride time and cadence when a participant walked overground on a 10 m walkway. In addition, we collected self-reported measure using a standard questionnaire to identify the personality. Based on the self-reported measure of personality, we grouped the participants and analyzed the gait-related measures to investigate the connectivity between the gait-related indices and the type of personality. The observations of my experimental study are promising.