

Emotion and Cognition in Innovation: Reflection and Perspective Change in a Theory U Setting

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1 Introduction

Innovation is often studied as an outcome: a product, a prototype, a solution. Less attention has been paid to what happens inside the people going through it: how they think and feel, and whether those two things are actually separable. Research on learning and perspective change suggests that emotions do more than accompany thinking; they may shape it (Mezirow, 1991). Yet how emotion and cognition interact in real innovation settings remains poorly understood. This study asks: how do emotional states shape reflection and perspective change during an innovation process?

The study is situated in the Innovation and Knowledge Creation programme at the University of Vienna, built around Theory U (Scharmer, 2009), a framework that guides participants through phases of opening up, letting go of existing assumptions and moving into prototyping. The deliberately open-ended process makes the relationship between emotional experience and thinking unusually visible across time.

2 Methods

Seven participants from two groups wrote individual learning journals at seven points across the programme (LJ0–LJ7), from initial expectations through to a final reflection after the prototype was complete. The two groups differed markedly in their relational dynamics, which emerged as analytically significant during analysis. The material was analysed using Grounded Theory (Glaser & Strauss, 1967), an inductive qualitative method in which categories emerge from the data rather than being defined in advance. Open coding was conducted in MAXQDA, leading to six thematic categories and a set of cross-cutting patterns.

3 Results

Four findings are most strongly supported by the data. First, emotions function as navigation instruments: they signal orientation, flag where existing frameworks are breaking down and later help participants make sense of why the difficult parts mattered. Second, staying with discomfort rather than resolving it early is what makes perspective change possible. Participants who remained in contact with confusion longest showed the most significant shifts and those who withdrew showed narrower change. Third, the group co-determines what

individual thinking is possible. In one group, conflict stayed at the level of ideas and participants kept thinking openly and in the other, unresolved interpersonal conflict progressively consumed the cognitive and emotional resources that reflection requires. Group formation is therefore not a logistical decision but a pedagogical one. Fourth, noticing a pattern in yourself and being able to change it are not the same thing. Several participants named their own habits as limitations and predicted what they would do without that recognition making a difference. Awareness is necessary but not sufficient.

4 Discussion

These findings are relevant across disciplines. For educators and programme designers, relational conditions may matter as much as content. For researchers in education, organisational psychology and design, the results suggest emotion and cognition are not separate systems but parts of the same process. Notably, in several journal entries insight appears in the act of writing itself, generated in the moment rather than reported after, which suggests that reflective writing is sometimes the site where thinking happens.

References

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