

**ACADEMICS AS DECISION MAKERS: WHAT STYLE DO THEY ADOPT?**

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**Abstract**

Many studies have focused on the decision-making styles (DMS) of managers, but very few have studied the DMS among academicians. Using the Rowe Decision Style Inventory, this study investigates the DMS of the academics in a public university in Malaysia. The objectives are to identify the common styles adopted by the academics and to determine their dominant styles in relation to their gender, age, faculty, qualifications, and years of service. This study employed a quantitative-questionnaire design that was distributed to 163 academics during an in-house training program. Four types of DMS—directive, analytical, conceptual, and behavioural styles—were identified with regard to gender, age, faculty, qualifications, and years of service. The results revealed that while the majority of the respondents have more than one dominant DMS, the conceptual and analytical styles predominate. Additionally, empirical evidence of variations in the types of DMS across demographic characteristics was found. These findings provide important implications for academics in making the most effective decisions within their profession.

**Keywords:** decision-making style, managing education industry, organisational decision-making, malaysian higher education system

**INTRODUCTION**

Decision-making is a fundamental activity for everyone. It is a cognitive function concerned with the process of reflecting on the consequences of a certain choice (Bechara, 2005). Employees are viewed as managers in an organisation because they are increasingly being asked to manage their work effectively (Kakabadse, Ludlow, & Vinnicomb, 1987). As innovation and creativity have been the talk of the world today, more autonomy is being given to employees in making decisions. Traditionally, according to Mintzberg (1975), making decisions was generally the manager's job; however, Tolbert and Hall (2009) believe that decision-making is not confined to any particular group or any level within an organisation. Inevitably, the decisions made would significantly affect the organisation. Therefore, it is important to identify the type of decision-making styles (DMS) a person is inclined to demonstrate.

The existence of different DMS has been acknowledged for decades, and one prominent perspective is the four styles (i.e. directive, analytic, conceptual, and behavioural) proposed

by Rowe and Boulgarides (1983). They state, 'Knowing an individual's decision style pattern, we can predict how he or she will react to various situations', (Rowe & Boulgarides, 1983, p. 28). The DMS can be observed from relationships with others through consultations, instructions, transferring responsibilities, or wanting to please certain people (Gati, Landman, Davidovitch, Asulin-Peretz, & Gadassi, 2010). Knowing how and why decisions are taken can make the difference to the types of DMS. Differences in demographics, qualifications, socialisation, work scope, and business environment can also affect a manager's decision-making process and style.

Many studies have focused on the DMS of managers (e.g. Benfari, 1991; Rowe & Boulgarides, 1983; Nutt, 1990; Ali, 1993; Park, 1996; Yousef, 1998; Fox & Spence, 1999; Connor & Becker, 2003; Gati, et al., 2010); however, studies on the DMS of academics seem to be lacking. According to Analoui (1995), academics are also viewed as managers because they make decisions with regard to their job specifications in the education industry. Students always assume that academics have the right to make decisions in their teaching (Tolbert & Hall, 2009). Acknowledging the role of academics in cultivating the development of diligent decision makers, there is a growing need to know how academics make decisions and which styles they are more inclined to use. Styles are the tools for decision-making for both individuals and teams (Kemp, 2008). Further, DMS mirror teaching competency among Malaysian school teachers (Hamdan, Ghafar, & Ting, 2010).

This paper focuses on the DMS among academics in one of the leading public universities in Malaysia. It first identifies the common styles adopted by the academics. Then it investigates the DMS and the dominant styles of those academics in relation to their gender, age, faculty, qualifications, and years of service. We utilised the Rowe Decision Style Inventory (DSI; Rowe & Boulgaride, 1983) to identify the DMS of Malaysian academics. Although our study does not examine the relationships of different DMS, we emphasise demographic characteristics (i.e. gender, age, faculty, qualifications, and years of service) to support the empirical findings on the styles of strategic decision-making that prevail among academics. We expect to contribute to the literature on decision-making and managers as well as decision-making in tertiary industries.

