Chapter 1

Applying the IAT to Assess Big Five Personality Traits:
A Brief Review of Measurement and Validity Issues

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ABSTRACT

This chapter reviews the studies that applied the Implicit Association Test (IAT) to assess the Big Five personality traits, focusing on issues related to measurement and validity. After a brief introduction on the implicit self-concept of personality, the following five issues are critically reviewed: (1) the experimental procedure of both classical and questionnaire-based Big Five IATs, (2) the factorial structure and reliability of the implicit traits and the degree of dissociation between implicit and explicit measures, (3) the state and trait components of implicit scores, (4) the predictive validity of the Big-Five IATs with respect to relevant behavioural criteria, and (5) the robustness to faking of the Big Five IATs. Future research directions for the implicit measures of the Big Five were discussed.

INTRODUCTION

As widely demonstrated by many years of theoretical and empirical research, human personality can be adequately described referring to five general dimensions, namely Extraversion (or Energy), Agreeableness, Conscientiousness, Neuroticism (or Emotional Stability), and Openness (or Intellect). The five-factor structure has proved to be stable across time (Costa & McCrae, 1988) and consistent across different languages and raters (McCrae & Allik, 2002). Furthermore, empirical

studies have demonstrated the predictive validity of the five factors in diverse areas of human functioning, as mental health (Widiger, Costa, & McCrae, 2002), job performance (Barrick, Mount, & Judge, 2001), and academic achievement (Poropat, 2009).

Classical measures of personality traits are list of adjectives, markers of the Big Five, and phrase-based questionnaires aimed at measuring the five dimensions. However, self-report measures suffer from well-known limitations, including: a) their vulnerability to faking, namely individual's deliberate alteration of responses aimed to present a favourable impression (Griffith & Peterson, 2008), and b) the introspective limits of respondents, that may lead to inaccurate responses. In order to overcome these problems, several authors have recently developed a series of experimental paradigms that permit to assess many psychological constructs without the use of subjective introspection (see Gawronski & Payne, 2010, for a review).

Among implicit measures, the most popular experimental paradigm is the Implicit Association Test (IAT, Greenwald, McGhee & Schwartz, 1998). Although the IAT has been originally developed to measure stereotypes and prejudices, it has been subsequently applied to other psychological constructs (Greenwald, Nosek & Banaji, 2003; Greenwald, Poehlman, Uhlmann & Banaji, 2009; Nosek, Greenwald, & Banaji, 2007), including personality traits.

Depending on target-categories and attributes that are employed, the IAT can be applied to assess the association between the self and a specific personality trait. According to Asendorpf, Banse and Mücke (2002), a part of the self-concept regards some typical personality characteristics (such as traits), traditionally measured through psychometric instruments, that are labeled as the *personality self-concept.* Big five IATs, as well as other implicit measures of personality, allow to assess the implicit self-concept of personality while self-report scales refer to the explicit self-concept of personality.

In this regard, Back, Schmukle and Egloff (2008) proposed a Behavioral Process Model of Personality (BPMP), derived by the Reflective–Impulsive Model by Strack and Deutsch (2004). The BPMP assumes an implicit and an explicit way of social information processing, both converging on behavioral schemata. According to this model, when a stimulus or a situation trigger the cognitive system, associative (implicit) and propositional (explicit) representations are activated, both of which are able to regulate behavioral schemata. Personality self-attributions may be connected to the characteristics of the situation, to motivational tendencies of the individual, and the subsequent impulsive behaviors, developing a pattern of chronic associations that can be automatically and implicitly activated. Therefore, implicit personality self-attributions can be conceived as a consequence of many precedent activations of automatic behaviors, that ultimately assume the form of implicit chronic associations. In contrast, explicit representations of the personality self-concept refer to controlled behavior, and assume the form of a propositional self-judgments. In the section of this chapter that deals with the predictive validity of implicit traits we will illustrate that, as a consequence of their sensitivity to chronic automatic associations, Big Five IATs are expected to be better predictors of impulsive behavior than self-report scales. Implicit Big Five, on the contrary, should be worse predictors of reflective behavior as they are not appropriate to evaluate deliberate self-judgments.

In this chapter, the main issues addressed by implicit Big Five literature are reported and critically examined, focusing the attention on: (1) the experimental procedures developed to assess the Big Five using the IAT (e.g., Back, Schmukle & Egloff, 2009; Schnabel, Asendorpf & Greenwald,

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