

# DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft  
ZBW – Leibniz Information Centre for Economics

Tovmasyan, Gayane

## Article

How do psychological factors, cognitive biases and cognitive dissonance affect the work performance and decision making?

**Reference:** Tovmasyan, Gayane (2023). How do psychological factors, cognitive biases and cognitive dissonance affect the work performance and decision making?. In: Marketing i menedžment inovacij 14 (3), S. 26 - 36.  
[https://mmi.sumdu.edu.ua/wp-content/uploads/2023/09/04\\_A-713-2023\\_Tovmasyan.pdf](https://mmi.sumdu.edu.ua/wp-content/uploads/2023/09/04_A-713-2023_Tovmasyan.pdf)  
doi:10.21272/mmi.2023.3-04.

This Version is available at:  
<http://hdl.handle.net/11159/631424>

## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/econis-archiv/>

## Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.  
<https://zbw.eu/econis-archiv/terms-of-use>

## Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.*

## HOW DO PSYCHOLOGICAL FACTORS, COGNITIVE BIASES AND COGNITIVE DISSONANCE AFFECT THE WORK PERFORMANCE AND DECISION MAKING?

Gayane Tovmasyan,  <https://orcid.org/0000-0002-4131-6322>

Ph.D., Associate Professor, Armenian State University of Economics, Republic of Armenia

Public Administration Academy of the Republic of Armenia, Republic of Armenia

[tovmasyangayane@yahoo.com](mailto:tovmasyangayane@yahoo.com)

**Type of manuscript:** research paper

**Abstract:** *This paper outlines the viewpoints and opposing perspectives in the scientific discourse on the issue of the impact of psychological factors on the working environment. The analysis of the literature proves that the efficiency of work performance and decision making in organizations also depends on psychological factors. The main goal of the paper is to explore whether psychological factors, cognitive biases and cognitive dissonance affect work performance and decision making. Understanding the impact of psychological factors on the working environment is important for organizations and decision-making processes, as based on the results, innovative solutions may be applied for better management and HR policies. Methodological instruments are based on a survey and Pearson chi-square analysis. This empirical study presents survey results among 100 participants. According to the results, 83% of respondents think that the most effective managers/employees are calm and balanced people (phlegmatic). Cognitive biases and dissonance hinder work performance, although sometimes people do not realize it. Based on the situations that were frequent among participants, the most frequent cognitive biases are choice-supportive bias, groupthink, authority bias, ostrich effect, IKEA effect, optimism bias, confirmation bias, anchoring bias, etc. However, 90% do nothing to overcome cognitive biases, as many of them do not realize that they have biases. Similarly, 75% mentioned that they have experienced cognitive dissonance in their behavior, but they do nothing to overcome it. The study empirically and theoretically validates that cognitive biases and dissonance can affect decision-making, communications and interactions with other people. The results of the Pearson chi-square analysis showed that mainly phlegmatic people have experienced the influence of cognitive biases and cognitive dissonance on their work experience. Additionally, mainly choleric and phlegmatic people try to overcome cognitive biases, while sanguine people try to do something to overcome cognitive dissonance. The analysis may be useful for organizations, managers, and workers to understand the hindering factors that may affect decision making and work performance. Additionally, the paper recommends using innovative methods of group decision making, developing critical and innovative thinking skills among employees, adjusting HR policies, applying innovative forms and styles of leadership and participative management, etc.*

**Keywords:** management; psychology; cognitive bias; cognitive dissonance; decision making; survey; innovative thinking; HR policy.

**Received:** 31 May 2023

**Revised:** 28 August 2023

**Accepted:** 01 September 2023

**Funding:** There was no funding for this research.

**Publisher and Founder:** Sumy State University

**Cite as:** Tovmasyan, G. (2023). How Do Psychological Factors, Cognitive Biases and Cognitive Dissonance Affect the Work Performance and Decision Making?. *Marketing and Management of Innovations*, 14(3), 26-36. <https://doi.org/10.21272/mmi.2023.3-04>



**1. Introduction.** Work performance efficiency depends on many factors. Among the most important factors are psychological factors. Depending on a person's psychology and personality, he or she may act differently in different situations. Psychological factors also influence decision making, negotiations, communications, etc. Currently, it is crucial to take into account psychological factors in organizational performance, as anticipating it may cause other problems, such as inefficient jobs, conflicts, dissatisfaction, profit losses, etc. Additionally, understanding the impact of psychological factors on the working environment is significant for organizations and decision-making processes, as based on the results, innovative solutions may be applied for better management and in HR policies.

