

JOURNAL OF  
BEHAVIOR STUDIES IN ORGANIZATIONS

**The Effects of Workload, Work Control and Self-Efficacy in Decision Making on Decision Making Styles**

*Enkh-Otgon NARANGEREL, Anil Boz Semerci*

Hacettepe University, Turkey

Received: 7 May 2020

Revised: 21 June 2020

Accepted : 27 July 2020

---

**ABSTRACT**

The aim of this study was to investigate the mediating role of self-efficacy in decision making between the relationship of workload, work control and decision-making styles. Although the decision-making process seems basically the same for every individual, it is different for each individual in terms of content. The reason for this is the methods used by individuals in making decisions and their approach to problems are different. The data was gathered from 252 government officials, chiefs, branch managers and heads of the departments of the Republic of Turkey. The data was analysed with structural equation model. The results indicate that there was a negative relationship between the level of workload and vigilant decision-making style, and a positive relationship with buck-passing, procrastination, and hypervigilance decision making styles. On the other hand, a positive relationship between work control and vigilance decision-making style, and a negative relationship between buck-passing, procrastination and hypervigilance decision-making styles were observed. At the same time, there was a negative relationship between workload and self-efficacy in decision-making, yet a positive relationship was found with work control. In addition, a full mediating role in the relationship between workload in decision-making self-efficacy, work control, vigilant, buck-passing, and procrastination decision-making styles; a partial mediating role was found in the relationship between workload and hyper vigilant decision-making style in work control were found separately. The results were interpreted with the light of literature and lead to develop practical suggestions for managers and employees.

---

**Keywords:**

Workload, Work Control, Self-Efficacy, Decision Making Styles.

## Introduction

Every decision taken throughout the life has a result, and this is the person who made these decisions has to bear their results (Miller & Byrnes, 2001). Individuals throughout their lives both take simple daily decisions that do not seem important and also decisions that have significant effects on their lives. While the right decisions can make individuals' lives easier and make them happy, the wrong ones can make life difficult for individuals and offer them an unhappy life.

Decision making behaviour can be defined as a process consisting of sequential stages. The decision-making process begins with the awareness of a situation that needs to be decided. The individual evaluates this situation with a special approach, determines some options as a result of the evaluation process, and thinks about the possible outcome of each option and goes to the selection process. When the individual determines his / her decision for this situation the process will be completed (Alver, 2011).

Although the decision-making process seems basically the same for every individual, it is different for each individual in terms of content. The reason for this is that the methods used by individuals in making decisions and their approach to problems are different. These different methods are called as decision-making styles. The decision-making process of each individual is shaped according to their decision-making style. Harren (1979) defined the style of decision making as “the reaction and typical interpretation of the individual to his / her decision-making duties”. The decision-making event is not as simple as it seems and many factors have an effect on the decision-making process of the person (Tasdelen, 2001).

In the current research, workload and work control concepts will be examined as factors that can affect decision making styles. Employees with a high level of workload perception are crushed under the pressure of incomplete tasks and this can affect their reactions and interpretations of decision-making duties which is the decision-making styles. Similarly, the level of work control of the employees can provide freedom in decision-making process and affect the decision-making styles. However, the effect of both workload and work control on decision-making styles may arise from one's self-efficacy for decision-making. In another words, workload and work perception of control will affect one's self-efficacy for decision making and this situation will be able to differentiate their decision-making styles. In the next section of the study the definitions of decision making, workload-work control and self-efficacy variables are explained, and a conceptual framework of the study was formed.

## Literature Review

### *Decision-making styles*

Decision making process is defined in several ways by different researchers. Guçray (2001) define as, “the process of gathering the necessary information and to evaluating the information and to choosing the ones that are suitable for the condition”. Sağır (2006) define decision making process as a systematic reasoning process and said that “it is a selection process that collects information about the situation encountered and this information is handled in order to reach the result”. Kuzgun (2014) stated that “decision-making is a cognitive and behavioural effort to solve the problem when there is more than one alternative for the situation that is thought to meet the needs”. The common features of these definitions can be listed as follows:

- 1) The goal of decision making is to solve the problem.
- 2) While making the decision, evaluation is made among the options.
- 3) Among the options, the most effective in reaching the target is chosen.
- 4) Decision making is not only one action, but it takes place in a process.

