

THE EFFECT OF NURSES' PSYCHOLOGICAL CLIMATE PERCEPTIONS ON THEIR PROFESSIONALITY IN THE CONTEXT OF WORK ENGAGEMENT

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ABSTRACT

BACKGROUND:

The psychological climate of the organization, the individual's perspective on work and whether they are engaged are meaningful in terms of the professionalism level of nurses. Work engagement, as a concept completely opposite to burnout, refers to the emotional and motivational state of the employee towards his work.

AIM:

The aim of this study is to determine the effect of nurses' positive psychological climate perception on their professionalism and to investigate the mediation role of work engagement in this relationship.

METHOD:

Related data were gathered from 190 nurses who are working in a public hospital belonging to Health Ministry Erzurum Public Hospitals Union. In the research, the questionnaire form was used as data collection method. The questionnaire consists of statements determining the participants' perceptions of psychological climate, work engagement and professionalism. Validity and reliability of the scales were measured by item analysis, exploratory and confirmatory factor analysis and internal consistency coefficient method. The model, which was developed to analyze the relations between the variables, was tested by structural equation modeling.

FINDINGS:

In the research model and correlations between the variables were determined, and it was concluded that the relationships between all three variables were significant at the level of $p < 0.001$. In the second stage of the analysis, a structural equation test was applied to the research model and the relationships between the variables were determined. Then, Baron and Kenny approach and bootstrap analysis were used to determine the mediating effect related to the structural model. By testing the structural model, it was determined that the results of the goodness of fit index values were within the specified reference ranges.

RESULT:

According to the analyzed results, it is seen that work engagement has a partial role on the effect of positive psychological climate perception on professionalism.

KEYWORDS

Professionalism, psychological climate, work engagement

INTRODUCTION

Professionalism is defined as the individual's orientation towards social interests rather than personal interests [1]. Nursing is one of the professions in which the sense of professionalism is most discussed, especially considering the welfare and health of the society. Since the profession is an important part of the health sector, it increases the importance of nursing in society [2]. When evaluated from this point of view, this value and meaning attributed to nursing should be strengthened with professional principles because professionalism expresses the behavioral aspect of the profession [3]. Rather than professional knowledge and experience, the behavior used in the transfer of this knowledge and experience is a part of professionalism. The concept of professionalism is also defined as the relations, behaviors and values expected from the professional in accordance with the social contract between the professional and the organization he is a member of [4].

Professionalism is a necessity for the institution to achieve its goals and to protect the ethical and moral values of the institution. A professional is expected to act in line with humane, moral and ethical values while performing the technical parts of his job. Professionalism emphasizes the existence of ethical principles related to the profession as well as the commitment to the principles [5]. Ali and Bradburn emphasizes that the qualifications of the professional encompass education and training that includes basic behaviors [6]. Having technical equipment related to any field of expertise will not be enough for professionalism. Therefore, a professional must exhibit attitudes and behaviors in line with the basic values of the field in which he is an expert. It is important for the management of the organization on which factors the behavioral and attitudinal side of professionalism depend [7].

A professional approach is needed for the nursing profession, as in all professions. Nursing is one of the oldest professions known, which has a sanctity in the society with its service to human health and requires ethical / moral responsibility [8].

The professional identity of the nursing profession consists of three dimensions. The first is the personal dimension, which emphasizes the characteristics that nurses should have in order to take on authority and responsibility. The second is the interpersonal dimension, which expresses the process of

adopting the values, norms and culture associated with their profession through the social interactions of nurses in their work environment. Finally, the third dimension consists of the historical and social development of the nursing profession. Based on these dimensions, it can be stated that the professional identity of nursing is significantly affected by individual perception and interpersonal relationships. Therefore, the possibility that nurses' perceptions of professionalism may be affected by their perceptions of the institution they serve and it could be examined.

