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“How to unlock myself from boredom?” The role of mindfulness and a dual awareness- and action-oriented pathway during the COVID-19 lockdown

Joachim Waterschoot^{a,*}, Jolene Van der Kaap-Deeder^b, Sofie Morbée^a, Bart Soenens^a, Maarten Vansteenkiste^a

^a Department of Developmental, Personality, and Social Psychology, Ghent University, Ghent, Belgium

^b Department of Psychology, Norwegian University of Science and Technology, Trondheim, Norway

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ABSTRACT

Although the COVID-19 crisis is a distressing situation entailing greater boredom and lower life satisfaction, there is considerably heterogeneity in people's reaction patterns. In a sample of 1455 participants ($M_{age} = 50.70$, 70% female), collected during the second lockdown in Belgium, we sought to examine an integrative process model, thereby distinguishing between an awareness- (i.e., decentering vs. ruminating) and an action-oriented (i.e., self-motivating strategies vs. lack of strategies) pathway to account for the association between dispositional mindfulness and participants' psychological functioning. In conjunction, both pathways were found to, respectively, partial and full account for the association between mindfulness and boredom and life satisfaction. The findings highlight, first, the importance of taking an observing stance towards negative experiences instead of being directly immersed in them. Second, congruent with the Self-Determination Theory, they suggest that not all self-motivating action strategies can be considered equal, as autonomy- and control-oriented self-motivating strategies to handle boredom episodes were differentiated related to boredom and life satisfaction.

1. Introduction

Eight months after the outbreak of the COVID-19 crisis in Belgium, the government was required to take new drastic measures to flatten and reduce the exponential growing infection numbers. Similar to the first lockdown, these measures affected the social, cultural, and economic domain in a profound way. All sport and cultural activities were cancelled, and people were demanded to adhere to strict social contact measures, both in- and outside their house. This period entailed an invasive disruption of individuals' daily routines and affected people's mental health, which manifested through increased anxiety and lower life satisfaction (e.g., Petzold et al., 2020). Interestingly, boredom was reported as one of the most salient negative experiences of the lockdowns due to the monotonous and tedious life circumstances (e.g., Zhai & Du, 2020).

Boredom is characterized by a lack of meaning, challenge, purpose and attention devoted to a particular situation or activity (e.g., Van Tilburg et al., 2013) and often goes hand in hand with lower life satisfaction (Hoeyberghs et al., 2018). Like pain signaling the need to act to

reduce adverse physical feelings, boredom has been discussed as a responsive and self-effective psychological state, which prompts action to move out of the unstimulating and tedious circumstances or to engage in self-regulatory strategies to better cope with the experienced boredom (e.g., Elpidorou, 2016). Although the experience of boredom became more salient during the lockdowns, there is nevertheless substantial heterogeneity across individuals. To shed light on this issue, we sought to examine the associations between dispositional mindfulness and people's experience of boredom and life satisfaction by an integrative process model, thereby questioning two components accounting for these associations.

1.1. A dual pathway to boredom: awareness- and action-oriented components

Boredom is said to reflect a discrepancy between the current, meaningless situation and a desired, more meaningful situation (Elpidorou, 2016). Through a process of *decentering*, individuals can become aware of such discrepancy, as this entails an increased focused attention

* Corresponding author at: Faculty of Psychology and Educational Sciences, Department of Developmental, Personality, and Social Psychology, Henri Dunantlaan 2, B-9000 Ghent, Belgium.

E-mail address: Joachim.Waterschoot@ugent.be (J. Waterschoot).

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towards one's internal state (e.g., [Bench & Lench, 2019](#)). While decentering implies a process of being attentive and non-judgmental towards feelings and thoughts, people alternatively could get stuck in their emotions and start to *ruminate* ([Mori & Tanno, 2015](#)). Rather than taking distance and being able to get a clearer view, individuals then get caught in their thoughts, tending to think repetitively about their feelings and problems ([Nolen-Hoeksema et al., 2008](#)). Past research has shown that the process of decentering relates to greater life satisfaction ([Elliott & Coker, 2008](#)), and more autonomous self-regulation ([Thomsen et al., 2011](#)), while rumination was found to be positively associated with various negative emotions ([Ding et al., 2019](#)), disengagement, and emotional exhaustion ([Sousa & Neves, 2020](#)). However, only a limited number of studies examined the association between decentering, rumination and boredom with rumination being related to boredom among students ([Ding et al., 2019](#)) and employees ([Sousa & Neves, 2020](#)).

