COMMENTARY



How Would the Buddha Rate on Rosenberg's Self-Esteem Scale?

Anna-Lena Lumma 1 · Thomas Heidenreich 2 · Johannes Michalak 1 D

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Abstract

In a recent study, Gebauer et al. addressed a fundamental question regarding the effects of mind-body practices (MBPs) on the self. Does the practice of MBPs in accordance with traditional contemplative traditions quiet the ego or is the practice of MBPs associated with increased self-centrality, which breeds self-enhancement bias? Both hypotheses were investigated in two separate studies with a longitudinal design. Study 1 included 93 participants, who regularly practiced yoga, and study 2 contained 162 participants, who regularly practiced loving-kindness meditation. In both studies, trait questionnaires of self-centrality and self-enhancement were taken after the practice of yoga (over the course of 15 weeks) or meditation (over the course of 4 weeks). Findings from both studies showed that participants scored higher on measures of self-enhancement and self-centrality after practicing yoga and meditation as compared with not practicing yoga and meditation. Based on these findings, Gebauer et al. argued that MBPs such as yoga and meditation do not quiet the ego, but instead lead to self-enhancement bias through increased self-centrality. We have concerns about the far-reaching conclusions made by Gebauer et al. regarding the effects of MBPs on the self. The key concerns refer to the conceptualization of the quiet ego and to the assessment of the psychological constructs investigated in this study. Gebauer et al. addressed a timely and important research question, but their far-reaching interpretations should be reconsidered due to conceptual and methodological ambiguities.

Keywords Meditation · Yoga · Mindfulness-based interventions · Self-referential processing · Quiet ego · Self-enhancement

Currently so-called mind-body practices (MBPs) are widely disseminated in the public sphere (Michalak and Heidenreich 2018). The application of MBPs includes domains such as education (Felver et al. 2016; Zoogman et al. 2015), health (Gu et al. 2015; Khoury et al. 2015), and work environment (Eby et al. 2019; Jamieson and Tuckey 2017). A recent study on fundamental assumptions associated with MBPs and their influence on the self was conducted by Gebauer et al. (2018). In two studies, they addressed a profound research question: Do MBPs, in accordance with yoga or Buddhist philosophy, foster well-being by curtailing self-enhancement bias and quieting the ego or, in contrast, do MBPs, like any other skill, render that skill self-central and this self-centrality breeding self-enhancement bias or self-

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centrality principle (SCP)?. To test these opposing ego-quieting and SCP-universal hypotheses, they longitudinally studied participants who regularly practiced yoga (study 1, N = 93) over the course of 15 weeks or loving-kindness meditation (study 2, N=162) over the course of 4 weeks. In study 1, participants either had to fill out self-report questionnaires directly after the practice of a hatha yoga class (weeks 1, 5, 9, and 13) or in a control condition without yoga practice (weeks 3, 7, 11, and 15). In study 2, participants had to fill out the similar self-report questionnaires after the practice of a 15-min. guided loving-kindness meditation or in a control condition without meditation. Self-centrality was measured with self-report items regarding the degree to which participants perceived the MBPs as self-central (Brown 2012). Exemplary items of the self-centrality measure were "Focusing mindfully on the exercises across the whole yoga class is... (1 =not at all central to me, 11 = central to me)." Self-enhancement was measured with the better than average scale (Alicke and Govorun 2005), the Rosenberg Self-Esteem Scale (Rosenberg 1965), the Single-Item Self-Esteem Scale (Robins et al. 2001), and the Communal Narcissism Inventory (Gebauer et al. 2012). The better than average scale assessed the degree to which people evaluate themselves more positively compared with others and



[☑] Johannes Michalak johannes.michalak@uni-wh.de

Department of Psychology and Psychotherapy, Witten/Herdecke University, Alfred-Herrhausen-Straße 50, 58452 Witten, Germany