Many approaches to professionalism state that professionalism is related to individuals' perceptions, motivations, attitudes, and logic. On the other hand, some approaches underline that professionalism is affected by environmental factors [9]. Both approaches are essentially complementary to each other because the perception, motivation, attitude and logic of the employee are significantly affected by environmental factors.

Psychological climate is basically the cognitive descriptions of the employees about the organization they are in [10]. Therefore, the organization's creation of a positive psychological climate for its members will be effective in exhibiting positive organizational behaviors. Nurses who feel the support of the organization they work for, who think that their efforts and contributions are aware of the organization management and whose contributions are appreciated will not have difficulty in exhibiting the professional attitudes and behaviors desired by the organization. Each employee creates a psychological climate for himself by interpreting his own perception in a meaningful way. This cognitive representation makes it possible for individuals to attribute meaning to organizational events and to determine which behavior will lead to the best results [11]. Specifically, psychological climate refers to the perceptual and experiential components of the interaction between the organizational environment and the employee. This indicates that there is a relationship between employees' giving their personal energies to their roles in the workplace, depending on whether their organizational environment is meaningful and safe [12]. When employees think that their psychological needs are met in the workplace, they put their time and energy in response to this effort of the organization. This situation leads to the estimation that there is a direct positive relationship between psychological climate and employee effort [13]. Many studies also support this prediction. Psychological climate has positive effects on employees' work attitudes and behaviors

towards the organization [14]. Employees' climate perceptions have significant effects on employees' citizenship behaviors and job satisfaction, and therefore positively affect their job performance [15]. In addition, there are studies showing that positive psychological climate is positively related to various work-related attitudes and behaviors such as work engagement, job satisfaction, dedication, effort, employee performance, and productivity [16]. In addition to the psychological climate of the organization, the individual's perspective and work engagement may also be meaningful in terms of the professionalism level of nurses. Because work engagement, as a concept completely opposite to burnout, expresses an emotional and motivational state of the employee towards his work. Therefore, being engaged in the work enables employees to be energetic and excited about their work [17]. In this respect, it can be expected that the individual who is engaged to work will form a professional identity that easily adopts professional values.

When management is perceived as supportive, employee roles are clearly defined, employees feel free to express themselves, and they feel that they make a meaningful contribution to the organization, they are more engaged and put more effort into the work [18]. These findings are similar to studies showing that a positive work environment reduces employee demands, motivates them, and increases employee dedication to their work [19]. According to these data, it can be predicted that nurses' positive psychological climate perceptions may increase their level of engagement in their work.

Considering that the positive psychological climate is a resource that increases the level of work engagement of the employees and the level of work engagement is evaluated as a factor that can increase professionalism, it can be predicted that work engagement may have a mediating role in the effect of the psychological climate on professionalism.

Although there are many studies in the literature on the effect of psychological climate on work engagement, there aren't enough studies that reveals its relationship with professionalism. In the study, it is aimed to obtain the required information by using the model that may explain in the context work engagement the relationship between psychological climate and professionalism.

METHODS

POPULATION AND SAMPLE OF THE RESEARCH

The research is of a descriptive type. The population of this research consists of 414 nurses who have been working for more than 1 year in a state hospital affiliated to the Erzurum Public Hospitals Association of the Turkish Ministry of Health. The sample size to be selected was calculated as 200 by estimating a 5% margin of error within the 95% confidence limits of the research population in question (<http://www.surveysystem.com/sscalc.htm>). 207 nurses voluntarily participated in the study and answered the questionnaires. However, 190 questionnaire forms were deemed suitable for use. As a result of data collection, 83.2% of the survey participants were women and 70% were married, 41.6% were 24-30, 34.7% were 31-37, 16.3% were 36-44, It was found that 7.4% of them were in the age group of 45 and above. In addition, 52.2% of the participants fulfill their profession for 1 to 5 years, 31.3% for 6 to 10 years, and 16.5% for more than 10 years.

DATA COLLECTION TOOLS AND DATA COLLECTION

A questionnaire technique was used as a data collection tool in the research process. Questionnaire forms were delivered to the determined sample group by the researcher himself, distributed on a voluntary basis and collected in the following days (April 2018).

