

# MEDIATING ROLE OF THE PSYCHOLOGICAL CONTRACT BETWEEN INERTIA AND ORGANIZATIONAL PERFORMANCE OF HEALTHCARE PROFESSIONALS IN RADIATION FIELDS

Halil Türkteviz<sup>1,2</sup>, Nezihe Tüfekci\*<sup>3</sup>

1. Vocational School of Health Services, Department of Medical Services and Techniques, KTO Karatay University, Konya, Turkey
2. Faculty of Health Sciences, Department of Health Management, Sakarya University of Applied Sciences, Sakarya, Turkey
3. Faculty of Economics and Administrative Sciences, Department of Health Management, Süleyman Demirel University, Isparta, Turkey

Correspondence: [nezihetufekci@gmail.com](mailto:nezihetufekci@gmail.com)

## ABSTRACT

### BACKGROUND/AIM:

This study aims to reveal the mediating role of the psychological contract with regard to the effect of inertia on the organizational performance of healthcare workers in radiation.

### MATERIALS AND METHODS:

The data were collected by using a survey. The questionnaire form consists of four parts. The first part included the "Inertia Scale" second, the "Psychological Contract Scale", third part "Organization Performance Scale," fourth, questions regarding the socio-demographic characteristics of the participants were included. The target population was the 745 healthcare professionals working in the field of radiation from hospitals in the city of Konya, Turkey; thus, no sampling method was selected and an attempt was made to cover the entire population. A total of 419 healthcare professionals agreed to participate in the study. Process Macro Model 4 structural equation model were used in the analyses of data, descriptive statistics, validity and reliability, and correlation.

### RESULTS:

Inertia has a negative effect on the psychological contract ( $\beta = -0.455$ ). The psychological contract has a positive effect on organizational performance ( $\beta = 0.823$ ). In addition, inertia has a negative effect on organizational performance ( $\beta = -0.311$ ). This effect increases ( $\beta = -0.143$ ) with the addition of the mediating role of psychological contract.

### CONCLUSION:

The psychological contract loses its effect and reduces organizational performance due to inertia. Therefore, inertia is one of the issues that merits research to increase organizational performance.

### KEYWORDS

radiation fields, healthcare professionals, inertia, psychological contract, organizational performance

("This study was produced from Halil TÜRKTEMİZ's PhD thesis")

## INTRODUCTION

Nowadays, new information constantly emerges because of rapidly advancing technology and science. To ensure their survival, institutions must stay abreast of scientific advancements, prioritize innovation, and continuously update themselves. However, institutional inertia can hinder their ability to stay up to date. Inertia may lead to inaction, stagnation, laziness, passivity and, thereby, cause adverse effects on productivity [1]. Inertia, can be defined as a situation that reduces individual productivity, prevents timely update, causes resistance to learning new things, and leads to delayed actions.

Employees commonly cope with problems by referring to existing knowledge and experience. This strategy, namely, "information inertia" [2], is defined as individuals learning information from the same source. In other words, employees receive information from individuals that closely relate to themselves rather than the best performers in organizations [3]. Moreover, information inertia may be divided into two types, namely, learning and experience inertia [2, 4, 5].

Organizational performance expresses whether the company effectively carries out administrative and operational functions and produces actions and outputs in accordance with its mission [6]. Organizational performance is defined as the output of the company activities or the achievement of its goals [7, 8]. A focus on the elements that can increase the individual employee performance is necessary to improve the organizational performance. In addition, if organizations wish to create a competitive structure to maintain their survival, the removal of managerial and organizational inertia is inevitable [9]. Otherwise, organizations that show inertia in thinking and policy making may face loss and failure [4].

The psychological contract is commonly defined as the beliefs regarding the mutual obligations between employees and their organization [10, 11]. The primary focus of the psychological contract is the individual-level relationship between the employer and employee [12]. Given that these mutual expectations are not limited to the conditions in the formal contracts, several psychological contracts may have emerged [13] that are subjective and not legally binding for the parties. Yet, these contracts have a strong influence on behavior, with their general basis on the beliefs of the involved parties

and especially the views of the employees regarding the nature of the employment relationship under which they work [14]. In addition, psychological contracts are generally considered as transactional and relational [15]. The psychological contract is an important factor in closing the lack of agreement between organizations and employees. Therefore, satisfying the psychological contract for both parties can positively affect the performance of the organization. For managers, psychological contracts are critical because of their potential to be one of the strongest practical drivers of business success [17].

