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INTEGRATED INTUITION IN STRATEGIC MANAGEMENT: A STUDY OF TAIWANESE MANAGERS

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Abstract

Managerial decision making is not always the result of rational analysis. Business studies literature have reported that many mangers relied on their intuition for strategic decision making. This study investigates the managerial decision-making process in relation to personal intuition, in an integrated institution. In the analysis of this study, the structural equation models SPSS 22.0 and AMOS 22.0 that we divided intuition into innate intuition and acquired intuition, examined the influence of rational analysis on the mediating factors in decision making, and completed the integration of intuition through a unified strategy. The results suggested the cultivation of calmness and understanding to improve innate intuition. Accumulating a wide range of knowledge and experience improved the acquired intuition, and an open mind agrees with integrated intuition but understands that mistakes may also arise from accepting intuition. These findings support our hypotheses. In various literature studies on business people, many managers reported that they were influenced by or even relied on their intuition when making decisions, and that it was positively related to organizational effectiveness. This study makes a

significant contribution to existing literature by presenting an analysis of integrated intuition from the perspective of Eastern philosophy.

Keywords: Innate intuition; acquired intuition; integrated intuition, strategic intuition, strategic management

INTRODUCTION

Scholars have suggested that no meaningful conceptualization of cognition can be developed without first understanding intuition, and whether it is the most mysterious source of wisdom in humans and the key to unlocking one's potential (Dörfler and Ackermann, 2012). Intuition is one of the least understood aspects of strategic awareness (Hodgkinson and Healey, 2011), which is why it has become an increasingly popular topic in academic fields, such as philosophy, psychology, management, and even neuroscience in the last two decades (Akinci and Sadler-Smith, 2012). The Oprah Magazine (2008), (https://www.oprah.com/spirit/trust-yourinstincts-listen-to-your-intuition) records that in an interview with CNN, Bill Gates once said, "Often you have to rely on your intuition." Oprah, a star talk-show host, also explained, "My career skills are guided by intuition." In his book Trump: The Art of the Deal, Former President Donald Trump admitted: "I built a billion-dollar empire using my intuition" (Trump and Schwartz, 2009). David G. Myers in his book Should You Believe Intuition? stated that "social psychologist Irving Janis, after interviewing decision-makers in government, business, and education, concluded that they 'often don't think through problems,' later asking, 'How do they make decisions? If you ask them, they will tell you that they mostly make decisions based on their feelings" (Myers, 2002).

In numerous studies of business people, many managers reported that their decisions were influenced by or even depended on their intuition, which was positively related to organizational effectiveness (Andersen, 2000; Burke and Miller, 1999). In current organizations, many managers still rely on intuition rather than data analysis in decision-making (Bonabeau, 2003), perhaps because they are making decisions based on a combination of "intuition" as the dominant factor and "thinking" as the supporting factor. Some scholars suggested that intuition is more effective in complex decision-making and is best suited for "rapidly changing environments or crises" (Sinclair, 2010) because we do not have the ability to consciously process all relevant information. In the face of crises or emergencies, emergence of new trends, or the inapplicability of existing data, many managers admit to relying on intuition to make decisions. Therefore, the power of intuition can be considered key to business success (Duggan, 2004). This study develops a survey questionnaire to investigate the intuition of senior

managers in central Taiwan. It aims to examine whether managers recognize the use of intuition in decision-making by integrating intuition into its innate and acquired aspects.

This rest of this paper is structured as follows: Section 2 presents the literature review; Section 3 discusses the research methodology; Section 4 explains the findings and their interpretation; and Section 5 concludes the paper.

