ELSEVIER

Contents lists available at ScienceDirect

#### Personality and Individual Differences

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



Why do exercisers with a higher trait self-control experience higher subjective well-being? The mediating effects of amount of leisure-time physical activity, perceived goal progress, and self-efficacy\*



Walid Briki

Sport Science Program, College of Arts and Sciences, Qatar University, Doha, Qatar

#### ARTICLE INFO

Keywords: Personality Self-regulation Goal-selection Physical exercise Happiness Life satisfaction

#### ABSTRACT

A first goal of the present study consisted in examining the interrelationships between trait self-control, amount of leisure-time physical activity (LTPA), goal progress, self-efficacy and subjective well-being. A second goal of this study was to examine whether LTPA amount, goal progress and self-efficacy could mediate the beneficial effect of trait self-control on subjective well-being. Five hundred one individuals, who reported to perform LTPA regularly, took part voluntarily in the study. Preliminary analyses showed acceptable and significant estimates of the measurement and structural model (absolute GoF = 0.394, relative GoF = 0.990, outer model GoF = 0.998, inner model GoF = 0.991,  $R^2$  = 18.02%, p = 0.000). Correlation analyses revealed that trait self-control, LTPA amount, goal progress, self-efficacy and subjective well-being were positively associated with each other (ps = 0.138 to 0.711, ps  $\leq$  0.002). Mediation analyses revealed that LTPA amount, goal progress and self-efficacy partially mediated the positive effect of trait self-control on subjective well-being. Interestingly, structural model analyses revealed that the effect of LTPA amount on subjective well-being vanished when goal progress and self-efficacy were included in the PLS model. Theoretical and practical implications for the study of the relationships between trait self-control and subjective well-being are discussed.

#### 1. Introduction

Subjective well-being has captured the attention of politicians, scientists, and thinkers since research evidenced the capability of this variable to account for several indicators of adaptive functioning and development of society, groups, and people, such as economic development, attachment to law and human rights, citizenship, quality of life, longevity, work productivity, etc. (e.g., see Diener, Oishi, & Lucas, 2015). Subjective well-being corresponds to "people's overall evaluations of their lives and their emotional experiences" (Diener et al., 2017, p. 87). It refers to general appraisals comprising happiness, life satisfaction and positive emotions and feelings. Given the evidenced capability of this variable to foster adaptive psychosocial outcomes (e.g., Diener et al., 2017, 2015), advancing our understanding of its development is of great importance.

Recent studies showed that personality traits (e.g., temperament, Big Five personality traits) could influence subjective well-being (e.g., Briki, 2018; Chen, 2015; Soto, 2015). Briki (2018) demonstrated that approach and avoidance temperament (i.e., a general neurobiological sensitivity to appetitive and aversive stimuli, respectively) predicted

trait self-control (i.e., stable capability to operate self-corrective adjustments while pursuing goals) and subjective well-being. He also demonstrated that approach (or avoidance) temperament positively (or negatively) predicted subjective well-being through experiencing higher (or lower) trait self-control. Additionally, the author proposed that the beneficial (or detrimental) influence of approach (or avoidance) temperament on subjective well-being would be due to the development of adaptive (or maladaptive) cognitions and behaviors, resulting from the activation of adaptive (or maladaptive) regulations. Following such a perspective, the goal of the present study was to explore *why* trait self-control could promote subjective well-being.

This study was conducted in the context of leisure-time physical activity (LTPA), which refers to "cumulative, acute bouts of physical activity that are planned, structured, and repeated and result in improvement or maintenance of one or more components of physical fitness, including cardiorespiratory capacity, muscle strength, body composition, and flexibility" (Puetz, O'Connor, & Dishman, 2006, p. 866). We presumed that LTPA amount, perceived goal progress and self-efficacy could account for the relationship between trait self-control and subjective well-being in exercisers.

<sup>\*</sup> The author thanks Bryna Catherine Rose Christmas for her contribution in the creation of the single items of perceived goal progress and self-efficacy. E-mail address: wbriki@qu.edu.qa.

#### 1.1. Trait self-control and subjective well-being

Although it could be viewed as a part of conscientiousness (a Big Five personality trait) (see Roberts, Chernyshenko, Stark, & Goldberg, 2005), trait self-control is more usually thought as the core component of self-regulation, which refers to the set of self-corrective actions taking place while pursuing desired goals (e.g., Carver & Scheier, 1998). Generally, trait self-control reflects a stable tendency of the self to activate appropriate adjustments while attempting to adapt to one's external environment (Tangney, Baumeister, & Boone, 2004). Specifically, it refers to a stable capability of the self to promote goalfacilitative means and to override goal-disruptive desires (De Ridder & Gillebaart, 2016; Hagger, 2013, 2014). Research has revealed that trait self-control was positively associated with well-being indicators (e.g., positive emotions, self-esteem, happiness, life satisfaction), and negatively associated with ill-being indicators (e.g., depression, anxiety) (e.g., Briki, 2016; De Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012).

Drawing from empirical and theoretical research, De Ridder and Gillebaart (2016) assumed that trait self-control could promote wellbeing because of its capability to regulate goal-directed behavior. Indeed, trait self-control would enhance well-being through both initiating desired behaviors and inhibiting undesired ones, and it would rely on adaptive routines requiring more effortless than effortful cognitive operations. Cheung, Gillebaart, Kroese, and De Ridder (2014) exhibited that promotion focus (i.e., motivational orientation concerned with gains and successes) and prevention focus (i.e., motivational orientation concerned with losses and failures) mediated the relationship between trait self-control and happiness, supporting the view that trait self-control would activate (or inhibit) adaptive (or maladaptive) means (e.g., De Ridder & Gillebaart, 2016). Moreover, Hofmann, Luhmann, Fisher, Vohs, and Baumeister (2014) found that people with a higher trait self-control reported less experiences of conflicting goals than did people with a lower trait self-control, supporting the view that trait self-control would inhibit goal-disruptive temptations (e.g., Hagger, 2013, 2014) thereby promoting greater sense of coherence among the different self-concepts (or life domains).

