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Replicating future orientation: Investigating the constructs of hope and optimism and their subscales through replication and expansion☆

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ABSTRACT

Recent decades have seen considerable debate as to how the constructs of hope and optimism are conceptualized, with some researchers questioning if they represent one global trait or two distinct traits. Past research has supported *both* the unidimensional view (Rand, 2009), and the claim they are two distinct entities (Bryant & Cvengros, 2004). The primary aims of the present study were to replicate the work of 1) Bryant and Cvengros (2004), who constructed several competing models and found that hope and optimism are best explained as two separate constructs, and 2) Rand (2009), who found hope and optimism to be part of one larger trait ("goal attitude"). Six distinct, theoretically-meaningful models were constructed and compared using confirmatory factor analysis to determine which model best fit data collected from 417 participants using Amazon's Mechanical Turk: (1) a one-factor hierarchical model, (2) a one-factor non-hierarchical model, (3) a two correlated factor model, (4) a four correlated factor model, (5) a bi-factor model, and (6) Rand's (2009) hierarchical model. Findings suggest that a bi-factor model, which includes both a global and a distinct two-factor component, best explains the constructs of hope and optimism. Implications of these findings are discussed.

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1. Introduction

Beliefs about outcomes of one's future, whether assuming the worst or expecting the best, are crucial to the human experience, and highly correlated with general well-being (Magaletta & Oliver, 1999). Two key concepts within this framework, hope (Snyder et al., 1991) and optimism (Scheier & Carver, 1985), have received much research attention. Extensive debate has centered on whether hope and optimism are distinguishable traits, given their considerable conceptual overlap. This paper aims to conceptually replicate findings of the works of 1) Bryant and Cvengros (2004), who compared several competing models and found that hope and optimism are best explained as two separate constructs, and 2) Rand (2009), who found evidence that hope and optimism are part of a larger shared aspect termed "goal attitude." Furthermore, this study expands methodologically on past work by using a broader sample of participants, and expands on other potential explanations by incorporating a bi-factor model into our methodology.

1.1. Theoretical models of hope and optimism

Unsurprisingly, hope and optimism have been used interchangeably and conceptualized as similar constructs, as both are considered positive expectancies about the future (Bruininks & Malle, 2005). Alarcon, Bowling, and Khazon (2013) found support for hope and optimism as two positively related distinct traits. Their results suggest hope and optimism are correlated strongly, yet differently, with other measures of well-being and personality (e.g., conscientiousness), and insist both constructs are necessary to fully understand the construct of positive expectations. Furthermore, they highlight an important difference: compared to optimism, hope is more concerned with self-initiated actions for successful outcomes. Simply put, although hopeful individuals believe that their futures will be fulfilling and successful through the self-appraisals of their own capabilities, optimistic individuals believe success and fulfillment will be achieved "either through luck, the actions of others, or one's own actions" (pp. 822).

Bryant and Cvengros (2004) noted that distinguishing or merging hope and optimism may rely on whether the goal is to maximize predictive accuracy, or to gain a general summary of the individual by assessing global future orientation. Regardless, more information on this issue is needed to determine whether hope and optimism are indeed two sides of the same coin, or two separate coins. In the present study, we conceptually replicated Bryant and Cvengros's (2004) and Rand's (2009) models, and included a bi-factor model to compare and examine specific nuances embedded in each model. The first four

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models have been adapted through the original design of Bryant and Cvengros, and theoretical rationales are provided for each model.

1. One factor hierarchical model

This model assumes covariations among the first order factors (i.e., pathways, agency, pessimism, optimism) underlie a single factor, labeled "future orientation" (Bryant & Cvengros, 2004). Their results suggest this model provided "reasonable fit" to their data. Carvajal, Clair, Nash, and Evans (1998) found support for a similar model, in which three subscale factors (optimism, agency, and pathways) comprised a global positive expectancies factor. Such expectancies not only characterize future outcome (optimism) beliefs, but also a sense of determination to achieve one's goals (agency), and the perceived ability to employ resources to achieve these goals (pathways; Snyder et al., 1991). Furthermore, Carvajal et al. (1998) suggest global positive expectancies "reflect the extent to which persons have favorable beliefs toward themselves and their future outcomes" (pp. 423), and note that many constructs can comprise this expectancy, with hope and optimism being two most prominent (see Fig. 1, Model 1).

2. One factor non-hierarchical model

The second model assumes that all 16 items of the Life Orientation Test Revised (LOT-R; Scheier, Carver, & Bridges, 1994) and the Adult Hope Scale (AHS; Snyder et al., 1991) reflect a single, global dimension, also labeled "future orientation." This model suggests all items from both scales load onto a *single* factor, collapsing the second-order factors of hope and optimism, and their respective first-order subscales (optimism, pessimism, pathways, and agency). As predicted by Bryant and Cvengros, this model yielded a poor fit of their data (see Fig. 1, Model 2).

