

On Consequences of Awareness of Unknown Alternatives in Decision Making in Business Environments

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Background: The assessment of alternatives and likelihoods of consequences of decisions requires time, effort and experience in daily and business lives whereby limited information processing capabilities reduce information from reaching human brains.

In rational choice theory, no special focus is placed on assumptions about unconscious options. Due to the entire states of awareness no unknown facts are assumed (French 1986). However, people are resource-bounded and thus lack the abilities to regard all possible aspects of their decisions (incomplete information). Unconsciousness can hence result in undesirable outcomes emphasizing the importance of assumptions about the unknown (Finkelstein et al. 2009; Foote et al. 2012) (see also the Conscious Competence Model in Table 1).

Learning	Incompetence/ Unawareness	Competence/ Awareness
Unconscious/ unaware	1. <u>Not</u> knowing what we do not know	4. Not knowing what we know
Conscious/ aware	2. Knowing what we do not know	3. Knowing what we know

Table 1. The Conscious Competence Model (CCM)(according to Robinson (1974)).

Illustration: “[...] [I]magine there are red, black and white balls in an urn, but Alex is unaware of the red balls. Although Alex cannot bet on either “the ball is red” or “the ball is not red,” he could, and presumably would, bet on the event “the ball is either black or white [...]” (Li 2008).



1. Unconscious Unawareness: “black or white”



2. Conscious Unawareness: “black or white or...any other colour(s)”

Aims: i) Examining aspects of the conversion from unconscious to conscious unawareness and ii) whether (and if so: how) decision outcome is improved or altered

i) Conversion from Unconscious to Conscious Unawareness (literature survey):

Individual is informed about lack of knowledge (Li 2008)

Receive messages with new information (Schipper 2012)

Reflect upon strategies of others (Oliveira 2007)

Assuming the fact that one is unconscious (Walker 2011)

Other strategies...

Unconsciousness can hence be removed predominantly with external help. However, third parties can purposely influence a decider’s level of awareness by showing her – or do not showing her – new alternatives.

ii) Preliminary Empirical Observations:

Aim: Examining experimental setups for observing decision alteration after conversion to conscious unawareness.

Methods: Participants (n=150) prospectively estimated own performances relative to others before accomplishing a memory test. Afterwards participants were scientifically well-informed that self-judgment is subjectively positively biased and thus virtually impossible (*overconfidence bias* (Kruger & Dunning 1999)) and asked to re-estimate to improve decision.

(First) Results: Preliminary results show that ~50-60% of participants did not re-estimate decision after becoming consciously aware of the bias.

Conclusions: People react differently when becoming aware of own incompetence/ unawareness to make a proper decision. If decision outcome is improvable by becoming consciously aware is currently under investigation.