

# Exploring the Relationship between Organizational Cultures, Openness to Experience and Work Engagement

**Damlasu UYUĞ ŞENGÜN\***

*İzmir University of Economics, İzmir, Turkey*

*\*Corresponding author, damlasu.uyug@std.iue.edu.tr*

**Tuğba TUĞRUL**

*İzmir University of Economics, İzmir, Turkey*

*tugba.tugrul@ieu.edu.tr*

**Abstract.** *The present study aims to investigate the effects of organizational culture and openness to experience personality trait on work engagement in a collectivistic country context. A within-subject, vignette-based experiment was conducted to compare the effects of clan and hierarchy cultures on work engagement among Turkish employees. Results indicated that hierarchy culture and clan culture both lead to high work engagement. However, mixed-design ANOVA results revealed that organizational culture type neither individually nor interacting with openness to experience lead significant differences in work engagement levels. The coexistence of a clan culture and hierarchy culture in Turkish companies may be one explanation for these findings. The knowledge of how and under what conditions organizational culture affects work engagement may be enhanced by future cross- country comparative studies.*

**Keywords:** organizational culture, work engagement, openness to experience, vignette-based experiment, collectivistic country context.

## Introduction

Work engagement is an important topic in the field of positive psychology and positive organizations (Csikszentmihalyi & Seligman, 2000). For companies, higher levels of work engagement have been linked to financial returns, increased commitment, and improved performance (Xanthopoulou et al., 2009; Schaufeli & Bakker, 2004; Demerouti et al., 2010). For employees, work engagement has been found to be associated with lower levels of stress (Demerouti et al., 2001), increased happiness, enthusiasm, and optimism (Demerouti & Bakker, 2008). However, the most recent Gallup State of the Global Workplace Report (2022) states that only 21% of employees are engaged at work. Therefore, it is crucial to understand the factors that contribute to work engagement, both at the organizational and individual level. Research has begun to explore what types of organizations foster work engagement, and how individual characteristics, such as personality traits, may play a role in this process (Chen, 2016; Akhtar et al., 2015; Awadh & Wan Ismail, 2012). However, there is still much to be learned in this area, such as organizational and individual factors that shape work engagement.

Organizational culture is a topic that has been shown to be closely linked to both employee experiences and organizational outcomes. It has been shown that the culture of an organization may have a significant impact on a variety of job-related outcomes, including job satisfaction, employee commitment, well-being, and proactive work behavior (Belias & Koustelios, 2014; Yiing & Ahmad, 2009; Shukla, 2017). For instance, Kuşlivan & Karamustafa (2003)'s study found that organizational culture is positively related to such employee attitudes and behaviors as job satisfaction, commitment, empowerment, job involvement, creativity, participation, and

motivation, and negatively related to stress, job tensions and intent to turnover. Given the potential benefits of a positive organizational culture, many organizations have begun to focus on implementing culture-building practices. These practices may include things like developing a shared mission and values, promoting open communication and transparency, and encouraging employee participation and feedback. By taking steps to create a positive and supportive culture, organizations can work to improve employee experiences and promote positive outcomes for the organization as a whole. To sum it up, internal and external functioning of an organization is shaped by the type of culture adopted (Cameron & Quinn, 2011).

