**Using Intuitive Awakening for Business Students to Enhance Strategic Thinking Skills**

**Melvin Prince**

*Southern Connecticut State University*

**Constantinos Vasilios Priporas**

*Middlesex University*

“The only real valuable thing is intuition”

Albert Einstein

 **Introduction**

A continuing problem in business education is the gap between degree programs that prepare students for business careers and the development of competencies that are of value in an employment context. The balancing of intuition and rational aspects managerial decision making is a prime example of this gap (Brown et al., 2015). While business students may become knowledgeable with the general domain of managerial decision making, knowledge of specialized domains applicable to diverse industry settings is far more tenuous. It is in these specialized areas that students can profit by increasing their focus on intuition or non-rational thinking.

 The objective of this paper is to provide practical guidance about the implementation of the Intuitive Awakening Elicitation (IAE) method. This method focuses on developing and enhancing students’ intuitive skills for marketing decision-making. IAE is designed to upgrade the effectiveness of intuition, by minimizing its biases and maximizing its expert blend with steel-trapped logic and conceptual marketing knowledge. Additionally, IAE aims to improve students’ self-confidence and trust in making marketing decisions by using intuitive thinking.

 The significance of this work lies in the fact that business school graduates as prospective employees will be a better fit to their future organizations when they are fully capable of meeting requirements for effective use of intuition skills. In the ensuing sections of this paper we present a unique system of concrete ways to facilitate transmission of these important skills into the marketing curriculum and teaching practice. In sum, the recommended approach for awakening marketing students’ intuition will lead to essential advancement of the quality of future marketing managers.

Among the instructional techniques for improving intuition modes among business students are: (a) active reflection. (b) self-checking mechanisms, (c) multiple metaphors and (d) response failures of fatigue and memory (Burke and Sadler-Smith, 2006). Students may be advised to speculate about assumptions that key players in business are making when they arrive at their decisions. Student intuition may further be stimulated by teaching them to generate ample alternatives to a preferred business problem solution, and to assess the merits of the varied options. In so doing, they can re-visit the facts of the case, so as to test their earlier conceptualization of best business strategies (Hogarth, 2001).

A program aimed at enhancement of intuition skills among MBA students is reported in the literature. This program taught the use of several general principles and provided reinforcement exercises. These included: (a) use of passive volition, (b) meditation, (c) mindfulness, (d) somatic awareness, (e) insight, (f) spontaneity, (g) visual imagery, and (h) relaxation. Participants kept a log while under instruction, by which they evaluated changes in their workplace experiences, owing to program learning. Based on participants’ self-reports, the program succeeded in making them aware of concepts that develop intuition skills (Sadler-Smith and Skefy, 2007). Beyond intuition-building efforts, there are no studies that address the use of intuition in standard pedagogical approaches, such as individual business case analyses. In a typical evidence-based case study, students are expected to practice, test, confirm, extend or refute formal knowledge (Erez and Grant, 2014). Such pedagogically oriented cases are extensive, and include abundant complex data tables, requiring analytical skills and conceptual interpretation. This does little to stimulate intuition thinking, as the primary objective is to bring student critical thinking to a higher level of rationality (Rebeiz, 2011). In this effort, we do not use or replicate Sadler-Smith and Skefy’s (2007) as program intuition training processes do not fit in with the standard curriculum classroom schedule (e.g. taking time from other learning activities, lack of student interest, etc.). Other skills that are cultivated for marketing students include written and oral comnmunication, creativity, and computer usage. With the immersion of intuitive case work, we seek a balance between a variety of skill enhancement routines. Additionally, we want to use the natural thinking processes that individuals have as their own. Some people are more intuitive and some more rational in their general thinking processes. If the thinking style is primarily intuitive, individuals nevertheless can use rational decision making, and *vice versa.* Additionally, other intuition training processes do not fit in with the classroom (e.g. taking time from other learning activities, lack of student interest, etc.).

 The present study breaks new ground by demonstrating ways of exposing students to new business to business case materials and priming them in ways that constrain them to use intuition problem solving. Consequently, the present paper contributes insights to this under-researched business education phenomenon.

