

Health Psychology Of Key To Sustaining And Thriving Of Human Well Being: Self Control, Conscientiousness, And Adverse Health Behavior

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Abstract

This paper explained that a description of several adverse health behavior and their health care cost impacts, it was argues that, rather than a focus on external environmental factors, the intrinsic constructs of self control and Conscientiousness should be given more priority in explaining and combating these behaviours. Self control and Conscientiousness have profound influences on an individual's choice to succumb to temptation or resist it, respond impulsively or with self restraint, or seek immediate versus delayed gratification. Method used literature reviews from authoritative databases. Several examples are offered to illustrate the impact of self control and Conscientiousness on a mix of common adverse health behaviors and positive health behaviors, and through these examples it is argued that self control and Conscientiousness are unappreciated constructs in health psychology. Several recommendations for improving self control and Conscientiousness are discussed.

Keywords: self control; conscientiousness; adverse health behavior

INTRODUCTION

This scientific paper showed that there are a wide range of behaviors that have adverse health consequences: smoking and increased cancer risk, substance abuse and addiction, risky sexual behavior and increased rates of sexually transmitted diseases such as HIV/AIDS, and a range of other factors that lead to increased rates of overweight and/or obesity^{[1],[19]}. Such adverse health behaviors also have significant undesirable impacts on health care costs. Initial estimates indicated that treatment costs for overweight or obese individuals are \$1,723 higher for Medicare patients, \$1,021 higher for Medicaid patients, and \$1,140 higher for private insurers^[35].

Recent research has more than doubled the additional costs of obesity at \$2,800 in additional costs per obese person^[2]. The cost impact of treating HIV/AIDS is more severe estimated at over \$20,000 in increased total costs per patient^[13]. The combination of private and public costs related to smoking are estimated at \$96 billion annually, with second hand smoke increasing health care costs for children by an additional \$890 per child per year^[2]. Given these costs, it is certainly imperative to reduce the prevalence of these behaviors in society.

Adverse Health Behaviors and External Causes

As a great deal of monetary and professional resources have been dedicated to combating such widespread risky health behaviors, much of the focus has been on identifying external factors (e.g., social, environmental) and exploring their relationship to adverse health behaviors^[29]. For example, the growing rates of childhood obesity in the United States have been blamed on the layout of suburban environments, too much access

to fast foods, increasing rates of sedentary behavior due to excessive TV watching and/or use of computer games^[14]. Some have even linked higher rates of obesity to less educated parents^{[16],[22]}. The focus on external factors such as low education levels and low socioeconomic status have been implicated in increased smoking rates^[35], drug use^{[4],[8]}, risky sexual behavior^[5], and lower levels of health status^[24].

Self Control

Focus on external factors as causes of adverse health behavior may mistakenly confuse symptoms for causes^[35]. Recognizing that adverse health behaviors begin with the individual and are keenly linked to individual choice patterns throughout life but particularly in the developing years, it is reasonable to look to intrinsic factors as contributing causes of an individual's poor performance in school, inability to delay gratification, and inability to resist temptations to engage in risky sexual behavior, drug use, smoking, overeating, or any other adverse health behavior^[26].

Self control is a higher order cognitive function linked to the metacognitive ability to consciously step back and see one's own thought referred to as "Theory of Mind"^[25]. Studies in cognitive neuroscience have located metacognitive self referential abilities in the anterior medial prefrontal cortex, retrosplenial cortex, and caudate nucleus^[27]. Self control also seems to have an implicit component that acts to direct individuals away from tempting situations in favor of situations which support long-term goals^[28], and is also a quality with limited capacity: self control can wane with extended use, but also be strengthened with proper implicit^{[3],[7]}.

Self control is an unappreciated construct in health psychology: A review

of several health psychology textbooks^[2] revealed only one reference to self control^[31]. Self determination was the closest term listed in Robbin^[30] and self regulation theory was the closest to self control^[32]. Even though self control appears unappreciated in health psychology, there are plenty of examples of how its absence contributes to the prevalence of adverse health behavior^[33].

METHOD

A review of the literature is an essential part of research project. The review is a careful examination of a body of literature pointing “health psychology” toward the answer this research question. Literature reviewed typically includes scholarly journal, scholarly books, authoritative database and primary sources. Sometimes it includes newspapers, magazines, other books, films, and audio or video tapes, and other secondary sources^[6].