3. Two correlated factor model

The third model consists of two correlated second-order factors (hope and optimism) that underlie the covariation of both of their subscales (i.e., hope underlies the covariation of agency and pathways, and optimism underlies the covariation of optimism and pessimism). Similar to the findings of Model 1, Bryant and Cvengros' results suggest this model provided an "acceptable fit" to their data. Furthermore, they found that a correlated two-factor model fit their data better

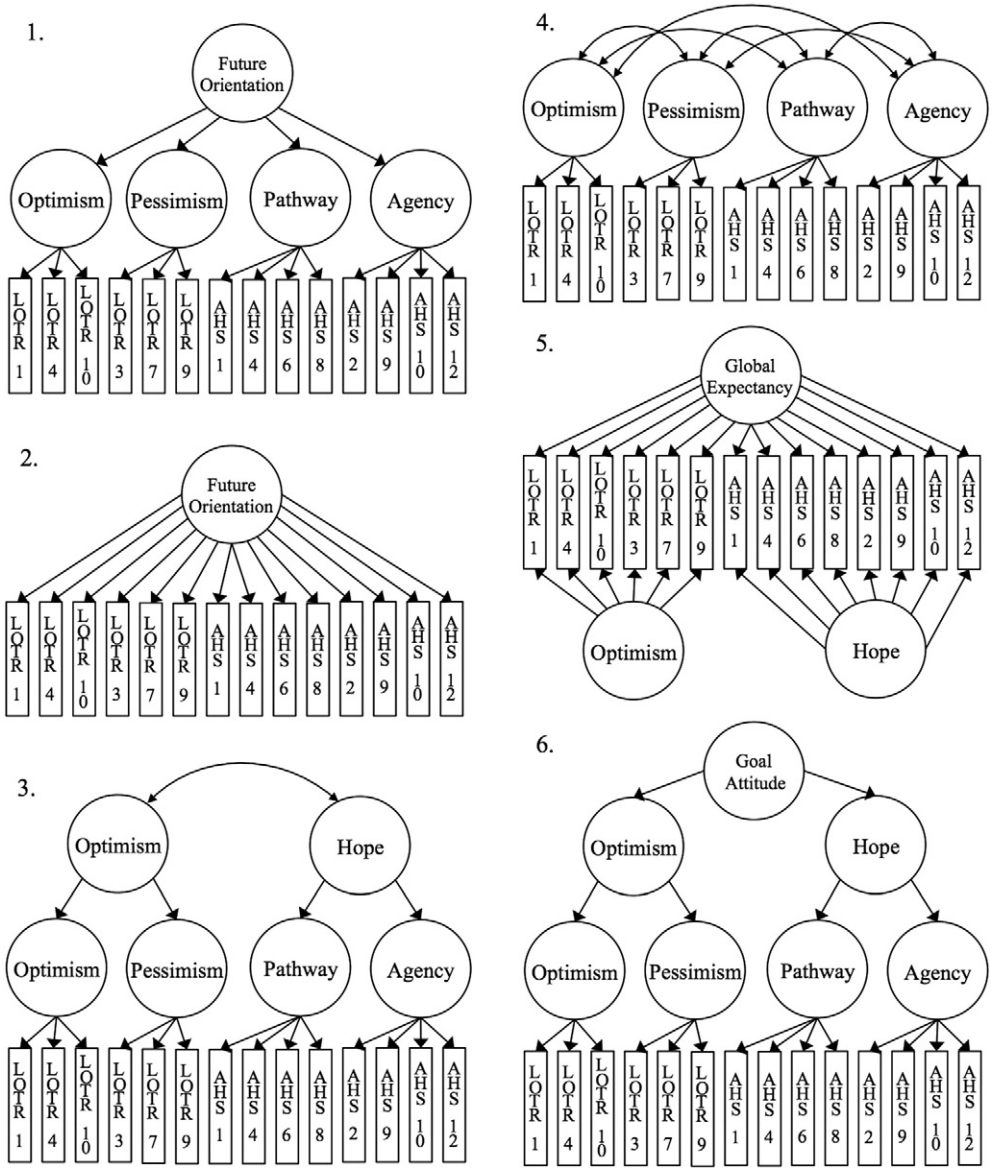

Fig. 1. Conceptual representation of the six competing models. Key: 1) one factor hierarchical, 2) one factor non-hierarchical, 3) two correlated hierarchical factors, 4) four correlated factors, 5) bi-factor model, 6) Rand model.