**Theoretical Foundation: The Nature of Intuition Thinking**

Intuition may be distinguished from other fast thinking processes that appear to be similar. These other processes need not be based on prior knowledge without awareness, are not physiological responses, and may involve sequential processing (Betsch, 2008).

*“Intuition is a process of thinking. The input to this process is mostly provided by knowledge stored in long-term memory that has primarily been acquired by associative learning. The input is processed automatically and without conscious awareness. The output of the process is a feeling that can serve as a basis for judgments and decisions”* (2008: 4).

Hogarth (2010) elaborates on this by adding that intuition responses require little apparent effort, involve little or no conscious deliberation, may have cognitive or emotional origins stemming from pattern recognition and are experienced in a holistic manner. Further, the knowledge associated with intuition cannot be made explicit. According to Hogarth (2008: 91-92), intuitions from observed stimuli may involve insights and inferences about predictions, postdictions, and preferences. Such insights and preferences may give rise to the illusion of validity. Beyond cognitive thought, feelings may be experiential and motivational factors in intuition decision making (Zeelenberg and Pieters, 2007).

Intuition-based strategies involve processing of high levels of well-consolidated information. Consistent with this definition, Epstein has developed cognitive-experiential self-theory which locates intuition within an experiential system and elaborates the role of involuntary feelings, independent of recall, which require sparse cognitive resources and employ pattern recognition. Knowledge may be experiential or intellectual (Epstein, 1985; 2008).

Experiential system thinking taps into a reservoir of unconscious information, acquired through automatic learning. Beliefs are acquired by means of classical conditioning, instrumental conditioning, and observational learning. Beliefs derive from the aggregation of emotionally significant experiences. Especially under extreme cognitive limitations which gives rise to intuition, it differs from other modes of thinking that derive from a rational system of verbal reasoning. In comparison with rational conceptual systems intuition is: linked more closely with affective experience, more action-oriented, more loosely integrated with personal systems, more holistic and generalized, and tends to be passively experienced (Epstein, 1985).

 Intuition thinking, in general, can outperform analytical styles under certain conditions. Intuition thinking may have an edge when problems are exceedingly complex or structured by multiple variables with indeterminate weights so as to make analysis impossible (Epstein, 2008: 32-33). The two systems may interact, either sequentially or in the same temporal time-frame. Either system may dictate to the other.

 Individuals may differ in psychological dispositions depending on the thinking systems that are prioritized. Individual differences in intuition intelligence have been measured by Epstein and Pacini (1999). The instrument is called the Constructive Thinking Inventory (CTI). Concepts that it measures are emotional coping, behavioral coping, categorical thinking, esoteric thinking, personal superstitious thinking, and naive optimism.

 Experiential thinking is positively associated with creativity and aesthetic judgment. On the other hand, rational thinking is positively associated with favorable adjustment traits, such as high self-esteem or conscientiousness (Epstein, 2008: 28). Intuition often produces different results, depending on the primary thought system involved. Intuition and analytic thinking observe different rules.

 Cognitive-experiential self-theory posits that the accuracy of intuition judgments and decisions depends on the appropriateness of stored experience, its situational familiarity and its relationship to the situation involved. Intuition is functional i.e., it is adaptive.

 The learning of intuitions through experiences and their associated consequences have been addressed by Hogarth (2008). High level operations that result from conscious and controlled thinking may also be accomplished by means of implicit learning. Further, what originates as activity from explicit learning may become intuition with repeated tasks. However, opportunities to learn or environmental predictability affects the quality of intuition thinking, including judgments and decisions (Newell, 2016).

 Individuals differ in preferences between intuition and analytical thinking. Approaches to the measurement of such preferences are found in Briggs and Myers (1976) and Epstein et al. (1996). All thing being equal, variability between people in their intuition behaviors reflects experiential differences with respect to domains involved. People with more experience in a domain are classified as experts and those lacking experience are branded as novices. Experts have a distinctive thought process with respect to intuition. Their rich and greater exposure situations are coded by expected patterns, pattern recognition and more of these are available in memory for diagnosis (Hogarth, 2008: 94; Klein, 1993). Experts, themselves, differ in the character of intuition behaviors. Differences among experts are attributable to predictability of the environment, feedback for adequate learning, and experience in the professional environment (Newell, 2016).