The scale consisting of a total of 21 questions to measure the professionalism of nurses was created by compiling from two different scales. The first of the scales used is the 44-item scale developed by Weis and Schank [20]. In line with the purpose of the research and the characteristics of the research universe, 13 items related to the dimensions of responsibility, safety and human dignity of the original scale were used. Another scale used is the professionalism scale of Chisholm et al. [21]. The 8 items in the original scale were selected in terms of their compatibility with the other scales used in the research and their suitability for the purpose of the research. The finalized scale was graded on a 5-point Likert scale (1- Never, 2- Rarely, 3- Sometimes, 4- Very often, 5- Always).

The psychological scale developed by Brown and Leigh was used to measure the psychological climate perceived by the participants in the institution where they work [22]. The scale consists of 21 questions expressing the dimensions of supportive management, role clarity, contribution, recognition, self-expression and difficulty. All statements in

the scale were rated with a 5-point Likert scale (1- Strongly disagree, 2- Disagree, 3- Undecided, 4- Agree, 5- Strongly agree).

The 9-question short version of the work engagement scale developed by Schaufeli and Bakker was used to measure the level of work engagement of the participants, grading

as a 5-point Likert scale (1- Never, ..., 5-Always) [23]. The scale consists of vigor, dedication and adoption dimensions, and each dimension is measured with three questions.

The goodness-of-fit indices obtained for the scales as a result of Confirmatory Factor Analysis are given in Table 1.

TABLE 1 CONFIRMATORY FACTOR ANALYSIS GOODNESS OF FIT INDICES FOR SCALES

Variables	CMIN/DF	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA	SRMR
PC	1.737	.909	.850	.919	.964	.946	.963	.062	.060
WE	1.362	.977	.942	.983	.996	.991	.995	.044	.025
PRO	1.226	.942	.905	.900	.980	.970	.979	.035	.048

(PC: Psychological Climate, WE: Work Engagement, PRO: Professionalism)

EVALUATION OF DATA

While reliability analysis, exploratory factor analysis and correlation analysis were applied to the research data, confirmatory factor analysis was carried out and direct and indirect relationships between the variables of the model were determined by testing the structural model.

ETHICAL ASPECT OF RESEARCH

The research questionnaire includes scales related to the variables of the research model and demographic and factual questions. Since the scales with validity and reliability tests are universal scales that have been used before, it was concluded that they would be sufficient to define the research variables. After the questionnaire form was created, it was evaluated by Atatürk University Social and Human Sciences Ethics Committee, and it was decided that the questionnaire study was ethically and scientifically appropriate (14.06.2017; Decision no: 22)

A state hospital affiliated to Erzurum Public Hospitals Association was determined as the research universe and an official application was made to the institution. Our

research request was approved by the institution and necessary permissions were given. Hospital nurses were asked to participate on a voluntary basis, and any concerns that might arise were tried to be resolved by stating that the questionnaires would only be used for academic purposes, the names of the participants were not required, and the results of the research would not be given to any person or institution. In this respect, it is assumed that the participants in the study perceive and interpret the statements in the questionnaire correctly and share their sincere views. In addition, the Helsinki Declaration 2008 Principles were complied with during the study.

RESULTS

The descriptive statistics (mean and standard deviation) related to the variables in the research model and the correlations between the variables are given in Table 2. As seen in Table 2, there are significant relationships between the variables that make up the research model.

