Re-conceptualizing and Measuring Tacit Knowledge

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Abstract

Purpose: to develop and test a new method of measuring of tacit knowledge that can be replicated across domains. We also study the connection between tacit knowledge and mindfulness.

This paper proposes to develop a new measure of tacit knowledge based on an updated definition that distinguishes tacit knowledge and tacit skills which we build based on Taylor's taxonomy (2007). Since tacit knowledge is domain specific, we also propose a new method of measuring tacit knowledge that can be replicated across domains. This study occurs in two stages. The participants in the first stage will be recruited from the field of research methodology. The second stage is the validation of the new scale. The outcome of this study could provide organizations with a new measure of tacit knowledge that will predict additional variance in performance beyond the explicit knowledge factor and can be replicated across domains.

Introduction

Tacit knowledge is invaluable to organizational strategy because it is the basis of expertise (Horvath, 2000; Matthew & Sternberg, 2009; Collins, 2018). However, there is no consensus on a single definition of tacit knowledge, nor is there a reliably and valid measure that could be used across knowledge domains. In this study, we define tacit knowledge as the complex mental models that are learned implicitly through experience. We also distinguish tacit knowledge from explicit knowledge, which we define as knowledge learned through formal instruction. Previously developed measures use a poorly defined conceptualization of tacit knowledge, bringing into question if tacit knowledge is actually being measured or some other construct like practical or explicit knowledge. Therefore, we propose to develop a new measure of tacit knowledge in the domain of research methodology that can be used to differentiate tacit from explicit knowledge. Additionally, because mindfulness has important meta-cognitive processes that occur both externally and internally in the present moment (Dane, 2011), mindfulness as a skill may be related to an individual's ability to acquire tacit knowledge. Thus, we argue that mindfulness should correlate with tacit knowledge.

Hypotheses

- *Hypothesis 1:* The new test will yield a two-factor structure for knowledge (tacit and explicit knowledge).

- *Hypothesis 2:* Expertise is positively associated with tacit knowledge.

- *Hypothesis 3:* Tacit knowledge will predict professional and research achievements.

- *Hypothesis 4:* Tacit knowledge factor will predict additional variance in performance beyond the explicit knowledge factor.

- *Hypothesis 5:* Mindfulness skills and the tacit knowledge inventory scores are positively correlated

Participants and Materials

Participants will be individuals with varying levels of experience in research methodology recruited via email and social media

Method

In the first stage of the study, a critical incidents questionnaire will be sent to subject matter experts. The responses will be content coded in order to develop a situational judgment test for assessing tacit knowledge. These questions will then be reviewed by a panel of subject matter experts before validation. Simultaneously, explicit questions will be developed using research methodology textbooks. The second stage of the study is the validation process of the newly developed measure. Additional materials to be used include two mindfulness skills scales, a metacognitive assessment ability, and a questionnaire regarding their achievements in research. The new measure and additional measures will be administered to a sample of participants with varying degrees of experience in research methodology.

Proposed Analyses

A confirmatory factor analysis will be used to test hypothesis 1. An ANOVA will be conducted to test hypothesis 2. Regression analyses will be run to test hypothesis 3 and 4. Finally, a correlational analysis will be run to test hypothesis 4.

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