Decision Making Styles of University Leadership

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Abstract

Universities operate under the direction, leadership, and vision of their educational administrators. Throughout planning, implementing, and evaluating daily activities, they are continuously making decisions. Individual differences in thinking styles and information processing styles cause them to make their decisions differently. So assessing the decision making style (DMS) is vital to make administrators aware of their own style, evaluate the practicality of their style in the various tasks and finally adopt precautionary measures when their own style is not suitable to handle the situation. The core objective of this study is to explore the age and gender differences in DMS among departmental heads (Deans/ Principals, Directors, Chairpersons, Coordinators) of universities in Lahore. For this purpose, the Rational Experiential Inventory (REI) was administered to a sample of 440 participants (322 men and 118 women) of ages between 26-70 years. The statistical analyses revealed no significant differences regarding gender in utilizing rational and intuitive DMS. Post hoc (ANOVA) indicated significant mean differences among heads in the preference for rational DMS regarding age. The study also showed no significant differences among heads in preference for intuitive DMS.

Keywords: Decision-making style, Intuitive decision making, rational decision making

Introduction

Several factors play an important role in the success of educational administration such as talent, skill, experience, qualification, being energetic and doing right things at the right time. The administrators' decision styles are also vital among these factors. Individual differences in thinking styles and information processing styles cause them to make their decisions differently. What one administrator considers right or a golden opportunity might be considered wrong or a threat by someone else.

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Universities operate under the direction, leadership, and vision of their educational administrators. Throughout planning, implementing, and evaluating daily activities, they are continuously making decisions. They need to possess general cognitive and other abilities. Those abilities may have a conceptual relationship with decision-making style. Assessing the decision making style is important not only to guarantee the match between an individual's cognitive functioning and the characteristics of the work tasks but also to make administrators aware of their own style, so that they recognize the advantages and limitations of their style, judge the functionality of their style in the various tasks that they must face, and eventually adopt precautionary measures when their own style is not the best one to deal with the situation.¹ So the core aim of this research is to explore the decision making styles of universities' heads and to investigate the differences in decision-making styles among educational heads', both to extend generalizability and to explore individual differences in educational decision-making.

Epstein² explained the rational and intuitive modes of managerial cognition in cognitive experiential self-theory (CEST). Theory argues that human information processing is carried out by two parallel cognitive systems³: the rational system which is emotions-free and conscious,⁴ deliberate and inferential,⁵ careful and systematic examination of decision options,⁶ relatively slow, intentional, controlled, effortful and analytical. The experiential system which is automatic and associated with emotions,⁷ concrete, associative, rapid, effortless, unintentional, holistic⁸ and relies heavily on human intuition.

The theory assumed that behaviour is usually affected by these two systems along a continuum revealing their relative influence.⁹ These dual-process models bring about the importance of both processes as basic determinants of decision making.¹⁰ By definition, these two approaches of decision making are quite different.

Intuition is defined as "a capacity for attaining direct knowledge or understanding without the apparent intrusion of rational thought or logical inference".¹¹ Administrators make decisions based on previously experienced patterns and automatic reasoning process. Individuals with this DMS consider only few alternatives and inductively go with the first option that strikes in their mind.

Rational decision making entails a completely different type of information processing system than the intuitive decision making. It consists of cognitive ability to process information logically and to interpret the event accurately with conscious reasoning and deliberative analytical thought.¹²

Interaction between Intuition and Analysis

A considerable literature on decision making suggests that the use of intuition is generally substandard than rationality.¹³ In contrast, a reasonable body of research suggests that intuition may be superior to other decision-making approaches under certain circumstances.¹⁴ Advocates of dual process approach assume that these two systems work jointly in decision making. Effective administrators may not have the comfort of selecting between one or another. Real expertise and to be able to function well demands the use of both types of DMS.¹⁵ Researchers have proposed many recommendations about using mixture intuitive and rational decision making style. For example, Sadler-Smith & Shefy identified the specific weightage that should be given to rationality and intuition (empirical vs. Intuitive) correspondingly in making decisions.¹⁶ So both processes are vital to managerial decision making and no one be preferred over the other. Literature shows clear evidences that adoption of any decision making style is affected by the number of variables in which age and gender are main source of variations.

