



Investigating the structure of regulatory focus: A bifactor analysis



Flaviu A. Hodis ^{*,1}

Faculty of Education, Victoria University of Wellington, New Zealand

ARTICLE INFO

Article history:

Received 11 July 2016

Received in revised form 1 November 2016

Accepted 4 January 2017

Available online 13 January 2017

Keywords:

Bifactor modeling

Regulatory focus

Promotion

Prevention

ABSTRACT

Regulatory focus theory proposes that two strategic orientations, namely promotion and prevention, shape individuals' self-regulation and make key contributions to the psychological mechanisms undergirding the development of depressive disorders, generalized anxiety disorder, and their comorbidity. Although two distinct conceptualizations of regulatory focus coexist in the literature, it is unclear whether promotion and/or prevention are hierarchical constructs comprising both general and narrower factors, with the latter corresponding to the self-guide and, respectively, the reference-point definitions of regulatory focus. This research used information from a large sample of secondary school students ($N = 5732$) and examined a number of competing models to examine the structure of promotion and prevention. Findings of this investigation suggest that a general promotion construct accounted for most of the variance in the combined set of items mapping both self-guide and reference-point conceptualizations. Results also indicate that the reference-point definition of regulatory focus did not facilitate an appropriate measurement of the prevention construct in this population. These findings make important contributions to advancing extant knowledge and have salient implications at both conceptual and practical levels.

© 2017 Elsevier Ltd. All rights reserved.

Regulatory focus is a psychological theory that has informed work in a wide range of research domains spanning motivation, cognition, and emotion (Haws, Dholakia, & Bearden, 2010; Higgins, 2012b; Polman, 2012; Summerville & Roese, 2008). An individual's regulatory focus encompasses two strategic orientations, namely promotion and prevention (Higgins, 1997). Two distinct conceptualizations of regulatory focus coexist in the literature (Summerville & Roese, 2008; details follow in the next section). Given that they both have strong theoretical foundations, an important yet unanswered question is whether a general overarching construct of promotion (prevention) could be identified by using concomitantly both of these conceptualizations (Hodis & Hodis, 2016). Importantly, if such a general construct could be identified for promotion (prevention), this would alleviate concerns that results couched in different conceptualizations of regulatory focus may not be interpreted as a unitary corpus of findings (Summerville & Roese, 2008). In addition, this general construct would have a higher content validity than that of its counterparts associated with only one of these conceptualizations (Chen, Hayes, Carver, Laurenceau, & Zhang, 2012). To investigate the potentially hierarchical and/or multifaceted nature of promotion and prevention, we examined several competing models

offering conceptually distinct representations of the measurement structure of these constructs. Before we discuss how testing these models provides insights into the nature of promotion and prevention, we overview briefly the two different conceptualizations of regulatory focus that co-exist in the literature.

1. Conceptualization of regulatory focus

Regulatory focus theory proposed that children's early socialization with families and caregivers influences the type of self-guide, that is, the "self-directive standards" (Higgins, 1987, p. 321), they try to emulate. An important tenet of accessibility theory is that mental representations stored in memory become accessible and could be activated for use when they are relevant to ongoing self-regulatory processes (Higgins, 2012a). Thus, children's self-guides are readily accessible and shape their emotional, cognitive, and behavioral reactions (Dweck, Higgins, & Grant-Pillow, 2003; Higgins, 1997, 2012b). In particular, children whose early socialization focuses on attaining own ideals have most accessible ideal self-guides and are likely to develop a promotion orientation. In contrast, children whose socialization centers on being safe and fulfilling duties, obligations, and responsibilities (represented in social norms and/or conveyed by families, teachers, etc.), have readily accessible ought self-guides and are likely to develop a prevention orientation (Higgins, 1997, 2012b). Summerville and Roese (2008) labeled this conceptualization the self-guide definition of regulatory focus.

^{*} Corresponding author at: Victoria University of Wellington, PO BOX 600, Wellington 6140, New Zealand.

E-mail address: flaviu.hodis@vuw.ac.nz.

¹ Flaviu A. Hodis is a senior lecturer in the Faculty of Education, Victoria University of Wellington, New Zealand. Flaviu can be contacted at flaviu.hodis@vuw.ac.nz. Tel: 64-4-463-9550. Fax: 64-4-463-9561.

Regulatory focus theory posited that a strong emphasis on promotion is associated with sensitivity to the presence (vs. absence) of positive outcomes (i.e., gains vs. non-gains; Higgins, 1997, 2012b). As a consequence, self-regulation having a promotion focus uses gains as its reference point and represents success (failure) as the presence (absence) of gains. In contrast, when prevention is emphasized, individuals are sensitive to the absence (vs. the presence) of negative outcomes (i.e., non-losses vs. losses) (Higgins, 1997, 2012b). Thus, self-regulation having a prevention focus uses losses as its reference point and represents success (failure) as the absence (presence) of losses. This conceptualization has been termed the reference-point definition of regulatory focus (Summerville & Roese, 2008).

Although individuals differ with respect to which self-guide is most chronically accessible to them, they use both ideal and ought self-guides to some degree (Higgins, 2012b). In addition, people are sensitive to (the presence/absence of) both positive and negative outcomes. As a consequence, individuals can activate both promotion and prevention orientations (Dweck et al., 2003; Higgins, 1997, 2012b).

Summerville and Roese (2008) proposed that the self-guide definition of regulatory focus is operationalized by means of Higgins et al.'s (2001) Regulatory Focus Questionnaire (RFQ). These authors also argued that the reference-point definition is operationalized by means of Lockwood, Jordan, and Kunda's (2002) General Regulatory Focus Measure (GRFM). Notably, the RFQ and the GRFM are the two instruments that have most often been used in regulatory focus research (Gorman et al., 2012; Summerville & Roese, 2008). In addition, "the range of findings with each scale suggests they possess adequate predictive validity" (Summerville & Roese, 2008, p. 249).