Healthcare professionals working in radiation fields have fewer working hours and longer vacation periods compared to other healthcare professionals. This situation differentiates healthcare workers in radiation fields from other healthcare professionals in terms of their working conditions. Considering that these healthcare professionals working in radiation fields have distinct organizational behavior practices, studies targeting this group become necessary. In fact, it is possible that the psychological contract is more evident in the relationship between inertia and organizational performance of people working in the field of radiation. Furthermore, there is limited research on organizational behavior specifically focused on this group. Inertia is one of the main problems that causes difficulties for organizations to adapt to changes and reduces their performance and efficiency [20]. The psychological contract can help increase job satisfaction and performance [21]. From this perspective, this study aims to reveal the mediating role of the psychological contract in the effect of inertia behaviors on organizational performance of healthcare workers in the field of radiation.

## THEORETICAL BACKGROUND AND HYPOTHESES OF THE STUDY

One of the factors that increases employee performance in business is employees finishing their work on time and not delaying it. However, inertial workers "...act as if dead soil has been sprinkled on them" and usually take action when their work deadline approaches [22]. Çankaya and Demirtaş [23] declared that inertia negatively affects performance. Based on this information, the H1 hypothesis was established as follows:

**H1: Inertia behaviors affect organizational performance.**

Individual inertia is defined as the lethargy, sluggishness, slow movement, and reluctance observed in individuals, and their not taking action to achieve the goals [24]. In the relationship between the employer and employee, mutual obligations are partially recorded in the written and official employment contract but are mostly implicit, confidential, and rarely discussed [25]. When a person joins an institution, opportunities for advancement, salary, status, office space and decor, amount of hard and tedious work etc. expectations are formed. The institution is also from that person; technical skills, time and energy commitment, communication ability, supervisory skills, loyalty etc. expects it to work [11]. Given the thought that inertia may be an obstacle to meeting employer expectations, H2 hypothesis is proposed as follows:

**H2: Inertia behavior affects the perception of psychological contract.**

Within the scope of the psychological contract, expectation theory demonstrates that making an effort

reveals the performance, which in turn will provide the reward [26]. Employees' thoughts, perceptions, beliefs, chance and probability estimates, and other similar factors strongly affect their motivation, performance and behavior [27]. Therefore, based on the idea that the psychological contract affects performance, H3 hypothesis is proposed as follows:

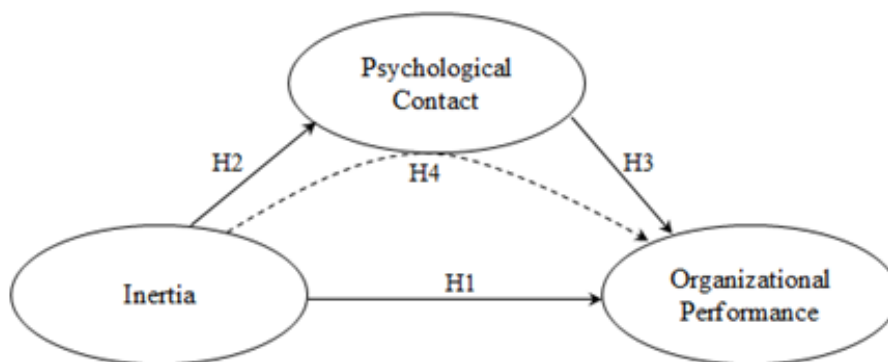
**H3: Psychological contract perception affects organizational performance.**

Based on H1, H2, and H3 hypotheses, the H4 hypothesis is proposed to reveal how psychological contracts can affect the possible effect of inertia on organizational performance as follows:

**H4: Psychological contract perception has a mediating role in the effect of inertia behaviors on organizational performance.**

Considering the above hypotheses, the model was established as shown in Figure 1.