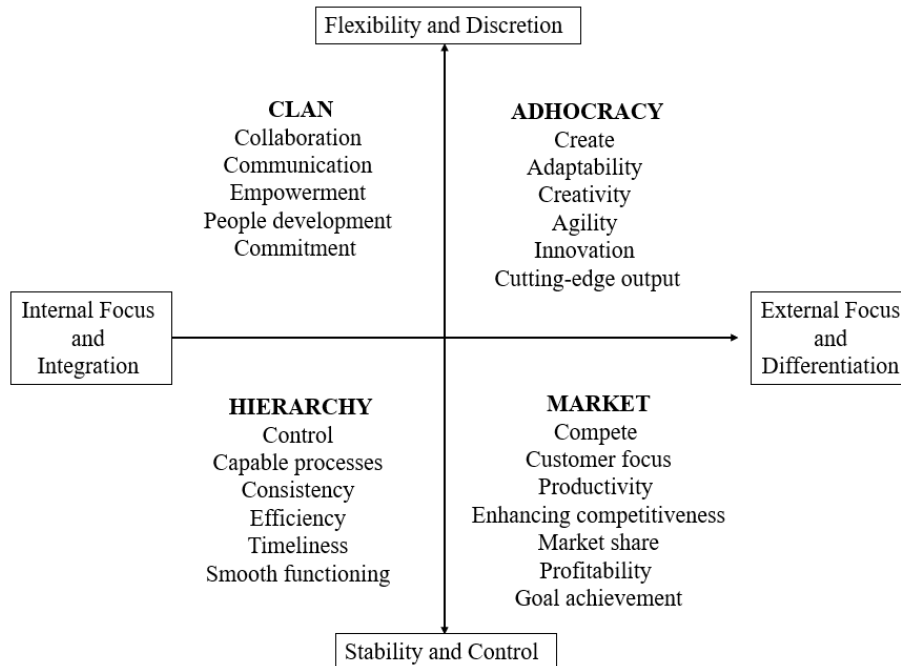
The concept of organizational culture has gathered significant attention in the literature (e.g., Yiing & Ahmad, 2009; Hartnell et al., 2011; Schneider et al., 2013; Marchalina et al., 2021) yet this study aims to contribute by proposing an individual-level variable that may alter the previously established relationship between different types of organizational culture and work engagement in a collectivistic country context. By introducing openness to experience personality trait as a moderating variable, this study seeks to explore the role of individual differences in shaping employee behaviors. Although it is widely discussed that organizational culture influences various organizational, group, and individual constructs, research investigating the specific employee behaviors and attitudes affected by organizational culture is limited (Krog, 2014). To study this gap in the literature, this study employs an experimental research design, which is uncommonly utilized in the study of organizational culture.

## Literature review

### *Organizational culture*

Organizational culture can be seen as the unique personality of a company, which is defined by the shared values, beliefs, and assumptions that guide the way in which daily business operations are conducted (Trompenaars et al, 2004). One widely cited definition of organizational culture is provided by Schein (1991: 313) which is “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration...and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems”. This definition emphasizes the dynamic and adaptive nature of organizational culture and highlights its role in shaping both the internal and external functioning of the organization.

Cameron and Quinn (2011) argued that there are four types of organizational culture (hierarchy, clan, market, and adhocracy) based on two main dimensions: focus (Flexibility vs. Stability) and structure (Internal Focus vs. External Focus). The former represents a company's general approach towards being whether flexible or stable. Flexibility is characterized by a spontaneous and open attitude towards change, while stability values order and control. The structure dimension, meanwhile, has two ends: internal and external. Internally structured organizations prioritize internal organizational demands, valuing unity and integration among employees, while externally structured organizations prioritize organizational competition and individualism.



**Figure 1. Organizational Culture types according to Competing-Values Framework**

Source: Albayrak & Albayrak, 2014.

Previous studies provide evidence of clan culture in Turkish organizations (Öney-Yazıcı et al., 2007; Giritli et al., 2013; Genc, 2017). For example, Öney-Yazıcı et al. (2007) provided evidence of clan culture dominance among the organizations in the Turkish construction industry. The authors defined clan culture as perceiving the organization as a family, having strong emotional ties between employees, feeling a sense of belonging, and focusing on the well-being of employees. The study found that the companies in the sample had strong emotional ties between employees, a sense of belonging, and a focus on the well-being of employees, which were all characteristics of the clan culture. Another study by Trompenaars and Hampden-Turner (1998) that examines the management practices of companies across different countries, also found that Turkish companies tend to have a family-like culture, with close relationships between employees and a strong sense of loyalty to the company while having a strong hierarchy within the organization. Additionally, research has found that the dominant organizational culture in Turkish public universities (Caliskan & Zhu, 2019) and Turkish healthcare industry (Acar & Acar, 2014) is hierarchal. Moreover, research revealed that clan culture is the most desired organizational culture in Turkey (Demir et al., 2011; Soylu, 2004).

Clan culture emphasizes strong social connections, a sense of belonging, and a family-like atmosphere within the organization (Cameron & Quinn, 2011). In addition, there is a strong emphasis on loyalty, tradition, and a sense of shared history and purpose. The organization is often seen as a "family" and employees are often treated as "family members". The leader is often seen as a mentor or a "father figure" who guides and protects the members of the organization. In clan cultures, the workplace prioritizes flexibility and teamwork, with a focus on employee development (Quinn & Kimberly, 1984), as well as on creating a positive and supportive work environment. This culture value a strong internal focus and prioritize the cultivation of relationships and commitment among employees. In clan cultures, decision-making is often based on consensus, giving importance to group cohesion and collaboration. The culture is often built on trust, mutual

respect, and a sense of community, with a focus on employee well-being and satisfaction. Clan culture is generally found in smaller organizations, or in organizations where employees have a strong sense of shared values and identity such as family-owned businesses, non-profit organizations, and small community-based organizations.

