ELSEVIER

Contents lists available at ScienceDirect

Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid



Entity and incremental theory of personality: Revisiting the validity of indicators



Maria Preißinger*, Harald Schoen

University of Mannheim, Germany

ARTICLE INFO

Keywords: Lay theory Implicit theory Personality Validation

ABSTRACT

This article tests the validity of indicators of entitavist and incremental lay theories about the malleability of personality (Dweck, Hong, & Chiu, 1993; Levy, Stroessner, & Dweck, 1998) in a two-wave panel survey over a 12-month period. After controlling for systematic measurement error stemming from different directions of item wording, the indicators form a single dimension. Moreover, hypotheses concerning (non-)correlations with socio-demographic characteristics and psychological dispositions largely receive support from the evidence. Further, beliefs about the malleability of personality exhibit higher intra-individual stability than attributions when controlling for measurement error in structural equation modeling. However, beliefs do not influence these attributions

1. Introduction

The idea that people hold beliefs about the malleability of personality has considerably influenced scholarly debates in social psychology (Chiu, Hong, & Dweck, 1997; Dweck, Chiu, & Hong, 1995; Dweck, Hong, & Chiu, 1993). Accordingly, some people believe that personality consists of fixed dispositions that cannot be changed; these are so-called "entity theorists." As dispositions are believed to be stable within a person, it makes sense to attribute other people's behavior to these dispositions. Core dispositions are conceived as "the unit of analysis the fundamental construct in terms of which they understand the nature and the workings of the social world they live in" (Dweck et al., 1993, pp. 644-645). "Incremental theorists," by contrast, think that even the most basic characteristics of a person are malleable and open for change. For incremental theorists, attributes of a person are not fixed entities but merely convenient labels they attach to current mental states such as goals, needs, and emotions of a certain individual in a specific situation (Dweck et al., 1993, p. 645). According to incremental theorists, these mental states can change and do change in response to situational changes (Dweck et al., 1993, pp. 651-652). Therefore, incremental theorists should assign more causal weight to the situation when explaining others' behavior than entity theorists do (Levy & Dweck, 1999, pp. 1164-1165; Levy, Plaks, Hong, Chiu, & Dweck, 2001, pp. 160-161).

Despite the influence of this theory, there remain open questions at the conceptual level with repercussions for its measurement. The aim of this paper is to resolve these issues which we shall discuss in turn. First, it is unclear whether the existing indicators accurately reflect the dimensionality of the theoretical concept because the dimensionality itself is theoretically contested. In early theorizing, beliefs about the malleability of personality are one-dimensional. Recent accounts make a case for a two-dimensional concept with both belief sets being independent knowledge structures with separate cognitive representations (Anderson & Lindsay, 1998; Levy et al., 2001, pp. 163-164; Levy, Chiu, & Hong, 2006, pp. 9-10; Poon & Koehler, 2006, 2008). The former view appears to rest on the assumption that lay beliefs about personality can prove useful in guiding social perception only if people cannot believe simultaneously that personality is fixed and highly malleable. By contrast, proponents of the latter view argue that entity and incremental beliefs are so often discussed in everyday life that they are available in everybody's long-term memory and individuals differ only in their chronic accessibility (Levy et al., 2001, pp. 163-164; Levy et al., 2006, pp. 9-10; Poon & Koehler, 2006, 2008). Furthermore, a two-dimensional structure could emerge because people do not hold a lay theory about personality per se, but about different parts of personality, some of which are regarded as fixed and some as malleable. Extant evidence does not clearly support one conception or the other, however. Most studies use a Likert-item battery comprising indicators worded in a way that approval of these items means approval of entitybeliefs of personality and therefore cannot examine the dimensionality (Dweck et al., 1995; Erdley & Dweck, 1993; Hong, Chiu, Dweck, & Sacks, 1997; Poon & Koehler, 2006). Others use an extended item battery including indicators worded in both directions (developed by Levy, Stroessner, and Dweck (1998)) but do not properly examine the

E-mail address: maria.preissinger@uni-mannheim.de (M. Preißinger).

^{*} Corresponding author.

dimensionality. When tackling this issue, one has to consider the methodological challenges arising from survey response sets. In a confirmatory factor analysis, a two-dimensional factorial structure could do a better job than a one-dimensional model in reproducing inter-item-correlations not because the underlying concept is indeed two-dimensional but because survey respondents tend to approve rather than to disapprove of survey items (acquiescence bias) - irrespective of their content.1 Others use bipolar semantic differential scales that may avoid acquiescence bias but are not helpful in empirically investigating the dimensionality of the underlying construct (e.g. Dickhäuser, Dinger, Janke, Spinath, & Steinmayr, 2016; see also Lüftenegger & Chen, 2017). In this paper, we examine the unresolved question of the concept's dimensionality by using the two-sided Likertitem battery and comparing different measurement models in a confirmatory factor analysis approach while controlling for systematic measurement error caused by acquiescence bias.