It is seen that many models and theories have been developed by researchers from different disciplines in order to explain decision making process. Janis and Mann (1977) proposed a decision-making theory based on an arousal theory. They claimed that selection process may lead to complex situations. These complex situations can, in turn, cause personal conflicts. This is especially valid if options have potentially serious deficiencies, which in turn creates arousal. Arousal tends to increase until a person makes his/her decisions and then decreases. The conflict related to decision making of an individual might be good or bad. Whether the conflict is good or bad depends on the amount of stress a person feels. The complexity of decision making demonstrates a stressful action. This stress can be caused by objective, personal, material or subjective harm caused by the decision maker's choice (Janis & Mann, 1977). In another words, they may experience psychological unrest and conflict when evaluating and calculating the costs of their current actions. In this manner, conflict theory suggests patterns on how decision-makers behave in stressful decision-making process and what are their coping mechanisms. According to Janis and Mann (1977), individuals can exhibit four different decision behaviours which are; vigilant, buck-passing, procrastination, and hypervigilance decision making styles.

*Vigilant decision-making style:* People who act with caution in decision-making carefully search for information about the decision situation before making a decision and are those who decide after careful consideration of the alternatives. The person who makes careful decisions is optimistic about finding a solution and evaluates all alternatives in detail before finally making a decision.

*Buck-passing decision-making style:* People who show avoidant behaviour in deciding to tend not to decide, and often leave decisions to other people. In this way, it avoids making decisions by transferring all liability to other people.

*Procrastination decision-making style:* People who display procrastination decision-making behaviour are those who constantly try to delay decision making. They try to postpone decisions even if there is no logical reason. Although decision-making responsibilities are known to some extent, under the pressure of the decision-making process, the decision was postponed, or no decision was made at the end.

*Hypervigilance decision making style:* People who show panic behaviour in decision making they feel themselves under time pressure and under intense stress when they encounter a result. In the end, they tend to behave thoughtlessly and bring emergency solutions. In other words, if a person is not optimistic about solving problems under current circumstances and thinks there is not enough time for a detailed investigation, he can choose the worst alternative. Such strategy means completing the process and relieving stress without thinking about the effects of decision alternatives. Therefore, when evaluated pragmatically, it means reaching the end of the conflict.

These patterns developed by Janis and Mann on how decision makers behave in stressful situations constitute decision-making styles. Many researchers conducted several empirical studies on antecedents and consequences of decision-making styles. In her study of 492 university students, Deniz (2006) studied the relationship between decision-making styles and coping with stress. As a result of the study, it has been concluded that students who use vigilant decision-making style are more successful in coping strategies than students who use buck-passing, procrastination, and hypervigilance styles. In another study conducted by Katman (2017), it was found that the decision-making self-efficacy levels and vigilant decision-making styles of the high school students participating in the research were positively related, while the buck-passing, procrastination, and hypervigilance styles were negatively related. A total of 721 people participated in another study conducted by Tatar et al. (2017) to explain the relationship between the decision-making styles and the learned resourcefulness. According to the results, it was found that there is a positive relationship between learned strength and vigilant decision-making style, procrastination decision-making style

and negative relationship with buck-passing decision-making style. Allwood and Salo (2012), also examined the relationship between decision-making styles and stress in their survey of 472 public institution employees. It was found that buck-passing decision-making style was positively associated with perceived stress. There are many work-related variables like stress levels of employees that can affect individuals' decision-making styles. Workload and work control can be also considered some of the predictors in decision-making process.

#### ***Workload and work control as predictors of decision-making styles***

The concept of workload has been defined by many researchers in different ways. One of the oldest definitions found in the literature on the concept of workload was made by Weiner. Weiner (1982) defined the workload as “various pressures that affect employee responses and performance”. Hart and Staveland (1988) stated the workload as “the capacity of the employee to do a job” or “perceptual relationship between the resources provided to do the job and the amount of work and responsibility undertaken”. Workload in terms of ensuring harmony between the individual and the work is very important. When balance is achieved, employees do their jobs willingly and their productivity increases. In addition, employees can develop themselves professionally and make plans for their careers and thus keep their motivation at a high level (Ardic & Polatci, 2009). On the other hand, in cases where the workload balance is disturbed, in other words, when the employees are faced with the high level of workload, the employees' commitment to the job and organization decreases and turnover intention increases (Xiaoming, Ma, Chang & Shieh, 2014).