LITERATURE REVIEW

Intuition

In the 1970s and 1980s, cognitive psychologists suggested that brain activity might have a degree of hemispheric specialization where the left hemisphere of the brain performs more analytical tasks, while the right hemisphere is responsible for intuition and creative thought. This simplification has been adopted by the popular press, including management scholars. Mintzberg's (1976) description of planning as a left-brain activity and management as a rightbrain process is a dual process theory, essentially suggesting that subconscious (System 1) and conscious (System 2) processes occur simultaneously in the brain. Although some thought processes are more applicable to one system than the other, they are usually used to some extent in most thinking processes (Hodgkinson et al., 2009). The cognitive-experiential selftheory developed by Epstein (2010) is one of the most widely accepted dual-process theories, which describes System 1 as an experiential system. Sinclair and Ashkanasy (2005) defined intuition as a nonsequential mode of information processing that includes cognitive and affective elements, leading to direct cognition without conscious reasoning. Scholars' definitions of intuition vary, ranging from descriptions based on its representational characteristics (Pretz et al., 2014) to those based on its owned characteristics (Dane and Pratt, 2007; Jung, 1923). Some scholars view intuition as wisdom inherited from human ancestors, a genetic heritage, which is the same system observed in animals (Jung, 1923; Epstein, 2010). Others suggest that it is merely a re-awareness: a cognitive-based decision and unconscious, rapid recognition mode that integrates past professional experience and expertise (Klein, 2003; Simon, 1992). While our research is based on existing literature, it will mainly examine intuition from the perspective of its characteristics and Eastern philosophy.

Integrated Intuition

Innate Intuition

Jung (1923) defined intuition as a basic psychological function in the book Psychological Types. Intuition has its own peculiar nature; it is neither a feeling, emotion, nor intellectual awareness, but it may take any of these forms. It is an instinctive apprehension that has nothing

to do with the nature of its content. Any kind of content is represented as a complete whole through intuition. Its certainty depends on specific psychological elements, their origins, and state of preparation, but the subject itself is quite unconscious of all this. Intuition is an irrational perceptual function, such as feeling. The term "irrational" does not refer to something contrary to reason, but something that is beyond it, whose nature is not constructed by reason. Wally and Baum (1994) argued that intuition is an unconscious faculty that transcends personal consciousness. Langley et al., (1995) and Mintzberg (1989) argued that inexperienced decisionmakers can also intuitively arrive at answers. Jung's concept of intuition, therefore, can be described as an unconscious holistic perception that transcends the internal and external stimuli of the concrete experiential world of feelings (Pretz and Totz, 2007). Based on Jung's account, this study refers to intuition as "innate intuition" to distinguish it from expert, experiential, or schematic intuition (Pretz and Totz, 2007), which has been the focus of most scholars, and can be developed through learning or habits. In summary, the intuition advocated by these scholars is "innate intuition" in an unconscious state, whose characteristics can be depicted as follows. Sixth Sense. Intuition is like the sixth sense, a direct reference to its nature of "beyond time and space." Jung (1976) states that intuition is a "temporal" dimension through which you discover what is coming, that which you cannot indeed do. Stein (1998) argues that, if we know things beyond what we can know consciously, there is an unknown knower in us, a mental facet that transcends the conceptual realm of time and space, and can exist everywhere at once. In Sinclair and Ashkanasy's (2005) study, the physicist Bohm's concept of implied order was applied, where energy extends to space, time, and matter, among which matter can exist both locally and non-locally. Similarly, Sheldrake (1987) suggested in his morphological domain theory that knowledge can be transmitted in space and time through "morphic resonance," which indicates that one can intuitively tune in to any idea accumulated during human evolution. **Presage.** Many scholars describe intuition as something that suddenly appears, so to speak,

much like a presage (Jung, 1960)—it is a type of prophecy, a wonderful power (Jung, 1976). Pretz, Brookings, Carlson, Humbert, Roy, Jones, and Memmert (2014) suggested that the concept of intuition is a judgment of future presages captured through "gut feelings." Some scholars defined intuition as "presage." Goleman, Kaufman, and Ray (1998) suggested that what the unconscious knows is usually better known as a perceptible "sense of rightness"—a sense of foreboding, which we call "intuition." Jung (1923) described an intuitive person as having a keen "sense of smell" that can detect the future trend of things in their germination. This ability to sense future opportunities is particularly evident in entrepreneurs and has been referred to as "entrepreneurial intuition" (Sadler-Smith et al., 2008).