Second, it is not clear whether the indicators possess sufficient reliability because a reasonable benchmark to judge results against is missing. Using data from Likert-batteries measured in panel surveys, Poon and Koehler (2008) report an over-time Pearson's correlation coefficient r = 0.57 over an eight-week period; Dweck et al. (1995) find a test-retest correlation of r = 0.82 over two weeks, whereas Levy et al. (1998) report r = 0.71 over four weeks. While measuring over-time correlations is important, their significance depends on whether they meet theory-based criteria. Although Poon and Koehler (2008) compare their stability estimate of lay theories to some "widely studied individual-difference variables" (p. 973), they do not specify expectations for this comparison. Building on the idea that beliefs about the malleability of personality provide individuals with a framework for causal attributions, we argue that these beliefs should prove more stable than causal attributions individuals make in identical scenarios measured at multiple occasions. Previous reliability-studies did not report this benchmark statistic, however. What is more, previous studies did not check whether the measurement model is invariant over time and consequently whether the computation of stability estimates is reasonable to begin with. Therefore, in this paper we close this gap and examine the stability of malleability-beliefs about personality over a 12month period in a confirmatory factor analysis approach and provide analysis of the stability in attributions as a benchmark.

Third, prior research on the discriminant and convergent validity of indicators was conducted with small convenience samples only (Dweck et al., 1995; Levy et al., 1998). In this paper, we employ a large sample of the general population in order to include enough variation in the respective variables to test these validation hypotheses appropriately. A first set of expectations derives from the argument that incremental theory is not more correct than entity theory or vice versa, instead both theories are conceived as "alternative ways of constructing reality, each with its potential costs and benefits" (Dweck et al., 1995, p. 268; see also Levy et al., 2001, p. 157). Gender, education, and life experience therefore should not provide superior insight and should be unrelated to indicators of malleability beliefs if the latter capture the concept validly (Dweck et al., 1995; Levy et al., 1998). In contrast, malleability beliefs should be related to cognitive needs. Because global personality traits can be judged as good or bad in a straightforward manner, holding an entity view about personality may fulfill the need to evaluate - at least as far as people as attitude objects are concerned (Dweck et al., 1993; Hong et al., 1997). By contrast, incremental theorists' tendency to understand dispositions as mere labels of dynamic psychological states might fulfill a need to engage in effortful cognitive activity (need for cognition).

As the above discussion suggests, prior research has not been completely successful in demonstrating that the proposed indicators have theoretically desirable properties. We will thus take a fresh look at the measurement. Relying on data from a two-wave panel survey, we examine the validity of indicators by investigating their dimensionality, whether they exhibit sufficiently high over-time stability and correlate with other concepts in the expected way. In terms of methodology, we improve on prior research by avoiding problems arising from random and structural measurement error by employing structural equation modeling.

2. Method

2.1. Procedure

We collected survey data from 1098 adult Germans quota-sampled from an online-access panel administered by Respondi AG leading to a three-way uniform distribution in gender, three education groups (low, middle and high education) and five age groups (18-29, 30-39, 40-49, 50-59, 60 years or older). This sample size provides sufficient variation in sociodemographic characteristics to test Dweck et al.'s (1995) claim that malleability beliefs are independent of these characteristics. Respondents were awarded 1.50€ in exchange for their participation in the 15-minute interview and answered the survey on their personal device. Respondents were invited to take part in a follow-up interview about 12 months later in February 2017. 548 respondents completed the second wave. We considered only participants that were able to verify their identity by stating identical information regarding gender, year of birth, month of birth and first letter of birthplace in wave 2 as previously stated in wave 1. Respondents who completed the re-interview and those failing to do so do not differ substantially in beliefs about the malleability of personality as measured in wave 1 (results not reported in tabular form).

2.2. Lay theory measures

An item battery in German was modeled after the 8-item battery by Levy et al. (1998) via a translation and back translation procedure. This battery includes Likert items taking a fixed view on personality as well as items taking an incremental view. One item in Levy et al.'s original battery quotes a proverb ("you can't teach an old dog new tricks"). This item was not included in the German battery because proverbs sound familiar and thus are more strongly endorsed than other items (mere exposure effect: Zajonc, 1968); instead a new entity-worded item was created (item 3). Incremental items had to be adapted as well because very similarly worded items in English turned out to be word-for-word identical in the German translation. As a result, the German battery comprises seven items, four worded in favor of an entity view, three worded in favor of an incremental view (Table 1).

Participants were asked to rate each item on a single screen on a 5-point scale with options labeled "strongly agree", "agree", "partly agree/partly disagree", "disagree", and "strongly disagree". There was no "don't know" option. Respondents could, however, continue to the next screen without providing an answer. The scale of the original item battery by Levy et al. (1998) did not include a "don't know" option either but – in contrast to our measure – also lacked an exact mid-point. For someone who has not thought about the malleability of personality before and is looking for a way to express this lack of opinion, refusing to give an answer or clicking the middle category might represent a viable strategy (Krosnick, 1991). If no middle category had been provided, respondents might scatter between the adjacent scale points, falling – in the worst case, randomly – either into the entity or the incremental half of the scale.

¹ Examining related lay beliefs about the malleability of *intelligence*, Tempelaar, Rienties, Giesbers, and Gijselaers (2015) conduct this kind of analysis but do not take acquiescence bias into account. Similarly, the fact that an exploratory factor analysis results in two factors is not sufficient evidence for a two-dimensional structure (e.g. Dupeyrat & Mariné, 2005; Stipek & Gralinski, 1996).

Download English Version:

https://daneshyari.com/en/article/7248634

Download Persian Version:

https://daneshyari.com/article/7248634

<u>Daneshyari.com</u>