 Intuition may be viewed as a stock of knowledge or cultural capital at the ready for making inferences (Hogarth, 2010). Intuition has special advantages beyond its immediacy and effortlessness. These advantages are salient under the following conditions: a) people possess knowledge gained from prior relevant experience, b) implicit and explicit knowledge are disassociated, and c) implicit knowledge is useful to solve a task (Plessner and Czenna, 2008, 257-258). In general, the intuition thinking mode is better handled when intuition-inducing and intuition tasks, such as time pressured challenges, are undertaken. Further, benefits of intuition thinking increase with exposure to learning environments with representative, appropriate and accurate feedback. Intuition is especially beneficial when implicit knowledge exceeds that of explicit knowledge for a specified task (Plessner and Czenna, 2008, 260-262).

**Intuition in Business Education**

Although the importance of intuition has been discussed diligently in business and strategic decision making (Blume and Covin, 2011; Calabretta et al, 2017; Dane and Pratt, 2007; Sadler- Smith and Shefy, 2007; Sinclair and Ashkanasy, 2005), it scarcely be mentioned in the business and management education curriculum (Sadler-Smith and Shefy, 2007; Sadler-Smith and Burke, 2009). For example, previous studies have discussed issues related to educating intuition and incorporation in the executive education and management development programs (Burke and Sadler-Smith, 2006; Sadler-Smith and Burke, 2009), into MBA programs (Sadler-Smith and Shefy, 2007) and into holistic management and leadership development practices (Shefy and Sadler-Smith, 2006).

Educators in business studies face the problem that although people (students, managers) experience and use intuition, they are typically not well versed with regard to its nature, its significance and how they could be trained to cope with both its pitfalls and its potential (Sadler- Smith and Burke, 2009). An important purpose of business education is to train and develop effective managers (Brown et al., 2015)

In business world intuition is used extensively by managers (Sadler-Smith and Burke, 2009). However, managerial intuition is not on the standard list of business skills that the majority of business degree courses claim to teach. Therefore, it is essential that they include elements that start undergraduate students on a path to acquiring this skill (Brown et al., 2015), since many students in business programs lack practical experience and knowledge regarding decision making. In an educational environment where opportunities do not exist to acquire experiences and test intuitive judgments, either directly or proxy, students may suppress their intuitions, leaving their judgments untested and unrefined.

Educating managers intuitive awareness, capabilities, and skills should encompass practical, experiential approaches (Sadler-Smith and Shefy, 2007). Klebba and Hamilton (2007) assert that business cases provide an anecdotal learning experience that can advance the decision-making skills. The two cases discussed below offer special examples of how one can enhance students’ intuitive decision making.

**Program Design**

*Target-Graduate Marketing Oriented Business Students*

Although we have tried the awakening intuition experiment with marketing students at both levels (undergraduate and graduate), the course embedded intuitive enhancement effort focuses on graduate business students seeking a marketing career. These students have more expertise based on involvement with actual business problems and associated organizational environments. They better stocked with theories-in-use, as well as fundamental marketing ideas (markets, segmentation, etc.). In comparison with undergraduate marketing students, targeted students acquire superior knowledge of leadership and decision making. This kind of intuitive case exercise helps them prepare for professional decision-making, where judgments may have to be swiftly arrived at under circumstances where information is incomplete or unavailable.

*The Intuition Awareness Program*

In the first part of the program, instructors are oriented to understanding the value of intuition in management education and acquainted with the use of role playing techniques for awakening intuition in their students. Following this, students are given an orientation by their instructors about the need to balance intuitive and rational thinking in decision making as marketing managers. Intuitive thinking is explained as inexplicable gut feelings that arise suddenly, without deliberate analytical thinking. The program does not teach students advanced psychological theory or concepts about intuitive thinking. Nor does it call for exercises in mindfulness, meditation, relaxation or visual creation of everyday situations (Sadler-Smith and Shefy 2007). Such exercises in developing intuitive awareness have been grounded in innovative courses importantly dedicated to training and extended practice with innovative experiential techniques. Such training in building confidence in intuitive intuitive thinking, freeing one’s mind to allow insights, seeking environments that are intuition conducive and the like have value. It is most useful when applied to students in business programs involving working executives. Such students have the opportunity to test the principles learned in real-world environments—and to provide feedback from their logs on the program’s utility for workplace behavior.