Apperception. Jung (1923) wrote that we explain or discover the ways in which content is apprehended by people and that intuition was an instinctive apprehension independent of the nature of its contents. Therefore, we usually consider intuition as an instinctive activity of apprehension and the unconscious—a purposeful apprehension of highly complex situations (Jung, 1960). The accumulation or storage of universal experiences of organic existence after millions of repetitions eventually coalesces into archetypes, so that all experiences that have ever occurred on this planet since ancient times are concentrated in these archetypes. They are essences of imagery that can only be perceived through intuition and created in apperception (Jung, 1923).

Acquired Intuition

This study summarizes the research of several scholars on intuition. According to Simon (1995), intuition is the ability to understand things without conscious reasoning. It is characterized by situations wherein "the question is answered immediately after it is raised" and when "the problem solver often says that he or she cannot provide a clear explanation about his or her own solution." There is nothing mysterious or strange in the process of intuition, nor is there anything supernatural or irrational about it. Intuition is provided by knowledge stored in long-term memory, and acquired primarily through learning in related fields. Moreover, this input is an automatic, unexplained, and unconscious processing, and the emergence of input processes can be used as a basis for judgment and decision-making (Betsch, 2008). In Simon's concept, intuition is only the memory of daily experience and the result of rapid identification and response by experts to familiar clues (Akinci and Sadler-Smith, 2012). In his book, Thinking Fast and Slow, Kahneman also mentioned that our brain and mental activity consist of two systems, one of which is "fast thinking." Fast thinking involves a variety of intuitive thinking and the automatic mental activity of perception and memory. Therefore, it said that experts' accurate intuition is the result of their long-term experience (Kahneman, 2012). The viewpoint held by the field of management, that "intuition is an acquired mode of thinking," is more inclined to view intuition as a type of subtle reasoning process. This study refers to this aspect of intuition as "acquired intuition," which we define as intuition that can be triggered by cognitive or subconscious situations or pressures from external influences, such as learning, experience, and memory accumulation. The characteristics of acquired intuition advocated by scholars are as follows:

Memory. The context provides clues, which allow the expert to extract information stored in the memory that provides the answers. Intuition is simply "recognition," nothing more, nothing less (Simon, 1992). In other words, it is the result of the expert's quick identification of familiar clues and the countermeasures taken (Akinci and Sadler-Smith, 2012). When a message that is received unconsciously matches another already stored in the brain, intuition occurs (Raidl and Lubart, 2001). If you have seen or done something repeatedly, the brain can guickly identify the relevant memory, which is a process referred to as expert intuition (Duggan, 2007). All in all, intuition is the result of comparing external stimuli with the internal memory of the brain.

Experience. In terms of expert intuition, we draw on our accumulated knowledge in the field of expertise from the past. When people encounter a familiar situation, they respond with abilities derived from their own experiences (Duggan, 2007). The correct intuition generated by these experts does not come from shortcuts, but from the long-term accumulation of experiences (Kahneman, 2012). This accumulation of experiences is not limited to experts; people, regardless of their field, always accumulate experiences and summarize them into recognizable patterns that are stored in databases. The more patterns stored, the easier it is to identify the patterns in the database that are relevant to the new situation, therefore, creating a sense of déjà vu (Klein, 2003). In another study by Simon (1992) the important role of experience in intuitive processing has also been examined.

Pressure. It is generally believed that higher-level management positions require a decisive and empirical approach, rather than a meticulous analysis in situations of uncertainty and time pressure (Allinson and Hayes, 1996). Agor's (1986) study of 200 managers found that managers operated best when they used their intuition under time pressure. This type of processing is often linked to decision-making and specific areas under pressure, and intuition tends to emerge quickly; therefore, people tend to rely on intuitive decision-making when faced with extreme time pressure (Suri and Monroe, 2003). Studies by many other scholars (Dörfler and Ackermann, 2012; Sinclair and Ashkanasy, 2005; Dane and Pratt, 2007) also suggested that higher-level decision-makers tend to rely more on their intuition in chaotic and time-critical situations.