FIGURE 1. GENERAL VIEW OF THE STUDY MODEL



**METHOD**

The data were collected by using a survey. The questionnaire form consists of four parts. The first part included the "Inertia Scale" developed by Liao et al. [4] and adapted into Turkish by Çankaya and Demirtaş [1] for the learning inertia sub-dimension and Çankaya [23] for the experience inertia sub-dimension. Secondly, the "Psychological Contract Scale" developed by Millward and Hopkins [28], adapted into Turkish by İyigün and Çetin [29], was used. The third part included the "Organization Performance Scale," which was validated as reliable by Karabetyan [30]. Fourthly, questions regarding the socio-demographic characteristics of the participants were included.

Among healthcare workers, those in the field of radiation have less shifts and more leave and thus differ from their peers in terms of working conditions. Therefore, the present study examines the population of 745 healthcare professionals in the field of radiation 4 state, 2 university and 7 private hospitals in the city center of Konya in Turkey. No specific sampling method was employed; instead, attempts were made to reach the entire population through a combination of face-to-face and online survey methods. A total of 419 (56.24%) people accepted the study invitation and returned the questionnaires in accordance with the set evaluation.

In addition to Amos and Lisrel, SPSS Process Macro was used for mediation analysis. SPSS Process Macro is a logistic regression path analysis modeling tool that is widely used in social, business, and health sciences to predict direct and

indirect effects in single and multi-mediator models (parallel and series) [31]. For this reason, SPSS Process Macro Model 4 regression analysis was selected to test the hypotheses. The package program for SPSS 20.0 was used in the descriptive analysis.

Before the study, approvals were obtained from the Health Sciences Ethics Committee of the University of Süleyman Demirel (09/03/2020-40/2). In addition, permission was obtained from the hospitals for the study.

### LIMITATIONS OF THE STUDY

The data were collected during the COVID-19 epidemic, which led to difficulties in reaching the entire target population. Three private hospitals in the city center of Konya did not allow research to be carried out, and thus were excluded from the survey. In line with the purpose of the study, the questionnaires were applied to health workers in the field of radiation and those carrying dosimeters. Other healthcare workers were excluded and can be examined in future study.

TABLE 1. CRONBACH'S ALPHA VALUES

	Cronbach Alpha	Number of Items
<b>Inertia</b>	0,712	13
<b>Psychological Contract</b>	0,815	17
<b>Organizational Performance</b>	0,912	12

TABLE 2. EFFECT OF INERTIA ON ORGANIZATIONAL PERFORMANCE

Dependent Variable	Independent Variable	Regression						Model Summary		
		$\beta$	S.E.	t	p	LLCI	ULCI	R <sup>2</sup>	F	p
OP*	<b>Constant</b>	4,520	0,258	17,500	0,000	4,012	5,027	0,072	32,321	0,000
	<b>IN**</b>	-0,455	0,080	-5,685	0,000	-0,612	-0,297			

\*OP: Organizational Performance, \*\*IN: Inertia.

Table 2 shows the results of the regression analysis regarding the effect of inertia on organizational performance. The model was statistically significant (F = 32.321, p = 0.000) and inertia negatively affected organizational performance ( $\beta$  = -0.455). In line with the findings, H1 was accepted.

Table 3 shows the results of the regression analysis on the effect of inertia on the psychological contract. The model was statistically significant (F = 8.068, p = 0.005), and inertia negatively affected the psychological contract ( $\beta$  = -0.174). In line with the findings, H2 was accepted.

## RESULTS

Among the participants, 60.1% were male and 70.9% were married. The average age was approximately 35. The majority had 16 years or more of work experience (30.3%), were associate degree graduates (39.1%), and worked in a university hospital (50.6%). In terms of field, 9.3% of the participants were physicians, 57.8% were radiology technicians/technicians, and 32.9% were other health workers (nurse, health physicist, operating room technician, health technician/technician, biologist, and support staff).

Table 1 shows the reliability analysis of the scales used in the study. The Cronbach's Alpha value should be between 0.70 and 0.95 for the scale to be considered reliable in social sciences [32]. Therefore, considering their Cronbach's Alpha values, the scales in this study were at an acceptable level.

Table 4 shows the results of multiple regression analysis regarding the effect of inertia and psychological contract on organizational performance. The model was statistically significant (F = 163.827, p = 0.000). In addition, inertia negatively affects organizational performance ( $\beta$  = -0.311) and the psychological contract positively affects organizational performance ( $\beta$  = 0.823). In line with the findings, H3 hypothesis accepted.