Work control can be defined as “the freedom to make decisions about the work of the employee”. These decisions can relate to all aspects of the business, including when, where, how to work and what work to do. An employee with a high level of work control is to make his/ her own work program, choose the tasks to be performed and has the freedom to decide how to carry out these tasks. In the case of low work control, the work program is prepared in advance, the tasks and performance criteria determined and notified to the employees (Spector, 2006).

The decision-making process is expected to be closely related to the perception of workload and of work control, as it is related to the resources, authority, skills and abilities of the person. Janis and Mann (1977) state that the complex nature of decision making makes this process stressful. That is, individuals may experience stress and conflict when evaluating their knowledge about alternatives and calculating the costs of their possible decisions. Accordingly, incompatibility between the individuals' skills and resources and the complexity, difficulty and/or duration of the work can directly affect the decision-making styles of individuals. Employees who perceive high level of workload tend to leave the decision taking responsibility to others or to make quick decisions. It is not expected to make a decision by evaluating the alternatives carefully and examining the details by individuals who feels pressure. Thus,

*Hypothesis 1a: There is a negative relationship between workload and vigilant decision-making style.*

*Hypothesis 1b: There is a positive relationship between workload and buck-passing decision-making style.*

*Hypothesis 1c: There is a positive relationship between workload and procrastination decision-making style.*

*Hypothesis 1d: There is a positive relationship between workload and hypervigilance decision making style.*

Similar to workload, perception of work control will also have an impact on an individual's decision-making styles. An individual who has a perception that he/she can control his/her job can make careful assessments during the decision-making phase. Having a control over every aspect of the work, including when, where, how, and what work to do will prevent the individual from postponing, avoiding and making panic on his/her decision-making process. That is,

*Hypothesis 2a: There is a positive relationship between work control and vigilant decision-making style.*

*Hypothesis 2b: There is a negative relationship between work control and buck-passing decision-making style.*

*Hypothesis 3c: There is a negative relationship between work control and procrastination decision-making style.*

*Hypothesis 3d: There is a negative relationship between work control and hypervigilance decision making style.*

### ***Decision-making self-efficacy as a mediator between workload, work control and decision-making styles***

Self-efficacy is "belief in one's capabilities to organize and execute the sources of action necessary to manage prospective situations" (Bandura, 1986). Self-efficacy refers to "personal judgments of performance capabilities in a given domain of activity" (Schunk, 1985). Self-efficacy determines how people feel, think, motivate and act (Bandura, 1994). Self-efficacy in decision-making is determined by people's more autonomous behaviour and self-confidence. This is the ability to express people's thoughts about anything, to be independent from others when making decisions (Hepler & Feltz, 2012). A person with high self-efficacy in decision-making feels capable and confident in each steps of decision-making process. When things get worse, they can accept their mistakes and learn from failure. On the other hand, a person with low self-efficacy acts in line with other people's decisions and recommendations and is afraid of failure in decision-making-process (Janis and Mann, 1977). Conflict theory, developed by Janis and Mann (1977), also states that individuals with self-efficacy in decision-making have a positive perception and tend to show vigilant decision-making style. On the other hand, those with low self-efficacy tend to delay the decision, avoid, panic and experience more stress in decision-making process (Mann et al., 1989).

Self-efficacy is also considered as an important factor in work life. Molero et al., (2018) examined the relationships between nurses' self-efficacy, self-esteem and workload. Data were collected from 1307 nurses and the results showed that workload has negative correlations with both variables (self-esteem and self-efficacy). In other words, self-esteem and self-efficacy levels of nurses decrease as the workload increases. Brouwer et al., (2011) also examined the relationships between workload, work control, social support and perceived self-efficacy. The results revealed that there was a negative relationship between perceived workload and self-efficacy. Thus, as the workload level increases perceived self-efficacy levels decreases. Considering the relationship of self-efficacy with workload, work control and decision-making styles, it is proposed that self-efficacy in decision-making has a mediator role between workload, work control and decision-making styles. That is;

*Hypothesis 4: Self-efficacy has a mediating role in the relationship between workload, work control and (vigilant, buck-passing, procrastination and hypervigilance) decision-making styles.*

## Method

### Sample

The data collection procedure consisted of contacting employees working in public sector in Turkey via email or phone. The snowball sampling method was implemented by a network of researchers and respondents. Of the 300 questionnaires distributed, 259 returned, but when the missing data were examined, it was seen that 252 questionnaires were filled in completely and were suitable for use in the analyses. The total response rate is 84%. 54.8% of the participants are women and 45.2% are men. The majority of the sample (54.4 %) is in the 26-35 age range and are married (56.7 %).

