

AperTO - Archivio Istituzionale Open Access dell'Università di Torino

## The Effect of Non-Cognitive Traits on Health Behaviours in Adolescence

**This is a pre print version of the following article:**

*Original Citation:*

*Availability:*

This version is available <http://hdl.handle.net/2318/1814844> since 2022-07-04T10:22:30Z

*Terms of use:*

Open Access

Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)

# THE EFFECT OF NONCOGNITIVE TRAITS ON HEALTH BEHAVIOURS IN ADOLESCENCE

SILVIA MENDOLIA<sup>a,\*</sup> and IAN WALKER<sup>b</sup>

<sup>a</sup>*School of Economics, Faculty of Business, University of Wollongong, Australia*

<sup>b</sup>*The Management School, Lancaster University, UK*

## ABSTRACT

This paper investigates the relationship between personality traits and health behaviours in adolescence using a large and recent cohort study. In particular, we investigate the impact of locus of control, self-esteem and work ethics at ages 15–16 years on the incidence of health behaviours such as alcohol consumption, cannabis and other drug use, unprotected and early sexual activity and sports and physical activity. We use matching methods to control for a very rich set of adolescent and family characteristics, and we find that personality traits do affect health behaviours. In particular, individuals with external locus of control, low self-esteem or with low levels of work ethics seem more likely to engage in risky health behaviours. Copyright © 2014 John Wiley & Sons, Ltd.

Received 29 May 2013; Revised 19 November 2013; Accepted 30 January 2014

*JEL Classification:* J13; I21

KEY WORDS: personality; locus of control; self-esteem; health behaviours

## 1. INTRODUCTION

The objective of this paper is to analyse the role of noncognitive traits on health behaviours in adolescence. In particular, we study the effect of locus of control, self-esteem and work ethics recorded when the child is 15–16 years old on subsequent risky health behaviours up to when she or he is 19–20 years old.

We contribute to the existing literature in two ways. First, we provide evidence from a more recent dataset based on a large cohort of English children born in 1990 and followed for 7 years, starting in 2004. Our analysis is focused on personality traits in adolescence. A variety of studies have shown that personality traits are relatively malleable, at least over the early life cycle. There is some evidence that policy interventions can target adolescents to promote useful traits and suppress harmful ones early in life. Existing studies either rely on relatively dated data (NLSY79 for Heckman *et al.*, 2006 and 1970 British Cohort Study for Preevo and ter Weel, 2013) or do not have a specific focus on adolescents (Chiteji, 2010 and Cobb-Clark *et al.*, 2012). Second, we use propensity score matching (PSM) to investigate the relationship between personality and health and ordinary least squares (OLS) estimation. OLS is widely regarded in providing an estimate of an upper bound on the causal effect, and PSM may be thought to tighten that bound.

Risky behaviour with respect to health is important and costly. In particular, risky health behaviours among youths are a major concern for many Western developed countries (see US CDC [Centers for Disease Control and Prevention], 2011). Many studies point to early initiation of these behaviours being strongly related to dependency in adulthood (Chen and Kandel, 1995).

---

\*Correspondence to: School of Economics, Faculty of Business, University of Wollongong, Building 40, Room 215, NSW 2522, Australia.  
E-mail: [silvia\\_mendolia@uow.edu.au](mailto:silvia_mendolia@uow.edu.au)