We first review relevant literature on decision-making and styles of making decisions. Second, we present our research design and method. Third, we disclose our findings, and fourth, we discuss the implications of the study. We then explain the limitations of our study, identify opportunities for further research, and present a conclusion.

## **LITERATURE REVIEW**

### **Decision-Making Styles**

DMS have been studied for decades. Different types of decision-makers have been identified, including those described by Martinsons and Davison (2007), personality types (Jung, 1959), and the classification scheme that dichotomizes introverts and extroverts (Mitroff & Kilmann, 1978). One assessment tool that has been extensively applied is the DSI proposed by Rowe and Boulgarides (1983). The DSI model is based on two perspectives, values and cognitive complexity, and four DMS: analytical, directive, conceptual, and behavioural, as shown in Figure 1.

		<i>Left Brain Hemisphere</i>	<i>Right Brain Hemisphere</i>
<b>Cognitive Complexity</b>	<i>High</i>	<p><b>Analytical</b></p> <ul style="list-style-type: none"> <li>• Enjoys solving problems/puzzles</li> <li>• Uses considerable data</li> <li>• Undertakes careful analysis</li> <li>• <b>Strong need for achievement (in the form of challenges)</b></li> </ul>	<p><b>Conceptual</b></p> <ul style="list-style-type: none"> <li>• Creative and humanistic</li> <li>• Broad and long-term focus</li> <li>• Seeks independence</li> <li>• <b>Strong need for achievement (in the form of recognition)</b></li> </ul>
	<i>Low</i>	<p><b>Directive</b></p> <ul style="list-style-type: none"> <li>• Aggressive and autocratic</li> <li>• Acts rapidly</li> <li>• Uses rules and intuition</li> <li>• <b>Strong need for power</b></li> </ul>	<p><b>Behavioral</b></p> <ul style="list-style-type: none"> <li>• Supportive and emphatic</li> <li>• Prefers communication/discussion</li> <li>• Uses intuition rather than data</li> <li>• <b>Strong need for affiliation</b></li> </ul>
		<i>Task Oriented</i>	<i>People Oriented</i>
<b>Values</b>			

Figure 1 Decision-making style model

Source: Rowe & Boulgarides (1983), as cited in Martinsons & Davison (2007, p.286)

The DSI model shows that individuals who demonstrate an *analytical* style are task oriented but have a high tolerance for ambiguity. The individuals with this style consider many alternatives and need information from various sources before reaching a decision. They are careful and take a long time, but they respond well in new and uncertain situations. Individuals with a *directive* style have a low tolerance for ambiguity and are task oriented. In addition, they are action oriented, focus on facts, use rules and regulations, and adopt a systematic approach in solving problems. Those with a *directive* style tend to make speedy decisions with an autocratic management style. In contrast, *conceptual* decision-makers tend to focus on people or social aspects of a work situation and are more action oriented. They are willing to take risks and are good at finding creative solutions by using intuition and judgment. Of the four styles, the *behavioural* style is the most people oriented. The individuals in this category tend to solve problems through the use of feeling and instinct, they have a tendency to avoid conflicts, and they show concern about others in their approach to decisions.

In recent findings, Baiocco, Laghi and D'Alessio (2009) conceptualised DMS in five categories: rational, intuitive, dependent, avoidant, and spontaneous. They proposed that these five styles are inter-correlated and argued further that higher scores in rational decision-making were strongly related to lower scores on the spontaneous style. The rational decision makers assess all alternatives more accurately compared to those with a spontaneous style; thus, more time is taken to make a decision (Gambetti, Fabbri, Bensi, & Tonetti, 2008).

Knicki and Williams (2003) suggest that the style of a decision maker is very critical because it affects decision processes and explains why managers decide certain ways (Nutt, 1990). In addition, knowing a manager's DMS can provide some insights into weaknesses and strengths of the different decision-making approaches (Gambetti, et al., 2008). Therefore, identifying the factors that influence the DMS, the approach taken, and the ability to interact with others can lead to a better understanding of the issue (Rowe & Boulgarides, 1983).