**TABLE 3. EFFECT OF INERTIA ON THE PSYCHOLOGICAL CONTRACT**

Dependent Variable	Independent Variable	Regression						Model Summary		
		$\beta$	S.E.	t	p	LLCI	ULCI	R <sup>2</sup>	F	p
PC*	Constant	3,742	0,198	18,918	0,000	3,353	4,130	0,019	8,068	0,005
	IN**	-0,174	0,061	-2,840	0,005	-0,294	-0,054			

\*PC: Psychological Contract \*\*IN: Inertia.

**TABLE 4. EFFECT OF INERTIA AND THE PSYCHOLOGICAL CONTRACT ON ORGANIZATIONAL PERFORMANCE**

Dependent Variable	Independent Variable	Regression						Model Summary		
		$\beta$	S.E.	t	p	LLCI	ULCI	R <sup>2</sup>	F	p
OP*	Constant	1,440	0,274	5,263	0,000	0,902	1,978	0,441	163,827	0,000
	IN**	-0,311	0,063	-4,963	0,000	-0,435	-0,188			
	PC***	0,823	0,050	16,558	0,000	0,725	0,921			

\*OP: Organizational Performance, \*\*IN: Inertia, \*\*\*PC: Psychological Contract

**TABLE 5. MEDIATOR ROLE OF PSYCHOLOGICAL CONTRACT IN THE EFFECT OF INERTIA ON ORGANIZATIONAL PERFORMANCE**

Direct Effect		Effect	S.E.	t	p	LLCI	ULCI
IN	OP	-0,311	0,063	-4,963	0,000	-0,435	-0,188
<b>Indirect Effect</b>							
IN*	PC**	OP**	-0,143	0,052		-0,249	-0,043
<b>Total Effect</b>		-0,455	0,080	-5,685	0,000	-0,612	-0,297

\*IN: Inertia, \*\*PC: Psychological Contract \*\*\*OP: Organizational Performance

Table 5 shows the results of the analysis regarding the mediating role of the psychological contract in the effect of inertia on organizational performance. The inertia negatively affects organizational performance ( $\beta = -0.311$ ) and the psychological contract exerts a mediating role in this effect ( $\beta = -0.143$ ). According to the model, inertia has an overall negative effect on organizational performance ( $\beta = -0.455$ ), both direct and indirect. In line with the findings, H4 hypothesis was accepted.

## DISCUSSION

In this study, the results show that inertia has a negative effect on organizational performance, which is in agreement with the literature that reports that inertia negatively affects the performance, efficiency, and effectiveness of both individuals and organizations [33, 34, 23, 1, 20].

In a psychological contract, the trust develops from the belief of a relationship in which contributions are reciprocated and the actions of one party depend on those of the other [35]. When the conditions of a

psychological contract are met, employees can exert greater effort than normal to fulfill their responsibilities. In this study, inertia has a negative effect on psychological contract. Therefore, inertia among employees may cause lack of effort and reduce the perceptions of psychological contracts.

In addition, the psychological contract has a positive effect on organizational performance, which is in agreement with the previous literature. Üçler and Bal Taştan [36] found a positive relationship between the psychological contract and employee performance behaviors. Acaray [13] demonstrated that the violation of the psychological contract has a negative effect on task performance. Elden [37] reported a negative relationship between the psychological contract violation and job performance. Thus, performance increases with an increase in the perception of psychological contract, and violation of the psychological contract decreases performance.

While inertia negatively affects organizational performance, the psychological contract positively affects

organizational performance [38, 39]. In this study, the negative effect of inertia on organizational performance increases when the mediating role of the psychological contract is added. The possible reason for this could be the negative effect of inertia on the psychological contract. Therefore, the inertia behaviors of the employees must be reduced to increase the effect of the psychological contract perceptions on organizational performance.

## CONCLUSION

This study shows that inertia reduces organizational performance, indicating that inertia is one of the important problems in business. Health professionals in the field of radiation assist physicians in the diagnosis and treatment of health services. Therefore, their inertial behavior and poor performance hinders the efficient diagnostic and treatment for patients. In addition, the psychological contract increases organizational performance. However, previous results show that the psychological contract decreases in effect and reduces organizational performance due to inertia. Therefore, research aimed at increasing organizational performance must pay attention on issues concerning inertia.