Cognitive biases and cognitive dissonance are also worth considering in organizations. Every person has cognitive biases, some know about it, while many people do not understand how biases affect their behavior. Cognitive dissonance also has an impact on decision making. Every human has its own psychological characteristics, which can have positive and negative effects on their life and work performance. Some people are impulsive, some are quiet, some are decisive, etc. When people work in groups, there is a need for cooperation towards the implementation of organizational goals. So here is a need to manage people, for which social-psychological methods of management are needed. To be successful, organizations should take into account the psychological features of their employees to lead them effectively. Based on the evaluations of the impact of psychological features, managers may apply innovative methods of decision making, team working, conflict resolution, and negotiation processes.

Here comes the necessity of such studies, which are essential in the current changing environment. Good communications, effective negotiations, data-driven decisions, networking and long-term cooperation are necessary for every organization. Therefore, it is necessary to analyse how psychological factors and cognitive biases of employees influence all the abovementioned processes. Based on such studies, organizations may take necessary steps and elaborate effective and innovative strategies for being successful and creating a good work environment based on mutual understanding and healthy working collaborative relationships.

The aim of this paper is to determine how psychological factors, cognitive biases, and cognitive dissonance affect work performance and decision-making, whether employers and managers are aware of their cognitive biases, and how they think cognitive biases, dissonance, and psychological factors affect their work efficiency. To achieve this goal, surveys were conducted among workers and managers in Armenia, the results of which show that the most frequent cognitive biases are choice-supportive bias, groupthink, authority bias, the ostrich effect, the IKEA effect, optimism bias, confirmation bias, anchoring bias, etc. The majority do nothing to overcome cognitive biases or dissonance. The results of the study may be a very good basis for organizations' management systems. Based on such study results, they should try to overcome the obstacles and difficulties in work performance that are connected with the psychological factors of employees.

Actually, the novelty of the paper is taking into account psychological factors of employees on work performance and decision making and based on the results adjusting HR policies, management processes, leadership styles in the organizations, etc. The applied survey may be used in different organizations as a guide for finding the issues and resolving them. It may bring innovative solutions and a positive working environment.

The structure of the paper is as follows. First, some literature sources are analysed regarding the topic of the paper, and then the methodological section presents the main methods used for the research. Afterwards, the research results are presented, followed by a discussion and conclusions. Additionally, some recommendations and limitations are mentioned.

**2. Literature Review.** Work efficiency depends not only on motivation (Tovmasyan & Minasyan, 2020) but also on psychological factors.

The psychology of managers and their personalities influence the effectiveness of management and the decision-making process (Tovmasyan, 2017). The four types of temperament (Sanguine (talker), Choleric (doer), Melancholic (thinker), and Phlegmatic (watcher)) play significant roles in management (Mahusay-Baria, 2015). Management style is also connected with psychological factors. For example, extroverted persons prefer a participative management approach (Salimi et al., 2011). The main characteristics of people in the workplace are also connected with gender. For example, women opt for group decision-making, while men often choose solitary decision-making. During the decision-making process, women have the following characteristics: analytical reasoning, consulting, honesty and instinctive cognition (Minasyan & Tovmasyan, 2020). According to Yan et al. (2020), psychological climate has a significant impact on the performance and wellbeing of employees. Psychological empowerment (significance, competence, autonomy and influence) has an impact on employees' career satisfaction (Arogundade & Ayodeji, 2015). Salami (2008) asserted that organizational commitment among employees can be predicted by factors such as emotional intelligence, the

importance they attach to their work roles, their drive for achievement, and their level of job satisfaction. Psychological capital acts as an intermediary in the connection between the organizational climate and organizational citizenship behavior (Suifan, 2015).

Another study identified a largely steady trend of favorable connections between psychological factors and teamwork. Additionally, the documented psychological elements seem to have a positive correlation with both team autonomy and team interdependence (Rasmussen & Jeppesen, 2006). Additionally, emotional and psychological support from supervisors could result in increased job satisfaction, enhanced organizational commitment, and a reduced likelihood of considering resignation (Firth et al., 2004). A recent research study demonstrates that psychological elements play a tangible role in attaining positive work outcomes. When employees experience feelings of joy or contentment, they tend to exceed established performance benchmarks. Conversely, if the psychological aspect is disrupted, there is a likelihood of decreased work performance and productivity (Gozali, 2022).