TABLE 2 MEANS, STANDARD DEVIATIONS OF VARIABLES AND CORRELATIONS BETWEEN VARIABLES

Factor	Mean	SD	1	2	3
1- P	3.47	.655	1		
2- WE	3.65	.784	.490**	1	
3- PRO	4.37	.419	.410**	.385**	1

*p<0.05 **p<0.01

(PC: Psychological Climate, WE: Engagement, PRO: Professionalism, Mean: Average, SD: Standard Deviation)

In the second stage of the analysis, the structural model was tested and the relationships between the variables related to the model were determined. Then, Baron and Kenny approach and bootstrap analysis were used to determine the mediator relationship in the structural model [24]. The research hypotheses created in line with the theoretical background regarding the variables that are the subject of the research were tested by applying them to the research model through validated scales. In the model, psychological climate is included as the only exogenous variable. Engagement and professionalism are the endogenous variables of the model. In addition, the variable of being engaged to work was added to the model as a mediator variable in line with the theoretical framework. The regression loads between the variables of the research model are given in Figure 1.

The fit index results obtained from testing the structural model are as follows: CMIN/DF= 1.887; GFI= .950; AGFI=.887; NFI=.909; IFI=.955; TLI=.939; CFI=.954; RMSEA=.069; SRMR=.060. When the data are examined, it is seen that the obtained fit index results are within the specified reference ranges. Therefore, it is realized that the research model in question is at an acceptable level.

The predictive values of the model obtained in the structural equation analysis performed to test the research hypotheses are given in Table 3. According to the table, it is seen that there is a significant relationship at $p < 0.001$ significance level between psychological climate and work engagement. There is a significant relationship between psychological climate and professionalism at $p < 0.001$ significance level. In the research model, it was

found that there was a significant relationship at $p < 0.01$ importance level between being engaged in the work, which was taken as a mediator variable, and professionalism.

After examining the direct relations of the research variables with each other, the analysis methods and results performed to examine the indirect relations are taken into account.

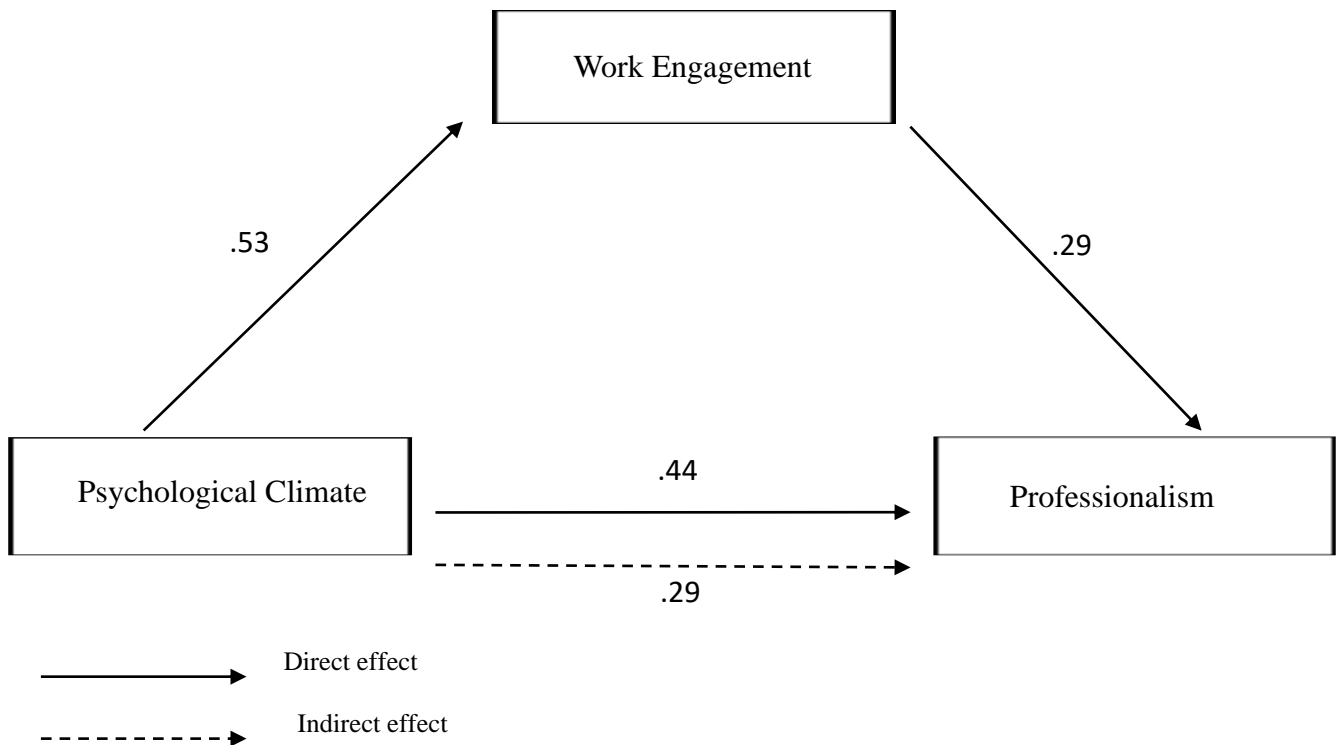
Psychological climate affects professionalism positively, directly and significantly (.448; $p < 0.001$). Since the necessary conditions for the mediation test were fulfilled, in the next step, the tool of engagement was placed in the model as a variable and the effect of the psychological climate on professionalism was examined. The psychological climate has also an indirect effect on professionalism by influencing work engagement. (.285; $p < 0.01$). Therefore, according to the Baron and Kenny (1986) approach, it can be said that engagement to work has a partial mediation role. However, it remains to be determined whether this partial mediation role is significant [25]. For this reason, the significance table of the model was examined by means of the bootstrap test, and it was determined that the partial mediating role of being engaged in the work on the effect of the psychological climate on professionalism was significant at the $p < 0.01$ significance level. Therefore, it is seen that the significant and positive effect of the positive psychological climate perceptions of the nurses participating in the research on their professionalism is partially mediated by their level of engagement in their work.