### 1.2. The mediating role of LTPA amount, perceived goal progress, and self-efficacy

Briki (2018) argued that goal selection would constitute a central mechanism of trait self-control. Goal selection represents the activity of the self consisting in embracing and eschewing goals depending on their relevance for the self (Carver & Scheier, 1998). Imagine, for example, a person willing to become a "dynamic individual" (i.e., idealself level) and considering that being physically active (i.e., behavioral aspirations level) constitutes an essential part of this ideal. It is likely that such representations lead her to schedule and execute LTPA sessions over the coming days, weeks, and months, leading her not only to reconsider the importance of her other life domains (e.g., work, friendship) (i.e., programs level) but also to influence her daily life behavioral reactions to external stimuli (i.e., concrete behaviors level). Indeed, enrolled in such a project the person may tend to behave more healthily (e.g., fastening the seat belt while driving, carrying out periodic medical check-ups, eating healthy foods) and to refrain from doing things that may harm her safety and health (e.g., drinking alcohol, consuming illicit drugs) (i.e., concrete behaviors). In accordance with that perspective, De Ridder and Gillebaart (2016) assumed that trait self-control would involve "an 'active self' that is able to prioritize longterm over short-term goals, even when these short-term goals are immediately gratifying" (p. 89). For example, an exerciser with a high trait self-control would be better at suppressing self-irrelevant goals (e.g., eating a fatty food, using the elevator) and at pursuing goals that are viewed as important and useful (e.g., eating a healthy food, taking the stairs) than would be another exerciser with a low trait self-control.

How does goal selection promote LTPA amount, goal progress and self-efficacy? Since goal selection is thought to enable the self to manage its own changes by developing ideals and aspirations and by promoting specific behaviors, we argue that goal selection is likely to trigger self-based and autonomous regulations, which are reputed to promote engagement and optimal functioning (e.g., Deci & Ryan, 2008). Indeed, research revealed that autonomous self-control was positively (or negatively) related to automatic attraction toward helpful goals (or temptations) (Milyavskaya, Inzlicht, Hope, & Koestner, 2015), thereby fostering perceptions of goal progress and performance (e.g., Jakubiak & Feeney, 2016; Muraven, 2008; Muraven, Gagné, & Rosman, 2008; Muraven, Rosman, & Gagné, 2007; Powers, Gorin, Hope, & Holding, 2015). Viewed as an essential self-regulatory variable, selfefficacy is thought to promote management of behaviors and emotions, adaptation to the environment, and goal attainment (e.g., Artuch-Garde et al., 2017). Research evidenced that perceived goal progress, self-efficacy, and LTPA amount positively predicted positive emotions and feelings as well as subjective well-being (e.g., Alessandri, Borgogni, Schaufeli, Caprara, & Consiglio, 2015; Gernigon, Briki, & Eykens, 2010; Hinkley et al., 2014; Klug & Maier, 2015; Koestner et al., 2006; Ku, Fox, & Chen, 2016; Mammen & Faulkner, 2013; Shimazu, Schaufeli, Kamiyama, & Kawakami, 2015). Therefore, one can suppose that trait self-control could promote commitment to LTPA, perceived goal progress, and self-efficacy, which in turn could positively predict subjective well-being.

#### 1.3. Research overview

This study attempted to investigate the interrelationships between trait self-control, LTPA amount, perceived goal progress, self-efficacy and subjective well-being, and to examine whether amount of LTPA, perceived goal progress and self-efficacy might mediate the relationship between trait self-control and subjective well-being. Using the structural equation model (SEM) method, we tested a model in which LTPA amount, goal progress, and self-efficacy constituted mid-level variables, situated between trait self-control (high-level variable) and subjective well-being (low-level variable) (see Fig. 1). Because trait self-control would optimize the goal-directed processes through the initiation of helpful behaviors, the inhibition of unhelpful behaviors, and the diminution of conflicting desires (e.g., De Ridder & Gillebaart, 2016; Hagger, 2013, 2014; Hofmann et al., 2014), we expected positive interrelationships between trait self-control, LTPA amount, perceived goal progress, self-efficacy and subjective well-being. In addition, we expected LTPA amount, goal progress and self-efficacy to mediate the positive influence of trait self-control on subjective well-being.

#### 2. Method

#### 2.1. Participants

Five hundred one volunteers from the USA took part in the study (294 females, 58.7%, and 207 males, 41.3%;  $M_{\rm age}=32.16$ ,  $SD_{\rm age}=10.43$ , from 18 to 65 years old). We recruited them from an online platform (ClickWorker) and they reported to perform LTPA regularly. They were Caucasian American (n=291, 58.0%), African American (n=98, 19.6%), Hispanic American (n=49, 9.9%), Asian American (n=40, 8.0%) and other (n=23, 4.6%). On Godin and Shephard's (1985) LTPA index (see the "Measures" section below), this sample revealed a mean score of 67.0 (SD=45.2), thus reflecting a sample of active exercisers.

#### 2.2. Study design and procedure

We conducted this study following the recommendations of the Declaration of Helsinki and the Institutional Review Board of the author's university. The whole study was performed online. The procedure

# دريافت فورى ب متن كامل مقاله

## ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان 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