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CORRELATES AND FACTORS OF DECISION MAKING IN MANAGEMENT

Costin Dămăşaru, PhD
Andra Crăciun

National School of Political Studies and Public Administration, Management/Bucharest,
Romania
University of Bucharest, Psychology Department, Bucharest, Romania

Abstract:

The present paper proposes a specific view regarding the process of making decisions in the managerial context. Specifically, we intend to identify the impact of several correlates and specific factors upon different styles of decision making (namely "Thoroughness", "Control", "Hesitancy", "Social resistance", "Optimising", "Principled" and "Instinctiveness", as identified by applying "The Decision Making Styles Questionnaire"). Our main hypotheses state that there should be a difference between managers and general (employed) population regarding dominant decision making styles and that several variables (such as sex, years of professional experience, self-efficacy, level of perceived stress, the completeness of information regarding the situation which requires a decision and its difficulty) play specific roles as factors in decision making. We propose that our results should be useful in recruitment processes, talent management and in the development of professional coaching programs which focus on decision-making

Key words: decision making, management, decisional factors, decision making styles, individual differences, management-specific decision making styles.

1. Introduction

We have chosen to focus our attention upon decision making as both practice and professional literature [1], [2], [3], [4], [5] recognize its major importance and impact within any type of managerial activity. Decision making has been identified as one of the three major abilities own by managers, along with implementation and entrepreneurship or visionary skills; it can even be regarded as a the critical function of a management set of activity, which implies the need that people involved in such activity should prove sound theoretical knowledge of the aspect [1]. Thus our paper stands as an initiative of providing a specific line of analysis within the Romanian professional area, by analyzing correlates and factors of decision making along with exploring potential differences between managers and other professionals from the point of view of the specified activity.

Managerial decisions are described by great importance as they are known to have a major impact upon the future of the organization [2]. According to Tarawneh, decision making can be equated to management itself, as it stands as the main difference between the manager and other employees and also as the basis of any other type of activity conducted by the manager, as decisions are continuously been made. The same author identifies within the professional literature different types of decisions that can be made in the discussed context, supporting the idea of the concept: decisions can be related to

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planning, organizing, team selection, leading and control; they can be complex or rather direct, with long or short term impact, flexible or rigid, and crisis – situation decisions.

The importance of research upon decision making is supported by professional literature [3], from the point of view of the high competition between organizations, which stresses the pressure of making the best decisions even under risk conditions, while the success of an organization resides precisely from this type of activity. Also, decisions are tightly connected to the organizational objectives and survival [5].

Most approaches to describing what decision making implies and what defines it relate to the idea of choosing between several alternatives [6], [1] which might refer to taking up a certain action or opting for a specific way of thinking. Today, decision making represents one of the main areas of research in cognitive psychology, which focuses on explaining how decisions are made and what factors influence the process mostly [7]. According to Turpin and Marais [7], we may generally describe the process of decision making based on two phases; the first implies a creative phase, of generating alternatives and the other implies choosing the best course of action. In this context, the best alternative is basically the solution which is best integrated within the purposes and values of the organization [1].

As far as decision making factors are concerned, we propose that their analysis is essential in order to better understand the given process. Research has taken into account several types of factors, aspects which will further be discussed. According to Nooraie [8], factors involved in decision making can be divided in four categories, namely: characteristics of the decision, internal organizational characteristics, external or environment characteristics and characteristics of the management team. On the other hand we will notice that authors debate on the nature of factors which influence mostly the decision making process; for instance, some will focus on personal values, others on available information regarding the issue or organizational context [9]. According to Dietrich [7], factors involved in the discussed issue should be given enough attention given that they might play a major role upon the final results of the decision making process.

The same author refers to individual differences and their importance upon the way factors influence the decision making. For instance, Dietrich describes past experiences and their influence upon decisions: when possible results are obtained from a certain decision, the person will be tempted to make similar choices in the present context; individual differences are also taken into account, such as age, social and economic status or cognitive ability.