Cognitive biases and cognitive dissonance also occur with people during work, so in organizations, they may impact overall work efficiency and working outcomes. The term "bias" refers to an irrational belief that has an impact on the capacity to make a particular decision grounded in facts and evidence (Acciarini et al., 2021). As stated by Haselton et al. (2015), cognitive biases can be characterized as situations where human cognition consistently generates perceptions that are systematically distorted when compared to certain aspects of objective reality. Cognitive biases are prevalent forms of mental shortcuts employed to form judgments (Simon et al., 2000). According to a study by Caputo (2013), 21 can result in making decisions of lower quality. Certain biases, such as anchoring, overconfidence, framing, status quo, self-serving, fixed-pie error, incompatibility error, intergroup bias, relationship bias, and toughness bias, can have an impact on negotiation processes. Cognitive biases in negotiations may affect the cognition and behavior of people who are engaged in negotiations influencing the agreements (Gimpel, 2008). At every level of the decision-making process in the organization, biases influence the outcome of the decisions. This may have an impact on an organization's effectiveness in achieving its short- and long-term goals (Ramalakshmi et al., 2018).

Some of the common biases are as follows (Lu, 2020):

1. Fundamental attribution error occurs when people judge other people based on their personality factors but judge themselves on the situation.
2. Self-serving bias (when people think that failures are often attributed to situational factors, whereas individuals tend to take responsibility for their successes).
3. Bandwagon effect (Ideas and beliefs expand as they are embraced by a larger number of individuals).
4. Groupthink (because of a yearning for cohesion within a group, individuals sometimes make irrational decisions).
5. False consensus (people often perceive greater agreement with their views than is actually the case).
6. Course of knowledge (once individuals acquire knowledge, they tend to presume that everyone else possesses the same information).
7. Spotlight effect (individuals often overestimate the extent to which others are observing their actions and appearance).
8. Naïve realism (an individual may hold the belief that he/she perceives an objective reality while considering others to be irrational or uninformed).
9. Availability heuristic (individuals tend to rely on readily available examples that come to mind when making judgments).
10. Dunning-Kruger effect (the less one knows, the more confident they tend to be, and conversely, the more knowledge one has, the less exaggerated their confidence tends to be).
11. Anchoring Bias (individuals tend to place significant reliance on the initial piece of information presented when making decisions).
12. Reactance (people often exhibit behavior contrary to instructions, particularly when they perceive threats to their personal freedom).
13. Confirmation bias (individuals tend to seek out and remember information that aligns with their existing perceptions).
14. Availability cascade (when collective beliefs are repeatedly voiced in public, they tend to gain greater credibility and acceptance).
15. Status quo bias (people generally have a preference for maintaining the status quo and often resist changes).
16. Gambler's Fallacy (people tend to believe that future possibilities are influenced by past events).

17. Authority bias (individuals tend to place trust in the viewpoints expressed by authority figures).
18. IKEA effect (people tend to attach greater value to things they have had a hand in creating themselves).
19. Pessimism bias (individuals tend to overestimate the probability of negative outcomes).
20. Optimism bias (individuals tend to overestimate the probability of positive outcomes).
21. Blind spot bias (people often believe they are not biased and tend to recognize bias more readily in others than in themselves).
22. Choice-supportive bias (people have a tendency to excessively emphasize the advantages of choices they have made and the disadvantages of options they have not chosen).
23. Bandwagon effect (do what most people do).
24. Ostrich effect (avoid bad news by ignoring negative information).
25. Illusory truth effect (if people hear about something often, they will start to believe that information, even without facts).

To avoid errors arising from biases, managers should be aware of the assumptions and biases employed in decision making (Das & Teng, 1999). Another important issue worth considering during organizational studies is cognitive dissonance. Festinger's (1957) theory on cognitive dissonance mentions that two cognitions can be either related to or unrelated to each other; thus, they are either consonant or dissonant. When one cognition follows from the other in this situation, consonance occurs. Meanwhile, dissonance occurs when one cognition follows from the opposite of the other.

Cognitive dissonance, or psychological discomfort, can hinder individuals from gaining and assimilating new knowledge while undergoing a period of transformation (Dechawatanapaisal & Siengthai, 2006). The organizational culture and the level of cognitive dissonance play a pivotal role in determining the most effective strategy for managing change in a specific situation (Burnes & James, 1995).

