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Theory on three rational and nine intuitive Decision-Making Styles (12 types)

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Unterstützung

Lukas Alvermann (Ostfalia Hochschule)

Theory on three Rational and nine Intuitive Decision-Making Styles

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Abstract

Intuition is a universally recognized as a prevalent decision-making approach across various research domains, encompassing intricate, interconnected, multi-faceted, and interdisciplinary concepts. An integrated framework that effectively combines and consolidates various approaches is currently missing when it comes to the practical implementation of intuitive decision-making. The main purpose of this paper is to develop a new and comprehensive measurement instrument embracing variety of styles by using existing and new items in the literature. The findings indicate that the 12-dimensional decision-making styles serves as a valid and reliable measuring tool for assessing different individual tendencies in the future studies.

Introduction

Intuition is a concept that has been studied across various disciplines, such as management, sociology, psychology, and philosophy (Hodgkinson and Sadler-Smith, 2003; Sinclair & Ashkanasy, 2005; Dane & Prat, 2009; Hogarth, 2010), neuroscience (LeDoux, 1996; Barais et al., 2017, 2018; Craig, 2002; Damasio, 1999), behavioral sciences (Hodgkinson et al., 2008), parapsychology (Bem, 2011; Radin, 2017), medicine, and health sciences (Glatzer et al., 2020), engineering (Cash & Maier, 2021; de Rooij et al., 2021). Due to the nonconscious nature and the complex process of cognition and affect interactions, intuition does not have a clear common understanding in terms of conceptualization and measurement across various scientific fields and practices.

Intuition-style measurement studies date back to the Myers-Briggs Indicator (MBTI, Myers, 1962), which distinguishes between intuition and sensing on a two-polar continuum following Jung (1926). Based on a broader integrative theory on personality, Cognitive-Experiential Self-Theory (CEST, Epstein, 1973, 1985) involves dual information processing systems as rational system with abstract rules and experiential system with context-specific, heuristic rules. Further developing the CEST approach, Pacini & Epstein (1999) suggest the Rational-Experiential Inventory (REI) for measuring rational and experiential thinking styles.

Focusing on decision making styles, General Decision-Making Style (GDMS, Scott and Bruce, 1995) proposes rational analytic (Hunt et al., 1989), avoidant, intuitive, dependent (Harren, 1979), and spontaneous styles. Rational style bases on logical decisions by searching information; intuitive style depends on hunches or feelings; dependent style is related with searching advice from others; avoidant style means hesitating to decide; spontaneous style indicates quick decisions. For the stress situations, Burns and D'Zurilla (1999) proposes Perceived Modes of Processing Inventory (PMPI) adding an automatic processing style beside the rational and emotional processing styles. Automatic processing style also indicates quickly, efficiently, swiftly, aware, repetitive and experience-based processes. Based on the requirements of situations, Betsch (2004) develops a scale for measuring individual tendencies of Deliberation or Intuition (PID). She distinguishes into Deliberation (Rationality) based on the need for cognition (Cacioppo & Petty, 1982), and Intuition based on REI (Pacini & Epstein, 1999).

For the rational style, Cools and van den Broek (2007) propose Cognitive Style Indicator (CoSi) based on the Cognitive style Index (Hayes & Allinson, 1994). suggest knowing,

planning and creating styles for receiving and processing information. Knowing style is related with facts and data, based on a clear and rational solutions; planning style indicates a need for structure with organizing and controlling work environment; creating style donates experimentation of environment in terms of opportunities and challenges.

Criticizing the intuition styles, Pretz et al. (2014) develop The Types of Intuition Scale (TIntS) with describing three types of intuition. Holistic intuitions integrate diverse sources of information in a holistic big picture as Gestalt-like and holistic abstract in a non-analytical manner (Pretz et al, 2007). Inferential intuitions are based on previously analytical processes that have become automatic. Affective intuitions are based on feelings. Lately, Pachur and Spaar (2015) combine different styles of REI, GDMS, CoSI, PMPI, PID into Unified Scale to Assess Individual Differences in Intuition and Deliberation (USID). They divided preference for intuition into affective and spontaneous, the preference for deliberation into knowing and planning.

Even these previous studies identify three rational styles (analytical, planning, and knowing) and six intuition styles (feelings, spontaneous, experience-based heuristic, holistic, and dependent), some of the styles are not sufficiently described and understood. It remains unclear what is meant with feelings or the general term gut feeling. Feelings can be described in more depths as emotional, body impulses, mood and anticipation (hunches). From a neuroscience perspective, the concept of a gut feeling can be described as a differentiated approach based on emotions originating from the stomach, colon, skin, and the visceral sensory system (Hopper, 2001; Arumugam et al, 2011; Cryan & Dinan, 2012), the interception and somatic markers of the heart beating rate (Schandry,

1981; Garfinkel et al, 2015; Schulz, 2016) and skin arousals (Loggia et al, 2011; Breimhorst et al, 2011).