On the other hand, hierarchy culture is characterized by a formal and structured approach, with a strong emphasis on rules, impersonality, and accountability (Cameron & Quinn, 2011). Within this framework, control and hierarchy are emphasized, and formal procedures and guidelines are used to govern behavior. The organizational culture emphasizes a clear chain of commanding, formal rules and procedures, and a clear division of labor. In hierarchy cultures, there is a strong emphasis on control, stability, and predictability. The organization is often seen as a machine, and employees are often treated as interchangeable parts. The leader is often seen as a manager or a "boss" who directs and controls the members of the organization. In hierarchy cultures, decision-making is often made by a central authority position or a small group of employees at the top of an organization, rather than being made by individuals or teams within the organization aiming for efficiency and productivity. Emphasis is also placed on maintaining order and stability, as while following established rules and procedures. The culture is often built on discipline, and a sense of duty, with a focus on achieving goals and meeting targets. Hierarchy culture is often found in larger organizations or in organizations where there are clear job descriptions. Examples of organizations that may have a hierarchy culture include government agencies, military organizations, and large corporations.

### ***Work engagement***

Work engagement is a positive and fulfilling state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). An employee can be considered vigorous if they exhibit high levels of energy towards their work and are able to sustain that energy throughout the tasks they have. Dedication is characterized by enthusiasm, high focus on personal aspirations, and a willingness to face challenges while they pursuit their goals. Finally, absorption represents a state of full concentration, like the concept of "flow," where an individual is fully absorbed in their work.

In Turkey, work engagement is found to be negatively related to work–family conflict which is also negatively associated with supervisor support and time flexibility (Turgut, 2011). Clan cultures that prioritize relationships, collectivism, and emotional well-being is expected to place a greater emphasis on work-family balance and support from supervisors, leading to higher work engagement. In the Norwegian context, Krog (2014) demonstrated that work engagement has a positive relationship with the dedication dimension of clan culture whereas no significant effects were found for the vigor and absorption dimensions. In addition, the relationship between hierarchy culture and all the work engagement dimensions were not significant. Hofstede (1980) characterized Norway as an individualistic country and thus hierarchy culture effect can be found in collectivistic countries, such as Turkey. But still, compared to clan culture, effect is expected to be higher on work engagement. Therefore, the following main effect is hypothesized:

H1: Compared to hierarchy culture, work engagement level on clan culture will be higher.

### ***Openness to experience personality trait***

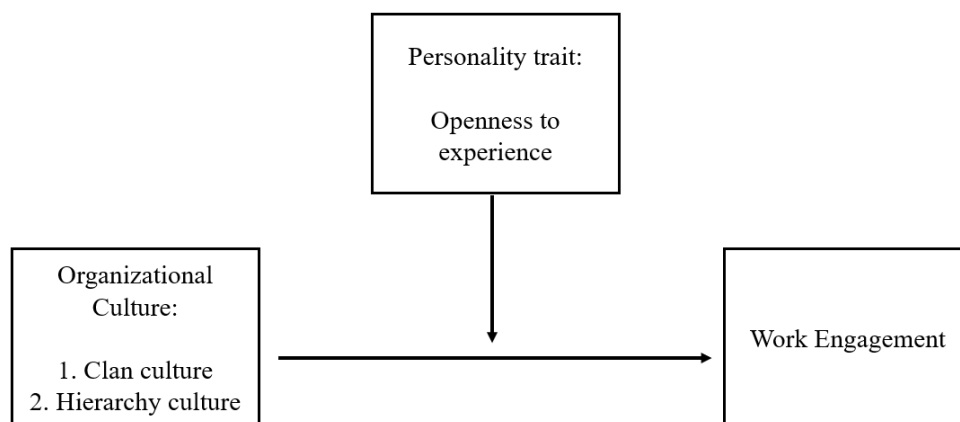
Work-related outcomes can be influenced by both organizational and individual factors. The Big Five Personality Theory proposes that individual differences in personalities affect how individuals react to their environment (Santos, 2016). Previous research has various findings about the effects of openness to experience trait (Mohan & Mulla, 2013; Burke & Witt, 2002; Baer & Oldham, 2006;