Age and decision making

Many studies have showed age related differences in the preference for any DMS. According to them as people become older they depend less on analytical and more on intuitive processing while making decisions. An explanation for these differences can be that analytical processing places heavy demands on working memory which declines with the age.

Finucane, Slovic, Hibbard, Peters, Mertz & Macgregor considered the impact of aging on decision making competence and found that the mean scale score was significantly lower for older people than younger ones which indicated that older people were less rational – vigilant in their decision styles.¹⁷ Morera Maydeu-Olivares, Nygren, White, Fernandez & Skewes analyzed age difference in using rational or intuitive DMS among US Hispanics Older individuals had higher intuitive scores which showed that older as compared to younger individuals reported themselves to use intuitive DMS.¹⁸ These results supported the findings given by Finucane, et. al.¹⁹

Gender differences and decision making

Pacini and Epstein²⁰ found gender difference in engagement of experiential or rational processing involved in decision making. According to the findings women reported greater appreciation and engagement in experiential (intuitive) processing whereas men reported greater appreciation and tendency towards rational processing. However the mean gender differences were very small. Morera et al.²¹ also showed

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gender difference in using intuitive or rational DMS. Females had higher intuitive scores which showed that females mostly relied only on intuitive DMS rather than rational style. These results are consistent with the assertion made by Pacini & Epstein.²² Salo & Allwood conducted a study on DMS, stress and gender among investigators and their gender analyses showed that male investigators showed higher values on rational DMS and female investigators higher values on the dependent DMS.²³

Leybourne & Sadler -Smith²⁴ investigated the relationship between rationality, intuition and gender. They failed to find any significant relationship between gender and intuition & rational DMS.

Method and Procedure

Population and Sample

625 departmental heads' (Deans/principals, Chairpersons/ Directors, Heads of Departments and Coordinators) of selected 27 universities (public and private) as well as degree awarding institutions of Lahore constituted the sample of the study. As population was very small therefore census was taken from the whole population. Out of 625 respondents 440 responded. Thus response rate was 70%. Out of 440 respondents 273 (62.0%) heads were from Public and 167 (38.0%) were from Private Universities. The sample was consisted of 322 (73.2 %) males and 118 (26.8%) females. Heads were divided into five categories with regard to Age. (6.1%) heads were less than 30 years of age, (13.6%) heads were between 30-39 years age group, (25.7%) heads were in 40-49 years age group, (41.1%) heads were between 50-59 years age group and 59 (13.4%) heads were above 60 years age.

Instrument

Rational Experiential Inventory (REI) developed by Pacini & Epstein²⁵ was adopted. It was 40-item questionnaire having two subscales (Rationality & Experientiality Scale) designed to measure information processing style as well as decision making styles of professionals. Twenty items were designed to measure each of the style: Rational and experiential, developed on 5-point Likert- scales. About half of the items are stated in positive direction, while the remaining half in negative direction. Thus some items are scored from 1-5and others are scored from 5-1. Cronbach Alpha was computed for reliability of the instrument and its value was found to be 0.74.

Procedure

Departmental heads were required to record their opinion against each item of the scale. Their responses were added to have total score for each scale. The maximum score against each scale may be recorded 100 while minimum as 20, because each scale contains 20 items constructed on five point scale. Research is descriptive in nature. The data set was analyzed through SPSS version 16.0. The ranks (nominal) data were treated as scores ordinal data. The data set was also normally distributed. Akindele, Nassar & Owolabi²⁶ posited that normally distributed data obtained from Likert scale could be treated as scores and analysed using parametric methods of analysis. Mean score, t test and ANOVA were applied for data analysis.