In the case of age, its impact upon decision making is referred to from different points of view, being considered a major moderator between objective criteria, strategic assessment as far as decision making is concerned [8]. Dietrich identifies study results which assert that aging is associated to poorer decisions due to cognitive decline but also because the older person tends to overestimate their competence and prefer to report to fewer options [7]. On the other hand, other studies emphasize that the lack of experience and information among young managers affect the way they perceive the complexity of the issue or of the decision along with the awareness of the factors involved in their decisions, while older actors develop more sophisticated approaches to decisions [10]. Other authors emphasize the tendency of young managers to make risky decisions [8].

Age is nonetheless one of the main factors which allow decision making analysis from the perspective of individual differences, along with gender [10]. Studies have shown several differences between men and women from this point of view, such as: women seem to be more influenced by the environment, tend to be more preoccupied with doubt and consequences, value aspects of time and finance, search for a much more quantity of

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information, are more aware of peer pressure, while men focus more on the given information and the definition of the purposes associated to the decision, being affected by not only peer pressure but by several sources of pressure.

An individual difference approach should also focus on other psychological factors, such as the emotional aspect. Some authors assert that we cannot expect full rationality, as the emotional element always occurs [4]. This is an important area to be analyzed and understood, especially as emotional conflicts are shown to lead to poorer decisions [8]. It is argued that positive emotions improve the capacity of problem solving and facilitate the integration of information, even widening the creative function; on the other hand, negative affect may lead to narrower attention and failure of searching for more options [8]. In short, the nature of affectivity influences the quality of the decision making process, affecting the cognitive availability of the subject; the way information and alternative are being analyzed, openness to overall examinations [8]. The approach of decisions from an emotional point of view cannot ignore the aspect of stress, a phenomenon which is highly encountered in most of professional aspects. Authors assert that stress influences the degree in which the person perceives their own control upon the process of decision making [11].

An essential aspect of decision making is represented by decision making styles [5], which are taken into account within the present research as indicators of decision making differences. Such styles are believed to reflect the manager's way of thinking and to explain the way they utilize information. Decision making styles are concepts describing complex cognitive processes which encompass elements of personality, needs, values and self-concept [5]. The concept explains how information is used and is given meaning, in order to reach the decision; professional literature states that decision making styles might predict not only decision-related outcomes but also reactions to stress, motivation and problem-solving skills [9]. Regarding the different types of decision making styles, as it is noticed in professional literature, we may encounter several categories, depending on authors working on the subject and their conceptualizations. On the other hand, some elements have been found as common themes among these categories, namely the importance of context and information presentation and also using intuition [6].

Given the discussed aspects of decision making, we further present a pilot study conducted on a sample of participants including both managers and employees with other occupations, study which intends to draw lines of further investigations regarding the specific of decision making styles among managers along with potential factors affecting this dimension.

2. Pilot study regarding correlates and factors of decision making in management

2.1 Objectives:

The present study proposes two main objectives, namely to investigate possible differences between managers and other employees from the point of view of decision making styles; the second objective is to identify which factors have the most impact upon the manifestation of specific decision making styles, both in the population of managers and employees.

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2.2. Hypotheses:

In order to support our objectives, we propose the following set of hypotheses:

- There are statistically significant differences between managers and employees regarding the dominant decision making style;
- Variables ages, gender and years of professional experience, level of problem difficulty and perceived difficulty of problem correlate to decision making styles;
- High self-efficacy correlates to the following decision making styles: thoroughness, optimizing, control, principles and instinctiveness;
- High perceived stress correlates to the following decision making styles: social s

The present study included the participation of both managers and non-management employees in order to provide the possibility of comparing the two types of activities from the point of view of decision making. The sample included a total number of 36 participants, out of which 16 were managers at the time of conducting the study, while 20 were non-managers. Participants were aged between 18 and 55 years old (N=36, m=35.86) and varied in years of work experience between less than one year and 35 years of experience (N=36, m=10.25). Also, the sample included 11 (30.6%) male participants and 25 female participants (69.4%). All participants voluntarily agreed to take part of the study, have given their consent and were not granted any kind of reward.