TABLE 3 ESTIMATION RESULTS FOR THE STRUCTURAL MODEL

Variables	Std. β	Std. Error	X ² (C.R)	P
WE<--- PC	.533	.208	4.603	***
PRO <--- PC	.448	.118	3.849	***
PRO <--- WE	.294	.054	2.989	**
***p<0.001 **p<0.01 *p<0.05				

(PC: Psychological Climate, WE: Engagement, PRO: Professionalism)

FIGURE 1. THE REGRESSION LOADS BETWEEN THE VARIABLES OF THE RESEARCH MODEL



DISCUSSION

In this study, the effect of nurses' perceptions of psychological climate regarding their work environment on their professionalism through their level of work engagement was investigated. It has been determined that the nurses participating in the research have a positive perception about the psychological climate in general. It has been observed that this positive perception is an important factor for nurses to use all their resources energetically for their work, to devote themselves to their work, to adopt and internalize their work, and thus to engage in work. A similar effect plays a role in nurses' adoption of professional values and creating a professional identity. It shows that the level of work engagement has a partial mediation role in increasing the professionalism of the positive psychological climate perceived by the nurses constituting the research sample in the work environment. These findings obtained in the research are actually the results that can be predicted in line with the conceptual framework. In this respect, it can be said that the research questions about the research model were answered clearly.

According to the research model data, it was determined that the positive psychological climate perceptions of the nurses participating in the research have a positive effect

their work engagement levels ($p < 0.001$) at significance level (.553). Based on this result, it can be said that the positive psychological climate they perceive in the work environment is effective in the full commitment of the nurses participating in the research to their work. These findings obtained; Gutierrez's research on service sector employees [26] and Lee and Ok's research on hotel employees show that it is consistent with the findings obtained from their research on hotel employees, and that employees' psychological climate perceptions are a determining factor on their level of work engagement [27]. The concept of work engagement emphasizes the psychological and emotional bond between the employee and his job. In this respect, this bond that the employee creates against his job will be affected by the psychological factors in the environment [28]. As a matter of fact, Kahn concluded that perceiving the organizational environment in a significant and secure way has a strong effect on the employees' giving all their energies to their roles in the workplace [29]. Brown and Leigh, on the other hand, found that if the employees think that their psychological needs are met by their organizations, they put all their time and energy into fulfilling their duties [30]. Uraon and Gupta also showed in their research that the positive psychological climate of employees is an important determinant of their task and contextual performance [31].