**3. Methodology and research methods.** The goal of the paper is to explore how psychological factors, cognitive biases and cognitive dissonance affect work performance and decision making. The primary approaches employed in the paper are qualitative and quantitative methods. The method of observation is used, by which the author has analysed the main psychological features of employees and managers and their influence on work performance in different organizations. Based on the observation results, it was decided to do a survey. The benchmarking method is also used to see what factors and directions explore other studies. Based on the observation and benchmarking results, the survey directions were defined.

The empirical study involves conducting surveys among both managers and employees. The survey includes 100 respondents from different spheres of the economy. The population size was 381700, which is the labour force in the capital of Armenia, Yerevan, based on statistical data by the Statistical Committee of the RA (2022). The confidence level was set to 90%, the margin of error was set to 7%, and using a sample size calculator, the sample size was equal to 139. The questionnaire was distributed to some organizations by online sources, and 139 answers were collected. However, after excluding incomplete questionnaires, the total number of responses was 100.

The survey was conducted using a structured questionnaire that was created by the author. The questionnaire included closed, semiclosed and open questions. The survey was conducted in January and February 2023. The results were analysed using SPSS. The detailed analysis of the survey is presented in the next part of the article according to the main questions, so there is no need to mention survey questions here.

Statistical analysis was performed using Pearson chi-square analysis (significance level is  $\alpha = 0.05$ ) and crosstabulation to check the statistical significance between the main results of the survey. The analysis checked the main research question of whether psychological factors, cognitive biases and cognitive dissonance affect work performance and decision making:

**H1:** Psychological factors, cognitive biases and cognitive dissonance affect work performance and decision making.

**H0:** Psychological factors, cognitive biases and cognitive dissonance do not affect work performance and decision making.

**4. Results.** The survey results indicate that the main respondents were 26-35 and 36-50 years old and female. Eighteen percent of respondents were employers. The majority of them had 1-3 and 4-10 employees under their leadership. The majority of them (52%) had 3-10 years of management experience. Forty-one percent of workers had 3-10 years of working experience, and 33% had 11-20 years of working experience (Table 1).



**Table 1.** Main characteristics of respondents

Questions	Frequency	Percent
<b>Your age:</b>		
Up to 25	16	16
26-35	<b>50</b>	<b>50</b>
36-50	<b>32</b>	<b>32</b>
51-65	-	-
66 and older	2	2
<b>Gender</b>		
Male	40	40
Female	60	60
<b>You are a</b>		
<i>worker</i>	<b>76</b>	<b>76</b>
employer	18	18
unemployed	2	2
retired	2	2
volunteer	2	2
<b>How many employees do you directly lead if you are or were a leader? (27 responses)</b>		
1-3	9	33.3
4-10	6	<b>22.2</b>
11-30	2	7.4
31-50	-	-
51-100	4	14.8
More than 101	5	18.5
<b>How many years have you been involved in management roles? (27 responses)</b>		
Less than 1 year	7	25.9
1-3 years	6	<b>22.2</b>
3-10 years	14	<b>51.9</b>
More than 10 years	-	-
<b>How many years of working experience do you have?</b>		
Less than 1 year	7	7
1-3 years	8	8
3-10 years	41	41
11-20	33	33
21 and more	11	11

Sources: developed by the authors.

According to the participants, the influence of psychological characteristics on their work performance was medium and high, with an average score of 3.77 (Table 2). The most frequent temperament type among participants was phlegmatic and choleric, followed by sanguine. According to 83% of respondents, the best characteristics of the most effective managers/employees are calm and balanced. The main characteristics that respondents have are smart (90%), analytic (64%), sociable (63%), balanced (55%), decisive (50%), and active (50%).

**Table 2.** Psychological characteristics and work performance

Questions	Frequency	Percent
<b>How do you think your psychological characteristics affect your work performance?</b>		
1 – do not affect at all	-	-
2 – affect a little	5	5
3 – <i>medium</i>	36	36
4 – <i>affect a lot</i>	36	36
5 – extremely affect	23	23
<b>Which type of temperament prevails in you?</b>		
<i>Choleric</i>	20	20
Choleric, Melancholic	4	4

Continued Table 2

Questions	Frequency	Percent
Choleric, Sanguine	6	6
Choleric, Phlegmatic	3	3
Melancholic	13	13
Sanguine	20	20
<i>Phlegmatic</i>	34	34
<b>What do you think are the characteristics of the most effective managers/employees? (they could mention more than one answer)</b>		
Impulsive	7	7
<i>Calm, balanced</i>	83	83
Ambitious	28	28
Introvert	0	0
<b>Which of these characteristics do you have? (they could mention more than one answer)</b>		
<i>Smart</i>	90	90
Fast	45	45
<i>Decisive</i>	50	50
<i>Analytic</i>	64	64
<i>Balanced</i>	55	55
Sensitive	45	45
Irritable	17	17
<i>Sociable</i>	63	63
<i>Active</i>	50	50

Sources: developed by the authors.

