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Analysis of Managerial Heuristics Through the Last Few Decades

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Abstract: Many psychological models such as cognitive model, demand control model, social support model suggest the decision-making process for workers. When it comes to managerial jobs, there is scarcity of data which is alarming since such data can be used towards a conclusiveness about decision-making. The aim of the study was to find decision heuristics for managerial level jobs. The objective was to analyze the perceived rewards of the job. Herzberg's theory, earlier, analyzed rewards in general and hygiene of workers. Chaudri (1982) studied the linkages between a set of Herzberg's constructs (1959) and the manager's perceived journey to the rewards, explained as heuristic of managerial jobs. Chaudri (1982) studied the Herzberg's model through a form of questionnaire in his doctoral thesis. Same questionnaire (anonymous) was repeated on 23 managerial jobs among a University's administrative personnel at West Virginia to find out how managers rank those constructs representing job satisfaction and decision-making. The results were compared with the data collected by Chaudri (1982) to investigate whether the trends of job satisfaction have changed from 1982 through present. Results showed that heuristic money and remuneration for job has gained more importance as a reward than success of doing the job over the years for academic managerial positions. Surprisingly, the managerial positions in food chains (non academic job) was found to endorse similar heuristics as the 1982 academic managerial group perceived.

Keywords: Managerial, decision, heuristics

1. Introduction

The research focus on finding the priority of perceived rewards as heuristics in managerial jobs and analyzed whether the priorities changed over years. The literature evidenced psychosocial stresses of workers under variations of three main job components i.e., job demand, job control and existing social support (DC model, Karasek). While variations of these psychosocial stressors were predictors of physiological symptoms, published research has often associated variation ratios of these predictors to varied physiological/psychological outcomes (such as cardiac disease, fatigue, burnout/chillout) that are associated with the job level. Under the DC model, associations have been predicted for jobs such as carpentry where the low job control and high job demand endorses a strained situation as the job outcome. Thus, the variations of these components can be used not only to predict the outcomes but also to redesign a job. Such a predictive model is not present for the managerial jobs. Hence, this study fills the gap of reaching beyond what managers do (i.e. the roles they adopt/play) and explaining what they got, received or experienced through the job. In other words these perceived rewards or heuristics will help to design the managerial jobs.

2. Background

Managers make decisions better when financial accounting information is provided; however, limited knowledge, objective diversity, and incomplete information are some factors that influence design making process for managers (Alexandra, 2012). Decision making can be a simple or complex multi-step approach. Ejimabo (2015) studies have shown that there are several factors that influence leader's decision in an organization, namely: experience, cognitive biases, age and personal believes, and commitment. For example, a decision for implementing changes in the new model of a car will be multi-step approach and members from design, engineering, finance, and research will be considered before the decision. The decision in that case will be political, while on the other hand, a decision taken in personal life; for example, career decision, medical choice, financial decision can be simple. In the modern world, leadership decision making process can be complicated. Interestingly, the result of Ejimabo (2015) study found that leaders should be educated in cultural diversity and ethical standards. Many managers agreed on Lewin leadership model that describe leaders as autocratic, democratic, and laissez-faire. Many studies show that highly educated people fail to appreciate team work and prefer work individually in the organization. Such people are positional-power oriented and overlook what they can achieve in a team.

Herzberg's constructs and their operationalization

Herzberg's constructs (1959) in general examine the motivating factors behind carrying out any task at job level. Herzberg himself and subsequent researchers made references to Herzberg's work and often used short construct names that are given meaning and substance within the context. The original Herzberg constructs and the assigned descriptive expressions are presented in table 1.