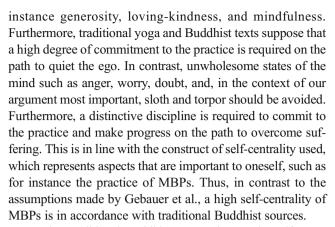
Department of Psychology for Social Work, Health and Nursing, Esslingen University of Applied Sciences, Kanalstraße 33, 73728 Esslingen am Neckar, Germany

included statements like "In comparison to the average participant of this study, I am a loving person" (response options ranging from 1 = very much below average to 81 = very much above average). In addition, self-enhancement was measured with the Communal Narcissism Inventory, which was designed to assess narcissistic self-thoughts in communal domains and included items such as "I will be well known for the good deeds I will have done" with response options ranging from 1 = does not apply at all to 7 = applies completely. Finally, the Rosenberg Self-Esteem Scale with items such as "I take a positive attitude toward myself' (response options ranging from 1 = strongly disagree to 4 = strongly agree) and the Single-Item Self-Esteem Scale with items like "At the moment, I have high self-esteem" (response options ranging from 1 = does not apply at all to 7 =applies completely) measured positive and negative feelings about the self. Overall, study findings showed that participants scored higher on measures of self-enhancement and selfcentrality after practicing MBPs as compared with before practicing MBPs. Based on their findings, Gebauer et al. argued that MBPs lead to self-enhancement bias through increased selfcentrality.

Critique on the Conceptual Understanding of the Quiet Ego

First, we would like to comment on the definition of the quiet ego that Gebauer et al. (2018) provided in their article. Gebauer et al. emphasized, "...mind-body practices do not ward off self-enhancement directly. Instead, they target the root cause of that bias: people's natural inclination to attach importance to their own attributes and actions" (Gebauer et al. 2018, p. 1300). Based on this understanding, Gebauer et al. associated a quiet ego with a reduced tendency to attribute importance to oneself, which in turn is associated with lower self-enhancement. Following this line of thinking, a quiet ego according to Gebauer et al. should also result in attaching less importance to the practice of MBPs. In contrast, the following definition by Wayment and Bauer (2018) is commonly associated with the quiet ego: "The quiet ego does not mean a squashed, deflated, or silenced ego. Nor does a quiet ego involve a disregard for one's immediate self-interest" (Wayment and Bauer 2018, p. 882). Instead, the quiet ego can be defined as a "self-identity that is neither excessively selffocused nor excessively other-focused" (Wayment et al. 2015, p. 1000).

A similar perspective on the self is offered by traditional Buddhist sources. In the famous Noble Eightfold Path, which was described in the Pali Canon, the Buddha suggested antidotes leading to a liberation from suffering (Bodhi 1994). One of the principles of the Noble Eightfold Path is that right effort should be established to generate wholesome states of the mind (Analayo 2009). Wholesome states of the mind are for



Another traditional Buddhist perspective on the self stems from the no-self doctrine, which posits that the self is not inherently existent (Sideritis 2015; Sideritis et al. 2011). According to this doctrine, the self can be regarded as a dynamic process that continuously changes throughout life and does not have an inherent existence (Shear 2014). Therefore, the intention of MBPs is to loosen the attachment to a fixed view on the self (Dambrun and Ricard 2011; Xiao et al. 2017) and deconstruct the self in a healthy way by freeing defensive or narcissistic aspects of the self (Epstein 1988; Vago and Silbersweig 2012). Once distortions of the self are reduced or even overcome, MBPs can then be used to establish adaptive aspects of the self (Dahl et al. 2015) and cultivate healthy mental states including equanimity and compassion towards oneself and others (Desbordes et al. 2015). Based on Buddhist principles, an increase in compassion through MBPs also includes the cultivation of taking care of oneself and treating oneself in an accepting and friendly manner (Hofmann et al. 2011; Lama 1995; Neff 2003). An act of selfcompassion could be reflected in treating the body well by doing physical exercises or treating the mind well by practicing MBPs. This stands in contrast to Gebauer et al., who emphasized that a quiet ego is associated with attaching less importance to oneself and therefore not taking the practice of MBPs too seriously.