## Factors Influencing DMS

The process of decision-making depends on many factors, including where a decision is made, who makes the decision, how the decision maker perceives cues, and what the decision maker values or judges about the subject (Rowe & Boulgarides, 1983; Rowe & Mason, 1987). A number of studies have linked DMS and the context in which decisions are made. For instance, Yousef (1998) conducted a study in the United Arab Emirates (UAE) focusing on organisational culture in relation to the level of technology used in the organisation and its role in predicting the DMS of expatriate managers working in the UAE. This study, conducted in a non-western multicultural country, suggested that organisational culture, government and private organisation, and level of technology used in an organisation are good predictors of DMS. In a different context, Connor and Becker (2003) discovered significant relationships between personal values and DMS among American managers. This indicates that managers in different contexts may pursue different DMS.

Managerial values, such as beliefs, attitudes, and traits, and employees' behaviours impact the decision-making process, which ultimately influences corporate outcomes. The success or failure of any organisation depends on the manager's decisions (Yukl, 1994). A recent study that examined the relationship between behavioural style and the personality trait of impulsivity found that highly impulsive individuals displayed a general deficit in decision-making abilities as compared to low-impulsive individuals (Franken, Van Strien, Nijs, & Muris, 2008). Indeed, making decisions is an important work-related task that is not only crucial for managerial performance but also assists managers in making appropriate job matches between managers and the tasks at hand (Pennino, 2002). In the rational decision-making process, managers have to choose the best alternative solution with emphasis on the quality of the decision (Basi, 1998). Therefore, the effectiveness of an organisation depends mainly on the managerial style of decision-making (Kaur, 1993).

The DMS is also investigated through the relationship with gender and its role. For instance, Gati, et al. (2010) disclosed that men were reported to make decisions faster than women, thus giving weight to the notion that the limited number of women in high-level leadership positions is due to the women's ability to assume leadership roles (Tolbert & Hall, 2009). From another gender-role perspective, Park (1996) investigated two dimensions of gender role that related to 'masculinity' and 'femininity'. Park describes masculinity as being aggressive, independent, objective, logical, analytical, and decisive. In contrast, femininity is described as emotional, sensitive, expressive, cooperative, intuitive, warm, and having a tactful nature. Based on a study conducted with final-year undergraduate students, Park (1996) proposed two significant relationships of DMS: (1) masculinity/directive/analytical/task-oriented styles, and (2) femininity/conceptual/behavioural/relationship-oriented styles. This shows that education is also a good predictor of DMS (Yousef, 1998).

Indisputably, the evidence of Park's (1996) findings on the gender identity of 'masculinity' and 'femininity' corresponds to one of the dimensions in a cross-cultural study conducted by Hofstede (1983) involving more than 70 countries (including Malaysia). Based on Hofstede's assessment, Malaysia's culture is characterised by a large power distance, high collectivism, small uncertainty avoidance, and femininity. This suggests Malaysians display inequality between superiors and subordinates, believe in loyalty and teamwork, tend to be more open to change and new ideas, and place more emphasis on relationships and quality of life. In relation to gender identity, masculinity is a characteristic in which the dominant values in society are success, money, things, and concern for quantity of life, whereas femininity emphasises the dominant values of caring for others and the quality of life (Hofstede, 1983). This indicates that Malaysia's society is dominated by values characterised as feminine. However, Kinicki and Williams (2003) argued that when the masculinity dimension is

measured on a continuum ranging from masculinity to femininity, Malaysia is positioned almost in the middle, reflecting a society with femininity values but closed to masculinity.