### Measures

*Decision-making styles* and *self-efficacy in decision-making* were measured using the “Melbourne Decision-Making Questionnaire” (MDMQ), developed by Mann, Burnett, Radford and Ford (1997) was used. The scale was adapted to Turkish by Deniz (2004). The first part of MDMQ consists 6 items aims to determine self-efficacy. The second part of the MDMQ consists of 22 items and 4 sub-factors to measure decision-making styles. The responses were rated on a five-point Likert scale format, ranging from 1 = ‘strongly disagree’ to 5 = ‘strongly agree’.

*Workload* was measured using the "Demand-Control-Support Questionnaire" developed by Sanne (2005). *Work control* was measured using the related items (5 items) of the “psychological empowerment” scale developed by Spreitzer (1995). Adaptation of these two scales into Turkish and reliability studies were performed by Bolat (2011). The responses were rated on a five-point Likert scale format, ranging from 1 = ‘strongly disagree’ to 5 = ‘strongly agree’.

## Results

Before starting to hypotheses tests, the confirmatory factor analysis was performed and the model fit indicators related to the measurement model that was created to determine the factor structures of workload, work control, decision-making self-efficacy and decision-making styles were found to be acceptable. ( $\chi^2 / sd = 2.41$ ; AGFI = 0.90; GFI = 0.92; CFI = 0.95; RMSEA = 0.08 and SRMR = 0.08). All items were uploaded above 0.40.

After confirmatory factor analysis reliability analyses were performed. If the variables and items in the research model are examined one by one, the internal consistency coefficient of the workload scale was first found. (Cronbach's alpha = .88). Similarly, when examining the variable and items of work control, the Cronbach's alpha value of the scale (Cronbach's alpha = .82) When the decision-making self-efficacy variable and the 6 related items were examined, the Cronbach's alpha value of the scale was found to be high, and when the item was subtracted from the item-total correlation, there was no evidence of an increase in the Cronbach's alpha value when the item was analysed. When the reliability analysis of decision-making styles are examined, the internal consistency values of cautious (Cronbach's alpha = .76), buck-passing (Cronbach's alpha = .73), procrastination (Cronbach's alpha = .75) and hypervigilance (Cronbach's alpha = .74) are high or acceptable. levels were observed.

For hypotheses testing, the structural equation modelling was performed. In the first step of model, it was observed that workload and work control had significant relationships on the dimensions of decision-making styles (Figure 1). It was found that workload negatively affects vigilant decision-making style ( $\beta = -.10$ ,  $p < 0.05$ ). However, the workload has positive impact on buck-passing decision-making style ( $\beta = .17$ ;  $p < 0.01$ ), procrastination decision-making style ( $\beta = .23$ ;  $p < 0.01$ ) and hypervigilance decision-making style ( $\beta = .25$ ;  $p < 0.01$ ). It has been observed that it affects.

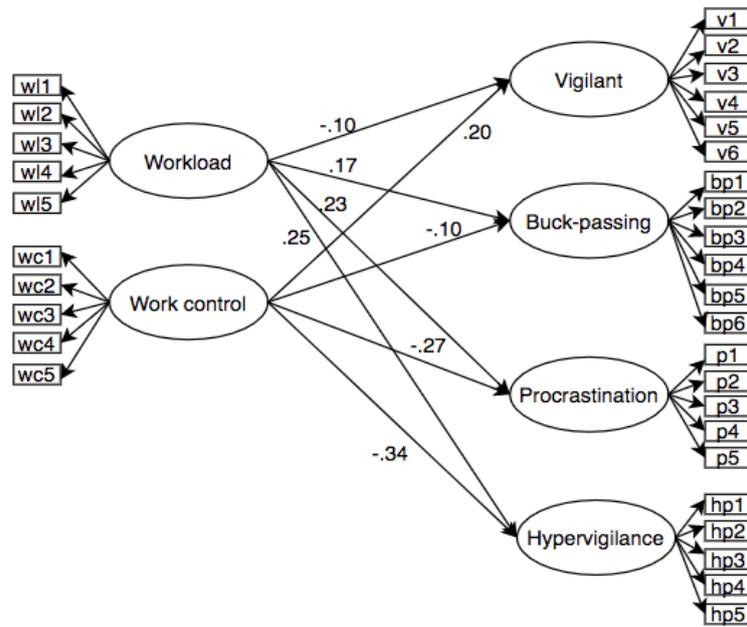


Figure 1. Direct relationship between workload and work control and decision-making styles