Table 1: Operationalization of Herzberg's factors

Herzberg Construct	**Expression used in current city**
1. Achievement	The success I have in doing my job
2. Recognition	The recognition I receive for the work I do
3. Work itself	The nature of the work I carry out
4. Responsibility and authority	The control I have over my own and other's work
5. Work conditions	The conditions prevalent at work (physical conditions and facilities)
6. Interpersonal relationship	The relationship I have with the boss and colleague.
7. Salary and benefits	The salary and benefits I earn
8. Supervision - technical	The technical competence of the boss and colleague
9. Advancement	The advancement I get through promotions
10. The policies and administration	The policies and administration of the organization I work for

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There is only scare to no literature available in managerial job designing, nor any studies till date postulated how the perceived awards play a role in motivating people to take challenges in their job.

3. Method

Development of questionnaire

Chaudri (1981) conducted the pilot-study study through a form of questionnaire using Herzberg's operationalized expressions (table 1) as questionnaire directed to the managerial positions. The development of the questionnaire took place in three steps. The pre-pilot study was conducted with faculty members and it was suggested to use of the word 'influence' instead of 'predetermine' because it might not be understood by respondents from industry. However, it was clear that the meaning they assigned to 'pre-determine' was different from that which they would ascribe to the word 'influence'. The author wanted to research the use of the word 'pre-determine' and it was therefore decided to retain the word, and pay attention during the pilot study to check whether there was any incomprehension or misinterpretation of the word.

The 2017 replication study was performed on 23 managerial jobs in the University Administrative Personnel at one University in West Virginia.

In the questionnaire, the questionnaire respondents were asked to indicate the importance of each construct to them on a scale of 1-3 (1=highest degree of importance; 3=lowest degree of importance). Herzberg's (1959) ten constructs were written, and a small circle was drawn around each of the statements. The respondents were given specific instruction to draw arrows and an example was presented to add clarity to the instruction. Moreover, respondents were asked to grade 1-3 to the question, where grade 1 indicated highest and grade 3 the least, which helped in computing heuristic pressures. Finally, to facilitate comparison with the original Herzberg study respondent where asked to mark with a tick the happiest or unhappiest situations in two columns.

The questionnaire was anonymously presented to them. The collection of questionnaire was carried out through a ballot box which was presented to the secretaries of each department.

There are 10 constructs in the survey and each of them were supposed to be ranked from most important to least important based on scale 1-3. The value given to a construct is standard static pressure on the construct. To standardize these values standard static pressures were calculated by dividing weighted number. The weighted numbers standardized a construct such that each construct has been given equal importance and value, and the sum of standardize static pressure would be 1.

For example, if the constructs 1,3,5,7 represented highest importance, constructs 2, 4 received intermediate importance, constructs 6,8,9,10 received least importance, then, the weighted number was calculated as following.

Weighted importance = (4*3) for construct 1,3,5,7 + (2*2) for construct 2&4 + (4*1) for constructs 6,8,9,10

= (4*3) + (2*2) + (4*1)

= 12+4+4

=20

Then, the standardized static pressure (SSP) for construct 1,3,5,7 was = 3/20,

the standardized static pressure (SSP) for construct 2,4 was 2/20,

the standardized static pressure(SSP) for construct 6,8,9,10 was 1/20.

After calculating standardize static pressure, heuristic pressure has been calculated. Heuristic pressure is determined from the pre-determinant constructs. For example, if construct A pre-determines construct B which further determines construct C and the static pressures are 2,3, and 1 on these constructs. Then the heuristic pressure was calculated as:

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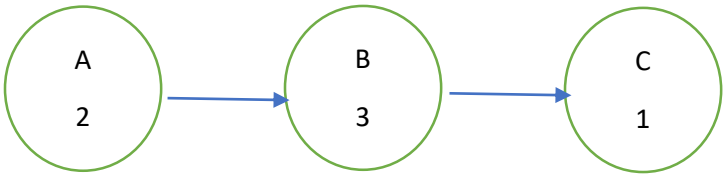


Heuristic pressure (HP) on C = Static Pressure on C + sum of Static Pressure from B & C