Further investigation of the DMS within the context of Malaysia is needed, focusing on academics in a public university as the unit of analysis. The findings may generate different empirical evidence to compare with existing theories. To summarise, the aim of the present study is to investigate the DMS among the academics in Malaysia. The objectives of the study are twofold: (1) to identify the common styles adopted, and (2) to determine the dominant styles in relation to gender, age, faculty, qualifications, and years of service. The following section discusses the research method.

## **METHODS**

### **Setting and Sample**

This study used a questionnaire designed to elicit the DMS among the academicians in a public university in Malaysia. This questionnaire, which was written in English, was distributed to the respondents during a six-hour training program held internally (at that particular university) over three consecutive weeks. Using purposive sampling, 190 academics were involved in this study; however, only 163 questionnaires (85.8% success rate) were usable.

The majority of the respondents were Malays (90.8%), followed by Chinese (7.4%) and Indians (1.8%). Most of the respondents were in the range of 30 to 35 years old (46.6%), followed by 36 to 40 years (24.5%), 40 to 45 years (16.0%), less than 30 years (9.8%), and more than 45 years (3.1%). There was an almost equal number of males (47.2%) and females (52.8%) in the sample. By qualification, 60.7% had master's degrees and 39.3% had PhDs. Finally, most of the academics had served between 6 to 10 years (44.2%), followed by less than 10 years (32.5%), 11 to 15 years (17.2%), and more than 15 years (6.1%).

The respondents represented 11 faculties, including F1 = humanities and social sciences (13.5%), F2 = education (9.2%), F3 = law, F4 = general studies (6.7%), F5 = information science and technology (7.4%), F6 = Islamic studies (4.3%), F7 = science and technology (16.6%), F8 = economics (3.1%), F9 = business management (10.4%), F10 = engineering (5.5%), and F11 = medical sciences (19.6%).

### **Instruments and Data Analysis**

This study adopted the DSI developed by Rowe and Mason (1987), comprising nine scenario-based questions (see Appendix 1). Each item featured four statements corresponding to the four styles. The participants were asked to select one of the responses, designated A, B, C, or D. Each answer was given one point. The scores for each letter were totalled, and the highest score represented the dominant DMS. A highest score on A = directive style, B = analytical style, C = conceptual style, and D = behavioural style. The result of the reliability test indicated that the overall Cronbach's Alpha was above 0.90.

Data were analysed using SPSS. Descriptive statistics were computed to ensure that all data were coded correctly and to obtain details of the demographic profiles. Using the cross-tabulation method between all nine questions and the demographic items, the responses were gathered. Then, all the responses were entered into an Excel sheet and converted to percentages. This was done in order to avoid ambiguity and to ensure that all responses were measured correctly.

## FINDINGS

The results will first discuss DMS among the academics, followed by DMS in relation to gender, age, faculty, qualifications, and years of service.

### DMS among the Academics

Figure 2 shows the types of DMS reported by the academics in this particular university. The predominant styles were conceptual (29.5%) and analytical (28.5%), followed by directive (24.5%) and behavioural (17.5%). Next, Figure 3 compares the DMS in relation to *gender*. In general, the two leading DMS were analytical and conceptual, although the greatest tendency for male academics was conceptual (15.5%) and for females it was analytical (16.2%). As for the directive style, the female academics (13.3%) were more directive than the males (10.6%). Likewise, for the behavioural style, female academics (9.2%) preferred the behavioural style in making decisions more so than the males (8.5%).