2.4. Instruments

All participants were given a set of instruments to complete, in an online version. Before completing standard questionnaires, participants were asked to consider a recent event in which they had to make a decision and to evaluate on one side, the difficulty of the situation and secondly, the amount of information they had regarding the situation (whether the information was whether enough or not in order to make a decision). Both items were scored using a Lickert scale system, ranging from 1 to 5. Further, participants were asked to complete the following instruments:

- The Decision Making Questionnaire (or DMQ): according to Stein & Stein [12] the instrument differentiates between several decision making styles, as follows: thoroughness – which manifests through being open to analyze costs and benefits which are associated to a certain decision; hesitancy – showing a tendency of changing courses of actions; social resistance, or denying external advices; control – namely feeling under control; instinctiveness – using intuition or feelings to make decisions; principled – or emphasizing principles instead of practical aspects; the applied instrument also identifies ”optimizing” as a decision making style.
- The General Self-Efficacy Scale [13]: the self-efficacy consists in a personal belief that the subject is able to perform well in new or difficult tasks, being believed that it works as a facilitator for goal-setting, effort adjustment and persisting in spite of obstacles.
- Perceived Stress Scale [14]: is a scale of measuring stress as it has been perceived by the subject during the past month.

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2.4. Results

Scores obtained after participants have completed the instruments were analyzed using SPSS. The present subsection presents the obtained results:

As far as potential differences between managers and non-managers in decision making styles are concerned, the obtained data do not allow the identification of such differences. In order to test the possibility of such differences, the independent sample T-test was applied for each type of decision making style, obtaining the following results:

- Thoroughness: no significant mean difference was identified between managers (M=15.25; SD=2.69) and non-managers (M=15.65; SD=2.56); $t(36)=-.45$, $p>0.005$.
- Hesitancy: no significant difference was identified between managers (M=10.44, SD=2.70) and non-managers (M=10.95, SD=2.24), $t(36)=-.60$, $p>0.005$.
- Social resistance: no significant difference was identified between managers (M=10.94, SD=2.14) and non-managers (M=11.65, SD=2.23), $t(36)=-.96$, $p>0.005$.
- control: no significant difference was identified between managers (M=18.06, SD=1.80) and non-managers (M=17.90, SD=2.29), $t(36)=.23$, $p>0.005$
- Instinctiveness: no significant difference was identified between managers (M=7.75, SD=1.84) and non-managers (M=7.25, SD=2.51), $t(36)=0.66$, $p>0.005$.
- Optimizing: no significant difference was identified between managers (M=7.81, SD=1.94) and non-managers (M=7.70, SD=1.72), $t(36)=.18$, $p>0.005$.
- Principled: no significant difference was identified between managers (M=8.19, SD=1.79) and non-managers (M=7.50, SD=1.70), $t(36)=1.17$, $p>0.005$.

Since no major differences were identified between managers and non-managers regarding the decision making styles, we continued by analyzing correlated of decision making for the entire sample of participants. Results are reported as follows:

The Pearson Correlation test was applied. No significant correlations were identified between gender and decision making styles. Gender obtained the following correlations: Thoroughness: $r=.14$, $p>0.005$ (N=36); Hesitancy: $r=.17$, $p>0.005$ (N=36); social resistance: $r=.27$, $p>0.005$ (N=36); control: $r=-.00$, $p>0.005$ (N=36); instinctiveness: $r=0.02$, $p>0.005$ (N=36); optimizing: $r=.14$, $p>0.005$ (N=36); principled: $r=-.17$, $p>0.005$ (N=36).

So was the case for work experience, as it has not shown significant correlations with any of the decision making styles (N=36, $p>0.005$): Thoroughness: $r=.04$; Hesitancy: $r=-.23$; social resistance: $r=.12$; control: $r=-.06$; instinctiveness: $r=0.05$; optimizing: $r=-.13$; principled: $r=-.04$.

