Catalyst Training – How Do We Know It Works?

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I. Decision Making

The goal of this module was to train participants in six distinct facets of decision making (called "links" in the training). These links are as follows: Helpful Frame, Clear Values, Creative Alternatives, Useful Information, Sound Reasoning, and Commitment to Follow Through. We assessed the effectiveness of this training using a range of measures that variously capture potential changes in affect, cognition, and pseudo-behaviors. Specifically, we measured (1) decision making self-efficacy (an affective outcome), (2) intellectual humility, (3) a knowledge test pertaining to decision making (a cognitive outcome), and (4) a writing scenario that asks participants to read a decision making dilemma and write out their full decision making process, which we then score for quality using the decision making links from training as a rubric (a pseudo-behavioral outcome). Although intellectual humility is not a training-related objective, we include it as a "balance check" on increased decision making efficacy. We would like to observe a significant *increase* in decision making efficacy, but we would also like NOT to observe a corresponding *decrease* in intellectual humility. The latter combination would be problematic for leaders, as it would indicate that we have facilitated hubris.

Results across two cohorts indicate reasonable support for the impact of this training. We observed a significant increase in decision making efficacy without a corresponding decrease in intellectual humility. We also observed a significant increase in decision making knowledge on the knowledge test. The results of the writing exercise were less impressive, however, even though the change in scores from pre to post was in the expected direction. The latter type of measure tends to be statistically "noisier" than the other measures because it depends on quantitative coding of qualitative data, so larger sample sizes are needed to find statistically significant changes with such measures.

Table 1. Decision Making Outcomes

Scale	Pretest	Posttest	t-test	p-value
Decision Making Efficacy	3.78	4.57	4.86	0.001
Intellectual Humility	4.27	4.31	0.43	0.670 (ns)
Knowledge Test	5.13	6.50	4.26	0.001
Decision Making Writing Exercise	7.04	8.38	1.06	0.301 (ns)

Note: n = 24. Decision Making and Intellectual Humility scale responses ranged from 1-5. Knowledge test scores range from 0-7. Decision making scores could range from 0-24.