Wolf Mehling is professor in the Department of Family and Community Medicine and the Osher Center for Integrative Medicine at the University of California, San Francisco. In his clinical work he sees patients with chronic musculoskeletal pain conditions using hands-on mind-body therapies. His research focusses on mind-body interventions for hypertension, PTSD, dementia, and chronic low back pain. He led a team that developed the Multidimensional Assessment of Interoceptive Awareness (MAIA) for assessing treatment-related changes in interoceptive bodily awareness.

Received: 28 February 2021
Revised: 3 March 2021
Accepted: 5 March 2021

Micro-phenomenological Measures and Mechanisms

Mog Stapleton
East China Normal University, China
mog.stapleton.philosophy/at/gmail.com

> Abstract • I explore three questions that concern the micro-phenomenological part of the study, which I take to be a novel addition to the psychologist's toolkit. (a) What is it exactly that the micro-phenomenological interview measures? (b) What does the insight into the dynamics of experience reveal? And, (c) is the micro-phenomenological interview a mere measure or potentially also a mechanism?

« 1 » Sebastián Medeiros et al.'s target article showcases an exciting way that phenomenological methods can be used in conjunction with standard methods from psychology and neuroscience. Adding the practice of phenomenology to the mix of the methods can give us a deeper insight into the processes that underlie ways of thinking and behaving that cause ourselves and others suffering, whether or not these are deemed to be pathological. The mixed methods used in the study reported in the target article are bodily measurements, self-report questionnaires, and the micro-phenomenological interview. The authors chose to measure heart rate variability (HRV), higher levels of which are presumed to track parasympathetic nervous system activity (the counter to the fight, flight, or freeze sympathetic nervous system response). This not only gives a bodily measure that can be compared with the other measures taken before and after the intervention to see if they correlate occurrently, but is taken to also track dispositional changes in the parasympathetic nervous system activity that happen as a result of the training.

« 2 » Using these methods is a highly enactive approach to doing psychological research. This is not merely because the intervention used in the study, i.e., mindfulness-based cognitive therapy, is a hot topic in enactive cognitive science. The methods used are highly enactive because HRV and the micro-phenomenological interview (MPI) allow the researchers to include an investigation into the dynamics of experiences, and their diachronic structure, and because the experience itself is taken seriously as an object of and aid to investigation.

« 3 » Here, I will focus on three questions that concern the micro-phenomenological part of the study, which I take to be a novel addition to the psychologists' toolkit:

- What is it exactly that the MPI measures?
- What does the insight into the dynamics of experience reveal?
- Is the MPI a mere measure or potentially also a mechanism?

What does the micro-phenomenological interview measure?

« 4 » The MPI uses an investigator to guide the participant through exploring the structures of a particular experience. On the face of it, this might not seem so very different from standard self-report measures. After all, both are asking the participant to report on their experiences. One obvious difference is that the MPI is person-centred. The investigator follows the lead of the participant, asking questions that help draw out their experience through "questions without content, echo and fragmentation" (§17) rather than imposing a standard set of questions that do not adapt to the experience that the participant is describing and the way that they are describing it. The authors contrast self-report questionnaires, which they consider to be "thin" phenomenology, with the MPI, which they call "thick" phenomenology "due to its highly refined and detailed description of subjective experience" (§12). One worry that one might have is that the results of the MPI may nevertheless be subject to the very kinds of criticisms that the authors level against subjective reports. Namely, that "they may translate social desirability or unrelated opinions" (§37). We know from work on the interoception literature that although self-reports measure something, this does not always correlate well with the thing that they are ostensibly reporting. For example, self-reports on interoceptive experience often do not line up with accuracy tasks such as ability to (accurately) count one's heartbeat, and this is predictive of psychopathologies such as anxiety or depression (Critchley & Garfinkel 2017). Why would it be so commonly the case that people's own assessment of whether they are good at feeling internally does not line up with how good they are as measured by an accuracy task? And, should this make us worry about the validity of self-report measures, including the MPI? (Or, indeed, should we worry about whether any tasks that involve subjective reports, like the heart-beat detection task, are measuring what they claim to?) Why should we think that the MPI is measuring something more than our own perceptions of ourselves, which can be clouded by self-deception and shaped to fit what or who we would like to be rather than who we are (or contrarily shaped to fit whatever negative core beliefs we might have inherited and that structure our perception of ourselves)? In essence, what is the MPI measuring: our direct experience or one that has been clouded through our own self-perception and the baggage that may go along with that? Q1