According to 38% of respondents, cognitive biases sometimes hinder their work experience; 26 answered yes, and 16 answered no.

**Table 3.** Cognitive biases and behavior

**In your opinion, have cognitive biases ever hindered you in your work?**

Yes	26	26
No	16	16
Sometimes	38	38
I can't say	12	12
I do not know what they are	8	8

Sources: developed by the authors.

Fifty percent mentioned that after making a decision, they tend to focus more on the benefits and less on the shortcomings, 40% said that to ensure harmony within the group, they accept the opinions of group members, even if they disagree mentally, and 30% value more highly the things that they have created themselves or the work that they have done. Based on Table 4, it may be concluded that the most frequent cognitive biases among survey participants were choice-supportive bias, groupthink, authority bias, ostrich effect, IKEA effect, optimism bias, confirmation bias, anchoring bias, etc.

**Table 4.** Types of cognitive biases in behavior

Which of the following situations are typical for you? (they could mention more than one answer)	Percent	Type of cognitive bias
When interpreting the behaviour of others, you rely on their personal qualities and underestimate situational factors, and when observing your own behaviour, you overestimate the role of situational influences, underestimating personal factors	17	Fundamental attribution error
<i>Seek and accept information that confirms personal beliefs, while rejecting and discrediting information that contradicts</i>	25	<i>Confirmation bias</i>
<i>The inclination to overvalue the likelihood of favorable outcomes</i>	26	<i>Optimism bias</i>
Use a very narrow approach when describing a situation or issue	10	Narrow framing bias

Continued Table 4

Which of the following situations are typical for you? (they could mention more than one answer)	Percent	Type of cognitive bias
If you hear about something often, you will start to believe that information, even without facts	17	Illusory Truth Effect
<i>To trust the opinions of people who are an authority for you, even without any facts</i>	26	<i>Authority bias</i>
Do what most people do	3	Bandwagon effect
You think that everyone thinks like you	12	False consensus
You are always right and never wrong	8	Self-Enhancement Bias
<i>Rely more on the first information received and use it as a basis for further comparison</i>	25	<i>Anchoring Bias</i>
<i>After making a decision, you tend to focus more on the benefits and less on the shortcomings</i>	50	<i>Choice-supportive bias</i>
<i>Avoid bad news by ignoring negative information</i>	26	<i>Ostrich effect</i>
Recent occurrences are more easily recalled and might carry more significance in your decision-making process compared to events from the past or events yet to come	18	Recency/serial position effect
Your failures are due to situational factors, and your successes are due to your responsible work	18	Self-serving bias
<i>To ensure harmony within the group, you accept the opinions of group members, even if you disagree mentally</i>	40	<i>Groupthink</i>
In your opinion, you are always in the centre of everyone's attention	15	Spotlight effect
You always judge objectively, while others do not	17	Naïve realism
If you are told to do something, you always do the opposite if you feel that doing what someone else says is limiting your personal freedom.	3	Reactance
You want things to stay the same, avoiding change	10	Status Quo bias
You believe that the possibilities of the future are determined by the events of the past	15	Gambler's Fallacy
<i>You value more highly the thing that you have created yourself or the work that you have done</i>	30	<i>IKEA effect</i>
You overestimate the likelihood of bad things happening	5	Pessimism bias
You do not have any cognitive biases, while others have them	3	Blind spot bias

Sources: developed by the authors.

Ninety percent do nothing to overcome cognitive biases (Table 5).

Table 5. What steps do you take to overcome cognitive biases?

Question	Percent
<i>Nothing</i>	<i>90</i>
Looking at the situation soberly and through the eyes of another person will help overcome problems	2
Be as objective as possible, make judgments based on facts	2
I do analysis and try to overcome	4
I am trying to clarify the criteria for assessing the situation	2

Sources: developed by the authors.

Seventy-five percent mentioned that they have experienced cognitive dissonance in their behavior. The majority think that cognitive biases and dissonance can affect decision-making, communications and interactions with other people. 74% does nothing to overcome cognitive dissonance (Table 6).