 Our approach to intuitive awakening for marketing students may be applied to any marketing specialization course, at any level. It can be combined with customary evidence-based training. Further, it can be integrated with the development of other skill-building course objectives, importantly valued by employers. Our students are given practical examples of business decisions where intuition played a part. They are also supplied with biographical sketches of business leaders known for their intuitive decision styles. Class discussion is invited. This is followed with student active involvement with group role playing, followed by individual tasking of simulated business decision-making.

*Group Management of Buyer-Supplier Power Relations: An Intuitive Case Example*

In order to elicit intuition under group influence, an intuitive case is handled students who are involved in role playing. One example of a model intuition awakening case involves the strategic implications of variations in buyer-supplier power relations. This is a complex marketing issue because power relations are difficult to assess, and effective strategies cannot readily be generalized. the consequences for interorganizational exchanges. The complexity is further increased by potential for changes over time in power relations between buyers and suppliers. Students are called upon to role-play the part of a purchasing agent in cooperation with several other members of a company’s buying center.

 As a purchasing manager, the student interacts with other role players, and assumes ultimate responsibility for the purchase of a product from a single major supplier. This study concerns the student’s attitudes, opinions and judgments as a purchasing manager based on the analysis of power relations between the buying organization and this single major supplier. The student, in consultation with others in the buying center, is asked to mentally simulate inter-organizational relations involving communications, trust, commitment, cooperation and influence between you’re the buying organization and its major supplier, based on facts about power relations between them. Qualitative case information is supplied to all role players about:

* buyer organization market share
* supplier dependency
* buyer organization’s switching costs
* supplier switching costs
* attractiveness of buyer organization’s account to supplier
* commoditization of supplier’s offering
* market availability of suppliers
* search costs
* information advantages of supplier

After the case is read in class, the student is asked to fully supply, in writing, free response impressions of two-way communications between buyer and supplier, information quality that is exchanged, states of trust and commitment, mutual cooperation, customer satisfaction, reward strategies to influence supplier, and coercive strategies to influence supplier. These written responses are the basis of extensive class discussions about similarities and differences in intuitive inferences. In the end students are asked to evaluate their intuitive experiences. Subsequently, students are given an intuitive case for analysis and decision making, based on a course topic. The case is a radically condensed and ambiguous in nature.

*Individual New Product Pricing Decisions: An Intuitive Case Example*

Key decisions about issues in the case concerning the most appropriate strategies reflect each individual student’s idiosyncratic approaches. An example of an individual assignment to an intuition awakening case might involve price determination for a new product. This is a complex marketing issue, because of the range of pricing options, and the numerous actors typically involved. Adding to the complexity is that the price of a new product depends on much more than the product’s positioning. Among things, such decisions involve consumer tradeoffs between product features and varying price levels.

But the case provides precious little information to whet analytical appetites. The intuition awakening case contains little information for analytical input concerning price structuring, long-term pricing, product line pricing, and development and production. Case information is lacking about whether the product will have a single comprehensive price or have offerings with minor product differences at different price levels. Nor is any consideration in the case given to the possibility of planned price changes after the early introduction stage. Since intuition is likely to awaken when key facts are unknown, the case provides no relevant secondary or historical information for initial guidance or confirmation of judgment. There is no marketing research data for field experiments, market testing or laboratory studies involving new product price elasticity and sales volumetrics.

The intuitive awakening case provides information on marketing variables that can be used to generate intuitive judgments about a new product’s planned pricing levels. The decision to be made is whether to set new product introductory pricing at a low (penetration) price or a high (skimming) price.