HP on C = 1 + (2+3) = 6

Heuristic pressure (HP) on B = SP on B + SP from A

= 3+2 = 5

Heuristic pressure (HP) on A = SP on A = 2

Now when a construct is determining more than one constructs then the standardize static pressure is divided such that if a construct determine 2 constructs then the static pressure from this construct to the next will be ½ of the standardize static pressure. If a construct pre-determines 3 constructs, then the standardize static pressure sent to the next construct will be 1/3 of the standardize construct. For example, as show in figure construct A pre-determines 3 more constructs, and if the weighted number is 20, then the heuristic pressure one construct B will be calculated as:

HP on B = SSP on B + (1/3) * SSP from A

HP on B = 2/20 + (1/3*3/20)

HP on C = SSP on C + (1/3) * SSP from A

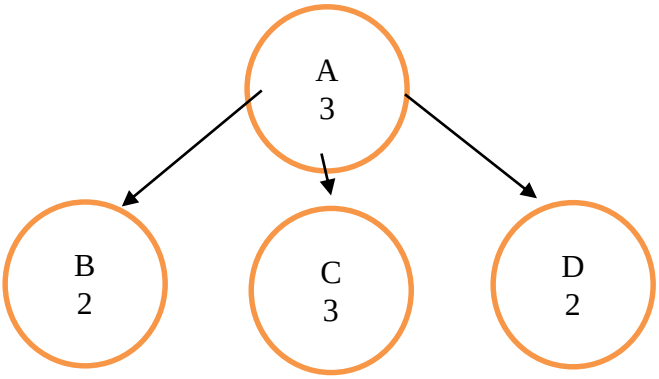
HP on C = 3/20 + (1/3) * (3/20)

HP on B = SSP on B + (1/3) * SSP from A

HP on B = 2/20 + (1/3*3/20)

HP on C = SSP on C + (1/3) * SSP from A

HP on C = 3/20 + (1/3) * (3/20)



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4. Results

The heuristic pressure (HP) and standardized static pressures (SSP) are considered as the decision making constraints for each job. Mean HPs for Chaudri (1982) study, 2017 replication study (academic) and 2017 replication study (corporate) are shown through figures 1, 2 and 3.