When facing experiences of boredom or circumstances leading to lower life satisfaction, a more action-oriented perspective could be taken as well during which individuals engage in different self-motivating strategies. Although the literature on self-motivation as a self-regulatory capacity and resource is still limited (e.g., [Sansone et al., 1992](#)), some evidence has demonstrated for one's capacity to seek alternative activities or circumstances to escape the encountered boredom (e.g., [Bench & Lench, 2019](#)). To illustrate, [Van Tilburg et al. \(2013\)](#) tested a theoretical model in which the focus on personal values counteracted experiences of boredom and resulted in enhanced meaningfulness in life. While some individuals may stay passive and lack the energy or (perceived) competence to engage in any self-motivating strategy (e.g., [Balkis & Duru, 2016](#)), the actual usage of self-motivating strategies to uplift one's motivation does not guarantee decreased feelings of boredom. For instance, situation-avoiding strategies like seeking for situation-irrelevant activities (e.g., playing games during colleges) or looking for distractions yielded an adverse relation to school engagement (i.e., more boredom; [Nett et al., 2010](#)). More approach-oriented strategies that help to alleviate the initial sources of boredom more directly were found to be more effective. For example, strategies that aim to enhance the interest or personal relevance of a boring task among students (e.g., asking questions, adding variety) were found to increase perceived pleasure and engagement ([Sansone et al., 1992](#)).

Similarly, from the perspective of Self-Determination Theory (SDT; [Ryan & Deci, 2017](#)), a macro theory on human motivation, not all types of self-motivating strategies are created equal. Paralleling the differences between motivational subtypes (autonomous vs. controlled), we aim to examine whether the use of more autonomy- and control-oriented self-motivating strategies when encountering boredom differently relate to the experience of boredom as such. An autonomy-oriented strategy denotes the extent to which individuals actively seek to increase interest, enjoyment, and value of an activity when facing dull circumstances ([Smit et al., 2017](#)). This can be done, for instance, by including game-related elements to monotonous work conditions ([Skowronski, 2012](#)) or reappraising the current situation towards personal meaningfulness (e.g., "How could this task be relevant to me?"; [Green-Demers et al., 1998](#)). A control-oriented self-motivating strategy refers to people's use of pressuring forces to push themselves into or continue engaging in the activity. To illustrate, participants deploying control-oriented self-motivating strategies showed higher levels of boredom (i.e., disengagement), more physical pain, and lesser chance to finish during a 100 km walking tour ([Waterschoot et al., 2021](#)).

1.2. The mind attended to here and now

The degree to which individuals effectively cope with psychological distressing circumstances by using decentering (versus rumination) and autonomy-oriented (versus control-oriented or a lack of) self-motivation may depend on their level of mindfulness. Mindfulness describes a

personal attitude of being aware, attentive, and open to what is happening in the present moment ([Brown & Ryan, 2003](#)) and has been found to play a similar role across cultures ([Ghorbani et al., 2009](#)). Mindfulness has been shown to yield a positive relation with adaptive emotion regulation ([Quaglia et al., 2016](#)) and increased life satisfaction ([Amundsen et al., 2020](#)), while being negatively related to psychological constraints like anxiety, stress, and boredom (e.g., [Koval & Todman, 2015](#)).

Through its receptive and non-judgmental attitude towards present experiences (i.e., feelings, cognitions, sensations), mindful individuals are capable of bringing experiences to awareness. Rather than getting irritated by the experience of boredom, mindful individuals would decenter from the felt boredom and engage in less rumination; with the resulting effect of experiencing less boredom (e.g., [Ding et al., 2019](#)) and more life satisfaction (e.g., [Stolarski et al., 2015](#)). Further, we reasoned that mindfulness should predict the use of autonomy-oriented self-motivating strategies as mindful people might more easily redirect their attention from the disrupting experience to a quest for meaning and interest in the activity at hand. Indeed, mindful individuals are conscious about what is personally meaningful in life and have the capacity to deal adaptively with experienced constraints ([Amundsen et al., 2020](#)). Indirect evidence for this hypothesis comes from a recent meta-analysis, which found mindfulness to be positively associated with autonomous motivation ([Donald et al., 2020](#)). Furthermore, mindfulness interventions showed enhanced active self-management to deal with symptoms of ill-being (e.g., anxiety, depression) in both healthy and primary care patient populations (e.g., [Gawande et al., 2019](#)).