« 5 » Here is one way in which the MPI might be importantly different from the standard self-report measures, and thus might not succumb to the same kinds of worries and criticisms that are levelled against self-reports. Self-report questionnaires by their nature are composed of somewhat abstract questions. This is because they need to be able to capture a variety of situations. However, there is evidence that affective states can affect memory (e.g., Brosch et al. 2013; Dalgleish & Watts 1990). If people are affectively unstable or emotionally labile, as would be expected in those who have a tendency to anxiety and depression (e.g., Koenigsberg

2010), then it may be difficult for them to report on what it is like for them when they are in a very different emotional or mood state from the one they are in when taking the questionnaire. Thus, if questionnaires pose questions about one's experience generally, rather than right now at this particular time, then there may have to be an element of confabulation in the struggle to remember what it is like when one feels very different to how one feels now. However, the MPI does not ask abstract questions. They are questions without content, but that does not mean they are abstract. They are asking about a particular experience. This will surely be much easier for an emotionally labile person to do without resorting to confabulation, because the experience they are bringing to mind is present to them now. Furthermore, it seems likely that they would be less inclined towards confabulating an answer to fit with personal or social desirability, because the questions are only about a particular experience. They are not asking them to judge themselves generally and thereby risk undermining some self-perception or self-narrative that might be critical to their sense of mental security. Answering honestly about one particular experience does not risk shaking (or potentially disintegrating) that narrative.

« 6 » The above considerations suggest at least one reason why the MPI might turn out to be more "accurate" than self-report measures (at least in the sense that it may be less subject to being coloured by confabulation or unintended self-deception). However, even if it were not, would it matter? It seems to me that for the purposes of the study reported in the article, perhaps it would not. What matters is that the participant is put into a state in which they are relating to difficult experiences. Should it matter if (a) the difficult experience is based on direct experiences, or (b) their experience of their experience is shaped through self-defence mechanisms or constructed narratives? Q2 It might matter if we take the MPI to be training the skills of engaging with direct experience (rather than, e.g., habitually engaging with ruminations). Yet it is not clear to me that it is supposed to be playing that function in the target article. Rather, the MPI is just playing the role of a measure (although see §9 below).

What does the insight into dynamics reveal?

« 7 » The MPI gives us insight into both how participants relate to difficult experiences before and after the intervention, and how this might be different at the different phases of rest, evocation, and confrontation. However, it also gives us insight into the diachronic nature of the experience within these phases, and this is – I believe – worth emphasizing. Here, I outline why I take this to be so important. Acknowledgement of the importance of temporal dynamics is a key issue for enactivists (Varela 1999). Emotions and emotional experiences are not static (Varela & Depraz 2005; Colombetti 2014). They are dynamic, both in the sense of responding to one's situation (dynamically) but also in that they transform from one to another as the thoughts and feelings change. In the cases at issue in the target article, where people are prone to rumination, as is common in anxiety and depressive disorders (e.g., Watkins & Roberts 2020), there will be many thoughts and associated feelings being stimulated and triggered. Using the MPI to explore experiences, rather than taking a single time slice of the experience and labelling parts of it with emotion labels such as "angry" or "frustrated," seems to me therefore to be a clearly positive move towards a more ecologically valid approach to emotion research than is currently the standard. And, it might even play a mechanistic role by enabling those with low emotional granularity to come to understand their experiential space and their movement through it (see §9 below).