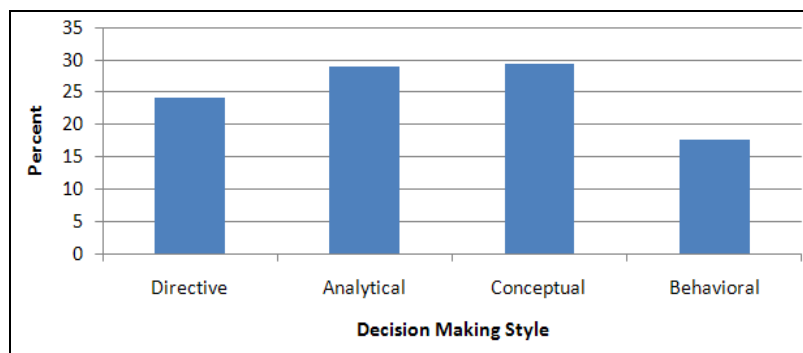


Figure 2 Decision-making styles among the academics

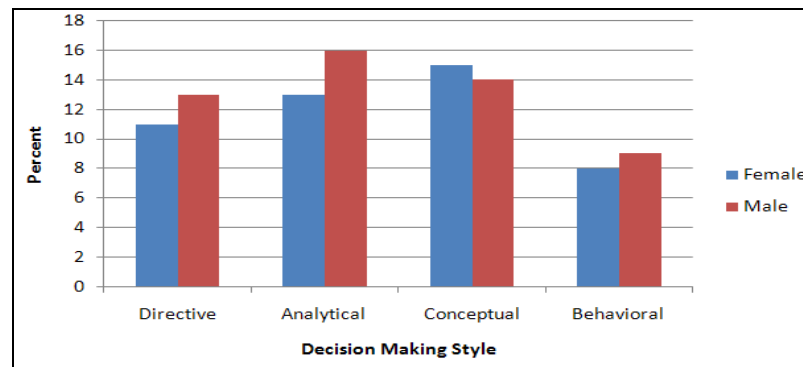


Figure 3 Decision-making styles in relation to gender

Figure 4 represents the DMS of the respondents in relation to *age*, which is separated into five age groups. Across all age groups, there was a tendency toward analytical and conceptual styles as the dominant DMS. Of those surveyed, 46.6% are in the group of 30 to 35 years old. For respondents less than 30 years old, an almost equal percentage for analytical and conceptual styles was reported. Findings were similar for respondents 30 to 35 years old. It is clearly seen from the bar graph that young academics have a tendency to adopt analytical and conceptual styles more than other styles.

In the age range of 36 to 40, respondents had an almost normally skewed curve for all styles, led by conceptual, analytical, directive, and behavioural. Interestingly, those in early to middle 40s (41 to 45 years) showed a nearly equal preference for all DMS. This may indicate that at that particular age, academics are flexible in making decisions. Also worth mentioning is that academics more than 45 years old showed an inclination towards directive, conceptual, behavioural and analytical in decreasing order of frequency.