This paper is guided by a review of the relevant literature. it be the mechanism by which this research is viewed as a cumulative process related “health psychology”. That makes it an integral component of the scientific process

DISCUSSION

There is a wide range of research illustrating that a lack of self control contributes to increased levels of adverse health behaviors such as smoking, drug use, and alcohol use. In a study of male high school students of Don bosco Indonesia found that students who rated low on self control reported higher rates of smoking, drug abuse, and an inability to withstand peer pressure. Additionally, students who scored low on self control also reported incidents of parental abuse. Similar findings confirming the link between low self control levels and

adverse behavior^{[9],[10]} comparing two samples of students: one from normal high school and one of alternative high school.

Jongh, Bolt, and Olivier^[11] extended the issue of self control to both behavioral and emotional self control in the context of smoking, alcohol, and marijuana use among middle school and high school students. They found that low behavioral control had a direct impact on student's affiliations with other students representing bad influences, and emotional control had a direct impact on coping. Gropen, Clark, Hoisington, and Ehrlich^[15] explored the relationship between different levels of self control and psychological symptoms in relation to engaging in drug abuse, associating with friends who engage in drug use, and levels of efficacy supporting nonuse. Through the use of structural equation modeling (SEM) the authors found that higher levels of self control had stronger positive relationships with feelings of well being and less symptomatology while lower levels of self control showed opposite symptomatology and had adverse impacts on resistance efficacy. Finally, for further linked low levels of smoking with high levels of self control^[17].

Obesity has definite associations with poor self control. Kenned, et al^[18] explored the relationship overweight tendencies, overeating, and the ability to inhibit eating responses. The authors found that failure to inhibit was a key factor associated with individuals being overweight or obesity. The flipside of inhibition failure is impulsivity which has likewise been linked to higher rates of obesity in children who lack the ability to control the impulse to eat^[3].

Lack of self control has been linked to higher levels of truancy from school^[20] while positive levels of self control has

been identified as the key factor responsible for success in on line distance learning^[6]. Such results clearly show that self control is a critical factor in success with education. Given the link between success with education and higher socioeconomic status, and self reported health status^[21] it is clear that self control is critical factor in all of them.

Conscientiousness is regarded as one of the Big Five personality temperaments^[1] and is intimately linked to self control Research has shown that conscientiousness is represented by many other positive traits including:

“industriousness, order, responsibility, traditionalism, and virtue”^[35] and shown to be negatively associated with many adverse health behaviours. In addition, conscientiousness has been positively linked to rational strategies of decision making, negatively linked to irrational strategies, and also involved in the coordination of self regulatory traits”^[34].

Individuals who possess high degrees of Conscientiousness are associated with a wide range of health protecting behaviors. In a study of college students as in^[28] found that students with conscientiousness showed much higher rates of buckling their seat belts when driving, engagement in regular exercising, eating a healthy diet, consuming alcohol at moderate and safe levels, and getting sufficient rest.

A recent meta analysis of the relationship between Conscientiousness and education also found Conscientiousness to be as critical as intelligence for educational success^[26]. A large multinational study exploring the relationship between exercise, personality traits, and motivation found that Conscientiousness, Openness, and Agreeableness were associated with motivation to exercise^[5]. Conscientiousness, like self control, has

also been associated with lower rates of smoking^[22] and more positive patterns of coping among hemodialysis patients^[23].

CONCLUSIONS AND IMPLICATIONS

This scientific paper has presented of the relationship between self control, Conscientiousness, and behavior amply illustrates the importance of both on health. Many adverse health behaviors such as smoking, drug use, overeating, and risky sexual behavior are associated with the absence of sufficient self control and Conscientiousness while positive levels of both foster more positive health behaviors such as exercise, and improve the chances of educational success leading to increased protection from poverty. There is evidence that self control and self regulation can be improved with practice^[4] and that the balance of personality tempera-ments can be changed resulting in less adverse health behavior^[14].

A critical factor in promoting self control is positive parenting in the first 10 years of a child's life^[24] which suggests there should be a much greater focus on training and supporting new parents (e.g., teen mothers) in parenting skills that support the development of child self discipline potentially up through a child's pre adolescence. Developing religiousness also has positive impacts on self control and self regulation. Religiousness appears to direct individuals to those behaviors and activities which support self control (e.g., self monitoring, development of regulatory strength)^[15]. Given recent trends in increasing church attendance^[9] higher rates of self control nationally may become evident.

In closing, it is argued that self control is an important, yet unappreciated factor in health psychology. Even though it fails to be adequately represented in

health psychology text books, self control is an important factor shaping many aspects and levels of both healthy and adverse health behavior. The same is true with respect to Conscientiousness. This means both should be singled out as important health psychology constructs due to their relationship to many aspects of positive health, including those core virtues like self control driving positive health behavior.