It has been determined that work control positively affects vigilant decision-making style ( $\beta = .20$ ,  $p < 0.01$ ) and negatively affects buck-passing decision-making style ( $\beta = -0.10$ ;  $p < 0.01$ ), procrastination decision-making style ( $\beta = -0.27$ ;  $p < 0.01$ ) and hypervigilance decision-making style ( $\beta = -0.34$ ;  $p < 0.01$ ).

For the mediation role of decision-making self-efficacy, firstly, it was seen that there was a significant relationship between workload and decision-making self-efficacy. While workload negatively affects decision-making self-efficacy ( $\beta = -0.16$ ,  $p < 0.05$ ); work control positively affects decision-making self-efficacy ( $\beta = 0.24$ ,  $p < 0.01$ ). Besides, when the results of structural equality analysis between decision-making self-efficacy and decision-making styles were examined, it was seen that decision-making self-efficacy had significant relationships on the dimensions of decision-making styles. Decision-making self-efficacy has a positive effect on vigilant decision-making style ( $\beta = 0.40$ ,  $p < 0.01$ ), on the other hand, has negative affect on buck-passing decision-making style ( $\beta = -0.60$ ;  $p < 0.01$ ), procrastination decision-making style ( $\beta = -0.72$ ;  $p < 0.01$ ) and hypervigilance decision-making style ( $\beta = -0.87$ ;  $p < 0.01$ ).

The relationship between workload and vigilant, buck-passing, procrastination decision-making styles become meaningless when decision-making self-efficacy is included in the model and full mediation is in question. However, the relationship between workload and hypervigilance decision-making style remained significant, but the beta value ( $\beta = 0.13$ ,  $p < 0.05$ ) decreased when decision-making self-efficacy is included in the model, which suggests partial mediation.

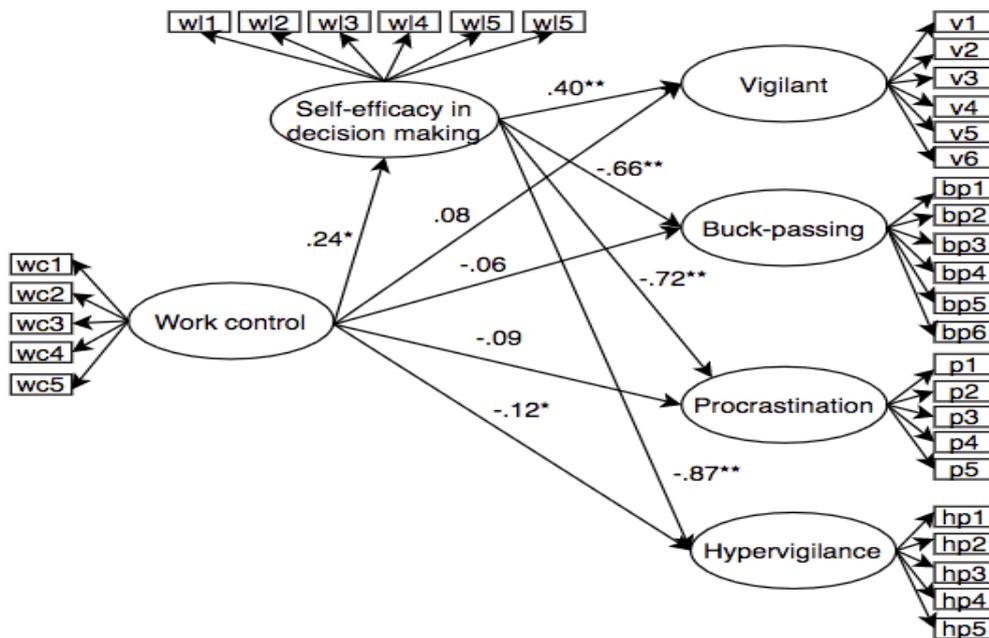


Figure 2a. The mediating role of self-efficacy in decision-making in the relationship between workload and decision-making styles.