Emotion. Epstein (2010) argues that emotion is critical for the generation of intuition; without it, there would be no associative learning, and no intuition. Other scholars, such as Dane and Pratt (2007), Epstein (2010), Groves and Vance (2015), Lange and Houran (2010), and Pretz and Totz (2007) have similar definitions, views, or findings. In the study by Sinclair, Ashkanasy, and Chattopadhyay (2010), a more complex relationship between emotion and intuition was found. Strong emotions or moods could seemingly promote intuition regardless of whether they were positive or negative (Sinclair et al., 2010). However, some scholars suggest that emotions may either help or hinder the processing of intuition depending on the type of emotion; for example, negative emotions may hinder the generation of intuition, whereas positive emotions make

decision-makers more likely to resort to their intuition (Sinclair, 2010; Sinclair and Ashkanasy, 2005; Sadler-Smith et al., 2008).

Integrated Intuition

This study distinguishes between innate and acquired intuition in terms of their characteristics, and proposes the integration of intuition. It does not use a dichotomy to identify and categorize intuition as a general category, but integrates Eastern and Western views on intuition. In the field of philosophy, Eastern philosophical discourse on intuition focuses on enlightenment, capturing intuition through abstract experience and meditation-like realization. In contrast, Western philosophical discourse on intuition develops from the aspect of logical thinking, using intuition and reasoning to deduce knowledge and truth (Li, 2014).

Jung (1923), initiated the development of intuition in the field of psychology, which was followed by Simon's (1987), bounded rationality, Tversky and Kahneman's (1981), bias in decision-making, and theories of self-recognition, experience, and the dual-system process developed by many scholars. The fields of management and neurocognition have also contributed to many studies on intuition. This study discusses intuition from the practical side of business management, integrates the views of various scholars, and examines it from the perspective of pragmatic strategic management. The sensitivity to "innate intuition" is enhanced through the intuitive development of human nature and continuous physical and mental training; knowledge and memory are reinforced through education and experiences accumulated during life and work, thereby expanding the breadth and depth of "acquired intuition." Therefore, a sudden creative idea or groundbreaking solution is a combination of "innate intuition" and "acquired intuition," which is the manifestation of one's "integrated intuition."

Determination. Intuition occurs when there are flashes of insight. Once the decisive creative idea or answer is "in sight," the mood is soothing and confident. This is the key to the change of situation around the axis; it is a "winning" strategy and a "just do it." Duggan (2007) mentions in his book, Strategic Intuition, that light integrates past elements into new and unexpected combinations, providing strategies. Accordingly, this study called this strategic determination, which is the driving factor for integrated intuition.

Inspiration. This study explains the epiphany of integrated intuition with practical inspiration. Chinese Zen enlightenment is the result of an epiphany that focuses on "clearing the mind to see nature," transforming the mind into great wisdom. During the process of solving a difficult problem, the answer, which is often difficult to find, sometimes comes inadvertently and quietly. This phenomenon is called "inspiration" by literary scholars and "epiphany" by psychologists (Kuo, 1983). In management science, the coming of intuition is the inspiration to "realize" the answer, and flashes of insight provide decision-making with inspiration.

MATERIALS AND METHODS

Research Hypotheses and Framework

This study conducts an in-depth investigation on the following questions: Why does sensitivity to intuition vary from person to person? Is it possible that innate intuition also varies from person to person? Is acquired intuition helpful to an individual's performance in the workplace? Is there a link between rational analysis and intuition? Is the theory of integrated intuition tenable? Finally, do managers in higher positions have better strategic performance when making decisions based on integrated intuition? We propose the following hypotheses as Figure 1:

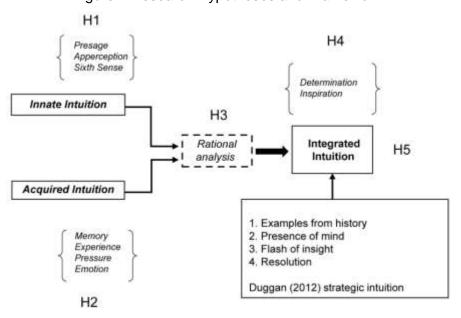
Hypothesis 1: The characteristics of innate intuition—presage, apperception, and sixth sense—are tenable.