Critique on the Assessment of the Quiet Ego

Another concern relates to the psychological scales used by Gebauer et al. (2018) to assess the quiet ego. Let us consider a thought experiment, in which a person has profoundly quieted the ego (like a Buddha). Based on the above expectation that he regards his practice as self-central, we, in contrast to Gebauer et al., would expect a Buddha to score high on the measures of self-enhancement. The better than average scale evaluates the degree to which people evaluate themselves more positively as compared with others, and the Communal Narcissism Inventory measures narcissistic self-thoughts in communal domains. In addition, the Rosenberg Self-Esteem Scale and the Single-Item Self-Esteem Scale measure positive and negative feelings about the self. To demonstrate how



somebody with a quiet ego might have scored on these scales, let us take the item "I take a positive attitude toward myself" of the Rosenberg Self-Esteem Scale as an exemplary item (we expect that similar response tendencies apply to the other measures of self-enhancement as well). The forced-choice format of the Rosenberg Self-Esteem Scale (response options ranging from 1 = strongly disagree to 4 = strongly agree) only allows a Buddha-like person with a completely quieted ego to attribute positive or negative aspects to his self and does not offer the option to provide more nuanced responses (Wetzel and Greiff 2018).

Based on the fact that a Buddha is motivated to cultivate wholesome states of the mind and therefore regards his practice as central to himself, we would expect that a Buddha would rate "strongly agree" or at least "agree" on the Rosenberg Self-Esteem Scale after practicing MBPs. As opposed to this, the findings by Gebauer et al. indicate that someone practicing MBPs should score low or neutral on measures of self-enhancement implying a more negative view of the self after practice. Thus, the assumption that someone practicing MBPs should view themselves more negatively, as implicitly implied by Gebauer et al., seems to be inaccurate.

The task of selecting a questionnaire response could entail different fields of attention. For example, while selecting an answer to the item "I will be well known for the good deeds I will have done" (answer options ranging from 1 = does not apply at all to 7 = applies completely) from the Communal Narcissism Inventory, one could focus on the aspect of standing out for doing a good deed. On the other hand, one could focus on the act of the good deed itself while selecting an answer to the question. For a Buddha, the focus on the act of the good deed would be more relevant, because it would be important for him to apply the wholesome states that he gained through the practice of MBPs to the world. Therefore, higher scores on the Communal Narcissism Inventory after the practice of MBPs could also represent a genuine commitment to do good deeds and not to brag with one's good nature as suggested by Gebauer et al.

In addition, method biases might have affected the results. It is well known that meditation and yoga have positive effects on mood (Keng et al. 2011), and indeed, Gebauer et al. (2018) found that well-being was higher after practicing MBPs than before (control condition). Also, it is well known that positive mood leads to more positive responses to questionnaire items (Podsakoff et al. 2003). Thus, we argue that a "transient mood state" bias, induced through the practice of MBPs, might have caused higher ratings in self-enhancement measures and not, as Gebauer et al. supposed, the other way round. Thus, the response that "Focusing mindfully on the exercises across the whole yoga class is central to me" might be biased through an overall good mood after attending a yoga class.

Suggestions for Future Research

In their study, Gebauer et al. (2018) formulated hypotheses with regard to effects of MBPs on the quiet ego, self-centrality, and self-enhancement. In general terms, their study investigated the effects of MBPs on different aspects of the self, which is a complex psychological construct. In the scientific literature, distinct types of the self are discerned and subdivided. According to Gallagher (2000), the minimal self relates to bodily and pre-reflective aspects of the self. In contrast, the narrative self relates to the self-referential processing of relevant information to form one's life story (Gallagher 2000). Moreover, the psychological construct of the self might serve as a convergent zone for different psychological functions, and it is often involved in psychological illnesses (Christoff et al. 2011; Northoff 2011; Northoff and Panksepp 2008). Maladaptive distortions and affective biases of the self, such as heightened negativity towards oneself or low self-esteem, are often associated with psychopathological conditions including depression (Abramson et al. 1978; Grimm et al. 2009; Rude et al. 2010). Overall, the self might be a meaningful psychological target construct to investigate the effects of MBPs, because they often aim to induce alterations in different aspects of the self (Dahl et al. 2015; Lindahl and Britton 2019). However, the multidimensionality of the construct of the self should be considered when selecting suitable study measures. The validity of the measures used by Gebauer et al. could be questioned, because the selected measures do not directly assess the quiet ego. Instead, the focus of the measures used by Gebauer et al. was to quantify the constructs of selfcentrality and self-enhancement. Therefore, future studies should consider which facets of the self should be investigated (Lindahl and Britton 2019) and select appropriate outcome measures that match the investigated psychological construct of interest. Effects of MBPs on the quiet ego could for instance be assessed with the Quiet Ego Scale by Wayment and Bauer (Wayment et al. 2015).