Schilpzand et al., 2011). McCrae (1987) presented that openness to experience involves active imagination, attentiveness to feelings, search for variety, and intellectual curiosity. These characteristics have been found to facilitate motivation to actively seek out new and diverse experiences, and when faced with new situations, individuals with high levels of openness to experience are more adaptable (Nieß & Zacher, 2015; Baer & Oldham, 2006). Sanchez-Cardona et al. (2012) stated that openness to experience trait can be beneficial as it can show demands as challenges and thus promote learning experiences that can also promote engagement.

There are several arguments that can be made to support the idea that openness to experience functions as a moderating variable in the relationship between organizational culture and work engagement. Firstly, individuals who are high in openness to experience tend to be more open-minded and adaptable, which may allow them to navigate and find meaning in different cultural contexts. This may result in a less negative impact of hierarchy culture on work engagement, and a more positive impact of clan culture on work engagement. Secondly, individuals who are high in openness to experience may be more likely to seek out and engage in opportunities to expand their knowledge and skills, which may enable them to feel more challenged and engaged in their work. This may result in a more positive relationship between clan culture and work engagement as clan culture emphasizes employee development and growth. Also, individuals high in openness to experience may be more likely to challenge and change the cultural norms of their organizations, which may lead to a better alignment between their values and the values of the organization, and subsequently to a higher level of work engagement.

Considering the different effects of different organizational cultures on employees' work engagement, and the possible moderating role of trait openness to experience, formulated hypothesis is presented below:

H2: People who score high on openness to experience will show higher work engagement in a clan culture compared to hierarchy culture.



**Figure 2. Conceptual model**

Figure 2 presents the conceptual model proposing that the type of organizational culture produces work engagement, and openness to experience as a personality trait moderate the relationship.

## Methodology

A within-subject, vignette-based experiment was conducted to compare the effects of clan and hierarchy cultures on work engagement among Turkish employees. The same group of people received the treatments which were created by using two hypothetical scenarios.

### Sample

For this study, the condition for participation were working full-time, in a corporation, for minimum 1 years. The participants were 33 employees (21 women, 12 men; mean age = 34.88, SD = 7.78) from Turkey. Participants had an average 11.76 years of work experience (SD = 8.96). As educational background, 11 participants (33.3 %) had a master’s degree, 19 of them (57.6 %) had a bachelor’s degree, and 3 of them (9.1 %) had a high school degree. Industries varied across participants including textile, logistics, production, finance, and information technologies. Table 1 provides demographic characteristics of the sample.

**Table 1. Sample demographics**

	N (%)	M (SD)
Gender		
Female	21 (63.6)	
Male	12 (36.4)	
Education Level		
High School	3 (9.1)	
Bachelor’s Degree	19 (57.6)	
Master’s Degree	11 (33.3)	
Age		34.88 (7.78)
Years of Work Experience		11.76 (8.96)

Source: Authors’ own research.

### Procedure

Participants were first asked to complete a measure of openness to experience. Next, they were presented with two different scenarios describing a fictitious orientation day of an organization. Organizational culture type (clan versus hierarchy) was manipulated based on dominant characteristics (sense of community versus formal rules), organizational leadership (personal growth versus coordination), strategic emphases (flexibility versus stability) and criteria of success (commitment versus efficiency) (Cameron and Quinn, 2011). It should be noted that in the vignette development process, scenarios were evaluated by three experts in terms of plausibility, clarity, simplicity, and ability to represent the above-mentioned dimensions of each organizational culture type. After reading the scenarios, participants were asked to complete a measure of work engagement, reflecting on the workplace described in the scenario. Also, four filler questions were asked in between two scenarios to decrease the likelihood of respondents to uncover the purpose of experiment and responding accordingly. Finally, participants answered demographics questions.

### Measures

Work engagement was measured by a 9-item, 7-point frequency scale ranging from 0 (never) to 6 (always) (Schaufeli et al., 2006) which was adapted into Turkish by Eryılmaz and Doğan (2012) and found to have high reliability ( $\alpha = .94$ ).