REFERENCE

1. J. Asendorpf, P. Borkenau, F. Ostendorf, and M. Van Aken, "Carving personality description at its joints: Confirmation of three replicable personality prototypes for both children and adults," *European Journal of Personality*, 15(3), 169-198. Retrieved June 19, 2009, doi:10.1002/per.408, May, 2001.
2. Associated Press [AP](2010). Obesity costs U.S. \$168 billion, study finds. USA Today. Retrieved October 20, 2010. [Online]. Available: http://www.usatoday.com/yourlife/fitness/2010-10-18-obesity-costs_N.htm?loc=interstitialskip
3. C. Braet, L. Claus, S. Verbeken, and L. Van Vlierberghe, "Impulsivity in overweight children," *European Child & Adolescent Psychiatry*, 16(8), 473-483. doi:10.1007/s00787-007-0623-2, 2007.
4. C. Broman, "The Longitudinal Impact of Adolescent Drug Use on Socioeconomic Outcomes in Young Adulthood," *Journal of Child & Adolescent Substance Abuse*, 18(2), 131-143. Retrieved from ERIC database, 2009.
5. H. Chu-Hsin, L. Li-Yueh, and C. Man-Ling, "The influence of personality and motivation on exercise participation and quality of life," *Social Behavior & Personality: An International Journal*, 35(9), 1189-1209. Retrieved from SocINDEX with Full Text database, 2007.
6. J. Cunningham, "Self Direction: A Critical Tool in Distance Learning," *Common Ground Journal*, 7(2), 89-100. Retrieved from Academic Search Complete database, 2010.
7. Y. Chudasama, "Animal models of prefrontal executive function," *Behavioral Neuroscience*, 125(3), 327-343. doi:10.1037/a0023766, 2011.
8. Daniel, J., Hickman, M. Macleod, J. Wiles, N., Lingford Hughes, A. Farrell, M., "Is socioeconomic status in early life associated with drug use? A systematic review of the evidence," *Drug & Alcohol Review*, 28(2), 142-153. doi:10.1111/j.1465-3362.2008.00042.x, 2009.
9. M. Daniels, (2010). Gallup: Conservatives outnumber liberals 2:1, church attendance rising. Secular News Daily. Retrieved August 15, 2010 [Online] Available: <http://www.secularnewsdaily.com/2010/06/28/gallup-conservatives-outnumber-liberals-21-church-attendance-rising/>
10. J. Davis, C. Marra, M. Najafzadeh, and Liu-Ambrose, T, "The independent contribution of executive functions to health related quality of life in older women," *BMC Geriatrics*, 1016. Retrieved from EBSCOhost, 2010.
11. R. de Jongh, Bolt, I., M. Schermer, and B. Olivier, "Botox for the brain: Enhancement of cognition, mood and prosocial behavior and blunting of unwanted memories," *Neuroscience and Bio-behavioral*
12. Reviews, 32(4), 760-776.