Significant correlation was identified between the level of information regarding the problem and the optimizing decision style ($r=-.46$, $p<0.005$, N=36). Therefore we may consider that the less information is available, the more people might be tempted to look for ways of optimizing the situation. No other significant correlations were found between the level of information and the rest of decision making styles (N=36, $p>0.005$): Thoroughness: $r=-.19$; Hesitancy: $r=-.19$; social resistance: $r=-.006$; control: $r=-.05$; instinctiveness: $r=-.20$; principled: $r=.11$.

Significant correlations were also found between the difficulty of the problem and Thoroughness ($r=0.35$, $p<0.005$, N=36) and hesitancy ($r=0.48$, $p<0.005$, N=36). No other significant correlations were found between the difficulty of the problem and the rest of the

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decision making styles: social resistance: $r=0.02$; control: $r=.01$; instinctiveness: $r=-.07$; principled: $r=.02$.

As for age, it has not been identified as a variable which significantly correlates to decision making styles: ($N=36$, $p>0.005$): Thoroughness: $r=.14$; Hesitancy: $r=-.16$; social resistance: $r=.17$; control: $r=.06$; instinctiveness: $r=.15$; optimizing: $r=.21$; principled: $r=.04$.

A small but significant correlation was found between perceived stress and hesitancy ($r=.33$, $p<0.005$, $N=36$), while stress did not correlate with the other decision making styles: Thoroughness: $r=-0.3$; social resistance: $r=.29$; control: $r=.04$; instinctiveness: $r=.14$; optimizing: $r=.03$; principled: $r=-.02$.

As for the former proposed variable, namely self-efficacy, it did not correlate significantly to any of the decision making styles: ($N=36$, $p>0.005$): Thoroughness: $r=.18$; Hesitancy: $r=.03$; social resistance: $r=-.09$; control: $r=.14$; instinctiveness: $r=-.22$; optimizing: $r=.01$; principled: $r=.25$.

3. Conclusion

The results obtained through our study data reveal less specific information than expected. Firstly, and most importantly, the data did not support the existence of a significant difference between managers and non-managers as far as decision making styles are concerned. In this case we should consider several aspects. On one hand, there is the objective aspect of the sample size included in our study, which is rather small and can be considered not representative and should be stated as a limit of our study. On the other hand, this lack of difference between managers and non-managers should be considered and further analyzed, in order to verify if it applies on a general population level. From this point of view, we may launch several premises. For instance, it is possible that managers, in the Romanian field of activity, might need better clarifications regarding the required soft skills and competences which are specific to their activity, aspect which can be calibrated through proper training and more specialized educational programs in management. We should also consider the reverse – namely that, since there are no significant differences between managers and non-managers in decision making, perhaps employees and work teams could be involved in the processes of decision making. These are both aspects which deserve further investigations.

In the case of correlates of decision making styles, we proposed gender, years of work experience, perceived stress, self-efficacy and characteristics of the problem to be solved – namely difficulty and quantity of relevant information. Out of these, the following obtained significant correlations: stress and hesitancy (a result easily expected), information and optimizing style, difficulty of decision and hesitancy along with thoroughness (in other words, difficult situations might trigger two options, whether the person tries to take a closer look at associated advantages and disadvantages associated to the decision, or slipper actions might occur). We may notice from the obtained results that rather subjective aspects tend to influence decision making, no matter the status of the individual. This aspect also calls on one hand for further explorations and on the other hand finding ways of managing the effects of variables such as stress upon decision making.

The results obtained by our pilot study also suggests that variables such as gender, experience do not play significant roles in differentiating between decision making styles, and nor does age.

We propose that future efforts should be involved in analyzing decision making styles and their specific dynamics and characteristics; as decision making is considered one of the basic and

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most essential skills of managers, such efforts would bring important information regarding the curricula to be covered in training and educating future Romanian managers.

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