« 8 » In this article, the authors do not focus on healthy emotional functioning and its corresponding dynamics. However, I take to be implicit in their approach that this understanding of the dynamics of the experiential space should also lead us (and the participants) to the insight that healthy emotional functioning is not about stability, where stability is cashed out in some static sense. The HRV, after all, is considered more adaptive if it is *not* stable (e.g., Ernst 2017; Shaffer & Ginsberg 2017) – a higher heart rate variability is (generally) considered better – it corresponds with the nervous system responding appropriately to situations but then returning to an unstressed baseline. Contrariwise, ruminative states – a tendency towards which is correlated with, and potentially a mechanism for, anxiety and depression (e.g., Alsubaie et al. 2017; Watkins & Roberts 2020) – tend to be rather stable and difficult to shift, which is exactly their problem. In light of this, it seems reasonable to conclude that healthier emotional functioning will present as the ability to go into negative emotional states that have been triggered and then to come back out of them rather than getting stuck in their (sometimes very sticky) attractors. Healthy emotional functioning on this dynamic view might be best understood not to be about consistency but rather to be about flexibility – flexibly moving between states as appropriate and helpful.

Is the MPI a mere measure or potentially also a mechanism?

« 9 » As discussed above, I take the MPI in this study to be an extra measure (with special features) to be added to the psychologists' toolkit. However, the description of the MPI that takes mindfulness as its object (Petitmengin et al. 2019) discussed in (§8) indicates that it may also be a mechanism for regaining contact with experience. In light of this, is the MPI in this study also playing a mechanistic role besides its use in measuring? That is, could the activity of engaging in the MPI with a practitioner in the pre-intervention phase be providing the conditions for the disruption of habitual thought patterns and ways of engaging? Q3 This disruption might function to open up the space for new habits of self-relatedness to emerge (that are developed through the mindfulness training). Even if it is not intended to in this setting, if it is the case that in other settings it is one of the mechanisms by which habits of mind are changed, then it is plausible that here it could also be one of the mechanisms by which the intended effects are happening. If this is right, then this might prompt us to integrate the MPI into mindfulness-based cognitive therapy and mindfulness-based stress-reduction programmes more generally in the future.

Funding

This commentary was written while sponsored by the Chinese Government Scholarship (CGS) – Bilateral Program at the Department of Philosophy, East China Normal University, Shanghai.

Competing interests

The author declares that she has no competing interests.

References

Alsubaie M., Abbott R., Dunn B., Dickens C., Keil T. F., Henley W. & Kuyken W. (2017) Mechanisms of action in mindfulness-based cognitive therapy (MBCT) and mindfulness-based stress reduction (MBSR) in people with physical and/or psychological conditions: A systematic review. Clinical Psychology Review 55: 74–91.

Brosch T., Scherer K., Grandjean D. & Sander D. (2013) The impact of emotion on perception, attention, memory, and decision-making. Swiss Medical Weekly 143: w13786. https://doi.org/10.4414/smw.2013.13786

Colombetti G. (2014) The feeling body: Affective science meets the enactive mind. MIT Press, Cambridge MA.

Critchley H. D. & Garfinkel S. N. (2017) Interoception and emotion. Current Opinion in Psychology 17: 7–14. https://doi.org/10.1016/j.copsyc.2017.04.020

Dalgleish T. & Watts F. N. (1990) Biases of attention and memory in disorders of anxiety and depression. Clinical Psychology Review 10(5): 589–604.

Ernst G. (2017) Heart-rate variability – More than heart beats? Frontiers in Public Health 5: 240. https://doi.org/10.3389/fpubh.2017.00240

Koenigsberg H. W. (2010) Affective instability: Toward an integration of neuroscience and psychological perspectives. Journal of Personality Disorders 24(1): 60–82.