2. The present study

With the COVID-19 crisis creating more monotonous and psychologically aversive conditions for people worldwide, the current study aims to study the role of mindfulness in predicting boredom and life satisfaction and a dual pathway model underlying these associations. The first awareness-enhancing pathway involved people's capacity to take a more observing stance towards their feelings and thoughts instead of being caught by them (i.e., decentering vs rumination), while the second action-oriented pathway involved people's active monitoring and uplifting of their motivation to handle the distressing circumstances (i.e., autonomy- and control-oriented self-motivating strategies vs lacking self-motivating strategies). Specifically, we expected, first, mindfulness to yield a negative relation to boredom, while being positively associated with life satisfaction (Hypothesis 1). Second, we sought to account for these direct associations, thereby examining the relevance of both proposed pathways. Specifically, mindfulness would yield its hypothesized association with both outcomes through people's capacity to take a more observing stance (i.e., decentering) and their more frequent use of adaptive (i.e., autonomy-oriented) self-motivating strategies, while being negatively related to indicators of low awareness (i.e., rumination) and the use of poor self-motivating strategies (i.e., either control-oriented strategies or the lack of thereof) (Hypothesis 2).

3. Methods

3.1. Participants and procedure

Data were collected during the sixth and seventh week of the second lockdown in Belgium, specifically from December the 16th till the 19th, 2020. This study was part of a larger study examining predictors and outcomes of individuals' psychological functioning during the COVID-19 related lockdown. For this purpose, an online questionnaire was distributed across Flanders (Belgium), with only one inclusion criterion: a minimum age of 18 years old. At the end of a first online assessment during and after the first lockdown in Belgium, participants were asked whether they would be willing to participate in future related research. In total, 16,942 individuals indicated to be willing to do so, of which

5531 (33% response rate) eventually participated in a second online assessment during the second lockdown. Of these, 2807 (50%) indicated to have experienced at least one episode of boredom in the previous week, with 1455 (52%) eventually filling out the questionnaires relating to this study. This final sample consisted of participants with a mean age of 50.70 (range: 20–64) from which 70% female participants, 19% parents with children younger than 18 years and 69% having a partner. In terms of episodes of boredom in the previous week, 69% experienced these sometimes, 26% often and 5% almost always. Participation in this study was anonymous, participants could withdraw their participation at any time, and participants were informed about the possible resources of psychological help and the opportunity to receive a summary of the study results. The procedure used in this study was approved by the ethical committee of Ghent University (nr. 2020/37).

3.2. Measurements

3.2.1. Mindfulness

The 15-item Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003) was used to assess dispositional mindfulness. Items (e.g., “I find myself preoccupied with the future or the past”) were rated on a Likert scale, ranging from 1 (“Almost never”) to 5 (“Almost always”). To end up with a total score for mindfulness, all items were reverse coded and then averaged ($\alpha = 0.88$), so that a higher score indicates a higher level of mindfulness.

3.2.2. Self-regulatory components

To measure both decentering and rumination and all types of motivational self-regulatory strategies, we asked participants to report to what extent they experienced each item in the previous week.

3.2.2.1. Decentering and rumination. The Self-Report Measure of Decentering (SRMD; Fresco et al., 2007) was used to assess decentering and rumination, thereby selecting five items with the highest loadings for each subdimension (e.g., “I can observe unpleasant feelings without being drawn into them”, $\alpha = 0.68$; “I analyze why things turn out the way they do”, $\alpha = 0.67$, respectively). Items were rated on a 5-point scale ranging from 1 (“Almost never”) to 5 (“Almost always”), such that higher scores refer to a more frequent use of decentering and rumination.