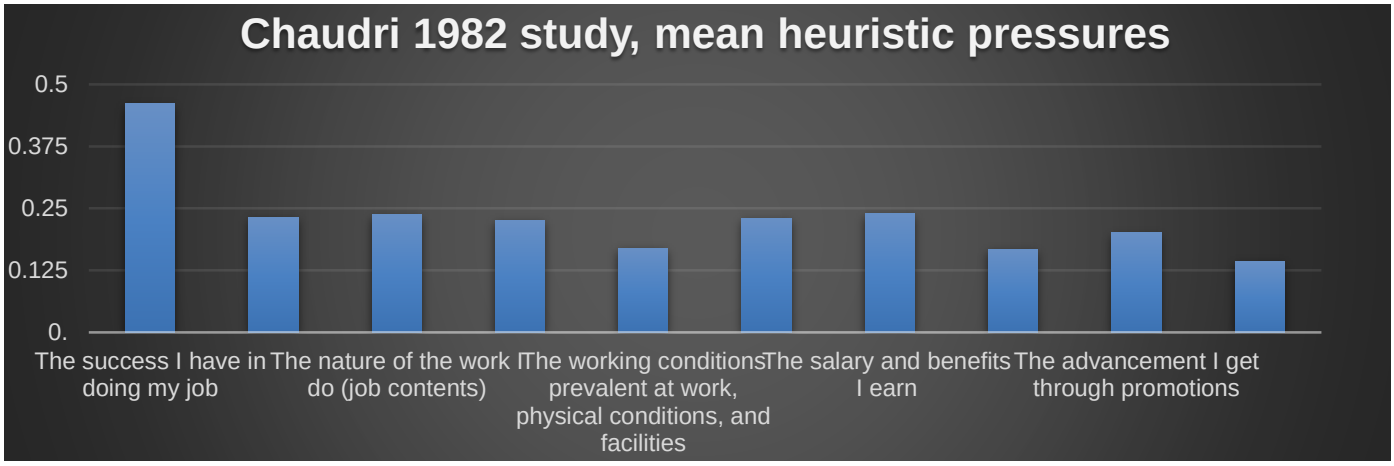

Figure 1: Chaudri 1982 pilot study mean heuristic pressure

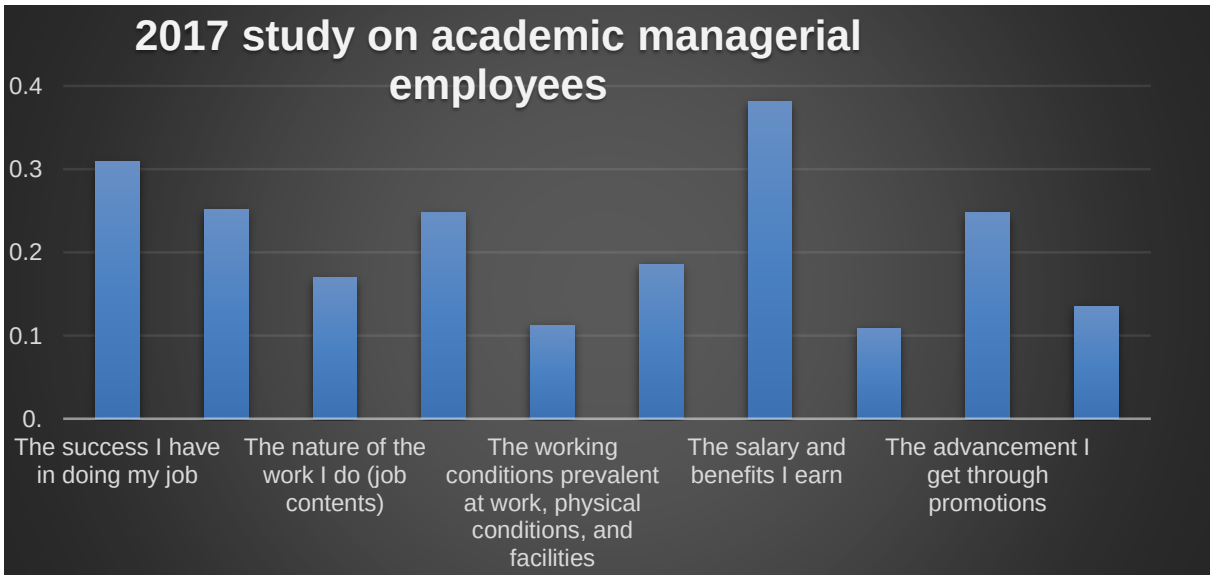

Figure 2: 2017 replication study on academic personnel, mean heuristic pressure

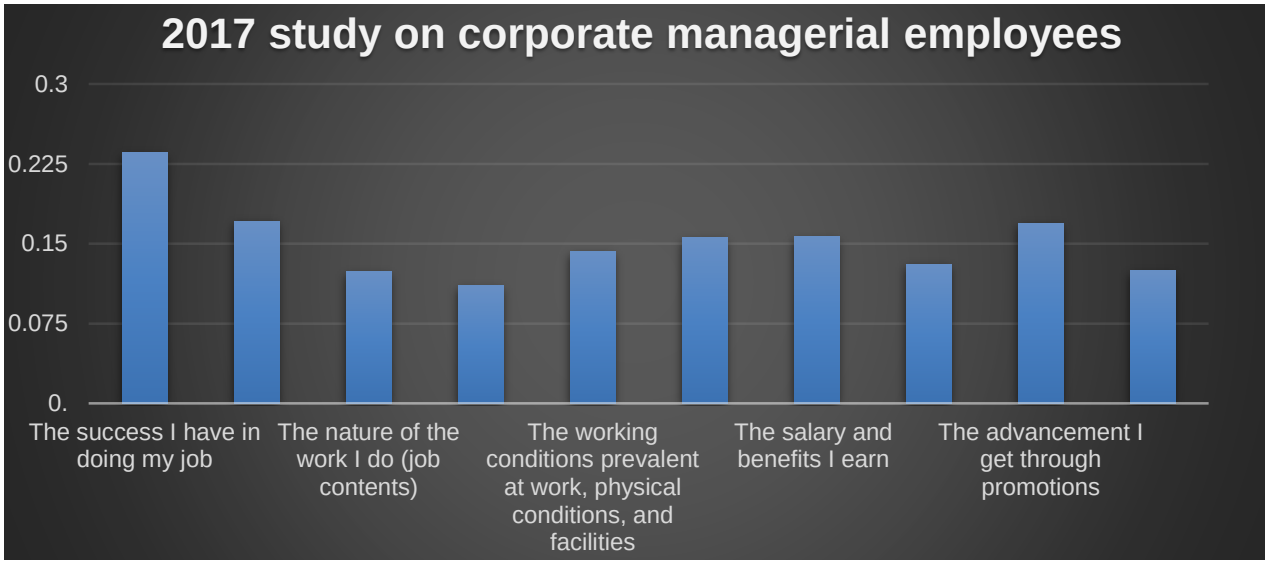

Figure 3: 2017 replication study on restaurant workers, mean heuristic pressure

5. Discussion

The nature of managerial jobs have changed over the past few decades. The pre -computer era managerial positions are defined by more goal oriented nature of the tasks; managers worked in order to find out solutions for situations, help allocating the resources, hire workforce and distribute tasks to the subordinates. After the 'internet explosion', period in late 1990s and early 2000s through present, information about job prospects and salaries are readily available in websites. The differences in salaries for different job profiles are arousing people's interest to look for a job where they find economic interest. In parallel, the organizations reward employees in the managerial positions when they generate higher profits for the organization. These profits might be 'retaining more employees', 'retaining more students', 'producing cost-effective products' and etc. For these situations, mentioned above, managers will receive awards in terms of salaries and other perks. In addition, in the past 30 years, the academic sector has particularly experienced a sharp rise in competition to get public research funding. To avoid the bottleneck in such grant funding, academicians and academic managers have turned to entrepreneurship and academia-corporate partnership of different flavors. Therefore, the motivation to carry out the job somehow remains associated with the monetary side of job. Due to the reasons mentioned above, two of the most prominent features of the managerial jobs these days are lack of stability and lack of predictability. Concurrently, the managers are trying to get compensated thus by the salary they draw from their job in order to do justice to their achievements. (Houdmont & Leka, 2010). This is reflected in the 2010 replication study (Figure 2), where we find complete dominance of the salary heuristics for the managerial level employees working in the University.