Results

Table 1: Distribution of Respondents on the Basis of DMS

| Decision Making Style | Frequency | percentage |
|------------------------------------|-----------|------------|
| Intuitive decision making style | 170 | 38.6 |
| Rational decision making style | 148 | 33.6 |
| Mixed (Intuitive & Rational) style | 122 | 27.7 |
| Total | 440 | 100.0 |

Table 1 reveals that 38.6% respondents were utilizing intuitive DMS, 33.6% reported that they use rational DMS and 27.7% showed their preference for mixed DMS. The table also indicates that intuitive DMS was most frequently used by the university heads.

Table 2: Cross Tabulation of DMS Regarding Gender

| Decision Making Style | Gender | | |
|--|-------------|-------------|--|
| Deersion waxing style | Male | Female | |
| Intuitive decision making style | 115 (26.1%) | 55 (12.5%) | |
| Rational decision making style | 107 (24.3%) | 41 (9.3%) | |
| Intuitive & Rational decision making style | 100 (22.7%) | 22 (5.0%) | |
| Total | 322 (73.2%) | 118 (26.8%) | |

Table 2 indicates that out of 322 male respondents 115 (26.1%) showed their preference for intuitive DMS, 107 (24.3%) preferred rational DMS and 100 (22.7%) males were in the favour of mixed (intuitive & rational) decision making style. Out of 118 females, 55

(12.5%) showed higher preference for intuitive DMS, 41(9.3%) preferred rational DMS and only 22 (5.0%) showed preference for mixed (intuitive & rational) DMS.

Table 3: Independent Sample t-test by Gender Regarding DMS

| Decision style | Gender | М | SD | df | t | р |
|-----------------|--------|-------|-------|-----|------|------|
| Experientiality | Male | 59.56 | 11.84 | 438 | 0.36 | 0.30 |
| | Female | 59.11 | 10.99 | | | |
| Rationality | Male | 73.93 | 10.80 | 438 | 1.97 | 0.24 |
| | Female | 71.63 | 11.02 | | | |

Table 3 shows the gender difference in using DMS. Mean score of rational DMS is higher than intuitive DMS for both male M=73.93 and female M=71.63 respondents while the mean score of intuitive DMS is lower for both male M=59.56 and female M=59.11 respondents. Table reflects no significant mean difference among male and female respondents in utilizing intuitive and rational DMS. But a slight mean difference (2.3) is seen in utilizing rational DMS. Male heads (M=73.93, SD=10.80) have higher score on rational DMS than female respondents (M=71.63, SD=11.02).

| | Experientiality | | Rationality | |
|------------------------|-----------------|-------|-------------|-------|
| Decision Making Styles | Μ | SD | М | SD |
| Less than 30 | 62.63 | 6.43 | 69.81 | 9.47 |
| 30-39 | 59.42 | 9.90 | 72.12 | 10.38 |
| 40-49 | 59.26 | 12.23 | 75.69 | 10.46 |
| 50- 59 | 59.97 | 11.54 | 72.96 | 11.32 |
| Above 60 | 56.69 | 13.66 | 72.64 | 10.97 |

Table 4: Descriptive Analysis of DMS with Regard to Age

Table 4 shows mean scores on rational DMS is highest among all the age groups of respondents while the mean score on intuitive DMS is lowest among all age groups. Mean score rational decision making (M=75.69, SD=10.46) of respondents in the age group of 40-49 was comparatively highest among all age groups and mean score of intuitive decision making (M= 56.69, SD = 13.66) of the respondents of above 60 years is lowest among all age groups.

Table 5: One Way Analysis of Variance on DMS with Regard to Age

| Decision Making Style | df | SS | MS | F | р |
|-----------------------|----|----|----|---|---|
|-----------------------|----|----|----|---|---|

| Decision Making Styles of Univer- | sity Leadershi | ip | Sada | af Jabeen & | Mahr Saeed |
|-----------------------------------|----------------|----------|--------|-------------|------------|
| Between Groups | 4 | 774.41 | 193.60 | 1.44 | 0.22 |
| Within Groups | 435 | 58371.81 | 134.19 | | |
| Between Groups | 4 | 1103.67 | 275.92 | 2.35 | 0.05 |
| Within Groups | 435 | 50992.67 | 117.23 | | |

Table 5 shows the age wise comparison of university heads in adopting any DMS. The F- value (1.44) for intuitive DMS was not significant. It means that there was no difference among respondents in using intuitive DMS. The F- Value (2.35) for rational DMS was significant at $\rho \leq 0.05$. It was concluded from the table that there was significant difference among the respondents of different age groups in utilizing rational DMS. For in depth analysis Least Significant Difference (LSD) was used as post hoc test.