Considering the challenging and stressful conditions of the nursing profession, it can be stated in parallel with the above research results that the existence of a positive psychological climate in the work environment will be effective in overcoming the aforementioned difficult conditions and in developing a positive bond with the nurses' work.

Similarly, nurses' positive psychological climate perceptions positively affect their professionalism $p < 0.001$ at significance level (.448). It can be said that positive psychological climate perceptions are effective for nurses participating in the research to define as professionals themselves. Professionalism requires the employee to act in accordance with moral and ethical rules, be aware of her responsibilities, always display a reliable stance, have professional sensitivities and altruism while performing her profession. These qualities may interact with different perceptual mechanisms in terms of attitudes and behaviors that emerge in line with the perceptions of the individual. Shao also emphasizes the importance of the attitude and behavior dimension of professionalism based on individual perception [32]. Similarly, Senapaty & Bhuyan state that professionalism is the behavioral aspect of the profession [33]. As a matter of fact, the results of the analysis show that the psychological climate, which is a perceptual process, may be related to the perceptions that form the source of nurses' attitudes and behaviors towards professionalism. Reaching of these values from a positive environment to the individual by positive ways will enable the individual to adopt these values and transform them into behaviors. If evaluated from this perspective, it can be emphasized will be affect the positive management style, culture and climate of organization on the source of the professional attitudes and behaviors of the nurses participating in the research. When the participants' work engagement levels are included in the research model, there is a decrease in the effect of psychological climate on professionalism ($p < 0.001$ (.448); $p < 0.01$ (.285)). Therefore, it is seen that work engagement has a partial mediating role in the effect of psychological climate on professionalism. In this respect, it can be said that the positive psychological climate perceptions of the nurses participating in the research also increase their level of work engagement and thus enable them to have a professional identity. In other words, although the positive psychological climate perceptions of aforementioned nurses' strongly increase their professionalism levels, it is seen that being engaged in the work partially renders this effect meaningless because it is a strong determinant on professionalism. For this reason, it

can be stated that the effect of being engaged in work on professionalism is so effective that it can reduce the effect of the psychological climate.

CONCLUSION

The development of professionalism has an important role in determining the standards for any profession and in the satisfaction of service recipients. Otherwise, it will not be possible for the person to demonstrate his professionalism and the institution to achieve positive results. The scope of professionalism and its differences in practice will be shaped according to the qualifications of the profession whose professionalism is evaluated. In this respect, the concept of professionalism has been examined in line with the professionalism qualifications of the nurses, who constitute the sample of our research. Participants' perceptions of professionalism; moral and ethical behavior are discussed in terms of emotional and cognitive dimensions such as responsibility, trust, professional sensitivity and altruism. Due to this feature of the dimensions, it was examined the concept of professionalism within the framework of the concepts of psychological climate and work engagement in this study, considering that different psychological phenomena can strengthen it.

Nursing is one of the important occupational groups that require professionalism because it serves an important purpose such as human health. However, the professionalism expected from nurses does not only include the technical knowledge and equipment of the work they do, but also includes the attitudes and behaviors to be exhibited in line with the values of the profession. In this respect, a positive psychological climate that will be a source for the professional attitudes and behaviors expected from nurses should be created by the organization.

A supportive management of the organization, clearly revealing their job roles, making employees feel free to express themselves, and most importantly, making them feel that they are making a meaningful contribution to the hospital they work will enable nurses to engage in their work and act professionally through this situation.

As a result, the management's creation of a positive climate in the work environment will positively guide nurses' perceptions of the organization, and eventually these

perceptions will turn into attitudes and behaviors that the organization expects them to exhibit.