Furthermore, it is assumed that MBPs improve attentional capacities (Hölzel et al. 2011; Malinowski 2013) and thereby also foster emotional regulation, which in turn could eliminate emotional biases of self-referential processing (Vago and Silbersweig 2012). Thus, we would expect that particularly the narrative self, which could also be termed "conceptualized" self, should be weakened through MPBs (Hayes et al. 1999). Prior empirical evidence supports this assumption and showed that the practice of MBPs reduced the attachment to one's narrative self and facilitated the immersion into an experiential mode of self (Farb et al. 2007). Another study (Golubickis et al. 2016) demonstrated that MBPs can reduce the tendency to overestimate how others pay attention to oneself, which is called the spotlight effect (Gilovich et al. 2000). More specifically, the study showed that participants who performed a short mindfulness-based meditation was less likely



to display the spotlight effect in comparison with a control condition (Golubickis et al. 2016). In addition, findings from a study with expert meditators showed that a greater experience with MBPs is associated with a reduced reactivity towards self-criticism (Lutz et al. 2016). Interestingly, findings on meditation-induced changes in the self were related to alterations in the experience of bodily boundaries and to relationships with others. Increased self-complexity was for instance shown to be related to increased social capacities such as perspective taking (Böckler et al. 2017). Shifts in bodily boundaries including a dissolution of self-other boundaries were observed in studies with meditation novices (Dambrun 2016) and experts (Ataria et al. 2015). These findings are interesting, because they demonstrate that different facets of the self, including the narrative self, can be altered through MBPs. Future studies that investigate the effects of MBPs on self-centrality and the quiet ego should also consider to integrate measures of changes in narrative and experiential facets of the self by using specific experimental paradigms (Farb et al. 2007) or qualitative approaches (Burkart 2018; Hurlburt 1997; Petitmengin et al. 2017; Weger et al. 2016).

Contextual factors regarding the empirical investigation of MBPs should be taken into account. Individual differences of study participants, including prior experience with MBPs and the motivation to practice MBPs, might influence findings of studies examining the effects of MBPs on psychological states and traits. Therefore, the practice of MBPs might be more effortful for beginners compared with experts and thus lead to different results when assessing the same psychological states or traits (Britton et al. 2014; Davidson and Kaszniak 2015; Tang et al. 2012). Effects of MBPs on the quiet ego could differ when comparing experts with novices. Therefore, future studies should also examine the effects of MBPs on the quiet ego in expert meditators. In addition, the goals of different types of MBPs could vary with respect to the socio-cultural context. Modern Western approaches might emphasize that MBPs lead to greater health and well-being. In Eastern and other traditional approaches, MBPs are often embedded in spiritual frameworks, which aim to overcome suffering and reach freedom through deeper spiritual transformation (Dahl et al. 2015; Sedlmeier and Srinivas 2016). Future research on the effects of MBPs on the quiet ego should provide detailed information about the specific types of MBPs and relevant socio-cultural factors.

The investigation of effects of MBPs on the self is an important research topic, because biases of the self are involved in many different psychopathological conditions and other domains such as medicine, law, or pedagogy. Therefore, a greater understanding about how to overcome such biases is of great relevance for several applied domains. Overall, we applaud Gebauer et al. (2018) for addressing a fundamental research question regarding the effect of MBPs on the self. However, based on the conceptual and methodological

ambiguities presented above, we propose to reconsider the far-reaching interpretations made by Gebauer et al. Future research with the appropriate study design and measures is needed to investigate whether the self-centrality and self-enhancement principle can be overcome through means such as MBPs or whether it is universal and unalterable.

Author Contributions JM conceived the idea for the commentary. AL drafted the manuscript, and JM and TH provided critical revisions. All authors approved the final manuscript for submission.

Compliance with Ethical Standards

Conflict of Interest JM is the Director of the Achtsamkeitsinstitut Ruhr (an institute offering mindfulness training) and Principal Investigator of several DFG (German Science Foundation) research projects. JM and TH receive royalties from mindfulness books they have authored. ALL declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

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