Table 6: Post hoc (LSD) Test

| 1 4010 0. 1 030 1 | ICC (LDD) ICSt | | |
|--------------------|--------------------|--------------------|-----|
| Age Groups (years) | Age Groups (years) | Mean Difference | р |
| 40-49 | Less than 30 | 5.88 | .01 |
| | 30-39 | 3.57 | .03 |
| | 50- 59 | 2.73 | .03 |

Table 6 indicates that the mean differences (3.57 & 2.73) between respondents of 40-49 years of age group and less than 30 years and 30-39 years of age groups were significant at $p \le 0.05$, while the mean difference (5.88) between respondents of 40-49 years and less than 30 years of age was significant at $p \le 0.01$.

Interpretation and Discussion

Decision Making is a peculiar and vital activity in all organizations. Stylistic differences has been proved to be existing in the field of decision making²⁷ so it is significant to know the stylistic differences of decision making among educational administrators. The findings reveal that majority of the university heads used intuition in their decision making. They trusted their feeling and believed that their intuitive and inductive inferences are always correct. These findings are in congruence with the results of Finucane, et. al. and Hon-Tat et. al..²⁸ One explanation of these results could be that most of the respondents were between the age group of 50-59 years. As empirical work suggests that deliberative processes are declined with age and showed increased reliance on associative processes.²⁹ Older people focus less on facts and more on

essence that may lead to less emphasis on analytical processing of information and increased emphasis on experiential processing or both.

The participants of different age groups behaved in the same way when they utilize intuitive DMS. Heads were different in utilizing rational DMS. Heads of age group 40-49 years were high on rational DMS than younger adults of age 26-39 years and older people of 50 and above years. These results coincide with the assertion made by Finucane et. al.³⁰ that older people were less rational in their decision styles.

The findings revealed that a reasonable number of heads use mixed style from which they choose according to the decision situation they confront. These findings are in congruence with the results of Spicer & Sadler-Smith, and Omotola, who suggested that neither of these two is an absolute way of making a decision. They suggested that individuals should ideally achieve balance between as excessive use of one approach may not be optimal solution.³¹

The gender difference showed the contradictory results from the previous studies. The literature showed that male usually adopt rational choices while making decisions whereas women mostly rely on intuitive DMS³² and less rational than men but perhaps this was the scenario researchers showed while studying business organizations, military departments and medical profession. Moreover, most of the research on decision making had been conducted on student sample and the inferences researchers wish to draw often are not generalizable to the population who are directly involved in official decision making. Strength of this research lies in the fact that it involves administrators at the key posts of decision making of institutions of higher education. In this context it was revealed that male and female heads showed no significant difference in utilizing intuitive as well as rational DMS. However a slight mean difference in rational DMS showed that male heads scored higher (more rational) than female heads. These results concur with the findings of Hansson & Andersen³³ which also showed no gender difference in the DMS of school principals in Sweden. These results also somewhat coincide with the results of study conducted by Hon-Tat et. al.³⁴ which aimed to compare the male and female university academic staff (non administrators) on intuitive DMS. The study revealed no gender difference in utilizing intuitive DMS.

Although self-report scales are most commonly used method to study stylistic differences yet this kind of constructs are actually difficult to measure with the help of questionnaires.³⁵ The weakness of this study lies in the fact that data were collected using self-report questionnaires that are influenced by social acceptability. Future research is advised to use both qualitative and quantitative method. For this purpose,

behavioural decision-making measures and observational data could be useful.

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