Openness to Experience was measured on a 7-item, 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), adopted from the Big Five Inventory (John, Donahue &

Kentle, 1991). The Turkish version of the Openness subscale ranging from “totally agree” to “totally disagree” was used (Karaman, Dogan & Coban, 2010,  $\alpha = .86$ ). The Cronbach’s alpha values for clan culture work engagement and hierarchy culture work engagement scales were  $\alpha = .90$  and  $\alpha = .96$ , respectively. Also, for openness to experience scale,  $\alpha = .80$ , all exceeding the 0.70 measurement reliability threshold (Nunnally, 1978). Results of the openness to experience scale were categorized into “low openness to experience” and “high openness to experience” by using median split for analysis.

## Results

In order to ensure the effectiveness of the manipulated scenarios in reflecting the intended organizational culture types, preliminary research was conducted with a different sample of participants ( $n=11$ ). Results revealed a significant difference between the scores of perceived hierarchy culture and clan culture in both of the clan culture [ $t(10) = 4.36, p = .001, M_{\text{clan culture}} = 5.41$  versus  $M_{\text{hierarchy culture}} = 3.86$ ] and hierarchy culture scenarios [ $t(10) = -6.26, p = .00, M_{\text{clan culture}} = 3.86$  versus  $M_{\text{hierarchy culture}} = 6.43$ ] suggesting that the adjustments to the scenarios were successful in eliciting perceptions of clan culture among the participants.

As for the main experiment, a mixed-design ANOVA test was conducted for measuring the main and interaction effects of organizational culture and openness to experience on work engagement evaluations. Firstly, 3 outliers were detected that were showing extreme values for all the three measures, and thus excluded from the analysis. Hypothesis 1 predicted that work engagement levels on clan culture will be higher than on hierarchy culture. Results showed that hierarchy culture and clan culture lead to high work engagement, while no significant difference in work engagement levels for the two type of organizational culture was found [ $F(1, 33) = 1.300, p = .262, M_{\text{clan culture}} = 4.54, SD = 1.07$  versus  $M_{\text{hierarchy culture}} = 4.30, SD = 1.23$ ]. Therefore, Hypothesis 1 was not supported.

Moreover, Hypothesis 2 stated that people who score high on openness to experience will show higher work engagement in a clan culture compared to hierarchy culture. Results revealed that there was no statistically significant interaction effect [ $F(1,33) = .002, p = .966$ ]. Thus, Hypothesis 2 was not supported. Results are detailed in Tables 2 and 3.

**Table 2. Descriptive statistics**

Level of Openness to Experience		Mean	Std. Deviation	N
Work Engagement Total Score - Clan Culture	Low	4.54	1.280	19
	High	4.53	.786	16
	Total	4.54	1.068	35
Work Engagement Total Score - Hierarchy Culture	Low	4.30	1.344	19
	High	4.31	1.124	16
	Total	4.30	1.230	35

Source: Authors’ own research.

**Table 3. Mixed-design ANOVA results**

	df	F	Sig.
Work_engagement	1	1.300	.262
Work_engagement * Openness_level	1	.002	.966
Error(work_engagement)	33		

Source: Authors’ own research

## Discussion and conclusion

First of all, contrary to the previous research (Krog, 2014), results suggest that clan culture and hierarchy culture in workplaces both make employees to very often feel engaged. This might be due to the cultural individualism-collectivism differences between Norway and Turkey. This cross-country comparison may enrich our understanding of the role of culture on work engagement.

The results of this study also indicated that there is no difference in work engagement levels between clan culture and hierarchy culture. This would mean that employees' engagement levels are not directly dependent to different types of organizational cultures. Furthermore, there was no interaction effect found between openness to experience and the type of culture on work engagement levels. Openness to experience, as a personality trait, was presented in the model as a possible individual-level moderator. However, the result of the current study did not find a significant relationship.

One possible reason for these results could be related to the fact that family-like culture and hierarchy within the organization co-exist in Turkish companies (Trompenaars and Hampden-Turner, 1998). Although each organizational culture type was successfully created via hypothetical scenarios, vignette role playing may produce this counter priming effect of the other dominant culture. In addition, the competing values framework by Cameron and Quinn used in this model was originally developed from an American cultural context. This framework was created by researching organizations across the United States and the values and practices commonly found within them. Since then, the framework has been applied to a different of cultural contexts, including non-Western cultures, and has proven to be relevant in a variety of cultural contexts. It can still be important to consider the cultural context in which the work is used and make changes accordingly. Additionally, it is possible that other factors, such as job characteristics, leadership style, and job stress, could influence work engagement.