- doi:10.1016/j.neubiorev.2007.12.00, 2008.
13. G. Dura Vila and Dura Vila, V. *Reply to Gold and Olin: antidepressants and the identity of persons.* Transcultural Psychiatry, 2010.
 14. A. Fredrickson, Snyder, P. J., Cromer, J., Thomas, E., Lewis, M., and Maruff, P, "The use of effect sizes to characterize the nature of cognitive change in psychopharmacological studies: an example with scopolamine," *Human Psychopharmacology: Clinical & Experimental*, 23(5), 425-436. doi:10.1002/hup.942, 2008.
 15. K.D. Gerlach, R. Spreng, A.W. Gilmore, and Schacter, D. L. "Solving future problems: Default network and executive activity associated with goal directed mental simulations," *NeuroImage*, doi:10.1016/j.neuroimage.2011.01.030, 2011.
 16. J. Gropen, N. Clark Chiarelli, C. Hoisington, and Ehrlich, S. (2011). The importance of executive function in early science education. Retrieved on September 30, 2011. [Online]. Available: <http://ltd.edc.org/sites/ltd.edc.org/files/Gropen%20et%20al%20CDP%20in%20press%20122110.pdf>
 17. R. Hoshi, K. Mullins, C. Boundy, C. Brignell, Piccini, P., and Curran, H. "Neurocognitive function in current and exusers of ecstasy in comparison to both matched polydrug using controls and drugnaïve controls," *Psychopharmacology*, 194(3), 371-379. doi:10.1007/s00213-007-0837-5, 2007.
 18. G. Jocham and M. Ullsperger, "Neuropharmacology of performance monitoring, " *Neuroscience and Biobehavioral Reviews*, 33 (1), 48-60. doi:10.1016/j.neubiorev.2008.08.011, 2009.
 19. D.O. Kennedy, R. Veasey, A. Watson, F. Dodd, E. Jones, Maggini, S., and Haskell, C. F, "Effects of high-dose B vitamin complex with vitamin C and minerals on subjective mood and performance in healthy males," *Psychopharmacology*, 211(1), 55-68. doi:10.1007/s00213-010-1870-3, 2010.
 20. T. Lin, "Self-regulation effect in dietary control of obesity [Chinese],". *Journal of Nursing*, 58(3), 97-103. Retrieved from EBSCO-host, (2011).
 21. S. McHale and N. Hunt, "Executive function deficits in short-term abstinent cannabis users," *Human Psychopharmacology: Clinical & Experimental*, 23(5), 409-415. doi:10.1002/hup.941, 2008.
 22. C., Ashmore, K. V., and A. Jansari, "The effects of a modest dose of alcohol on executive functioning and prospective memory," *Human Psychopharmacology: Clinical and Experimental*, 26(3), 208-215. Retrieved from EBSCOhost, 2011.
 23. O. Okonkwo, V. Wadley, H. Griffith, Ball, K., and Marson, D. Cognitive correlates of financial abilities in mild cognitive impairment. *Journal of the American Geriatrics Society*, 54 (11), 1745-1750. Retrieved from EBSCOhost, 2006.
 24. J. Odgen, *Health Psychology: A Text Book*, 3rd Ed. United Kingdom: McGraw-Hill Education. 2004.
 25. T. Osypuk and D. Acevedo Garcia, "Support for Smoke-Free Policies: A Nationwide Analysis of Immigrants, US-Born, and Other Demographic Groups, 1995—2002," *American Journal of Public Health*, 100(1),

- 171-181. Retrieved from Education Research Complete database, 2010.
26. P. Pokhrel, S. Sussman, L. Rohrbach, and Ping, S. "Prospective associations of social self control with drug use among youth from regular and alternative high schools," *Substance Abuse Treatment, Prevention & Policy*, 222-8. doi:10.1186/1747-597X-2-22, 2007.
27. A. Poropat, "A meta-analysis of the five-factor model of personality and academic performance," *Psychological Bulletin*, 135(2), 322- doi:10.1037/a0014996, 2009.
28. D. Radosevich, M. Levine, and G. Kong, "The influence of conscientiousness and anxiety on decision-making," *International Journal of Business Research*, 9(4), 194-200. Retrieved from Business Source Complete database, 2009.
29. D. Raynor and H. Levine, "Associations Between the Five-Factor Model of Personality and Health Behaviors Among College Students," *Journal of American College Health*, 58(1), 73-82. Retrieved from Education Research Complete data-base, 2009.
30. B. Roberts, O. Chernyshenko, S. Stark, and L. Goldberg, "The structure of conscientiousness: An empirical investigation based on seven major personality questionnaires," *Personnel Psychology*, 58, 2005.
31. T.W. Robbins and A.T. Arnsten, "The neuropsychopharmacology of frontoexecutive function: Monoaminergic modulation," *Annual Review of Neuroscience*, 32267 - 287. doi:10.1146/annurev.neuro.051508.135535, 2009.
32. J.K. Rybakowski, A. Permoda-Osip and A. Borkowska, "Response to prophylactic lithium in bipolar disorder may be associated with a preservation of executive cognitive functions," *European Neuropsychopharmacology*, 19 (11), 791-795. doi:10.1016/j.euroneuro.2009.06.002, 2009.
33. A. Sevincer and G. Oettingen, "Alcohol breeds empty goal commitments," *Journal of Abnormal Psychology*, 118(3), 623- 633 doi:10.1037/a0016199, 2009.
34. H. Suzuki, K. Gen, and Y. Inoue, "An unblinded comparison of the clinical and cognitive effects of switching from first generation antipsychotics to aripiprazole, perospirone or olanzapine in patients with chronic schizophrenia," *Progress in Neuro Psychopharmacology & Biological Psychiatry*, doi:10.1016/j.pnpbp.2010.10.021, 2010.
35. V. Topçuoğlu, N. Fistikci, O. Ekinçi, O., A. Gimzal Gönentür, and B. Cömert Agouridas, "Assessment of executive functions in social phobia patients using the Wisconsin Card Sorting Test," *Türk Psikiyatri Dergisi = Turkish Journal Of Psychiatry*, 20(4), 322-331. Retrieved from EBSCOhost, 2009.