Especially for those working in the radiation field, being separated from the workplace compared to other employees due to the risky area where they work may cause them to move away. This can be a significant threat to employees' alienation from their work. The psychological contract can positively affect this alienation. Therefore, managers need to be much more careful when making promises to employees. This situation should be reflected especially in human resources policies.

In order to increase organizational performance, managers need to constantly communicate with radiation employees. During the communication process, motivating words should be spoken to eliminate organizational inertia and meetings should be held with this focus. Priorities should always be clearly explained to employees in the organization. If there is a contract violation, organizations should make sure that they treat employees fairly, and traces of injustice perception in the employee's mind should be erased through open communication.

The inertia of health workers in the field of radiation plays a key role in realizing corporate goals. For this reason, strategies must be developed to overcome such inertia.

Joint meetings of minds, where employees at least once a year will share their knowledge and experience with each other regarding business processes, can prevent inertia. Managers may attach importance to the psychological contract after taking precautions against inertia to realize the organizational goals and increase their performance. In this context, future studies can determine and develop strategies to meet the mutual expectations of employees and managers, providing a fair and rewarding working environment for both parties.

In order to bring a new perspective in future studies related to this research, it is important to examine whether the effects of psychological contracts on the variables of job satisfaction, organizational commitment, perception of injustice, organizational citizenship and intention to leave are marginal in order to reach different results.

## References

1. Çankaya, İ. H. and Demirtaş, Z. (2010). The relationship between university climate and inertia according to preservice teachers' view. *Pamukkale University Journal of The Faculty of Education*, 28, 1-9.
2. Xie, X, Fang, L, Zeng, S. X. and Huo, J. (2016). How does knowledge inertia affect firms product innovation?. *Journal of Business Research*, 69(5), 1615-1620.
3. Tsai, S. B., Wu, W., Ma, S., Wu, C. H. and Zhou, B. (2019). Benchmarking, knowledge inertia, and knowledge performance in different network structures. *Enterprise Information Systems*, 14(5), 1-20.
4. Liao, S. H., Fei, W. C. and Liu C. T. (2008). Relationships between knowledge inertia, organizational learning and organization innovation. *Technovation*, 28(4), 183-195.
5. Fang, C. H., Chang, T. and Chen, G. L. (2011). Organizational learning capability and organizational innovation: the moderating role of knowledge inertia. *African Journal of Business Management*, 5(5), 1864-1870.
6. Kim, S. (2005). Individual-level factors and organizational performance in government organizations. *Journal of Public Administration Research and Theory*, 15(2), 245-261.
7. Mehmood, Qadeer, F. and Ahmad, A. (2014). Relationship between tqm dimensions and organizational performance. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*. 8(3), 662-679.

