Eating Behaviors 15 (2014) 63–67

Contents lists available at ScienceDirect

Eating Behaviors

Comprehensive examination of the trans-diagnostic cognitive behavioral model of eating disorders in males

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ARTICLE INFO

Article history:
Received 19 December 2012
Received in revised form 19 August 2013
Accepted 9 October 2013
Available online 22 October 2013

Keywords:
Cognitive–behavioral
Trans-diagnostic Model
Eating disorders
Men
Structural equation modeling

ABSTRACT

The Trans-diagnostic Model (TM) of eating pathology describes how one or more of four hypothesized mechanisms (i.e., mood intolerance, core low self-esteem, clinical perfectionism and interpersonal difficulties) may interrelate with each other and with the core psychopathology of eating disorders (i.e., over-evaluation of weight and shape) to maintain the disordered behaviors. Although a cognitive behavioral treatment based on the TM has shown to be effective in treating eating disorders, the model itself has undergone only limited testing. This is the first study to both elaborate and test the validity of the TM in a large sample ($N = 605$) of undergraduate men. Body mass index was controlled within structural equation modeling analyses. Although not all expected associations for the maintenance variables were significant, overall the validity of the model was supported. Concern about shape and weight directly led to exercise behaviors. There was a direct path from binge eating to exercise and other forms of compensatory behaviors (i.e., purging); but no significant path from restriction to binge eating. Of the maintaining factors, mood intolerance was the only maintaining variable directly linked to men's eating disorder symptoms. The other three maintaining factors of the TM indirectly impacted restriction through concerns about shape and weight, whereas only interpersonal difficulties predicted low self-esteem and binge eating. Potential implications for understanding and targeting eating disturbances in men are discussed.

1. Introduction

The Trans-diagnostic Model (TM; Fairburn, Cooper, & Shafran, 2003) of eating pathology was developed in order to recognize the common features of all eating disorders (EDs) and the high rate of diagnostic crossover (Fairburn & Cooper, 2011). At its core is an over-evaluation of weight and shape and attempts to control them. The attempts at control manifest as severe restriction, which in turn exacerbates shape and weight concerns (SWCs) and can lead to further restriction or a binge/purge cycle. What is unique about the TM is that it posits that some individuals may struggle in one of four areas hypothesized to maintain EDs: clinical perfectionism, core low self-esteem, mood intolerance, and/or interpersonal difficulties (Cooper & Fairburn, 2011).

Although randomized controlled trials (Fairburn et al., 2009) provide preliminary support for the efficacy of the Cognitive Behavioral Therapy—Enhanced (CBT-E; Fairburn, 2008), good treatment outcome does not necessarily constitute evidence for the adequacy of the TM on which the treatment is based. Recently, there has been increased focus on testing the validity of the conceptual relationship of the TM in both clinical and non-clinical female samples (e.g., Hoiles, Egan, & Kane, 2012; Lampard, Byrne, McLean, & Fursland, 2011; Schnitzler, von Ranson, & Wallace, 2012; Tasca et al., 2011). Overall data from these studies tended to support the validity of the TM in women.

1.1. Rationale and aims

The lack of a direct comprehensive evaluation of the TM of EDs in men is somewhat surprising, given that men and women are more similar than dissimilar in terms of core ED behaviors (i.e., comparable restriction and binge eating rates), though they differ in the frequency of certain compensatory behaviors (Hudson, Hiripi, Pope, & Kessler, 2007; Lavender, De Young, & Anderson, 2010). There is a comparable rate of excessive exercise between young men and women, but lower levels of purging among men (Lavender et al., 2010; Striegel-Moore et al., 2009). Although the main purpose of compensatory behaviors is to counteract the effects of eating in order to avoid weight gain, in men, who tend to be more preoccupied with enhancing musculature (Dakanalis & Riva, 2013), exercise is not exclusively in the service weight reduction, but may also be utilized for the purpose of muscle mass gain (Anderson & Bulik, 2004). According to the TM, all forms

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1471-0153/$ – see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.eatbeh.2013.10.003

of EDs should represent varying behavioral expressions of SWCs (Fairburn et al., 2003). However, given the different nature of SWCs in men, the dual function of exercise behavior, and the different rates of certain compensatory behaviors, it is unclear if and how the TM fits men.

The goals of the current study were to (a) test the TM among college men, who are recognized as a "high" risk group for the onset of harmful eating and body-related disordered behaviors (Hudson et al., 2007), and (b) consider exercise and other forms of compensatory behaviors (i.e., purging, fasting) separately in the evaluation of the model, as recommended (Anderson & Bulik, 2004). Our hypothesized model, depicted in Fig. 1A was analyzed using a structural equation modeling in which the specification of the structural relationships was based on the illustrations of the TM model and men's ED literature (Dakanalis & Riva, 2013; Fairburn et al., 2003).