In the beginning of 1970s a prominent feature of managerial jobs were willingness to take responsibility in crisis situations. Hence, work cultures then supported participation and taking responsibilities personally. Also, willingness to co-opearte in critical situations expanded their experience as a leader. Thus the proactive leadership style nurtured a 'teambuilding phenomenan' as aspect in the work environment. Thus the managers, who were often the team-builders, took most pride in their success in this transformational leadership and implemented 'inspirational behavior'. This is prominently reflected in the Chaudri study (1982) which explored highest mean heuristical pressure for the first managerial heuristic (table 1) or "the success I have in doing my job".

The restaurant managers showed high importance on the first constraint "the success I have in doing my job'. The trend in restaurant industry is that the waiters and waitresses make more tips than they are paid their wages. Although the managers experience absolute control over the tips, retaining the employees crew is the challenge of the managers which in a way is reflected as the success of their job. (
https://www.nytimes.com/2018/03/12/opinion/tipping-restaurants-servers-cuomo-new-york.html)

The fact that the nature of autonomy in managerial jobs is continuously changing explains the change in heuristics in our result also. As the analysis was focused on each heuristics, the result what the study found will be used in the future to design the

award – competency matrix of the managerial level jobs. In other words we are trying to find out a predictive model for different managerial level's competency in different variations of the heuristics.

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