Petitmengin C., van Beek M., Bitbol M., Nissou J.-M. & Roepstorff A. (2019) Studying the experience of meditation through micro-phenomenology. Current Opinion in Psychology 28: 54–59. ▸ https://cepa.info/6665

Shaffer F. & Ginsberg J. P. (2017) An overview of heart rate variability metrics and norms. Frontiers in Public Health 5: 258. https://doi.org/10.3389/fpubh.2017.00258

Varela F. J. (1999) The specious present: The neurophenomenology of time consciousness. In: Petitot J., Varela F. J., Pachoud B. & Roy J. M. (eds.) Naturalizing phenomenology. Stanford University Press, Stanford CA: 266–314. ▸ https://cepa.info/2081

Varela F. J. & Depraz N. (2005) At the source of time: Valence and the constitutional dynamics of affect. Journal of Consciousness Studies 12(8–10): 61–81. ▸ https://cepa.info/4378

Watkins E. R. & Roberts H. (2020) Reflecting on rumination: Consequences, causes, mechanisms and treatment of rumination. Behaviour Research and Therapy 127: 103573.

Mog Stapleton is a visiting scholar at East China Normal University. Her background is in philosophy and cognitive science with a particular focus on 4E (embodied, embedded, enactive, and extended) philosophy and the importance of affect for cognitive science. Some of her key papers in this area are: "Making Sense of Sense-Making: Reflections on Enactive and Extended Mind Theories" (2009, with Evan Thompson); "Steps to a 'Properly Embodied' Cognitive Science" (2013); "Leaky Levels and the Case for Proper Embodiment" (2016); and "The Enactive Philosophy of Embodiment: From Biological Foundations of Agency to the Phenomenology of Subjectivity" (2016, with Tom Froese). https://edinburgh.academia.edu/MogStapleton

Received: 3 March 2021
Revised: 6 March 2021
Accepted: 7 March 2021

Mindfulness is Phenomenology, Phenomenology is Mindfulness

Harald Walach
Poznan University of the Medical Sciences, Poland
harald.walach/at/uni-wh.de

> Abstract • Mindfulness is phenomenology and good phenomenology is a kind of methodological mindfulness. Mindfulness is not a Buddhist concept, but a human universal psychological resource. The target article does a good job of putting that into practice in using phenomenology to study experiences of mindfulness practitioners.

« 1 » A well-known sentence of the medieval mystical writer Meister Eckhart (1260–1328) reads: "If you do not resemble the truth I want to talk about, you won't understand me" (Walshe 2008: Sermon 32).[1] Although "truth" is a complex concept, the sentence might be translated within a modern, hermeneutic framework into "Unless you have some first-hand experience of what you want to research and understand, you won't be able to make sense of your topic." I find it very important, if not a landmark in research of mindfulness, that in their target article, Sebastián Medeiros et al. use a phenomenological approach to understanding mindfulness and its effects.

« 2 » It has long been my hunch, although I am not aware that there is a formal study pursuing this line of reasoning, that Edmund Husserl's phenomenological method of "epoché," the phenomenological reduction, or the abstaining of consciousness from conceptualization (Husserl 2009: Kap 2. §18; Varela 1996; Zahavi 2003), is a Western form of "mindfulness": a non-judgmental awareness of all that is present in consciousness. It is therefore timely and overdue that researchers such as Medeiros and colleagues use a mixed methods approach where micro-phenomenology is embedded as a qualitative component within a larger approach. They are to be congratulated and I can only express the hope that this will be the starting point of an even richer tradition.

« 3 » Their in-depth approach shows that it is not only big numbers and their obstinate crunching that lead to important insights, although for pragmatic reasons convincing quantitative results are mostly the starting point for new research programs (Grossman et al. 2004; Zenner et al. 2014). However, it is meticulous attention to detail that can unravel important contexts and preconditions of change.

« 4 » Sometimes change is not even measurable, but nevertheless profound. We did a study on mindfulness in fibromyalgia patients, a while ago (Schmidt et al. 2011). The changes that we could detect with quantitative methodology were small, and objective physiological markers, like heart rate variability and autonomic dysregulation were unspectacular, to say the least (Grossman et al. 2017). Yet qualitative data and individual outcome measurement such as the "Measure your own medical outcome profile – MYMOP" (Paterson & Britten 2000) showed important changes. So, perhaps it is time to break the dominance of

1 | In the original: "Wenn ihr dieser Wahrheit, von der wir nun sprechen wollen, nicht gleicht, so könnt ihr mich nicht verstehen."