**Table 6.** Cognitive dissonance among participants

Question	Percent
<b>Have you ever experienced cognitive dissonance?</b>	
Yes	75
No	15
I do not know	10
<b>If you are a heavy smoker and you learn from various sources that smoking is harmful to health, then according to the received information, you will choose the following behaviour</b>	
<i>quit smoking because you are convinced that it is harmful to your health</i>	47
deny that smoking is harmful and find information that in some cases smoking may even be beneficial, thus reducing the importance of negative information	12
<i>continue to smoke and avoid all information that emphasizes the dangers of smoking</i>	34
I do not smoke	3
other	4
<b>How do you think cognitive biases and dissonance can affect a person's work performance? (they could mention more than one answer)</b>	
Cannot affect	5
<i>Can affect decision-making</i>	65
<i>Can affect how you interact with other people</i>	55
<i>Can affect communication</i>	64
<b>What steps do you take to overcome cognitive dissonance?</b>	
<i>nothing</i>	74
It is difficult to answer	5
I am expanding my world view	3
I try to manage my own mind	2
I try to focus on the facts, not the emotions	2
I visited psychologist sessions	1
I give instruction to my mind to start everything from the new sheet from the next morning	1
I try to analyse the situation	8
I try to overcome	4

Sources: developed by the authors.

Pearson chi-square analysis shows that some factors are significantly connected (Table 6).

**Table 7.** Pearson chi square analysis

Factors	Value	Significance
Which type of temperament prevails in you? * In your opinion, have cognitive biases ever hindered you in your work?	58.319	0.001
Which type of temperament prevails in you? * Have you ever experienced cognitive dissonance?	27.074	0.019
Which type of temperament prevails in you? * What steps do you take to overcome cognitive biases?	101.007	0.000
Which type of temperament prevails in you? * What steps do you take to overcome cognitive dissonance?	247.933	0.000

Sources: developed by the authors.

Mainly phlegmatic people mentioned that cognitive biases and cognitive dissonance have hindered their work experience. Mainly choleric and phlegmatic people try to overcome cognitive biases, while sanguine people try to do something to overcome cognitive dissonance. Additionally, based on the results, the null hypothesis is rejected, so psychological factors, cognitive biases and dissonance affect work performance.

**5. Conclusions, discussion and recommendations.** Thus, the analysis carried out in the article shows that 83% of respondents think that the most effective managers/employees are calm and balanced people. The respondents think they are smart (90%), analytic (64%), sociable (63%), balanced (55%), decisive (50%), and active (50%).

According to 38% of respondents, cognitive biases sometimes hinder their work experience. The most frequent cognitive biases among survey participants were choice-supportive bias, groupthink, authority bias, the ostrich effect, the IKEA effect, optimism bias, confirmation bias, anchoring bias, etc. However, 90% did nothing to overcome cognitive biases. Many people do not realize that they have biases or that their behavior is biased, so they do not undertake any action to overcome them.

Seventy-five percent mentioned that they have experienced cognitive dissonance in their behavior, but they do nothing to overcome it. This can also be explained in the same way: they do not realize that they have been in such a situation and therefore cannot take any actions. Many people even did not know what cognitive bias and dissonance were, and after being told the definition, they realized that they had ever been in such situations. They think that cognitive biases and dissonance can affect decision-making, communications and interactions with other people.

The cross tabulation performed between some factors showed that mainly phlegmatic people have experienced the influence of cognitive biases and cognitive dissonance on their work experience. As phlegmatic people are mainly calm and balanced, they could understand the deviation from a normal situation to an abnormal situation. Additionally, mainly choleric and phlegmatic people try to overcome cognitive biases, while sanguine people try to do something to overcome cognitive dissonance. Choleric people are short-tempered and irritable, and phlegmatic people are relaxed and peaceful, so they would like to overcome cognitive biases. Similarly, sanguine people are optimistic and social, and they try to overcome cognitive dissonance.

The research results are supported by a literature review. In particular, the results indicate that psychological features, cognitive biases and dissonance affect work performance and decision making, and similar results were obtained by Tovmasyan & Minasyan (2020), Tovmasyan (2017), Mahusay-Baria (2015), Salimi et al. (2011), Yan et al. (2020), Rasmussen & Jeppesen (2006), Gozali (2022), Caputo (2013), Gimpel (2008), Ramalakshmi et al. (2018), etc. Managers should be aware of the psychological features, assumptions, and biases employed in working performance and decision making, as mentioned by Das & Teng (1999).