3.2.2.2. Motivational self-regulation. The Motivational Self-Regulation Strategies questionnaire (MSRS; Waterschoot, Morbée, et al., in progress; Waterschoot, Soenens, et al., in progress) was used to assess how participants motivate themselves during episodes of boredom using a 5-response scale from 1 (“Totally disagree”) to 5 (“Totally agree”). Apart from assessing the use of autonomous (e.g., “...I searched for ways to make the current situation more interesting”; 4 items, $\alpha = 0.84$), and controlled (e.g., “...I thought I only could be proud when I would do something in the current situation”, 8 items, $\alpha = 0.67$) self-motivating strategies, 2 items assessed the lack of strategies (e.g., “...I could not think of something to do”, $\alpha = 0.73$). Higher scores on these subscales refer to a more frequent use of a type of strategy.

3.2.3. Subjective well-being

Participants rated to what extent they had experienced boredom and life satisfaction over the previous week on a 5-point response scale ranging from 1 (“Almost never”) to 5 (“Almost always”).

3.2.3.1. Boredom. The Multidimensional State Boredom Scale (MSBS; Fahlman et al., 2013) assesses five different dimensions of boredom (i.e., disengagement, high arousal, low arousal, inattention, and time perception). However, for the sake of interest, we selected the two highest loading items for each dimension (Fahlman et al., 2013) and averaged these to have a total score of boredom (10 items, e.g., “...everything I did felt repetitive and monotonous”, $\alpha = 0.89$), with higher scores being indicative of experiencing more boredom.

everything I did felt repetitive and monotonous”, $\alpha = 0.89$), with higher scores being indicative of experiencing more boredom.

3.2.3.2. Life satisfaction. Life satisfaction was measured by the Satisfaction with Life Scale (SWLS, Pavot & Diener, 1993) with items referring to higher experiences of life satisfaction when scoring high. The average on the items was used as scale score for life satisfaction, showing a good internal consistency (e.g., “...my life conditions felt perfectly”, 5 items, $\alpha = 0.81$).

4. Results

4.1. Preliminary analyses

To account for sample characteristics (i.e., age, gender, being a parent, and having a partner) in the main analyses, we first performed a MANOVA for categorical factors. Multivariate effects were found for gender (Wilks' lambda = 0.97, $F(8, 1052) = 4.27$, $p < .001$, $\eta^2 = 0.03$), being a parent with young children (Wilks' lambda = 0.97, $F(8, 1052) = 3.62$, $p < .001$, $\eta^2 = 0.02$), and civil status (Wilks' lambda = 0.95, $F(8, 1052) = 7.37$, $p < .001$, $\eta^2 = 0.05$). Follow-up univariate analyses showed that female participants reported lower mindfulness ($M_{female} = 3.56$ vs $M_{male} = 3.69$, $F(1, 2347) = 33.18$, $p < .001$), higher rumination ($M_{female} = 3.04$ vs $M_{male} = 2.89$, $F(1, 2240) = 22.17$, $p < .001$), more autonomy-oriented ($M_{female} = 3.15$ vs $M_{male} = 2.97$, $F(1, 2240) = 32.73$, $p < .001$) and control-oriented self-motivating strategies ($M_{female} = 2.66$ vs $M_{male} = 2.49$, $F(1, 2240) = 37.93$, $p < .001$) and higher boredom ($M_{female} = 2.95$ vs $M_{male} = 2.80$, $F(1, 2347) = 4.02$, $p = .03$) compared to men. Next, parents with young children reported lower mindfulness ($M_{with} = 3.45$ vs $M_{without} = 3.64$, $F(1, 2348) = 14.79$, $p < .001$). Finally, those without a partner reported lower mindfulness ($M_{with} = 3.63$ vs $M_{without} = 3.54$, $F(1, 2348) = 14.34$, $p < .001$), more rumination ($M_{with} = 2.96$ vs $M_{without} = 3.07$, $F(1, 2241) = 13.03$, $p < .001$) and lower life satisfaction ($M_{with} = 2.52$ vs $M_{without} = 2.25$, $F(1, 1890) = 77.58$, $p < .001$). Next to the associations between study variables, Pearson correlation analyses (Table 1) showed that older participants reported higher mindfulness, decentering and life satisfaction and a lower rumination, less absence of self-motivating strategies and less boredom.

