Mind the balance, be contented: Balanced time perspective mediates the relationship between mindfulness and life satisfaction

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ABSTRACT

Both mindfulness and Balanced Time Perspective (BTP) are well confirmed and robust predictors of various aspects of well-being. In the present paper we argue that BTP may be considered one of the potential links between mindfulness and life satisfaction. We collected data from three samples, applying three different measures of mindfulness, as well as the Zimbardo Time Perspective Inventory and the Satisfaction with Life Scale. BTP was calculated using the Deviation from a Balanced Time Perspective index. Results have shown that BTP might mediate the relationship between mindfulness and life satisfaction. This effect was replicable across all three samples and for each of the mindfulness measures, however the causal relation between these constructs must be further examined in future studies. The results shed new light on the bases of BTP as well as mindfulness.

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1. Introduction

Mindfulness has become central for both positive psychology and individual differences (e.g., Brown & Ryan, 2003; Giluk, 2009). The increasing popularity of this construct seems to be mainly a result of its well-confirmed benefits for health and well-being (Keng, Smoski, & Robins, 2011; Khoury et al., 2013) combined with the fact that mindfulness can be cultivated, resulting in highly desirable changes in important life outcomes (Shapiro, Oman, Thoresen, Plante, & Flinders, 2008). Personality psychologists have attempted to identify mindfulness' nomological network, aiming to uncover potential mechanisms through which mindfulness exerts its salubrious effects. For instance, Schutte and Malouff (2011) showed that emotional intelligence mediated between mindfulness and higher positive affect, lower negative affect, and greater life satisfaction, and Coffey and Hartman (2008) showed that emotion regulation, nonattachment, and rumination mediated between mindfulness and psychological distress. In the present paper we focus on the construct of Balanced Time Perspective, analyzing its mediating role between three measures of mindfulness and life satisfaction.

Shapiro, Carlson, Astin, and Freedman (2006) note that mindfulness is composed of three components: intention (why we do what we do), attention (self-regulated and present-oriented), and attitude (open hearted, friendly, curious). As a non-judging, present-oriented mode of consciousness that involves the awareness of awareness itself, of one's own cognition and affect other stimuli and sensations that are present in the moment (e.g., Bishop et al., 2004), mindfulness may enhance self-knowledge by increasing the amount of information one consciously receives, and by simultaneously attenuating ego-protective defense mechanisms that usually act to prevent information that contradicts positive and/or accustomed self-perception from entering conscious awareness (Carlson, 2013). As a certain kind of relating to the present moment, mindfulness can also be seen as a time perspective (TP) (Seema & Sircova, 2013; Zimbardo & Boyd, 2008).

1.1. Time perspective

Zimbardo and Boyd (1999) define TP as "the often nonconscious process whereby the continual flows of personal and social experiences are assigned to temporal categories, or time frames, that help to give order, coherence, and meaning to those events" (p. 1271). This perceptual process is dynamic, yet individuals usually put a relative emphasis or develop a habitual focus on one of the time frames, which results in the emergence of a relatively stable bias (Boniwell & Zimbardo, 2004), reflected in individual TP profile. In their conceptual model, Zimbardo and Boyd (1999) distinguished five TPs: Past Positive, Past Negative, Present Fatalistic, Present Hedonistic, and Future.

Our time is limited, and over-using one temporal category leads to under-using others. For instance, one may remain permanently focused on the future, achieving impressive career successes, but fail to achieve happiness, due to a developed inability to live in the present. Such temporal bias could be a consequence of a number of factors, including individual experiences, culture, religion, social class, education (Zimbardo &

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Boyd, 2008), personality (Dunkel & Weber, 2010), and traumas (Sword, Sword, Brunskill, & Zimbardo, 2014). The most adaptive attitude towards temporal frames has been labeled Balanced Time Perspective (BTP; Zimbardo & Boyd, 1999). The authors defined balance as "*the mental ability to switch effectively among TPs depending on task features, situational considerations, and personal resources, rather than be biased towards a specific TP that is not adaptive across situations*" (Zimbardo & Boyd, 1999, p. 1285).

Stolarski, Bitner, and Zimbardo (2011) provided a continuous indicator of BTP labeled Deviation from the BTP (DBTP). The method has been described as the most optimal among available methods of assessment of BTP using the Zimbardo Time Perspective Inventory (Stolarski, Wiberg, & Osin, 2015; Zhang, Howell, & Stolarski, 2013) and thus was applied in the present study.

1.2. BTP as a link between mindfulness and well-being.

There is increasing evidence that individual differences in TP are linked to well-being, even controlling for standard dimensions of personality (Zhang & Howell, 2011). TP predicts a variety of relevant criteria including life satisfaction (Boniwell, Osin, Linley, & Ivanchenko, 2010), health behaviors (Daugherty & Brase, 2010), mental health (Vowinckel, Westerhof, Bohlmeijer & Webster, in press) and transient moods (Stolarski, Matthews, Postek, Zimbardo, & Bitner, 2014). Each TP dimension is more or less strongly related to well-being (see Cunningham, Zhang, & Howell, 2015), but the most consistent effects were observed for BTP (e.g., Zhang et al., 2013).