This research may be useful for organizations, as it shows how psychological factors, cognitive biases and cognitive dissonance may affect work performance and decision making. Managers and workers should take steps to overcome cognitive biases and cognitive dissonance and to manage psychological factors in order for the working process to be effective.

Based on the results, some recommendations may be made:

1. Use innovative methods of group decision making, such as applying brainstorming, role storming, reverse brainstorming, star busting, 6 thinking hats, Charrette process, 6-3-5 brainwriting, word association, mind mapping, etc.
2. Develop critical and innovative thinking skills among employers.
3. Do trainings towards improving emotional, analytical, decision-making and negotiation skills.
4. Organize innovative training on psychological features, cognitive biases and cognitive dissonance in organizations so that employees are aware of them and know how to overcome them.
5. Adjust HR policies, including innovative psychological tests in different parts of human resource management, which will enable the evaluation of the psychological level of employees.
6. Apply innovative forms and styles of leadership and participative management, etc.

#### *5.1 Limitations of the study and implications for future studies.*

Of course, the current research has some limitations. First, the number of respondents is low. Further studies should include more respondents from different places (not only the capital but also regions in Armenia). Additionally, studies may be conducted in different spheres of the economy to determine whether there are any differences based on the field of professional direction of the company and employees.

Future studies may also perform thorough analyses of psychological features, cognitive biases and cognitive dissonance separately, including laboratory tests and real-life simulations. This means that some situations should be created and the behavior of employees should be observed: how they react, what kind of decision they make, how and why, how they negotiate, how they solve conflicts, etc. This study was the pilot study in this field to fix the existing impact of psychological features on work performance, and based on it, future steps should be more detailed and comprehensive.

**Conflicts of Interest:** The authors declare no conflicts of interest.

**Data Availability Statement:** The data were collected based on a survey conducted in Armenia by the author.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

## References

- Acciarini, C., Brunetta, F., & Boccadelli, P. (2021). Cognitive biases and decision-making strategies in times of change: a systematic literature review. *Management Decision*, 59(3), 638-652. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Arogundade, O. T., & Arogundade, A. B. (2015). Psychological empowerment in the workplace: Implications for employees' career satisfaction. *North American Journal of Psychology*, 17(1), 27-27. [\[Google Scholar\]](#)
- Mahusay-Baria, R. (2015). The «talker», «doer», «thinker» and «watcher»\*: Analysis of the four temperaments in relation to public speaking performances. *Humanities and Social Sciences Review*, 04 (01), 121-126. [\[Google Scholar\]](#)
- Burnes, B., & James, H. (1995). Culture, cognitive dissonance and the management of change. *International Journal of Operations & Production Management*, 15(8), 14-33. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Caputo, A. (2013). A literature review of cognitive biases in negotiation processes. *International Journal of Conflict Management*, 24(4), 374-398. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Das, T. K., & Teng, B. S. (1999). Cognitive biases and strategic decision processes: An integrative perspective. *Journal of management studies*, 36(6), 757-778. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Dechawatanapaisal, D., & Siengthai, S. (2006). The impact of cognitive dissonance on learning work behavior. *Journal of Workplace Learning*, 18(1), 42-54. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Firth, L., Mellor, D. J., Moore, K. A., & Loquet, C. (2004). How can managers reduce employee intention to quit?. *Journal of managerial psychology*, 19(2), 170-187. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Gimpel, H. (2008, February). Cognitive biases in negotiation processes. In *Negotiation, Auctions, and Market Engineering: International Seminar, Dagstuhl Castle, Germany, November 12-17, 2006, Revised Selected Papers* (pp. 213-226). Berlin, Heidelberg: Springer Berlin Heidelberg. [\[Google Scholar\]](#)
- Gozali, A. (2022). Employee psychological analysis: Communication, Self Esteem, and Self Efficacy. *AKADEMIK: Jurnal Mahasiswa Humanis*, 2(3), 111-119. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Haselton, M.G., Nettle, D., & Murray, D.R. (2015). «The evolution of cognitive bias», in Buss, D.M. (Ed.), *The Handbook of Evolutionary Psychology*, John Wiley & Sons, Hoboken, New Jersey, NJ, pp. 1-20. [\[Link\]](#)
- Lu, M. (2020). 50 Cognitive Biases in the Modern World. [\[Link\]](#)
- Minasyan, D., & Tovmasyan, G. (2020). Gender differences in decision-making and leadership: Evidence from Armenia. *Business Ethics and Leadership*, 4, 6-16. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Ramalakshmi, V., Haritha, P. M., Hamim Akif, K., & Hari Krishnan, V. (2019, February). The Impact of Cognitive Biases on Organizational Effectiveness. In *SIMSARC 2018: Proceedings of the 9th Annual International Conference on 4C's-Communication, Commerce, Connectivity, Culture, SIMSARC 2018, 17-19 December 2018, Pune, MH, India* (p. 269). European Alliance for Innovation. [\[Google Scholar\]](#)
- Rasmussen, T. H., & Jeppesen, H. J. (2006). Teamwork and associated psychological factors: A review. *Work & Stress*, 20(2), 105-128. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Salami, S. O. (2008). Demographic and psychological factors predicting organizational commitment among industrial workers. *The anthropologist*, 10(1), 31-38. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Salimi, S. H., Karaminia, R., & Esmaeili, A. A. (2011). Personality traits, management styles & conflict management in amilitary unit. *Journal of military medicine*, 13(1), 11-16. [\[Google Scholar\]](#)
- Simon, M., Houghton, S. M., & Aquino, K. (2000). Cognitive biases, risk perception, and venture formation: How individuals decide to start companies. *Journal of business venturing*, 15(2), 113-134. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Suifan, T. S. (2016). The impact of organizational climate and psychological capital on organizational citizenship behavior. *International Journal of Business and Management*, 11(1), 224. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Tovmasyan, G. (2017). The Role of Managers in Organizations: Psychological Aspects. *Business Ethics and Leadership*, 1(3), 20-26. [\[Google Scholar\]](#)
- Tovmasyan, G., & Minasyan, D. (2020). The Impact of Motivation on Work Efficiency for Both Employers and Employees also During COVID-19 Pandemic: Case Study from Armenia. *Business Ethics and Leadership*, 4(3), 25-35. [\[Google Scholar\]](#) [\[CrossRef\]](#)
- Yan, R., Basheer, M. F., Irfan, M., & Rana, T. N. (2020). Role of psychological factors in employee well-being and employee performance: an empirical evidence from Pakistan. *Revista Argentina de Clínica Psicológica*, 29(5), 638.-650. [\[Google Scholar\]](#)