Hypothesis 2: The characteristics of acquired intuition—memory, experience, pressure, and emotion—are tenable.

Hypothesis 3: Rational analysis is positively correlated with innate and acquired intuition.

Hypothesis 4: The characteristics of integrated intuition—determination during decision-making and inspiration during practice—are tenable.

Hypothesis 5: The framework of integrated intuition is tenable.



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Figure 1 Research Hypotheses and Framework

Research Design and Data Collection

The study conducted survey research to test the research hypotheses; questionnaires were designed on the content of divided into four factors (Innate intuition, Acquired intuition, rational analysis, and integrated intuition). A purposive sampling method was used. Questionnaire was used for data collection. First, a pre-test questionnaire was conducted, and then based on the results of the collected data was modified to become an official questionnaire for the valid experiment. A total of 190 questionnaires were distributed and collected from business managers in central Taiwan.

Research Analysis

SPSS 22.0, and AMOS 22.0 statistical software were used for data analysis. Reliability and validity tests were conducted according to the framework, including internal consistency and confirmatory factor analyses. A descriptive statistical analysis and two-tailed Pearson's correlation analyses were performed. Finally, structural equations were used to test the hypotheses in the overall model.

FINDINGS

Respondents' Profile

There were total of 55 respondents (32%), mostly companies with 11–50 employees. The mode in the descriptive statistics indicated that the sample was predominantly male (52% male and 48% female) and mostly aged 51-55 years old (28%). In terms of educational level, most of the sample held a master's degree (74%). Most were engaged in the service sector (42%), holding senior executive positions (general manager, deputy general manager, and assistant manager; 44%). The professional field was dominated by marketing professionals (46%), and monthly income mostly exceeded NT \$1,500 million (32%). The sample had a long service life of 25-30 years (22%).

Descriptive Statistics, Reliability, and Validity of Each Dimension

The structured questionnaire was classified into dimensions of innate intuition, acquired intuition, rational analysis, and integrated intuition. The descriptive statistics, reliability, and validity of all dimensions and their respective subdimensions are listed in the Table 1.

Table 1 Descriptive Statistics, Reliability, and Validity of Each Dimension

		Descriptive statistics		Reli	alidity	
Dimension	Sub-dimension	М	S.E.	FL	CR	AVE
lonata	Apperception	2.973	1.047	0.75	0.87	0.75
Innate intuition	Presage	3.707	0.747	0.723	0.85	0.72
irituitiori	Sixth sense	3.44	0.893	0.633	0.76	0.63
Acquired intuition	Experience	4.347	0.683	0.663	0.79	0.66
	Memory	3.853	0.897	0.633	0.76	0.63
	Pressure	3.527	0.93	0.747	0.86	0.74
	Emotion	3.847	0.813	0.757	0.87	0.75
Rational analysis		2.9	1.013	0.627	0.75	0.63
Integrated	Determination	3.813	0.787	0.693	0.82	0.69
intuition	Inspiration	3.547	0.86	0.753	0.87	0.75

Note: M: mean; S.E.: standard error; FL: CR: composite reliability;

AVE: average variance explained

From the analysis of the confirmatory factors of innate intuition, the goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), non-normed fit index (NNFI), and Bollen's incremental fit index (IFI) all exceeded 0.9, whereas the root mean square error of approximation (RMSEA) was less than 0.8, as shown in Table 2. Thus, the model fit was good, and this result supported Hypothesis 1.