Zimbardo and Boyd (1999) emphasize the fact that the temporal framing process is usually nonconscious and point out that most people rarely take a metacognitive perspective towards their perceptions of own past, future, and present (Zimbardo & Boyd, 2008). However, to develop a BTP one needs to become aware of TP, in order to increase flexibility in adapting to a current situation. Lennings (1998) highlighted the fundamental role of a strong sense of time awareness while describing the (most adaptive) actualizer temporal profile. Boniwell and Zimbardo (2004) followed his argumentation, stating that flexibility and 'switchability' are essential components of a BTP, and allow 'balanced' individuals to operate in a temporal mode appropriate to the situation in which they find themselves.

As Dreyfus (2011) argues, mindful attention must not necessarily be directed towards an object that is 'located' in the present moment. Hence, objects of mindful attention can also be (in) the past or the future. Since mindfulness is synonymous, or at least intrinsically associated with skills of self-regulation of attention, including flexibility, sustaining and switching of attention (Bishop et al., 2004) and 'in an optimally balanced time perspective, the past, present and future components blend and flexibly engage, depending on a situation's demands and our needs and values' (Zimbardo, 2002, p. 62), mindfulness is likely to be a fruitful context for facilitating the emergence and maintenance of BTP (cf. Drake, Duncan, Sutherland, Abernethy, & Henry, 2008; Vowinckel, 2012).

Empirical evidence supports the above reasoning. Mindfulness is positively associated with psychological flexibility (Fledderus, Bohlmeijer, Smit, & Westerhof, 2010), deautomatization of cognitive processes (Kang, Gruber, & Gray, 2013) and increased self-control (Leonard et al., 2013). BTP seems to emerge from these processes: a flexible switching between particular temporal perspectives is its core, whereas automatic and non-reflective, externally induced time horizon foci are typical for unbalanced TP profiles (Zimbardo & Boyd, 1999, 2008). Indeed, BTP and mindfulness are positively associated (Drake et al., 2008; Seema & Sircova, 2013; Vowinckel et al., in press).

1.3. The present study

In the present study we tested the potential role of BTP in the relationship between mindfulness and life satisfaction. In three studies applying different measures of mindfulness we examined whether the construct of BTP may shed new light on the mindfulness–satisfaction link.

2. Method

2.1. Measures

Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) in the Polish (Jankowski, 2015) and Dutch (Steverink, Westerhof, Bode, & Dittmann-Kohli, 2001) translations were used. SWLS consists of five items scored with a seven-point (studies 1 and 2) or 5-point (study 3) Likert-type response format measuring global cognitive judgments of satisfaction with one's life.

Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003) in the Polish translation by Jankowski (2014) was used to measure dispositional mindfulness in study 1. MAAS consists of 15 items scored with a six-point Likert-type response format.

Freiburg Mindfulness Inventory (FMI; Walach, Buchheld, Buttenmüller, Kleinknecht, & Schmidt, 2006) in the Polish translation by Radoń (submitted for publication) was used to measure mindfulness in study 2. FMI consists of 14 items scored with a four-point Likert scale.

The Five Facet Mindfulness Questionnaire — Short Form (FFMQ–SF; Bohlmeijer, Ten Klooster, Fledderus, Veehof, & Baer, 2011) in Dutch version (Bohlmeijer et al., 2011) was used in study 3. FFMQ–SF contains 24 items rated on a five-point scale. We used the composite score of its five subscales.

The Zimbardo Time Perspective Inventory (ZTPI; Zimbardo & Boyd, 1999) in a Polish (Kozak & Mażewski, 2007) or Dutch (Vowinckel, 2012) version was used to measure TP. It comprises a total of 56 items rated on a five-point Likert scale and divided into five subscales: Past Negative, Present Hedonistic, Future, Past Positive, and Present Fatalistic.

Deviation from the Balanced Time Perspective (DBTP; Stolarski et al., 2011) based on the ZTPI scores was applied as an indicator of BTP (Zhang et al., 2013). Lower DBTP scores indicate a higher level of balance.

2.2. Participants and procedures

In study 1, participants were 219 undergraduate students (160 female) aged 18–40 years ($M = 21.2$, $SD = 2.5$) from two universities located in Warsaw. Most subjects were studying psychology and were tested in small groups (20–30 people) in classrooms just before class.

In study 2, participants were 191 subjects (138 female), aged 18–56 years ($M = 24.9$, $SD = 7.0$) invited via social media (mainly Facebook) and university website; all participants were native Polish speakers. Data were collected online using LimeSurvey survey tool (www.limesurvey.org).

In study 3, 124 participants (67 female), aged 19–43 years ($M = 24.3$, $SD = 3.4$) tested online were recruited among psychology students and via social networks. They were native German speakers ($n = 65$) studying in the Netherlands and native Dutch speakers ($n = 56$).

3. Results

3.1. Study 1

The correlation analysis revealed that life satisfaction was positively related to mindfulness and negatively to DBTP. Two hierarchical regressions were performed to test whether DBTP predicted unique variance in life satisfaction beyond mindfulness. The model with mindfulness as a sole predictor of life satisfaction was significant and accounted for 5% of the variance; entering DBTP into the regression model accounted for an additional 11% of the variance. Next, we conducted a second regression to investigate whether mindfulness predicted unique variance