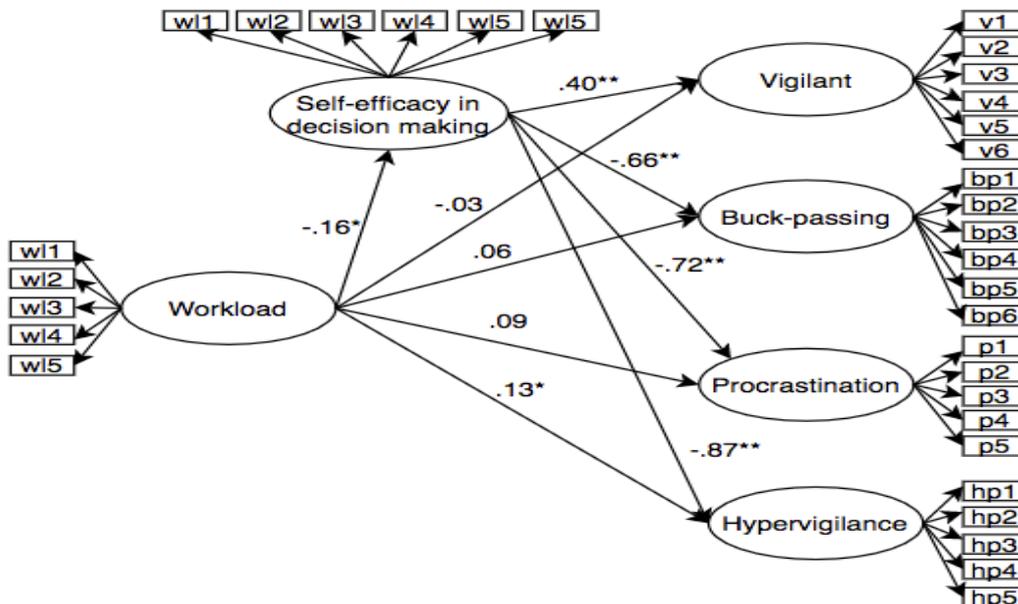


Figure 2b. Mediating role of self-efficacy in decision making in relation between work control and decision-making styles

Similarly, the relationship between work control and vigilant, buck-passing, procrastination decision-making styles has become meaningless when the decision-making self-efficacy is included in the model, which indicates the full mediating role of decision-making self-efficacy. However, for work control and hypervigilance decision-making style relationship, the significance continued, but the beta value ( $\beta = -.12, p < 0.05$ ) decreased and it was seen that the decision-making self-efficacy has a partial mediating role.

## Discussion

In this section, findings on inter-variable relations will be discussed with the help of theory and other studies, and the contribution of these relations to the literature will be explained. In addition, suggestions will be presented to managers, limitations and suggestions to researchers will be provided.

### *Contributions to literature*

The results of the current study revealed that there were significant relationships between workload, work control and decision-making styles. While a negative relationship was obtained between workload and vigilant decision-making style, there is positive relationships between workload and buck-passing, procrastination, and hypervigilance decision making styles. Findings regarding the relationship between workload, work control and decision-making styles are supported on the basis of Karasek (1979) “demand-control” model and Janis and Mann (1977) “conflict” model of decision-making. According to the demand-control model, it is stated that stress levels are high in jobs with high workload and low work control. Conflict theory, on the other hand, proposes patterns on how decision-makers behave in situations that cause conflict and stressful decision making. Accordingly, the results of this study indicated that, in cases where the workload is high and work control is low, which leads to stress, individuals are more panic, tend to delay and avoid from taking decisions. These findings not only show consistency with ‘demand-control’ and ‘conflict’ models, but also extends and provide empirical supports.

Another part of the findings revealed that while self-efficacy in decision-making fully mediates the relationship between workload, work control and vigilant, buck-passing, procrastination decision-making styles, it has a partial mediating role in the relationship between workload, work control and hypervigilance decision-making style. According to Janis and Mann (1977), people who display panic behaviour in decision making feels intense stress and time pressure.