1.1. Key implications of interindividual differences in promotion, and prevention orientations

Examining promotion and prevention orientations within the framework of the regulatory focus theory (Higgins, 1997) offers important information regarding the etiology of depression and generalized anxiety as well as of their often-reported comorbidity (Klenk, Strauman, & Higgins, 2011). Specifically, when individuals pursue goals with a strong promotion focus, they strive to attain positive outcomes (Higgins, 1997, 2012b). In turn, this strategic priority "engenders an eager, positive-outcome-focused motivational state" (Klenk et al., 2011, p. 936). According to regulatory fit theory, the pursuit of promotion goals by means of eager strategies (e.g., seeking to attain one's aspirations to advance by employing strategies that maximize the chances to gain even at the risk of incurring losses) is associated with stronger engagement in goal-related activities (Higgins, 2000). As success heightens eagerness (Higgins, 2012b), when individuals experience success in their pursuit of valued promotion goals, their strengthened eagerness makes it likely that they continue to pursue other promotion-related goals (Klenk et al., 2011).

In contrast, failure to attain promotion goals diminishes individuals' eagerness and, thus, reduces their subsequent engagement with promotion goals and dampens their valuations of positively valenced activities/goals (Klenk et al., 2011). Importantly, when failure experiences regarding promotion goals are significant (e.g., chronic or traumatic), they are likely to give rise to important dysregulations of the promotion system (e.g., dejection/dysphoria; Strauman et al., 2015); in turn, these could lead to generalized lack of interest and/or lethargy, which are states commonly experienced in depression (Higgins, 2006; Klenk et al., 2011). Therefore, theorists have argued that hypoengagement with promotion goals may lead to depressive states (Strauman et al., 2015).

Studies of the neural correlates of activating promotion (vs. prevention) goals support these contentions. For example, Eddington, Dolcos, Cabeza, Krishnan, and Strauman (2007) found that priming of promotion goals was linked to neural activation in the left orbital prefrontal cortex. Moreover, the magnitude of this activation was positively

associated with individuals' scores on the promotion subscale of the RFQ. Similarly, Eddington et al. (2009) used functional magnetic resonance imaging (fMRI) to investigate how depressed and non-depressed individuals responded to priming of promotion and prevention goals. Their findings indicated that "depression is associated at both behavioral and neurobiological levels with down regulation of promotion goal pursuit and simultaneous (and possibly compensatory) hyperresponsivity to prevention goals" (p. 243). In line with these results, a recent intervention that raised the levels of promotion engagement of individuals who previously reported little success in attaining promotion goals helped improve their levels of acute dysphoric mood (Strauman et al., 2015). This corpus of findings is consistent with Higgins' (2006), Klenk et al.'s (2011), and Strauman's (2002) theorizing of the interrelationships among regulatory focus orientations, depression, and generalized anxiety.

When individuals pursue goals with a strong prevention focus, they are concerned with responsibility, safety, and security (Higgins, 1997, 2012b; Klenk et al., 2011). This strategic orientation centers on attempting to keep "bad things from happening and engenders a vigilant negative-outcome-focused motivational state" (Klenk et al., 2011, p. 936; emphasis in original). In line with the tenets of regulatory fit theory, a vigilant strategic outlook is a regulatory fit for pursuing goals with prevention orientation and, thus, facilitates stronger engagement with goal-related activities (Higgins, 2000). As vigilance is heightened by failure (Higgins, 2012b), failing in prevention-related goal pursuits is associated with a stronger focus on detecting dangers and avoiding errors. This is why, when failure is chronic or traumatic, a state of hyper-vigilance and a ready accessibility of prevention goals are likely (Klenk et al., 2011). In turn, these aspects enlarge the array of contexts and situations that are perceived as potentially dangerous or threatening and magnify reactions to them. As a consequence of this hyperengagement of prevention goals, general levels of anxiety are likely to raise, thus creating the backdrop for generalized anxiety disorder (Higgins, 2006; Klenk et al., 2011; Strauman et al., 2015). In line with these propositions, Strauman et al. (2015) showed that an intervention aimed at reducing prevention engagement helped diminish the levels of acute anxious mood of participants who previously reported low levels of success with regard to achieving prevention goals.

2. The present study

We employed three sets of competing models to investigate the potentially multifaceted and/or hierarchical nature of promotion and prevention and assess whether the self-guide and reference-point definitions of regulatory focus could be used together to measure these constructs. The first model we used was a one-factor Confirmatory Factor Analysis (CFA) including all items measuring promotion (prevention) across the two definitions of regulatory focus. This model examined the extent to which scores on these items were influenced only by a single common factor and by indicator-specific and uncorrelated error terms. The one-factor CFA model, thus focused only on the most general promotion (prevention) factor and did not take into account narrower conceptualizations of the construct (i.e., the self-guide and the reference-point definitions). Unequivocal empirical support for the one-factor CFA model would provide evidence against regarding the self-guide and reference-point conceptualizations as independent.

The second model investigated, which was a 2-factor CFA model, hypothesized that two factors, one corresponding to the self-guide and the other to the reference-point definition of regulatory focus, account appropriately for the associations among the promotion (prevention) items. To examine the extent to which items spanning the two definitions of regulatory focus measure independent constructs, this two-factor CFA model restricted to zero all cross-loadings between a factor (e.g., the self-guide definition) and the items measuring the other factor (i.e., the reference-point definition) and evaluated the corresponding inter-factor correlation.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات