# Neuroscientific knowledge mediates perceived "realness" of felt experience

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### Introduction

With the expansion of brain imaging and neuroscientific research into nearly every aspect of human life, neuroscience increasingly came to be seen as the legitimate knowledge source to understand subjective experience and emotions in humans. Parallel to these developments, neuroscientific explanations of various human practices also became popular in lay society. In societies where recent neuroscientific findings circulate, humans increasingly understand their own experiences using the language and concepts of neuroscience.

Felt experience refers to an individual's first person experience that arises by perceiving inner states, emotions and sensations on the body level. Mindfulness meditation encourages tuning into one's felt experience in order to cultivate awareness of the present moment. The current research investigated mindfulness meditation practitioners' engagement with neuroscience. An inquiry was conducted into how mindfulness practitioners understand and evaluate the effects of their practice through neuroscience, in order to exemplify the use of neuroscientific reasoning in lay people's meaning making process.

#### **Methods**

Semi-structured in-depth interviews as well as participant observation were used to carry out the current research with Taiwanese mindfulness meditation (Mindfulness-based Stress Reduction) practitioners.

# Results

 Multiple practitioners assigned the main role in the body to the brain, and brain changes were perceived as the highest standard of legitimacy. "Obviously, out of all body parts of the human body, the brain is the most important."

• For multiple practitioners, neuroscientific evidence was found to be the criteria that qualified the effects as "real", validating felt experience.

"Scientific evidence can inform me what kind of things mindfulness is helpful with, that the effects are not just my own imagination."

*"If you use processed data of brain waves, then it is obviously a number. ... It is a proof. This brain does have this change. So it is a very real thing."* 

• What is real on an experiential level, was expected to also be quantifiable, visible and measurable in the brain.

*"I found, that the technique has scientific verification, that it changes the brain to a certain extent. I found this attractive. It is like seeing is believing."* 

## Discussion

What happens to first person felt experience when neuroscientific knowledge enters the equation? This research serves to show the power of neuroscience to shape the perception of laypeople about their very selves. This study shows, that even in a body-based practice modality such as meditation, **neuroscience is preferred to validate the realness of embodied first person experience**. While embodied experience is contextual and difficult to represent in simple forms through language, neuroscientific knowledge is decontextualized, visualizable, quantifiable and more easily presentable, therefore more appealing to the public.

Neuroscientific research is often pictured as providing a toolbox for inquiring into embodied experience, neuroscience being the method and felt experience being the object of inquiry. However, our understanding of neuroscience might influence how we perceive or evaluate our felt experience. As embodied experience is always contextual, **neuroscience might be understood not merely as method but also as part of the context in which embodied experience exists, influencing the embodied experience directly instead of just measuring and quantifying it.** If embodied experience and neuroscientific knowledge are framed as different 'ways of knowing' the body and the mind, then we might be observing a shift of the preferred 'way of knowing' oneself towards mediated, expert defined neuroscientific means.