2. Methods

2.1. Participants

Participants were 613 men ranging in age from 18 to 30 ($M = 20.64$, $SD = 4.3$) recruited from four large universities in Italy. The majority of

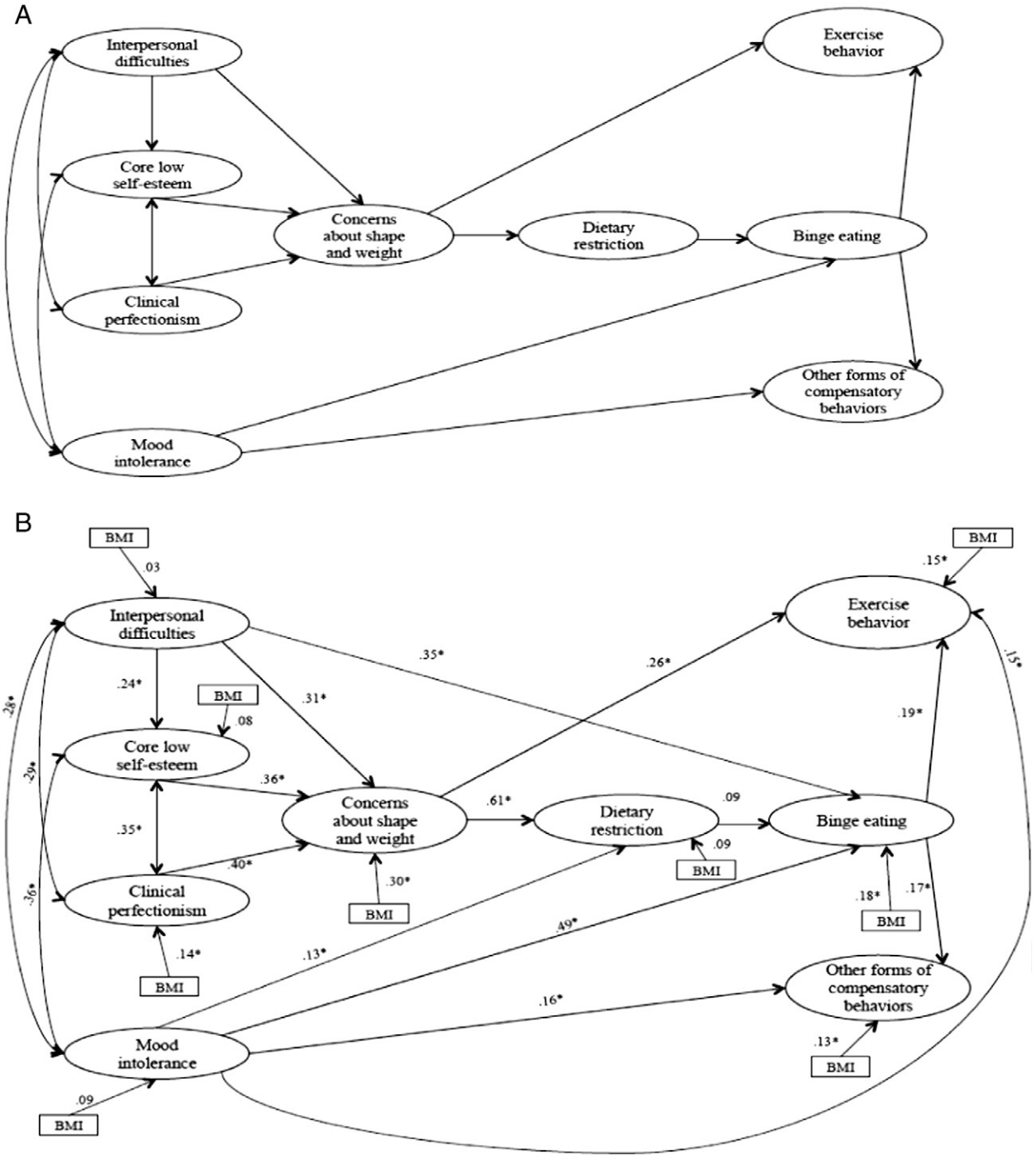

Fig. 1. This figure represents the hypothesized Trans-diagnostic Model of eating disorders in men (A) and the final structural model with non-significant paths trimmed and significant paths added (B). Singe-headed and double-headed arrows represent the impact of one variable on other and correlations between pairs of variables, respectively. Path coefficients for the structural model are presented. *$p < .05$.