Гаяне Товмасян, Ph.D., доцент, Вірменський державний економічний університет; Академія державного управління Республіки Вірменія, Республіка Вірменія

**Підвищення продуктивності працівників та якості прийняття управлінських рішень: психологічні фактори, когнітивні упередження та когнітивна дисонанс.**

Ця стаття узагальнює аргументи та контраргументи в межах наукової дискусії щодо впливу психологічних факторів на робоче середовище. Систематизація літературних джерел та підходів до розв'язання проблеми підвищення продуктивності працівників та якості прийняття управлінських рішень підтверджує, що ефективність виконання роботи та прийняття рішень в організаціях залежить від психологічних факторів. Основною метою статті є дослідження впливу психологічних факторів, когнітивних упереджень та когнітивного дисонансу на продуктивність роботи та процеси прийняття рішень. Методичним інструментарієм проведеного дослідження були методи статистичного аналізу. Емпіричні розрахунки здійснено на основі опитування працівників компаній в Армії. Загальна вибірка для дослідження становила 100 респондентів. За результатами, 83% респондентів вважають, що найефективнішими менеджерами/співробітниками є спокійні та збалансовані люди (флегматики). Когнітивні упередження та дисонанс можуть заважати робочій продуктивності, хоча іноді люди не усвідомлюють цього. За частими ситуаціями, серед яких найпоширеніші когнітивні упередження, включають упередження вибору, групове мислення, упередження до влади, ефект страуса, оптимістичне упередження, упередження підтвердження, упередження якорування тощо. Проте 90% респондентів не вживають жодних заходів для подолання когнітивних упереджень, оскільки багато з них не усвідомлюють їх наявність. 75% респондентів відзначили, що вони відчувають когнітивний дисонанс у своїй поведінці, але не вживають заходів для його подолання. Дослідження емпірично підтверджує та теоретично обґрунтовує необхідність впровадження інноваційних методів групового прийняття рішень, розвитку критичного та інноваційного мислення працівників, а також застосування інноваційних форм та стилів лідерства для розвитку людського капіталу компаній. Аналіз може бути корисним для організаційних керівників, менеджерів і працівників, які бажають краще розуміти чинники, які впливають на процеси прийняття рішень та робочу продуктивність.

**Ключові слова:** управління; психологія; когнітивне упередження; когнітивний дисонанс; прийняття рішень; опитування; інноваційне мислення; політика управління людськими ресурсами.