Table 2 Goodness-of-fit Index of Each Dimension

		Goodness-of-fit		Goodness-of-fit		Goodness-of-fit		Goodness-of-fit	
		of II		of AI		of RA		of II	
Tested factor	Standard fit	Tested value	Good ness- of-fit	Tested factor	Good ness- of-fit	Tested value	Good ness-of-fit	Tested value	Good ness-of-fit
X ²	P>0.05	28.931(p =0.223)	Е	89.965(p =0.000)	G	189.225(p= 0.084)	Е	8.263(p =0.408)	G
X ² /df	< 3	1.205	Е	1.799	Е	1.874	Е	1.033	E
GFI	>0.80	0.967	E	0.93	Е	0.926	E	0.986	Е
TLI	>0.90	0.984	Е	0.928	Е	0.953	Е	0.964	Е
CFI	>0.90	0.989	Е	0.945	Е	0.982	Е	0.999	Е
NFI	>0.90	0.942	Е	0.9	Е	0.937	Е	0.976	Е
IFI	>0.90	0.99	Е	0.946	Е	0.949	Е	0.999	Е
RMSEA	<0.08	0.033	Е	0.065	Е	0.055	Е	0.013	Е

Note. GFI, goodness-of-fit index; TLI, Tucker Lewis index; CFI, comparative fit index;

NFI, normed fit index; IFI, Bollen's incremental fit index;

RMSEA, root mean square error of approximation

All other indicators of the acquired intuition model were good. Accordingly, the model fit was good, and this result supported Hypothesis 2. An analysis of the reliability and validity of the rational analysis (Table I) revealed that the combined reliability of rational analysis was 0.75, and the mean variance was 0.63, both exceeding the recommended standards of 0.7 0.5. Therefore, the observation variable of "rational analysis" had good convergent validity. The model fit was good according to the test results, and the model was suitable for analysis using the structural equation model. An analysis of the reliability of determination in integrated intuition showed that the factor loads of all items were greater than 0.5. The combined reliability was 0.82, and the mean variance was 0.69, both exceeding the recommended standards of 0.7 0.5. This indicates that the determination dimension had a good convergent validity. An analysis of the reliability of inspiration showed that the factor loads of all items were greater than 0.5. The combined reliability was 0.87, and the mean variance was 0.75, both exceeding the recommended standards of 0.7 0.5. This indicates that the inspiration dimension had a good convergent validity.

Estimation and Analysis of Empirical Results

According to the goodness-of-fit index of the above model, the hypotheses were tested based on the relationship between the dimensions. Innate and acquired intuition were used as latent independent variables (or exogenous variables), and the determination and inspiration of integrated intuition were used as latent dependent variables (or endogenous variables). Innate intuition included "presage," "apperception," and "sixth sense," while acquired intuition included "experience," "memory," "pressure," and "emotion."

Direct Effect Model. In the direct effect model, the effects of innate and acquired intuition on integrated intuition were first observed without inputting the mediating variable of rational analysis. The test results of the overall goodness-of-fit for the structural equation model are listed in Table 3.

Table 3 Standard Errors of Estimates in Direct Effect Model and Indirect Effect Model Standard Errors of Estimates in Direct Effect Model

	Standardized						
R	Estimate	S.E.	C.R.	Р	Estimate		
Determination	<	Innate Intuition	1.964	0.758	2.591	0.01	0.87
Inspiration	<	Innate Intuition	1.972	0.785	2.511	0.012	0.953
Determination	<	Acquired intuition	-0.112	0.402	-0.277	0.782	-0.072
Inspiration	<	Acquire intuition	-0.361	0.436	-0.827	0.408	-0.256

	Standardized						
Re	Estimate	S.E.	C.R.	Р	Estimate		
Rational analysis	<	Acquired intuition	0.041	0.245	0.165	***	0.068
Rational analysis	<	Innate intuition	0.779	0.505	1.542	***	0.915
Inspiration	<	Rational analysis	1.659	0.697	2.38	0.017	0.691
Determination	<	Rational analysis	2.198	0.867	2.533	0.011	0.831

Standard Errors of Estimates in the Indirect Effect Model

In the table, the overall goodness-of-fit of the model was good. We further examined the relationship between the variables among the models, and the weights of the overall model for direct effects are as follows:

The C.R. and *p*-values of innate intuition on inspiration and determination reached significant levels, and the path coefficients exceeded 0.80, which indicated that innate intuition had a strong association with strategic integrated intuition and had an obvious effect. However, acquired intuition had a negative and insignificant effect on inspiration and determination. These results support Hypothesis 4. The detailed results are shown in Figure 2.