4.2. Main analyses

To assess the awareness- and action-oriented components as intermediate mechanisms of mindfulness and psychological functioning during the COVID-19 crisis, two Structural Equation Models (SEM) were built using the package ‘lavaan’ (Rosseel, 2012) in R. To examine the first hypothesis, the first model included two direct paths between mindfulness and both boredom and life satisfaction. In the second model, testing the second hypothesis, all measurements of both components (decentering, rumination, autonomy-oriented, control-oriented, and lacking strategies) were added as mediating factors. In each step of the procedure, we evaluated the models by several fit indices, namely the normed χ^2 test (i.e., acceptable when χ^2/df ratio is 2 or below), the Comparative Fit Index (CFI; minimal threshold of 0.95), the Standardized Root Mean Square Residual (SRMR; maximum threshold of 0.08), and the Root Mean Square Error of Approximation (RMSEA; maximum threshold of 0.06) (Kline, 2005). All pathways were controlled for all covariates (gender, being a parent, having a partner, age), resulting in a good fit for the first model ($\chi^2(13) = 1082.77$, $p < .001$; CFI = 1.00; SRMR = 0.00; RMSEA = 0.00). Based on modification indices, six correlations between mediators were allowed in favor of a good fit for the second model ($\chi^2(4) = 3.38$, $p = .50$; CFI = 1.00; SRMR = 0.01; RMSEA = 0.00). The first model, including direct paths, showed strong associations with mindfulness resulting in less boredom and more life satisfaction. In testing the second model (see Fig. 1), three main findings can be noticed with, first, both components partially mediating

Table 1
Means, standard deviations, and Pearson correlations of the study variables.

Variable	M	SD	1	2	3	4	5	6	7	8
1. Age	50.70	11.53								
2. Mindfulness	3.60	0.63	0.23***							
3. Decentering	2.84	0.63	0.19***	0.41***						
4. Rumination	2.99	0.67	-0.11***	-0.34***	-0.13***					
5. Autonomy-oriented SMS	3.10	0.84	0.04	0.23***	0.33***	-0.09*				
6. Control-oriented SMS	2.73	0.69	-0.02	-0.10***	-0.05	0.30***	0.43***			
7. Lack of SMS	2.74	1.00	-0.17***	-0.40***	-0.36***	0.18***	-0.32***	0.09***		
8. Boredom	2.87	0.75	-0.27***	-0.65***	-0.50***	0.41***	-0.27***	0.14***	0.58***	
9. Life satisfaction	2.43	0.77	0.11***	0.36***	0.47***	-0.24***	0.31***	0.01	-0.38***	-0.61***

Note. SMS = self-motivating strategies; M and SD are used to represent mean and standard deviation, respectively.

* $p < .05$.
*** $p < .001$.