Scenario-based experimental studies in organizational psychology can have a limitation effect of participants to behave differently in real-life situations. As another limitation, this research examined only two organizational culture type, and thus further studies could also investigate the effects of market and adhocracy cultures. Also, for openness to experience, future research might consider using multiple methods of assessment, such as observer ratings and behavioral measures, to enhance the validity of assessment.

## References

- Acar, A. Z., & Acar, P. (2014). Organizational culture types and their effects on organizational performance in Turkish hospitals. *EMAJ: Emerging Markets Journal*, 3(3), 18-31.
- Akhtar, R., Boustani, L., Tsivrikos, D., & Chamorro-Premuzic, T. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. *Personality and Individual Differences*, 73, 44-49.
- Albayrak, G., & Albayrak, U. (2014). Organizational culture approach and effects on Turkish construction sector. *APCBEE procedia*, 9, 252-257.
- Awadh, A. M., & Wan Ismail, W. (2012). The impact of personality traits and employee work-related attitudes on employee performance with the moderating effect of organizational culture: the case of Saudi Arabia. *Asian Journal of Business and Management Sciences*, 1(10), 108-127.
- Baer, M., & Oldham, G. R. (2006). The curvilinear relation between experienced creative time pressure and creativity: moderating effects of openness to experience and support for creativity. *Journal of Applied psychology*, 91(4), 963.



- Belias, D., & Koustelios, A. (2014). Organizational culture and job satisfaction: A review. *International review of management and marketing*, 4(2), 132-149.
- Burke, L. A., & Witt, L. A. (2002). Moderators of the openness to experience-performance relationship. *Journal of Managerial Psychology*, 17(8), 712-721.
- Caliskan, A., & Zhu, C. (2019). Organizational culture type in Turkish universities using OCAI: Perceptions of students. *Journal of Education Culture and Society*, 10(2), 270-292.
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework*. John Wiley & Sons.
- Chen, I. S. (2016). Examining the linkage between creative self-efficacy and work engagement: the moderating role of openness to experience. *Baltic Journal of Management*, 11(4), 516-534.
- Csikszentmihalyi, M., & Seligman, M. (2000). Positive psychology. *American psychologist*, 55(1), 5-14.
- Demerouti, E., & Bakker, A. B. (2008). The Oldenburg Burnout Inventory: A good alternative to measure burnout and engagement. *Handbook of stress and burnout in health care*, 65(7).
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, 86(3), 499.
- Demerouti, E., Cropanzano, R., Bakker, A., & Leiter, M. (2010). From thought to action: Employee work engagement and job performance. *Work engagement: A handbook of essential theory and research*, 65(1), 147-163.
- Demir, C., Ayyildiz Unnu, N. A., & Erturk, E. (2011). Diagnosing the organizational culture of a Turkish pharmaceutical company based on the competing values framework. *Journal of business economics and management*, 12(1), 197-217.
- Eryılmaz, A., & Doğan, T. (2012). Subjective well-being at work: Investigating of psychometric properties of Utrecht work engagement scale. *Journal of Clinical Psychiatry*, 15(1), 49-55.
- Gallup, I. (2022, June 18). State of the global workplace report. Gallup.com. Retrieved May 13, 2023, from <https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx>
- Genc, E. (2017). *Strategy implementation, organizational culture and performance in Turkish local government* (Doctoral dissertation, Cardiff University).
- Giritli, H., Öney-Yazıcı, E., Topçu-Oraz, G., & Acar, E. (2013). The interplay between leadership and organizational culture in the Turkish construction sector. *International Journal of Project Management*, 31(2), 228-238.
- Hartnell, C. A., Ou, A. Y., & Kinicki, A. (2011). Organizational culture and organizational effectiveness: A meta-analytic investigation of the competing values framework's theoretical suppositions. *Journal of Applied Psychology*, 96(4), 677-694. <https://doi.org/10.1037/a0021987>
- Hofstede, G. (1980). Culture and organizations. *International studies of management & organization*, 10(4), 15-41.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). Big five inventory. *Journal of Personality and Social Psychology*.
- Karaman, N. G., Dogan, T., & Coban, A. E. (2010). A study to adapt the big five inventory to Turkish. *Procedia-Social and Behavioral Sciences*, 2(2), 2357-2359.
- Krog, A. K. (2014). *The relationship between organizational culture and work engagement: A multilevel investigation* (Master's thesis).
- Kuşlivan, Z., & Karamustafa, K. (2003). Organizational culture and its impacts on employee attitudes and behaviors in tourism and hospitality organizations. In S. Kuslivan (ed.),