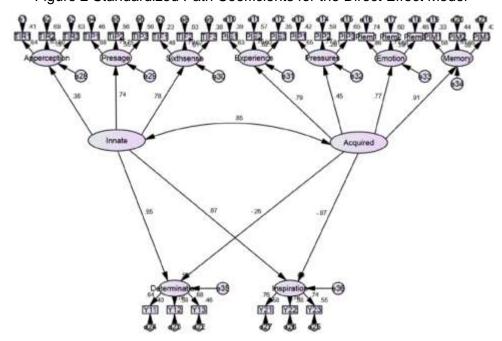


Figure 2 Standardized Path Coefficients for the Direct Effect Model

Indirect Effect Model. In the indirect effect model, the mediating variable was used to observe the mediating effect of rational analysis on managers' integrated intuition. The test results of the overall goodness-of-fit for the structural equation model are listed in Table III. The GFI, Tucker-Lewis index (TLI), and chi-square values were poor, but the other values of the model fit were

good. Additionally, the RMSEA was less than 0.80, indicating that the overall convergent validity of the indirect effect model was good. Usually, as the complexity of the model increases, the goodness-of-fit is affected. Therefore, according to Chin and Todd's (1995) definition, this study concluded that the GFI and TLI both exceeded 0.80, and still met the requirements of the model. The results supported this hypothesis. To further understand the mediating effect of the model, we examined the relationship between the variables in the indirect model with the following estimates of the goodness-of-fit of the model.

The results showed that the direct effect of innate and acquired intuition on the mediating variable of rational analysis reached significant levels, as did the C.R. and p-values of the effect of rational analysis on the strategic integrated intuition. In addition, the path coefficient of acquired intuition was 0.068, indicating an insignificant mediating effect of rational analysis on acquired intuition. On the contrary, the path coefficient of innate intuition for rational analysis was 0.915, indicating a significant mediating effect. The direct effect of rational analysis on integrated intuition suggests that rational analysis is more helpful for the generation of inspiration. The results supported the mediation hypotheses, namely Hypotheses 3 and 5. The detailed path coefficients are presented in Figure 3. However, we must further analyze the direct and indirect effects of the path coefficients to understand the overall effect of the mediator, as shown in Table 4. According to the results, acquired intuition had a smaller influence through mediation, while innate intuition had a significant effect on strategic integrated intuition through rational analysis as a mediating variable.

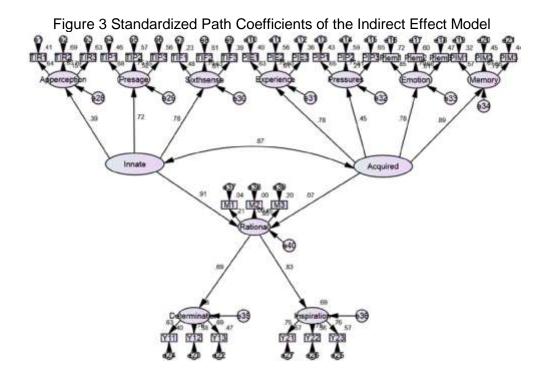


Table 4 Indirect Effect and Overall Effect

I	ndirect ef	fect	Estimate	95% confidence interval
Inspiration	<	Innate intuition	0.76	0.064-3.556
Inspiration	<	Acquired intuition	0.057	-3.633
Determination	<	Innate intuition	0.632	0.062-3.053
Determination	<	Acquired intuition	0.047	-2.829

DISCUSSION

The quantitative analysis in the previous section confirmed our hypotheses. In this section, we investigate the role of innate and acquired intuition on strategic integrated intuition, including inspiration and determination. We also conducted a mediating effect analysis based on the theories of other scholars on intuition and focused on the role of rational analysis. The following is a detailed summary of the research results.