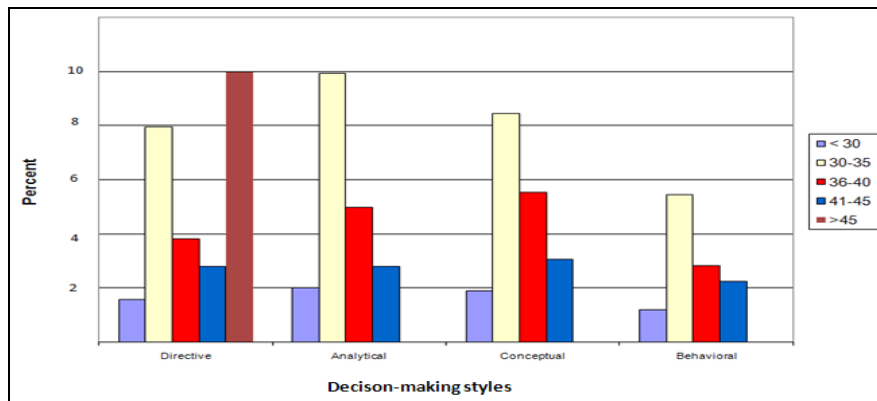


Figure 4 Decision-making style in relation to age

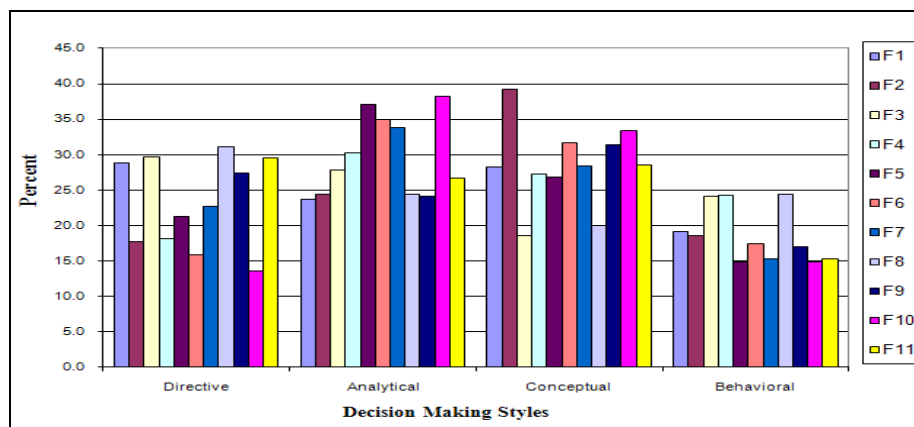


Figure 5 Decision making style in relation to faculty

**LEGENDS:**

- F1 = humanities and social sciences,
- F2 = education,
- F3 = law;
- F4 = general studies,
- F5 = information science and technology,
- F6 = Islamic studies,
- F7 = science and technology,
- F8 = economics,
- F9 = business management,
- F10 = engineering,
- F11 = medical sciences

In relation to the *school or faculty* representation, the DMS among the academics varies quite visibly, as shown in Figure 5. The directive style is dominant among the academics from F8 (economics), F3 (law), F11 (medical sciences), and F1 (humanities and social sciences). The analytical style seems to be obvious in all faculties; however, it is more evident in F10 (engineering), F5 (information science and technology), F6 (Islamic studies), and F7 (science and technology). The conceptual style is apparent in F2 (education), F10 (engineering), F6 (Islamic studies) and F9 (business management). As for the behavioural style, the results show a similar trend for all schools/faculties.

Figure 6 reveals the DMS in relation to *qualifications*. The directive and behavioural styles are apparent among the academics with master’s degrees, whereas the analytical style was most common among academics with PhDs. The conceptual style was equally adopted by those with both Masters and PhD qualifications.