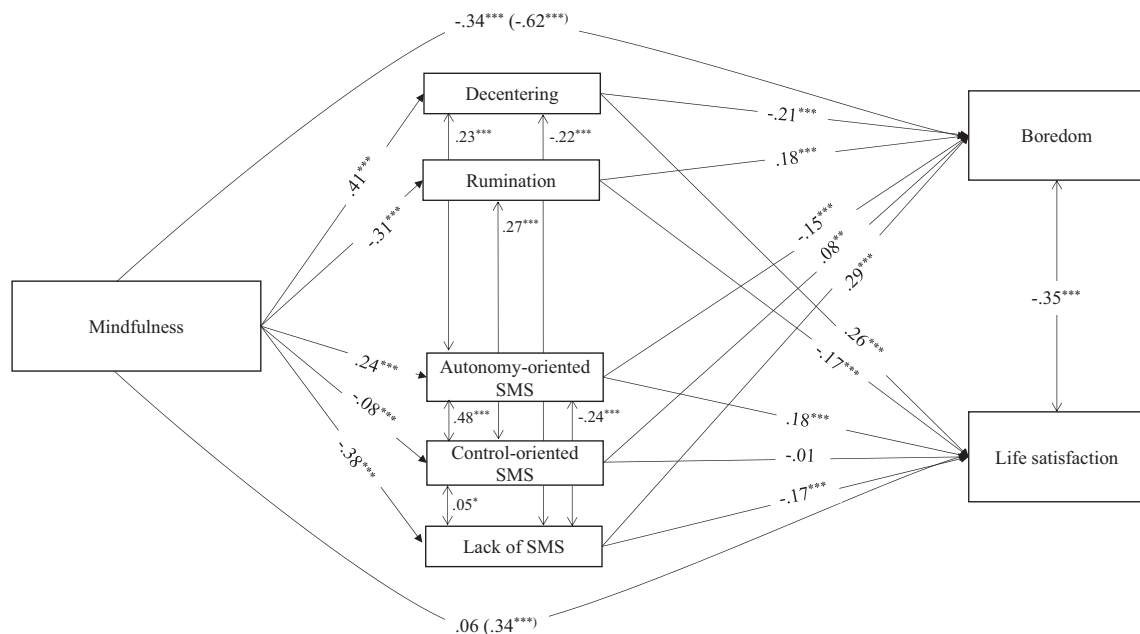


Fig. 1. Visualization of structural equation model with standardized regression coefficients.
Note. SMS = self-motivating strategies. * $p < .05$. ** $p < .01$. *** $p < .001$.

the direct path between mindfulness and boredom (with a change in R^2 from 0.44 to 0.61) and fully mediating the direct path with life satisfaction (with a change in R^2 from 0.15 to 0.35). Second, all indirect pathways are significant, except for the pathway through controlled strategies to boredom and to life satisfaction (see Table 2, Supplementary Materials). This indicates that mindful people experience less boredom and more life satisfaction by having a higher awareness about their own feelings and thoughts and by deploying autonomy-oriented strategies. In reverse, mindless people experience more boredom and less life satisfaction by ruminating and lacking from self-motivating strategies. A third and final main finding is the balanced attribution of both components towards people’s subjective well-being, with the control-oriented strategies being unassociated with life satisfaction.

5. Discussion

In the current research, we focused on boredom and life satisfaction as two key indicators of people’s psychological functioning during the COVID-19 crisis in Belgium. Although recent research indicates that people reported increased boredom (e.g., Zhai & Du, 2020) and reduced life satisfaction (Ammar, Chtourou, & Boukhris, 2020) during the stay-at-home lockdowns, less is known about the psychological mechanisms that predict people’s adaptive vs. maladaptive handling of these

psychological distressing circumstances. Herein, we examined two different pathways with presumed unique relevance for these outcomes: first, people’s capacity to take an observing stance as to re-perceive one’s own feelings and thoughts (i.e., decentering) instead of getting absorbed by them (i.e., rumination). Second, individuals’ capacity to engage in various of self-motivating strategies to deal with the encountered boredom and diminished life satisfaction. Finally, we reasoned that people’s frequent deployment of adaptive self-regulatory strategies (i.e., decentering and autonomy-oriented self-motivating) would be grounded in people’s dispositional level of mindfulness, while mindfulness would protect them against the use of maladaptive self-regulatory strategies (i.e., rumination, control-oriented or lack of self-motivating strategies).

5.1. A dual pathway approach to the effects of mindfulness on psychological functioning

First, convincing evidence is provided for the relation between mindfulness and boredom and life satisfaction, as experienced during the second lockdown. Although the relation with life satisfaction is well established (e.g., Kong et al., 2014), the association between mindfulness and boredom received less attention and, to the best of our knowledge, was not reported yet during a period when boredom peaks.

While Martin (2007) considers mindfulness and boredom as antipodes that lie on a unidimensional continuum, the present findings provide evidence for a substantial, yet not perfect relation between both concepts. This may be due to the fact mindfulness was measured in terms of a dispositional trait, while boredom centered situational experiences of the previous week. Yet, even conceptually, boredom may just represent one indicator of 'mindlessness', as argued by Martin (2007). Individuals low in mindfulness do not only fail to attend to signals of boredom, but to various inner thoughts, feelings, and sensations.

The most innovative contribution of the present study was to shed light on a dual pathway underling the relation between mindfulness, boredom, and life satisfaction in an integrative process model. When encountering episodes of boredom or reduced life satisfaction, one pitfall is to take direct action, thereby trying to change the situation or activity. Yet, two qualifications are needed here. First, bringing these negative experiences to awareness through taking a more observing stance yields benefits in itself. While mindfulness predicted positively decentering, it was negatively related to rumination. In the case of rumination, the actor is still 'on top' of the situation instead of taking more distance. Dwelling about the negative experiences is both cognitively and emotionally exhausting and leads one to get stuck on the feelings of boredom (Martin, 2007).