These people behave thoughtlessly and urgently in order to find a solution. Compared to other decision-making styles, people who make panic decisions experience more stress and this stress level do not decrease even after taking a decision. Keinan (1987) stated that individuals exhibiting panic decision-making behaviour felt deep regret after making a decision and their panic states did not end. Masureik et al., (2014) also indicated that stress and anxiety may increase the panic decision-making behaviour, that is they were strongly and positively correlated with hypervigilance decision-making behaviour. Therefore, it can be said that many factors may have direct and / or indirect effects on panic decision-making behaviour. The findings of this study consistently revealed that, workload and work control have both direct and indirect impacts on hypervigilance decision-making style. Individuals with a high workload and a low level of work control perceive low level of self-efficacy in decision-making and this make them panic.

To the best of authors knowledge such an examination between workload, work control and decision-making styles have been never reported. Therefore, these findings contribute to the literature by comprehensively reviewing the variables’ relationships and providing empirical evidence.

### *Practical Implications*

Employees are one of the most important factors that influence organizations to operate effectively and efficiently. Therefore, in order to ensure the success of the organization, managers need to manage the employees’ perceptions related to work and organizations. The workloads of the employees should be reduced, and their perception of work control should be increased in order to increase their efficiency and effectiveness in decision-making. Training activities can be organized to prevent negative consequences of high workload level and low work control level. It is necessary to

decrease the perceptions of workloads of employees and increase their perception of work control in order to increase their vigilant decision-making behaviours. Careful decision-makers can make fewer mistakes and be more efficient. In addition, self-efficacy in decision-making directly affects the employee's vigilant decision-making behaviours. Those who work in an environment with a high workload and a low level of work control tend to have more buck-passing, procrastination decision-making styles. Managers should consider all these relationships and help employees to develop self-efficacy and manage workload and work control in decision-making process.

#### *Limitations and suggestions for further studies*

Despite its contributions to the literature and practice, this study has some limitations. The first limitation concerns the data collection issue. In this study, data was collected using quantitative research method (questionnaire technique) about workload, work control, decision-making styles and decision-making self-efficacy. Collecting all variables in the same timeframe and from the same individuals may cause common method variance problem. All data may have been collected from working people and may have caused the relationship between variables to be more or less than necessary. In future research, in addition to self-assessments made by people themselves, criteria that can yield more objective results and methods that can be evaluated by others can be used to eliminate this problem. Qualitative research methods and interview techniques can be applied to reach more comprehensive results.

The simultaneous collection of data is another limitation of the study. To prevent this, a longitudinal investigation can be preferred and the continuity and stability of variables over time can be considered.

Another limitation of the study is the collection of data only from the state institution. Collecting data from individuals working under a single government agency reduces the generalizability of research results. Collecting data from a variety of institutions on a particular profession group in future studies will increase the generalizability of the research.

#### **References**

- Alver, B. (2011). Psikolojik danışma ve rehberlik eğitimi alan öğrencilerin empatik beceri ve karar verme stratejilerinin çeşitli değişkenlere göre incelenmesi. *Sosyal ve Beşerî Bilimler Araştırmaları Dergisi*, 1 (14), 9-34
- Allwood, C. M., & Salo, I. (2012). Decision-making styles and stress. *International Journal of Stress Management*, 19(1), 34.
- Ardıç, K. & Polatçı S. (2009). Tükenmişlik sendromu ve madalyonun öbür yüzü: İşle bütünleşme. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 32, 21-46.
- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*, Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A., & Self-efficacy In, V. S. (1994). Ramachandran. *Encyclopedia of human behavior*, 4, 71-81.
- Bolat, O. Ğ. (2011). ĞĞ Yüğü, ĞĞ Kontrolü ve Tükenmişlik ĞliĞkisi, *Atatürk Üniversitesi Ğktisadi ve Ğdari Bilimler Dergisi*, 25 (2), 87-101.
- Brouwer, S., Franche, R. L., Hogg-Johnson, S., Lee, H., Krause, N., & Shaw, W. S. (2011). Return-to-work self-efficacy: development and validation of a scale in claimants with musculoskeletal disorders. *Journal of occupational rehabilitation*, 21(2), 244-258.
- Deniz, M. E. (2004). Investigation of the relation between decision making self-esteem, decision making style and problem solving skills of university students. *Eurasian Journal Of Educational Research (Ejer)*, 15 (13), 23-35.
- Harren, V. A. (1979). A model of career decision making for college students. *Journal Of Vocational Behavior*, 14 (2), 119-133.
- Hart, S. G., & Staveland, L. E. (1988). Development of NASA-TLX (Task Load Index): Results of empirical and theoretical research. *In Advances in psychology*, 52, 139-183. North-Holland.