References

1. Black, P. B. Professional nursing concepts and challenges (8th ed.). Elsevier/Saunders, 2017.
2. Henry M.C., Joseph K. A., Reyna C., Raja S., Stein S. L. Redefining professionalism. *The American Journal of Surgery*, 2021, 222, 899-900. <https://doi.org/10.1016/j.amjsurg.2021.04.013>
3. Senapaty, S., & Bhuyan, N., Evaluating the profession and professionalism of business managers: control embedded in character. *Decision*. 2014, 41 (3), 271–278. doi: 10.1007/s40622-014-0051-3
4. Shao, J., Leiwen, T., Wang, X., Qiu, R., Zhang, Y., Jia, Y., Ma, Y., & Ye, Z. Nursing work environment, value congruence and their relationships with nurses' work outcomes. *Journal of Nursing Management*, 2018, 26(8), 1091–1099. <https://doi.org/10.1111/jonm.12641>.
5. Cusack, L., Drioli-Phillips, P. G., Brown, J. A., & Hunter, S., Re-engaging concepts of professionalism to inform regulatory practices in nursing. *Journal of Nursing Regulation*, 2019, 10(3), 21–27. [https://doi.org/10.1016/S2155-8256\(19\)30144-9](https://doi.org/10.1016/S2155-8256(19)30144-9)
6. Ali, C. & Bradburn, M.. Professionalism. *Surgery (Oxford)*, 2018, Volume 36, Issue 9, 443-447. <https://doi.org/10.1016/j.mpsur.2018.07.011>
7. Millard, M. L.. Psychological net worth: finding the balance between psychological capital and psychological debt. ETD collection for University of Nebraska–Lincoln, 2011.
8. Ichikawa N., Yamamoto-Mitani N., Takai Y., Tanaka M., Takemura Y. (2020). Understanding and measuring nurses' professionalism: Development and validation of the Nurses' Professionalism Inventory. *Journal of Nursing Management*, 2020, 29(3), 1607-1618. <https://doi.org/10.1111/jonm.13116>
9. Blue, A., Crandall, S., Nowacek, G., Leucht, R., Chauvin, S., & Swick, H., Assessment of matriculating medical students' knowledge and attitudes towards professionalism. *Medical Teacher*, 2009, 31(10), 928-932. doi: 10.3109/01421590802574565
10. Kataria, A., Garg, P. & Rastogi, R., Do high-performance HR practices augment OCBs? The role of psychological climate and work engagement. *International Journal of Productivity and Performance Management*, 2019, 68. (6), 1057-1077.
11. Parker, C.P., Baltes, B.B., Young, S.A., Huff, J.W., Altmann, R.A., Lacost, H.A., & Roberts, J. E., Relationships between psychological climate perceptions and work outcomes: a meta-analytic review, 2003, *Journal of Organizational Behavior*, vol. 24, 389-416. doi: 10.1002/job.198
12. Kahn, W.A., Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 1990, 33(4), 692–724. <https://doi.org/10.5465/256287>
13. Brown, S. P., & Leigh, T. W. A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 1996, 81(4), 358-368. <https://doi.org/10.1037/0021-9010.81.4.358>
14. Ogilvie, J., Rapp, A., Bachrach, D. G., Mullins, R., & Harvey, J., Do sales and service compete? The impact of multiple psychological climates on frontline employee performance. *Journal of Personal Selling & Sales Management*, 2017, 37(1), 11–26. <https://doi.org/10.1080/08853134.2016.1276398>
15. Biswas, S., & Varma, A. Psychological climate and individual performance in India: test of a mediated model. *Employee Relations*. 2007, 29 (6), 664-676. Doi: 10.1108/01425450710826131
16. Brown, S. P., & Leigh, T. W. A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 1996, 81(4), 358-368. <https://doi.org/10.1037/0021-9010.81.4.358>;
17. Biswas, S., & Varma, A. Psychological climate and individual performance in India: test of a mediated model. *Employee Relations*. 2007, 29 (6), 664-676. Doi: 10.1108/01425450710826131.
18. Chooi, A. M., Ramayah, T., & Doris, A., D. Psychological climate, employee engagement and affective organisational commitment: the oil and gas employees' perspective. *Int. Journal of Economics and Management*, 2018, 12 (2), 621-639.
19. Kosaka, D. & Sato, H. (2020). Employee Engagement and Work Engagement: Same Wine, Different Bottles? *Annals of Business Administrative Science*, 2020, 19, 227–239 <https://doi.org/10.7880/abas.0200911a>
20. Brown, S. P., & Leigh, T. W. A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 1996, 81(4), 358-368. <https://doi.org/10.1037/0021-9010.81.4.358>
21. Zagenczyk T. J., Purvis R. L. & Cruz K. S. Who matters to shared psychological climate perceptions? An investigation of social network tie types and attributes, *The International Journal of Human Resource*

