

## Examining How Expectancies and Values Can Overcome the Costs of Innovation: A Systematic Review of Environments and Approaches

Eleftherios K. Soleas Queen's University

## **Abstract:**

Making innovation more likely is a common goal of numerous educational initiatives ranging from the makerspace movement to high-skills majors and innovation incubators popping up across Canada. However, there has been limited cross-pollination across different disciplines towards a truly interdisciplinary understanding of what makes innovation more likely. This systematic review study examines the expectancies, values and costs that have been found to be involved in approaches and environments that promote the act of innovating. A systematic approach integrating an all-databases search in EBSCOhost (n=375 databases) yielded 115 full-text papers for data extraction. A majority of papers were found to be from business settings and predominantly using a survey methodology. There were limited considerations for implementation in schooling and education more broadly. Persistent trends for building expectancy tend to be supportive environments or approaches that make it safer for the aspiring innovators to practice and develop self-efficacy. Aspiring innovators tended to find intrinsic and utility value rather than attainment value as their principal task values, which suggests possibilities for maximizing their effect. Costs of innovation followed a similar pattern

## The Costs of Innovation

to costs as noted in other expectancy-value theory (EVT) studies. These findings point to a need for those interested in promoting innovation, especially educators, to focus their energies on creating a supportive environment and a needs-supportive approach.

**Keywords:** expectancy-value theory; motivation; innovation

## **Biographical Note**

Eleftherios Soleas is a recent graduate of the Faculty of Education at Queen's University. He works as an educational developer and researcher in the Office of Professional Development and Educational Scholarship at Queen's University. His research interests include motivation, innovation and designing learning environments for stoking higher-order thinking.

JCACS / RACÉC 102