- Hepler, T. J., & Feltz, D. L. (2012). Take the first heuristic, self-efficacy, and decision-making in sport. *Journal of Experimental Psychology: Applied*, 18(2), 154.
- Gucray, S. S. (2001). Ergenlerde karar verme davranışlarının öz saygı ve problem çözme becerileri algısı ile ilişkisi. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 8 (8),106-121.
- Janis, I. L., & Mann, L. (1977). *Decision making: A psychological analysis of conflict, choice, and commitment*. Free press.
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative science quarterly*, 24(2), 285-308.
- Katman, M. (2017). Meslek Yüksekokulu'nda Öğrenim Gören Öğrencilerin Öğrenilmiş Güçlülük Düzeyleri İle Karar Verme Stilllerinin İncelenmesi (Yayımlanmamış Yüksek Lisans Tezi). *Karamanoğlu Mehmetbey Üniversitesi Sosyal Bilimler Enstitüsü*, Karaman.
- Keinan, G. (1987). Decision making under stress: scanning of alternatives under controllable and uncontrollable threats. *Journal of personality and social psychology*, 52(3), 639.
- Kuzgun, Y. (2014). *Meslek gelişimi ve danışmanlığı (4. Baskı)*. Ankara: Nobel Yayınları
- Mann, E., Burnett, P., Radford, M., & Ford, S. (1997). The Melbourne decision making questionnaire: an instrument for measuring patterns for coping with decisional conflict. *Journal of Behavioral Decision Making*, 10, 1-19.
- Mann, L., Radford, M., Burnett, P., Ford, S., Bond, M., Leung, K., Nakamura, H., Vaughan, G., & Yang, K.S. (1998). Cross-cultural differences in self-reported decision-making style and confidence. *International Journal of Psychology*, 33, 325-335.
- Measureik, N., Roman, N. V., Roman, N. J., & Toefy, A. (2014). Stress, anxiety levels and decision making styles of South African senior learners: Results of a science fair project. *International Journal of Education*, 6(3), 57.
- Miller, D. & Brynes, J. P. (2001). Adolescents' decision making in social situations: a self-regulation perspective. *Journal of Applied Developmental Psychology*, 22 (3), 237-256.
- Molero Jurado, M. D. M., Pérez-Fuentes, M. D. C., Gázquez Linares, J. J., & Barragán Martín, A. B. (2018). Burnout in health professionals according to their self-esteem, social support and empathy profile. *Frontiers in psychology*, 9, 424.
- Sagır, C. (2006). Karar verme sürecinin etkileyen faktörler ve karar verme sürecinde etğin önemi: Uygulamalı bir araştırma. Yayımlanmamış Yüksek Lisans Tezi. Trakya Üniversitesi Sosyal Bilimler Enstitüsü. Edirne.
- Sanne, I., Mommeja-Marin, H., Hinkle, J., Bartlett, J. A., Lederman, M. M., Maartens, G., ... & Rousseau, F. (2005). Severe hepatotoxicity associated with nevirapine use in HIV-infected subjects. *The Journal of infectious diseases*, 191(6), 825-829.
- Schunk, D. H., & Ertmer, P. A. (2000). Self-regulation and academic learning: Self-efficacy enhancing interventions. In *Handbook of self-regulation* (pp. 631-649). Academic Press.
- Spector, P. E. (2006). *Industrial and organizational psychology: Research and Practice*, New Jersey: John Wiley and Sons.
- Spreitzer, G. M. (1995). Individual empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38, 1442-1465.
- Tasdelen, A. (2002). Öğretmen adaylarının farklı psiko-sosyal değişkenlere göre karar verme stilleri. Yayımlanmamış Doktora Tezi, Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü, İzmir.
- Xiaoming, Y., Ma, B. J., Chang, C. L., & Shieh, C. J. (2014). Effects of workload on burnout and turnover intention of medical staff: A study. *Studies on ethno-medicine*, 8(3), 229-237.
- Weiner, J. S., 1982. *The measurement of human workload: Ergonomics*.