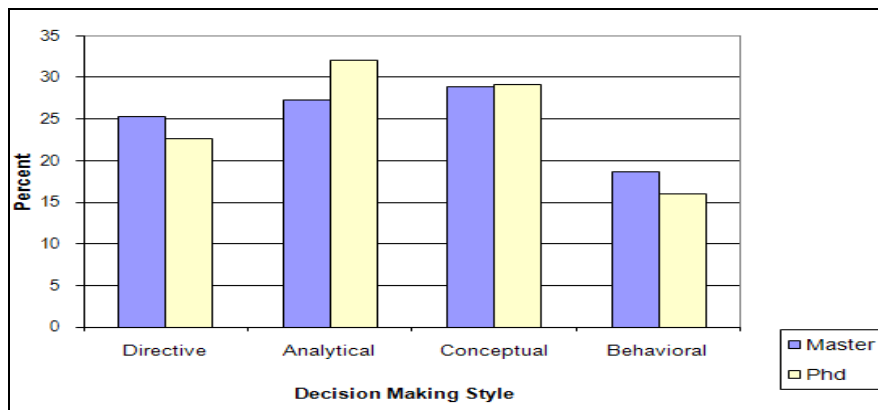


Figure 6 Decision making styles in relation to academic qualifications

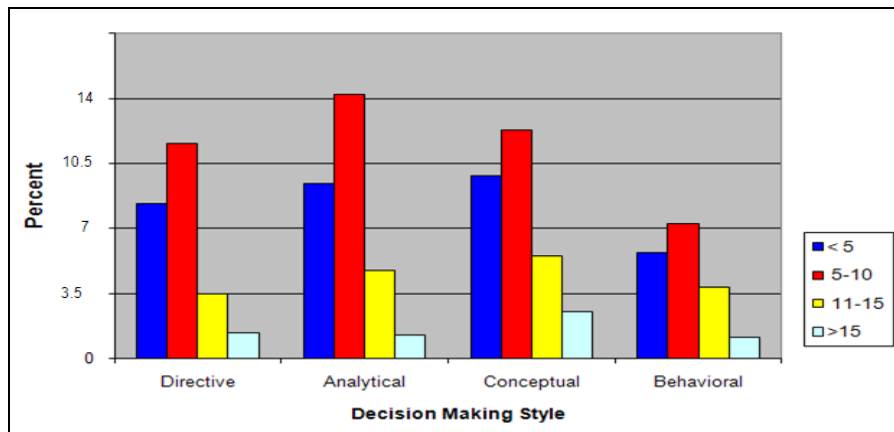


Figure 7 Decision making styles in relation to years of service

As shown in Figure 7, academics who have served this public university for less than 5 years and those who have served between 5 to 10 years approach decision-making with all DMS but most frequently with an analytical style, followed by conceptual, directive and behavioural. It is noted that regardless of tenure, these academics possess similar styles. Based on the above findings, Table 1 shows the overall summary of findings according to important respondent dimensions.



Table 1 Dominant decision-making styles amongst all respondents

Respondent Characteristics		Dominant Decision-Making Style
<b>Gender</b>	Male	Conceptual
	Female	Analytical
<b>Age</b>	Less than 30 years old	Analytical
	30 to 35 years old	Analytical
	36 to 40 years old	Conceptual
	41 to 45 years old	Conceptual
	More than 45 years old	Directive
<b>Qualification</b>	Masters	Conceptual
	PhD	Analytical
<b>Years of Service</b>	Less than 5 years	Conceptual
	5 to 10 years	Analytical
	11 to 15 years	Conceptual
	More than 15 years	Conceptual
<b>The Most Dominant Style amongst All Respondents</b>		<b>Conceptual</b>

## DISCUSSION AND IMPLICATIONS

This study identified and examined DMS among a sample of academics in a Malaysian public university. Several meaningful results were identified. First, the findings revealed that academics have more than one style in making decisions, which confirms results of earlier studies (Martinsons & Davison, 2007; Pennino, 2002). In the case of Malaysian academics, the *conceptual* and *analytical* styles are dominant, which supports Pennino's (2002) suggestion that, although individuals may have different DMS, typically, one or more styles are dominant. While we could see the existence of directive style, the behavioural style was the least utilised by the academics (See Table 1). Having a predominantly conceptual style indicates that the Malaysian academics are highly focused on the tasks assigned to them, and thus educating students is their major concern. Analytical style, which was the second most common style, complements their conceptual style by enabling them to have broad perspectives as well as relying on various approaches in managing their tasks. Thus, the combination of these two styles would result in a more creative and humanistic approach to managing their tasks, with students as their main clients.

Second, the study reveals some variations in patterns in relation to respondent characteristics. For instance, *conceptual style* was seen clearly among the male academics, the academics with master's-level qualifications, middle-aged academics (between 36 to 45 years old), those early in their tenure, and those who have served the university for more than 11 years, as well as those in the social science cluster (i.e. education, Islamic studies, and business management faculties). The *analytical style* is practiced more by female academics, those who have obtained a PhD, those less than 35 years old, those who have served the university between 5 and 10 years, and those in the pure science stream (i.e. engineering and science technology faculties). Interestingly, *directive style* was obvious among academics who were female, more senior (above 45 years old), and in the faculties of economics, medical sciences, and law. The *behavioural style* was mainly strong among those who were female, those who held master's degrees, younger academics (30 to 35 years old), and those in the faculty of economics. These findings indicate that while academics might have different characteristics, all strive to meet the nature of their work demands as required in the higher-education industry. In this respect, the main purpose of

making decision is to ensure high achievement for students. Apparently, applying variations of DMS styles enables academics to practice high tolerance for ambiguity, have concern for people and society, emphasise tasks and technical concerns, and thus achieve their objective tasks. Being in the education industry, academics are always expected to display creativity, possess a broad outlook and open-mindedness, accurately analyse situations, search for the best possible solutions, and respond well to new requirements and changes.

