

# Implicit Cognitive Vulnerability



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## INTRODUCTION

Implicit Cognitive Vulnerability is a theoretical construct, a concept that engages in an understanding revolving around how a person understands information, shifts information from short-term memory into long-term memory access, and the vulnerability within the learner's cognitive processes that support or abandon the learner's ability to conceptualize the new information within prior learned information. Vygotsky (1933/1966, 1935, 1981) referred to this as the conceptual framework of understanding, fitting new information within the previously learned information. The intriguing shift in thought, referred to as Implicit Cognitive Vulnerability, suggests that the discomfort and tension surrounding learning new information and engaging with this information in new and different ways introduces a level of cognitive dissonance and conceptualized resistance to the person's re-envisioning information in new and different ways. This vulnerability, specifically cognitive vulnerability, is the inherent undergirding towards a rationalization revolving around understanding new information in new and different, creative ways as the information moves from short-term memory and into implicit, long-term conceptual frameworks of understanding. The objectives of the article is to frame an understanding of Implicit Cognitive Vulnerability as a developing learning theory that supports one's understanding of the instructional process. This includes the supportive development of a "comfortableness" within the instructional environment that supports the learner's cognitive efforts and developing understanding of prior information with new information, as well as the creativity involved in "thinking outside the box" within a safe and supportive environment.

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## BACKGROUND

Cognitive vulnerability within the realm of cognitive psychology has a focus upon states of emotional depression (Haeffel & Hames, 2014; Hanklin & Abramson, 2001; Matthews & MacLeod, 2005; McGinn, Nooner, Cohen & Leaberry, 2015). However, within the learning process, one might suggest that cognitive vulnerability is not so much a state of depression, as much as a state of cognitive dissonance wherein the learner is attempting to understand information in new and different ways, by not only framing the information within the previously developed knowledge base, or conceptual framework of understanding (Vygotsky, 1933/1966, 1935, 1981) as well as the learner's need for support within Maslow's Hierarchy of Needs (1943, 1954, 1962, 1968, 1964/1970a, 1970b) that frames a five stage model that frames the deficiency needs (physiological, safety, social, esteem) and growth need (self-actualization) as vitally important areas of impact upon a learner's motivational needs. One may suggest that the vulnerability inherent within the learning process engages Vygotsky's conceptual framework of understanding the specific subject matter that also includes the connectedness of the new information with previously understood information, with Maslow's Hierarchy of Needs that engages in the safety and esteem aspects of the community of learning (Klamma, Rohde & Stahl, 2005; Swan, 2002). This also supports Wittgenstein's (1961) work related to a learner's understanding of information within the realm of their own socially communicated and socially corrective understandings that frame learned information within a social context that may be perceived as the community of learning environment

as well as the larger community of practice that also includes the larger social realm of influence.

The importance of Implicit Cognitive Vulnerability within a community of learning is clearly articulated through an understanding of the deficiency needs as defined by Maslow (physiological, safety, social, esteem) that clearly embraces the impact of the social realm upon the learner that includes not only the instructor but also the collegial learners. This includes the vitally integral support of the community of learners as a safe, supportive area that embraces self-efficacy (Bandura, 1977, 1986, 1997) as a motivational effort, including the expectancy construct (Parsons & Goff, 1978), supporting Vroom's expectancy theory (1964) that, according to Holdford and Lovelace-Elmore (2001), Vroom supports an understanding that "intensity of work effort depends on the perception that an individual's effort will result in a desired outcome" (p. 8). This supports an understanding towards the self-actualization and creativity that are inherent not only towards Bloom's Cognitive Taxonomy (Bloom, 1956, 1984; Bloom, Englehart, Furst, Hill & Krathwohl, 1956; Bloom & Krathwohl, 1956; Krathwohl, Bloom & Masia, 1964). This also includes Anderson and Krathwohl's revised Taxonomy for the Digital Age (2001) focus upon higher order thinking skills achievements but also towards supporting the creativity inherent within higher order thinking skills that may be described as "out of the box" creative thinking in new and different ways that are inherently vulnerable arenas into which one may journey boldly.

## **MAIN FOCUS OF THE ARTICLE**

The primary concerns revolving around the conception of Implicit Cognitive Vulnerability have to do with the impact of the instructional facilitator, the collegial learners, and the subject matter prior experience on the part of the learner. Each aspect within the instructional environment is integrally

important to the impact upon the learner's cognitive understanding and implicit memory retention and retrieval. Simplistically stated the triad of components, or constituents, within this instructional process are imperative towards supporting and engaging the learner's successes.

## **Instructional Facilitator**

The instructional facilitator is the learning community mentor, wherein the tone of the learning community is set and the level of collegial support by all members within the instructional community is gauged. The instructional facilitator's style of instructional presentation of materials to the learners, the ways that the students engage with the information, and the levels of direct engagement with higher order thinking skills efforts is directly designated and supported by the instructional facilitator. As well, the level of collegiality and professionalism of the learners within the instructional environment is set up and supported by the instructional facilitator, towards being a supportive environment in which learners are indeed colleagues who support the engagement with the information while also engaging in either supportive or non-supportive "out of the box" nontraditional and creative thought processes. This understanding and engagement may more fully address using the information in new and different ways, that not only integrate the new knowledge within each learner's conceptual framework of understanding, as checked and corrected by the instructional facilitator as well as learner colleagues, but also more fully supports the integration of new information into each learner's implicit memory attainment. The "comfortableness" modeled by the instructional facilitator guides the learners towards a collegial engagement within the bound learning environment, wherein a sense of "comfortableness" and creative engagement with the subject matter and learner colleagues may develop into a sense of community engagement that supports the learner's

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