The mood is another affective emotional intuition type influencing the feeling and affective actions (Sinclair, 2020). Positive and negative moods are accompanied by qualitatively different information processing modes (Bolte et al, 2003) according to the Affective Infusion Model (AIM), which explains how affect impacts abilities to process information (Forgas, 2001).

Hunches are described in the GDMS study as well as in REI, PID, and USID. Many researchers try to explain this atypical or paranormal type of decision making in depth (Honorton & Ferrari, 1989), as presentiments of future emotions (Radin, 2004), precognition and premonition (Bem et al, 2015), extrasensory perception (Thalbourne & Haraldsson, 1980) paranormal belief and experiences (Lange & Thalbourne, 2002), and automatic evaluation (Ferguson & Zayas, 2009). The received information in this regard may come from outside the body (Sinclair, 2011, 2014).

Based on the Unconscious Thought Theory (Dijksterhuis, 2004) decisions can not only be made fast but also after a period of time and (unconscious) reflection and activation (Bowers et al., 1990; Waroquier et al, 2010), incubation (Carlson, 2008), unconscious thinking (Dijksterhuis & Nordgren, 2006), distraction (Kohler, 1969), removal of blockages (Duncker, 1945), completion of schemes (Mayer, 2011), or in intuitive step-ups (Nicholson, 2000).

According to various theories and approaches from different fields, we combine or divide styles from different studies, add new styles which is not much mentioned before, and test styles for finding a comprehensive valid and reliable instrument. Therefore, the

main purpose of this paper is to develop a new measurement instrument embracing variety of styles. For this purpose, we named and propose twelve types of styles as *Analytic*, *Planning*, *Knowing*, *Holistic Unconscious*, *Spontaneous*, *Heuristic*, *Slow Unconscious*, *Emotions*, *Body Impulses*, *Moods*, *Anticipation*, and *Support by Others* on the basis of studies in the literature.

Analytic is a rational style with logical evaluation (GDMS), analytical and logical manner (REI), problem solving (PMPI), deliberative thinking on facts and details (PID). *Planning* is a rational style associated with sequential, structured, conventional, planned confirmative, and systematic routines (CoSI, PID, USID). *Knowing* is a rational style with understanding facts and details without the reasoning behind (REI, CoSI, USID).

Holistic Unconscious is an intuition style based on experiential ability in abstract terms or holistically in a Gestalt-like, non-analytical manner (CES, TIntS). *Spontaneous* is an intuition style with a speed and efficient automated information processing (GDMS, PMPI, TIntS, USID). *Heuristic* is an intuition style with an experience-based automated information processing (CEST, PMPI, TIntS, PID, USID). *Slow Unconscious* is an intuition style with an unconscious reflection and activation develops in a period of time with distractions (Dijksterhuis, 2004). *Emotions* is an intuition style relying on feelings (GDMS, REI, PMPI, TIntS, PID, USID). *Body Impulses* is an intuition style based on feelings such as gut, heart, skin arousal, etc. (REI, PMPI, TIntS, PID, USID). *Moods* is an intuition style based on negative and positive versus active and activated and deactivated states according to the Affective Infusion Model (Forgas, 2001). This indicates a different information processing mode (Bolte et al, 2003). *Anticipation* is an intuition style based on hunches and vibes (GDMS, REI, PMPI, TIntS, USID). *Support*

from others is an intuitive style involving seeking advice and direction from others while experiencing a sense of whether the person is right or wrong (GDMS, REI).

Discussion

The purpose of this paper is to develop a theory for a new instrument for measuring the complex and multi-disciplinary construct of rational and intuitive decision-making.

Elaborating items in the previous instrument studies on intuition, we try to establish a comprehensive instrument for measuring decision-making styles. Based on different theories and approaches from various fields, we combine the similar items, divide incompatible items, add new items needed, name or rename inconsistencies, and test all items and style structures for the psychometric properties. The results indicate a clear multidimensional measurement instrument for twelve different types of decision-making styles. The types are *Analytic, Planning, Knowing, Holistic Unconscious, Spontaneous, Heuristic, Slow Unconscious, Emotions, Body Impulses, Moods, Anticipation, and Support by Others*.

Conclusion

The study introduces an integrated and all-encompassing multidisciplinary structure aimed at understanding and measuring decision-making styles. The structure builds upon well-established and universally recognized research in the field. Encompassing a wide array of dimensions essential for both rational and intuitive decision-making processes, this framework presents 12 distinct dimensions that provide to these tendencies. Designed to be comprehensive, this framework can be applied across diverse decision-making situations within the extensive research field.

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