- Management, 2021, DOI: 10.1080/09585192.2021.1986108
22. Weis D., & Schank M. J.. Toward building an international consensus in professional values. *Nurse Educ Today*. 1997, 17(5), 366-369. doi: 10.1016/s0260-6917(97)80096-2
 23. Chisholm, M., Cobb, H., Duke, L., McDuffie, C., & Kennedy, W. (2006). Development of an instrument to measure professionalism. *American Journal of Pharmacy Education*, 2006, 70(4), 85-89. <https://pubmed.ncbi.nlm.nih.gov/17136204/>
 24. Brown, S. P., & Leigh, T. W. A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 1996, 81(4), 358-368. <https://doi.org/10.1037/0021-9010.81.4.358>
 25. Schaufeli, W.B., & Bakker, A.B. Test manual for the utrecht work engagement scale. unpublished manuscript, Utrecht University, the Netherlands.2003, Retrieved from <http://www.schaufeli.com>
 26. Baron, R. M., & Kenny D. A. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations, *Journal of Personality and Social Psychology*. 1986, 51(6), 1173-1182. doi: 10.1037//0022-3514.51.6.1173
 27. Baron, R. M., & Kenny D. A. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations, *Journal of Personality and Social Psychology*. 1986, 51(6), 1173-1182. doi: 10.1037//0022-3514.51.6.1173.
 28. Gutierrez, A. An Exploration of the Effects of Psychological Climate, Workplace Friendships, and Psychological Needs on Perceived Transformational Leadership and Work Engagement. 2014, Alliant International University.
 29. Lee, J., & Ok, C. Drivers of work engagement: An examination of core self-evaluations and psychological climate among hotel employees. *International Journal of Hospitality Management*, 2015, 44 (1) 84-98. <https://doi.org/10.1016/j.ijhm.2014.10.008>
 30. Johns, G. Advance in the treatment of context in organizational research. *Annual Review of Organizational Psychology and Organizational Behavior*, 2018, 5(1), 21-46. <https://doi.org/10.1146/annurev-orgpsych-032117-104406>
 31. Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 1990, 33(4), 692-724. <https://doi.org/10.5465/256287>
 32. Brown, S. P., & Leigh, T. W. A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 1996, 81(4), 358-368. <https://doi.org/10.1037/0021-9010.81.4.358>
 33. Uraon, R. S. & Gupta, M. (2020). Does psychological climate affect task and contextual performance through affective commitment? Evidence from public sector companies. *Evidence-based HRM: a Global Forum for Empirical Scholarship*. 2020, 9, (3), 258-275. DOI 10.1108/EBHRM-09-2019-0089
 34. Shao, J., Leiwen, T., Wang, X., Qiu, R., Zhang, Y., Jia, Y., Ma, Y., & Ye, Z. Nursing work environment, value congruence and their relationships with nurses' work outcomes. *Journal of Nursing Management*, 2018, 26(8), 1091-1099. <https://doi.org/10.1111/jonm.12641>.
 35. Senapaty, S., & Bhuyan, N. Evaluating the profession and professionalism of business managers: control embedded in character. *Decision*. 2014, 41(3), 271-278. doi: 10.1007/s40622-014-0051-3