While decentering brings experiences of boredom and poor life satisfaction to greater awareness, it may at times be critical to take action. Although the lack of self-motivating strategies was found to be most problematic, the usage of self-motivating strategies as such does not predict by definition higher life satisfaction and lower boredom. The qualitative differentiation between autonomous and controlled motivation within SDT (Vansteenkiste et al., 2006) does not only apply to people's reasons for engaging in a specific activity, but also for their ways of uplifting and steering their own motivation when facing boring episodes in life. While autonomy-oriented self-motivating strategies contain proactive cognitive and behavioral tools to enhance one's own life satisfaction (with minimum environmental impact) and decrease experienced of boredom, control-oriented self-motivating strategies did not show this effect on life satisfaction but even showed a small significant effect for enhanced boredom. Interestingly, much as mindfulness was predictive of the awareness-oriented component, it showed a gradient pattern of associations with the action-oriented component, such that mindfulness led to more autonomy-oriented strategies, only small to less control-oriented strategies and to much less a lack of strategies.

5.2. Practical and methodological implications

Investigating intermediate mechanisms between mindfulness as a personal trait and psychological indicators of well-being like boredom and life satisfaction could be helpful for practical and societal reasons. Especially during quarantine as part of the COVID-19 crisis, people are exposed to circumstances evoking more feelings of boredom and less life satisfaction, a finding in line with earlier studies (e.g., Petzold et al., 2020; Zhai & Du, 2020). As we explored intermediate mechanisms between dispositional mindfulness and these psychological distressing experiences, the current study provides an additive and more deeply exploring work which could be translated to practical implications. For instance, such findings could inspire mental (online) training sessions to enhance the deployment of decentering and autonomous strategies or, otherwise, reduce the level of rumination. This could be useful as boredom has been demonstrated as a psychological antecedent to adhere to social distance measures and enhanced life satisfaction could be a buffer to psychological constraints during the crisis (Martarelli & Wolff, 2020).

For future research, we would like to sum up several points of discussion. As a first point, we need to emphasize the cross-sectional design lacking us from interpreting the findings in terms of sequential associations. A longitudinal design with three time points at minimum could

provide us within-subject information regarding the pathways starting from mindfulness through both intermediate processes. Secondly, the current sample is said not to be representative for the Belgian population because of the selection bias regarding bored people. This could be discussed by weighting cases, although this accompanied by both costs (e.g., less precise findings by increased standard errors) and benefits (i.e., increase representativity). Additionally, future research might include the topic of cultural differences regarding mindfulness as.

6. Conclusion

The COVID-19 crisis served as an intrusive situation on people's daily lives, creating monotonous, repetitive, and unchallenging circumstances. In the second Belgian lockdown, the current study focused on a dual pathway being oriented to people's awareness of their own thoughts and feelings (i.e., decentering vs rumination) and to people's capacity to deploy self-motivating strategies (i.e., autonomy- and control-oriented vs lack of strategies) in dealing with experiences of boredom and life satisfaction. With mindfulness being investigated as a crucial ground for these pathways, findings showed that especially mindful people experienced less boredom and more life satisfaction by having a higher awareness and by deploying more autonomy-oriented strategies. For those scoring low on mindfulness, more boredom and lower life satisfaction was found by entailing more rumination and lacked self-motivating strategies. With investigating these concepts by an integrative model, the findings provide both theoretical and practical contributions by highlighting the importance of having an observing stance towards negative experiences and monitoring one's own motivation while being locked during the COVID-19 crisis.

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CRediT authorship contribution statement

Joachim Waterschoot: Conceptualization, Methodology, Formal analysis, Investigation, Writing – original draft, Visualization. **Jolene Van der Kaap-Deeder:** Conceptualization, Writing – original draft, Writing – review & editing. **Sofie Morbée:** Conceptualization, Methodology, Investigation, Writing – review & editing. **Bart Soenens:** Conceptualization, Writing – review & editing. **Maarten Vansteenkiste:** Writing – review & editing, Supervision, Project administration.

Declaration of competing interest

The authors declare they have no conflict of interest.

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