Embedded in the case is marketing mix new product information about the product type, planned distribution coverage, expected level of advertising and promotion support level. This is barebones, underdetermined marketing information relating to new product pricing. Missing is information about product positioning, the product’s likely obsolescence, distribution channel length, expected inventory turnover, and the uniqueness of the advertising message. Given limited information, the participant needs to make use of intuition judgment consider the interaction between the case available information variables under product, distribution, advertising and promotion conditions.

Students make pricing decisions, and supply their intuitive assumptions used to arrive at their pricing decisions, for example:

* positioning as me-too or unique
* usage versatility as limited or high
* importance of quality positioning as low or high
* channel lengthy as short or long
* expected inventory turnover as fast or slow
* expected advertising level as low or high

In free response format, they also describe the information that they would like to have had, but was missing. In a future class section, the instructor lectures about hypothesized relations between marketing mix variables and pricing. Then summarized results for all students assigned to intuitive awakening case—penetration or skimming biased—are presented in this context for discussion and insights. Participants then fill out a questionnaire that evaluates the intuitive lesson learned from their intuitive awareness case experience.

*Advertising Budget Allocation Decision: Analytical Case Example*

In order to cross-check our intuitive cases with an analytical case, we introduced a case that involved conceptual and logical processes for the solution. This case involved advertising budget determination for an existing product. This is a straightforward familiar marketing mix problem, in which a few budget options are given. The task involved invoking the analytical steps to determine the optimal advertising budget option. The parameters of the problem were few: it was an existing product, with known features and previously positioned in the market. Causal model variables were quantitatively specified and included advertising and promotional budgets, together with their respective historical sales responses. The simplicity of the model reduces ambiguity and jump-starts analytical thinking. As a catalyst to this thinking approach, a tentative analytical process precedes exposure to the actual case. The process involves database exploration, historical analysis, tracking model fit, field experimentation and adaptative monitoring of market response to model implementation. Students are asked several questions about their experiences with this case of causal modeling. They were asked to discuss the thought process that might be involved in such cases. Also, they were queried about the kinds of individuals who would be best qualifies to work with model development and market planning. In response, they mentioned analytical approaches such as quantitative modeling, and suggested strong research skills would be valued for qualifying participants.

***Comparison of Intuitive and Analytical Case Experiences***

Commentary of participants about their respective cases indicated that intuitive cases resulted in more reliance on life experiences and role playing. Analytical cases, on the other hand, invoked logical reasoning, and evidence-based conclusions. Students also felt more comfortable with the intuitive case framework. The analytical case generated feelings of uneasiness and strain.

**Conclusion**

It is clear that students in the program recognize the experience of accessing their intuitions to understand case dynamics and to fashion recommended strategies. We found anecdotally that students readily accepted and favorably responded to the challenge of a case that called for exercise of their own experiential systems. They recognized the ambiguity and the challenge posed by their limited experiences in the case’s domain. They identified their use of an internal dialog that tested intuitive assumptions, and their reliance on emotional responses, not readily associated with evidence-based cases.

This paper contributes to the limited studies of intuition in business education. In an era characterized by increased demand for higher education (Chan, 2018) and significant changes in the environment (i.e. technology), it is imperative for business schools to offer programs that integrate intuition in their curricula to meet the current industry standards as well as theoretical and pedagogical approaches (Smith et al., 2017), and thus improve students’ employability (Moore and Morton, 2017). Business students as future managers will be called on to make business decisions and intuition is important element in strategic decision making (e.g. Matzler et al., 2007; Miller and Ireland, 2005; Okoli and Watt, 2018). The two intuitive cases discussed in this paper can be used to enhance business students’ intuitive skills and help business educators to create a friendly pedagogical environment for understanding intuitive decision making. It is crucial for business schools to recognize the importance of intuition in managerial judgment situations as one of the imperatives for a new business model, since the traditional paradigm of business schools, with its strong focus on analytical models and reductionism, cannot handle the changing environment in the business arena (Schoemaker, 2008). As a matter of course, the emphasis should be on the balance between rational and intuition in decision making. It is not in expense of rational decision making, rather than integrating both.