The adaptation of both conceptual and analytical styles allows academics to include intuition and feelings in their decision-making, which in turn enables them to get along with others, enjoy sharing knowledge and discussions, and permits them to compromise. These criteria fit the description of the two styles in earlier studies (Rowe & Boulgarides, 1983; Fox & Spence, 1999). Further, having these criteria, the decision-makers tend to value praise, recognition, and independence. They prefer more flexible control and are willing to share power (Fox & Spence, 2005). The results of this study corroborate David McGuire, et al.'s (2006) empirical findings that decision-makers need to be aware of the fact that their own values influence how they make decisions. Attention to values among managers will improve comprehension of the decision-making process within organisations because DMS have direct links to the values possessed by decision makers (Argrawal & Krishnan, 2000). These characteristics of academics are pertinent in instilling an entrepreneurial orientation among students by being proactive, creative and innovative, and willing to take calculated risks to face today's turbulent environment.

## **CONCLUSION**

As expected, this study fulfilled its primary objective, i.e. to identify the nature of the DMS in a conveniently chosen sample of academics in a Malaysian Public University. The findings suggest that, while in general the respondents subscribe to more than one DMS, the conceptual and analytical styles dominate the other styles. Interestingly, variations could also be observed in the types of DMS across several demographic characteristics, which included gender, age, level of education, and years of service. These findings could offer some useful insights toward a better understanding of the impact, if any, of variations in DMS among academicians on teaching and learning in higher academic institutions. Indeed, the performance of students would be very much affected by the behaviours of academicians. Academicians in the role of student advisors significantly contribute to the process of students' decision making, of making sense of their world, of understanding how they go about learning, and of managing their learning environment.

Given the methodological limitations of this study, especially with respect to the sampling method employed, further research in this sub-field of management should be pursued in order to generalise the findings to other samples. Future research that looks into the impact of academicians' DMS on other aspects of teaching and learning in higher academic institutions is very much recommended.

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## APPENDIX 1: SELF-ASSESSMENT ON DECISION-MAKING STYLE

**Instruction:** Read the statements and **circle** the option that best represents your feeling about the issues.

1. I enjoy jobs that a) are technical and well-defined b) have considerable variety c) allow independent action d) involve people	6. When time is important, I a) decide and act quickly b) follow plans and priorities c) refuse to be pressured d) seek guidance and support
2. In my job, I look for a) practical results b) the best solutions c) new approaches or ideas d) good working environment	7. I work well with those who are a) energetic and ambitious b) self-confident c) open-minded d) polite and trusting
3. When faced with solving problems a) rely on proven approaches b) apply careful analysis c) look for creative approaches d) rely on my feelings	8. Others consider me a) aggressive b) disciplined c) imaginative d) supportive
4. When using information, I prefer a) specific facts b) accurate and complete data c) broad coverage of many options d) limited data that are easily understood	9. My decisions typically are a) realistic and direct b) systematic and abstract c) broad and flexible d) sensitive to the needs of others
5. I am especially good at a) remembering dates and facts b) solving difficult problems c) seeing many possibilities d) interacting with others	

Source: Griffin (2003)

Score the exercise by giving yourself one point every time you selected an A, one point for every B, and so on. Add up your scores for each letter. Your highest score represents your dominant decision-making style. If your highest score was A = directive style, B = analytical style, C = conceptual style, D = behavioural style

Answer	Frequency	Total
A	X 1	
B	X 1	
C	X 1	
D	X 1	

**MY SCORE:** \_\_\_\_\_