Relevance of Integrated Intuition to Inspiration

Managers find it difficult to explain the occurrence of many events or how decisions related to their businesses are made. Leaders, in particular, often perceive such difficult situations as being determined intuitively or subconsciously. For example, we explored this in the statement "When I intuitively make the right judgment, there is a surge of 'That's right!" This is a manifestation of the influence of intuition on inspiration. This study further divided intuition into innate and acquired intuition. Since there is a debate in the academic community as to whether intuition is innate or acquired through training, we made a comprehensive judgment based on different theoretical perspectives and found that innate intuition has a strong correlation with practical inspiration but acquired intuition does not. This means that intuitive decision-making by managers comes primarily from their innate ability, rather than from being acquired through scientific training or study. Therefore, both accurate decisions and poor strategic choices are the result of the leader's unique innate characteristics. The results of this study reveal the underlying reasons why many successes in practice are unable to be replicated.

Relevance of Integrated Intuition to Determination

This study found that the effect of managers' intuition on determination still conformed to the aforementioned pattern: innate intuition has a strong association with determination, while acquired intuition is not significantly related to determination. This means that the experience,

memory, emotion, pressure, and other acquired factors do not help the leader make strategic decisions. What often makes a leader think "That's right!" is a fleeting thought, prediction, or unique understanding. This is also because of the unique difference that companies can differentiate and diversify their business models and operating philosophies. We can still find many such phenomena in the practical world, such as the development of the Taiwan Semiconductor Manufacturing Company (TSMC), where no manager had thought of taking the original equipment manufacturer (OEM) concept to the extremes before; however, because of Chang Chung-Mou, we saw a change throughout the semiconductor industry. The results of this study suggest that innate intuition plays a key role in leaders' determination of their own unrecognized and unappreciated strategic decisions rather than an intuitive ability that is trained or enhanced later in life.

The Mediating Effect of Rational Analysis

In previous studies, especially organizational learning theories, intuition is referred to as the ability of managers to accumulate from the learning process through certain training and experience. Therefore, rational analysis and logical training play a decisive role in the development and improvement of intuition. However, according to the results of this study, rational analysis has a significant positive mediating effect on innate intuition, but a very weak mediating effect on acquired intuition. This suggests that leaders with innate intuition need more rational analysis to help them make the right choices, instead of pie-in-the-sky strategic decisions. Conversely, leaders who lack innate intuitive ability, or the ability to anticipate events, do not increase the mediating effect of rational analysis as they learn more with the accumulation of experience. In other words, the addition of rational analysis does not increase innate intuition in making the right strategic choices.

CONCLUSIONS AND RECOMMENDATIONS

This study uses data gathered from the existing literature and the questionnaire, and takes a theoretical and practical approach to break away from the biased view of intuition in management academics. It explores the characteristics of intuition to confirm that business managers agree that both innate and acquired intuition are used in decision-making. In addition, most people make decisions and judgments between bounded rationality and intuition. In other words, when making decisions, bounded rationality and intuition are mixed and used alternately with both an objective analysis of bounded rationality and intuitive value judgment. The data in this study confirm that managers not only involve rational analysis in decision-making, but also rely on the use of innate, acquired, and integrated intuition in decision-making.

This study had two major breakthroughs. First, most previous studies focused on the Western perspective of intuition with logical thinking using the dual-system theory or expert intuition perspectives, which has the problem of reinterpretation and detachment from reality. To extend the literature, we identified the definition of unconscious cognition as innate intuition and the definition of subconscious cognition as acquired intuition from the perspective of Eastern philosophy. Second, we proposed a complete framework for integrated intuition and rational analysis in decision-making from the perspective of "harmony between man and nature."

From the results of the study that managers are more likely to use integrated intuition than rational analysis in the decision making. Therefore, how to reduce the errors in decision making and increase the correctness of integrated intuition that will be an important issue for the future. We suggest for the further study and way forward on how to improve the sensitivity and correctness of integrated intuition.

Nevertheless, this research is still a preliminary study, and the inductive results may be biased due to differences in the regional nature of the questionnaire and respondent sample. Subsequent studies may include more case studies, expand the regional and subject surveys, or conduct further validation through different survey methods to analyze the use of intuitive ability in management and its impact.

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