 Future research should incorporate this approach in intuition research, whether by priming in its design or by other means. While we have focused on problem solving, ethical or creative intuition are both left unexplored in this research. We should investigate which ethical considerations are salient and what is their impact on recommendations and decisions by marketing students in their studies. Further, we should probe for implicit heuristics and theories that are outputs of student anticipatory socialization for careers.

**Implications**

The article argues for the use of intuition on the part of students in management education. The cases, given their parameters, are concrete examples of cases that would be used primarily to evoke students' intuitive thinking, and to acquaint them with a marketing topic, rather than to reach conclusions about the accuracy of their individual judgments. The article discusses individual students' feedback involving reported experiences of exercising intuition in the case.

 The cases' analyses of student responses are intended to motivate educators to go beyond traditional management education in their curriculums i.e., to let professors know that student intuition makes sense, in the aggregate.  In the end, we would expect students to perform their assignments better, by incorporating subjective intuitive inputs. There is a gap between what is formally learned and the characteristics of marketing problems. Examples of implications for pedagogy:

* Build awareness of intuitive decision making by introducing and discussing the intuition
* Concept in classroom sessions prior to an intuition case exercise
* Prior to the intuitive case, build intuitive skills with short exercises like a mock hiring
* Problem, followed by psychodrama interviewing of role players
* Immediately after the intuitive case, employ a mass interview using a guide as to what would be covered
* Student survey responses to the case could be tabulated and circulated for class discussion.
* Subsequently, one might continue with the case topic by giving relevant lectures and readings
* Reinforce the intuitive style by requiring its application in conventional case analyses

 Reflecting on the study’s lessons for building managerial intuition skills, general conditions for developing such skills may be suggested from the literature (see Sadler-Smith & Burke 2009). The case studies we have used is merely one pedagogical tool for students’ balancing intuitive and rational aspects of managerial thinking. Other modes for learning skills for managerial intuition include the use of guest speakers who discuss their personal uses of intuition in solving marketing problems. Field work assignments that involve the exercise of intuition for problem solving is another salient pedagogical application. Beyond that, peer group dynamics which include discussions of intuitive perspectives may be beneficial for enhancing balanced managerial thinking in marketing decision making.

 The aim of these radical innovations in marketing education is to stimulate students into thinking more broadly about marketing problems. Such pedagogical changes will produce independent and active lifetime learners through progressive marketing education. In the end, students will be better prepared for the challenges faced by the rapidly changing competitive business environment.

**REFERENCES**

Betsch, T. (2008). The nature of intuition and its neglect in research and decision making in Intuition and Judgment in Decision-Making, Plessner, H. Betsch, C. & Betsch, T. NY: Laurence Elbaum Associates, 3-22.

Blume, B. D., & Covin, J. G. (2011). Attributions to intuition in the venture founding process: Do entrepreneurs actually use intuition or just say that they do? Journal of Business Venturing, 26, 137-151.

Briggs, K. C. & Myers, J. B. (1976). Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.

Brown, A., Holtham, C., Rich. M., & Dove, A. (2015). Twenty-first century managers and intuition: An exploratory example of pedagogic change for business undergraduates. Decision Sciences Journal of Innovative Education, 13(3), 349-375.

Burke, L. A., & Sadler-Smith, E. (2006). Instructor intuition in the educational setting. Academy of Management Learning and Education, 5(2), 169-181.

Calabretta, G., Gemser, G., & Wijnberg, N. M. (2017). The interplay between intuition and rationality in strategic decision making: A paradox perspective. Organization Studies, 38(3-4), 365-401.

Chan, S. (2018). A review of twenty-first century higher education. Journal of Further and Higher Education, 42(3), 327-338.

Dane, E., & Pratt, M. G. (2007). Exploring intuition and its role in managerial decision making. Academy of Management Review, 32(1), 33-54.

Epstein, S. (1985). The implications of cognitive-experiential self-theory for research in social psychology and personality. Journal for the Theory of Social Behavior, 15(3), 283-310.

Epstein, S. (2008) Intuition from the perspective of cognitive-experiential self-theory in Intuition and Judgment in Decision-Making, Plessner, H. Betsch, C. & Betsch, T. NY: Laurence Elbaum Associates, 25-37.