- Managing Employee Attitudes and Behaviors in the Tourism and Hospitality Industry, (pp. 453- 485), New York: Nova Science Publishers, Inc.
- Marchalina, L., Ahmad, H., & Gelaidan, H. M. (2021). Employees' commitment to change: personality traits and organizational culture. *Journal of Economic and Administrative Sciences*, 37(4), 377-392.
- McCrae, R. R. (1987). Creativity, divergent thinking, and openness to experience. *Journal of personality and social psychology*, 52(6), 1258.
- Mohan, G., & Mulla, Z. R. (2013). Openness to experience and work outcomes: exploring the moderating effects of conscientiousness and job complexity. *Great Lakes Herald*, 7(2), 18-36.
- Nieß, C., & Zacher, H. (2015). Openness to experience as a predictor and outcome of upward job changes into managerial and professional positions. *PloS one*, 10(6), e0131115.
- Nunnally, J. *Psychometric Theory*, McGraw-Hill, New York, 1978.
- Oney-Yazici, E., Giritli, H., Topcu-Oraz, G., & Acar, E. (2007). Organizational culture: The case of Turkish construction industry. *Engineering, Construction and Architectural Management*, 14(6), 519-531.
- Quinn, R. E., and J. R. Kimberly, "Paradox, Planning, and Perseverance: Guidelines for Managerial Practice." In Kimberly, J. R., and R. E. Quinn (eds.), *Managing Organizational Translations*, Dow Jones-Irwin (1984), pp. 295-313.
- Sanchez-Cardona, I., Rodriguez-Montalbán, R., Acevedo-Soto, E., Lugo, K. N., Torres-Oquendo, F., & Toro-Alfonso, J. (2012). Self-efficacy and openness to experience as antecedent of study engagement: an exploratory analysis. *Procedia-Social and Behavioral Sciences*, 46, 2163-2167.
- Santos, O. (2016), "Emotions and personality in adaptive e-learning systems: an effective computing perspective", *Emotions and Personality in Personalized Services*, Springer International Publishing, pp. 263-285.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 25(3), 293-315.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement*, 66(4), 701-716.
- Schaufeli, W. B., Martinez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross-national study. *Journal of cross-cultural psychology*, 33(5), 464-481.
- Schein, E. H. (1991). *What is culture*. Newbury Park, CA: Sage, 243-253.
- Schilpzand, M. C., Herold, D. M., & Shalley, C. E. (2011). Members' openness to experience and teams' creative performance. *Small Group Research*, 42(1), 55-76.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual review of psychology*, 64(1), 361-388.
- Shukla, D. (2017). Pro-active work behavior, professional commitment and psychological well being. A mediation of organizational culture. *Journal of Applied Economic Sciences (JAES)*, 12(48), 643-647.

- Soylu, S. (2004). The Effect of Human Resources Practices in the Formation of Culture in Telecommunication Sector and Job Satisfaction Relationship. Unpublished PhD Thesis, Izmir, Ege University Institute of Social Sciences.
- Trompenaars, F. and Hampden-Turner, C. (1998), *Riding the Waves of Culture: Understanding Cultural Diversity in Business*, 2nd ed., McGraw-Hill, London.
- Trompenaars, F., Prud'Homme, P., & Trompenaars, A. (2004). *Managing change across corporate cultures* (Vol. 3). Chichester: Capstone.
- Turgut, T. (2011). Çalışmaya tutkunluk: iş yükü, esnek çalışma saatleri, yönetici desteği ve iş-aile çatışması ile ilişkileri. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 25(3-4), 155-179.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of occupational and organizational psychology*, 82(1), 183-200.
- Yiing, L. H., & Ahmad, K. Z. B. (2009). The moderating effects of organizational culture on the relationships between leadership behaviour and organizational commitment and between organizational commitment and job satisfaction and performance. *Leadership & Organization Development Journal*.
- Yiing, L. H., & Ahmad, K. Z. B. (2009). The moderating effects of organizational culture on the relationships between leadership behaviour and organizational commitment and between organizational commitment and job satisfaction and performance. *Leadership & Organization Development Journal*.