8. Suksod, P. and Cruthaka, C. (2020). The relationship between human resources practices and organizational performance in pharmaceutical industry of Thailand. *Systematic Review Pharmacy*, 11(3), 67-76.
9. Soysal, A. (2010). Inertia: a personal and organizational level analysis for effective management. *Journal of Cement Employer*, 24(3), 16-26.
10. Morrison, E. W. and Robinson, L. (1997). When employees feel betrayed: a model of how psychological contract violation develops. *Academy of Management Review*, 22(19), 226-256.
11. Kotter, J. P. (1973). The psychological contract: managing the joining-up process. *California Management Review*, 15(3), 91-99.
12. Guest, D. E. (2004). The psychology of the employment relationship: an analysis based on the psychological contract. *Applied Psychology: An International Review*, 53(4), 541-555. Doi <https://doi.org/10.1111/j.1464-0597.2004.00187.x>
13. Acaray A. The effect of psychological contract breach on job performance: the mediating role of affective commitment. *Anemon Mus Alparlan University Journal of Social Sciences*. 2019;7(ICOAEF'19):41-49. <http://dx.doi.org/10.18506/anemon.573197>
14. Middlemiss, S. (2011). The psychological contract and implied contractual terms synchronous or asynchronous models?. *International Journal of Law and Management*, 53(1), 32-50. Doi <https://doi.org/10.1108/17542431111111872>
15. Yılmaz, A. (2019). Analysis of the impact of psychological contract on organizational trust: a research on medical sales representatives. *International Journal of Disciplines Economics & Administrative Sciences Studies*, 5(12), 178-195. Doi <http://dx.doi.org/10.26728/ideas.199>
16. Conway, N. and Briner, R. B. (2005). *Understanding psychological contracts at work*. Oxford, Pa: Oxford University Press.
17. Wellin, M. (2007). *Managing the psychological contract*. Aldershot, Pa: Gower.
18. George, C. (2009). *The psychological contract managing and developing professional groups*. London, Pa: McGraw Hill Open University Press.
19. McDonald, D. J. and Makin, P. J. (2000). The psychological contract, organisational commitment and job satisfaction of temporary staff. *Leadership & Organization Development Journal*, 21(2), 84-91. doi: <https://doi.org/10.1108/01437730010318174>
20. Arlı, D, Ölmez Ceylan, Ö. and Akduman Yetim, S. (2012). Primary school administrators' views on organizational inertia. *Ege Journal of Education*, 13(1), 73-91.
21. He, X. (2019). Research on psychological contract, group cohesion and performance under harmonious employment relationship. *Journal of Social Sciences Studies*, 4, 237-240.
22. Sekman, M. (2019). *Everything starts with you*. Istanbul, Pa: Alfa Publications.
23. Çankaya, İ. H. (2010). The relationship between elementary school managers' conscience-oriented approach levels and inertia perceptions. *Journal of Kırşehir Education Faculty*, 65-74.
24. Kaya, Ş. D. and Yağcı, M. (2015). Relationship of inertia statuses of healthcare professionals with patient safety. *International Journal of Social Sciences and Education Research*, 1(2), 453-462.
25. Anderson N. and Schalk, R. (1998). The psychological contract in retrospect and prospect. *Journal of Organizational Behavior*, 19, 637-647.
26. Tağ, M. N. and Çetinkaya, B. (2019). A multi-level analysis of the relationship between subjective well-being, trust in others and work motivation: expectancy theory approach. *Int. Journal of Management Economics and Business*, 15(3), 858-888. doi: <http://dx.doi.org/10.17130/ijmeb.2019355054>
27. Parijat, P. and Bagga, S. (2014). Victor Vroom's expectancy theory of motivation – an evaluation. *International Research Journal of Business and Management*, VII(9), 1-8.
28. Millward, L. J. and Hopkins, L. J. (1998). Psychological contracts, organizational and job commitment. *Journal of Applied Social Psychology*, 28(16), 1530-1556.
29. İyigün, N. Ö. and Çetin, C. (2012). The impact of psychological contract on organizational deviance and a research in pharmaceutical sector. *Oneri*, 10(37), 15-29.
30. Karabetyan, L. (2019). *The effect of organizational learning, knowledge management and innovation on organizational performance: an application in service businesses*, Istanbul Arel University, Institute of Social Sciences, (Published Doctoral Thesis). Istanbul.
31. Hayes, A. F. The PROCESS macro for SPSS, SAS, and R. tarihinde Available at: <https://www.processmacro.org/index.html> .Accessed October 17, 2021.
32. Sönmez Çakır, F. (2019). *Parametric data analysis for social sciences*. Ankara, Pa: Gazi Bookstore.

33. Shimizu, K. and Hitt, M. A. (2005). What constrains or facilitates divestitures of formerly acquired firms?. The effects of organizational inertia. *Journal of Management*, 31(1), 50-72.
34. Godkin, L. and Allcorn, S. (2008). Overcoming organizational inertia: A tripartite model for achieving strategic organizational change. *The Journal of Applied Business and Economics*, 8(1), 82-95.
35. Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2(2), 121-139.
36. Üçler, Ç. and Bal Taştan, S. (2017). Investigating the relations of psychological contract, organizational transparency and leader-member exchange with employee performance behaviors. *Journal of Behavior at Work*, 2(2), 89-107.
37. Elden, B. (2020). The effect of psychological contract violation on job performance: the case of employees in ground handling services in airports. *Journal of Organizational Psychology and Behavior*, 1(1), 68-78.
38. İlhan, M. and Çetin, B. (2014). Comparing the analysis results of the structural equation models (sem) conducted using LISREL and AMOS. *Journal of Measurement and Evaluation in Education and Psychology*, 5(2), 26-42.
39. Kaya, Ş. D., Yüceler, A and Özen, M. Y. (2018). Inertia behaviours and patient safety among nurses. *Nobel Medicus*, 14(2), 40-48.