Epstein, S., Pacini, R., Denes-Raj & Heier, H. (1996). Individual differences in intuition-experiential and analytical-rational thinking styles. Journal of Personality and Social Psychology, 71, 390-405.

Epstein, S., & Pacini, R. (1999). Some basic issues regarding dual process theories from the perspective of cognitive-experiential self-theory. In S. Chaiken & Y. Trope (Eds.), Dual Process Theories in Social Psychology. New York: The Guilford Press.

Erez, A. & Grant, A. M. (2014). Separating data from intuition: Bringing evidence into the management classroom. Academy of Management Learning and Education 13(1), 104-119.

Hogarth, R. M. (2001). Educating Intuition. Chicago: The University of Chicago Press.

Hogarth, R. M. (2008). On the Learning of Intuition in Intuition and Judgment in Decision-Making, Plessner, H. Betsch, C. & Betsch, T. NY: Laurence Elbaum Associates, 91-105.

Hogarth, R. M. (2010). Intuition: A challenge for psychological research on decision making. Psychological Inquiry, 21, 338-353.

Klebba, J. M., & Hamilton, J. G. (2007). Structured case analysis: Developing critical thinking skills in a marketing case course. Journal of Marketing Education, 29(2), 132-139.

Klein, G. A. (1993). A recognition-primed decision (RPD) model of rapid decision making. In G. A. Klein, J. Orasanu, R. Calderwood & C. E. Zsambok (eds.), Decision Making in Action: Models and Methods (pp. 138-147). Norwood, NJ: Ablex.

Matzler, K., Ballom, F., & Mooradlan, T. (2007) Intuitive Decision Making, MIT Sloan Management Review, 49(1), 13-15.

Miller, C. C., & Ireland, R. D. (2005). Intuition in strategic decision-making, friend or foe in the fast-paced 21st century. Academy of Management Executive, 19, 19-30.

Moore, T. & Morton, J. (2017). The myth of job readiness? Written communication, employability, and the ‘skills gap’ in higher education. Studies in Higher Education, 42(3), 591-609.

Newell, B. R. (2016) Decision making in An Introduction to Applied Cognitive Psychology 2e, Groome, D. & Eysenck, M. W. NY: Routledge, 197-221.

 Okoli, J., & Watt, J. (2018). Crisis decision-making: the overlap between intuitive and analytical strategies. Management Decision. https://doi.org/10.1108/MD-05-2017-0462

Plessner, H. and Czenna, S. (2008) The benefits of intuition in Intuition in Judgment and Decision Making in Intuition and Judgment in Decision-Making, Plessner, H. Betsch, C. & Betsch, T. NY: Laurence Elbaum Associates, 251-265.

Rebeiz, K. S. (2011) An insider perspective on implementing the Harvard case study method in business teaching. US-China Education Review A5, 591-601.

Sadler-Smith, E., & Shefy, E. (2007). Developing intuitive awareness in management education. Academy of Management Learning & Education, 6(2), 186-205.

Sadler-Smith, E., & Burke, L. A. (2009). Fostering intuition in management education: Activities and resources. Journal of Management Education, 33(2), 239-262.

Shefy, E., & Sadler-Smith, E. (2006). Applying holistic principles in management development. Journal of Management Development, 29(4), 368-385.

Schoemaker, P. J. (2008). The future challenges of business: Rethinking management education. California Management Review, 50(3), 119-139.

Sinclair, M., & Ashkanasy, N. M. (2005). Intuition: Myth or a decision-making tool? Management Learning, 36(3), 353-370.

Smith, K., Kehrwald, J., Smith, E., Moulton, D. & Corcoran, P. (2017). Becoming civil engineers: Embedding academic and professional communicative practices in the curriculum. In R. G. Walker & S. B. Bedford (Eds.), Research and Development in Higher Education: Curriculum Transformation, 40 (pp. 344-355). Sydney, Australia, 27–30 June 2017.

Zeelenberg, M. & Pieters, R. K. (2007). A theory of regret regulation 1.0. Journal of Consumer Psychology, 17(1), 3-18.