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ORGANIZATIONAL ENVIRONMENT AS FACTOR OF
PSYCHOLOGICAL WELL-BEING

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Abstract

Organizational environment influences manifestation of various performance indicators, including the level of employee engagement, psychological well-being and creativity. Company employees define the creative environment as an environment characterized by a special atmosphere that gives freedom of creativity, the opportunity to offer and implement new ideas, the opportunity to go beyond the usual. The most important components of the creative potential of the company environment are the diversity and creativity of work tasks, the sound background, the possibility of solitude, indoor plants, and daylight. The sample of the study is comprised of 100 employees aged 20 to 62, working at 22 commercial companies in St. Petersburg. The following instruments were used for collecting the data: questionnaire 'Creative environment of the company', developed for research purposes on the basis of the 'Creativity Development Quick Scan' methodology, Utrecht Work Engagement Scale (UWES) and Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). The research results allow one to draw a conclusion that there is a link between the level of the organizational environment of the company and employee engagement level ($r = 476$, $p < 0.01$) and psychological well-being ($r = 329$, $p < 0.01$). The study allowed one to formulate the subjective characteristics of 'creative environment' as perceived by employees. The characteristics of organizational environment contribute differently to the overall assessment of company creative potential. The received data can be used by CEO's or HR-managers to improve company organizational environment. The adjusted questionnaire, developed on the basis of the 'Creativity Development Quick Scan' technique, amplifies the psycho-diagnostic toolkit.

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1. Introduction

Psychological well-being of an adult is often associated with whether he is able to realize his creative potential in everyday professional activity (Kislyakov, Shmeleva, Silaeva, Belyakova, & Kartashev, 2016). Satisfaction of the need for self-actualization leads to the sense of personal growth, health, maturity, personal autonomy (Maslow, 1999).

In addition, in the present socio-economic situation, a company's need to make their product unique, innovative and interesting is becoming prevailing. Undoubtedly, recruiting people with creative thinking is important as well (Shmeleva, Kislyakov, Kartashev, Romanova, & Abramov, 2017). However, then proper building up of work processes and work environment come into a play (Florida & Goodnight, 2005).

Human creative manifestations are determined not only by their individual characteristics, but also by external environmental factors. At the moment, there are a quite large number of foreign studies researching the influence of a company's work environment on the employees' creativity; however, we can notice the lack of research into the psychological aspects of the influence of the creative environment on a person.

The phenomenon of creativity began to be studied even in the last century, the following theories were created: the constituent theory of creativity by Amabile (1983), the theory of investing by Sternberg & Lubart (1996), the hierarchical theory of creativity and the Four-C model of creativity by Kaufman and Beghetto (2009). Each of these theories, in one way or another, highlights the importance of the environment's role in the formation and development of creativity.

Zhou and Shalley (2003) write about the fact that employees show great creativity under the condition that their work is challenging, their managers support rather than control them. The result of the work is assessed through a prism of opportunities for development, and not criticism, and also if they can work without a fear of someone's interference in the process. An important role is played by motivation to develop creative ideas, which is set by management, as well as recognition of creative ideas, encouragement of creativity, reward (Amabile, Conti, Coon, Lazenby, & Herron, 1996). The studies by Oldham and Cummings (1996) have shown that the challenging work performed by the employees in the absence of tight control by the manager and with the supportive management style is also associated with high rates of creativity and efficiency of the employees.

Basadur, Graen, and Green, (1982) divide the creativity literature into three streams: those belonging to the individual, those related to their organization, and those intended to identify enhancements gained from training and development. The first stream focuses on identification of characteristics carried by more creative people (Torrance, 1972; Wang, Wu, & Horng., 1999; McIntyre, Hite, & Rickard., 2003; Audia & Goncalo, 2007). A number of researchers have investigated importance of creativity to organizations from different point of view. As a result, a variety of elements have been chosen. Some of these researchers have focused on individual characteristics such as entrepreneurship (Drucker, 1993), and intrinsic motivation (Amabile, 1998), psychological security (Kislyakov, Belyakova, Savchenko, Polyakov, Senkevich, & Romanova, 2018). Others have assessed result of the creative process such as novel solutions (Johannessen, Olsen & Lumpkin, 2001).

Based on a review of theoretical concepts and research, we assumed that the creative environment of the company, by providing many resources, stimulates and supports the creativity of employees, which

creates a stable motivation for employees. This motivation increases the employee engagement, and also in the longer term affects their psychological well-being. The novelty of the study is that for the first time the creativity of the environment is researched in a complex relationship with psychological well-being and employee engagement.

2. Problem Statement

Organizational environment influences manifestation of various performance indicators, including the level of employee engagement, psychological well-being and creativity.

Yet a link between the level of the organizational environment of the company and employee engagement level and psychological well-being is not fully studied. And also the subjective characteristics of 'creative environment' as perceived by employees are not enough studied.

3. Research Questions

We formulated the following research questions:

- Are the employees of the companies with a more creative environment more involved in their work?
- Are the employees of the companies with a more creative environment characterized by higher rates of psychological well-being?
- Is the success of the companies related to the indicators of the creative potential of the environment?
- Is the creative environment evaluated by company employees as more attractive than the work environment with a low creative potential?

The novelty of the study is that for the first time, the creativity of the environment is researched in a complex relationship with psychological well-being and employee engagement.

4. Purpose of the Study

The purpose of our work was to determine the influence of the level of creative potential of the companies' work environment on employees' engagement and their psychological well-being.

5. Research Methods

The study involved 96 people from 22 companies in St. Petersburg, working in various fields: software development, web design, branding, recruiting and human resources consulting, logistics, B2B electrical equipment sales and others. 37% of the respondents were men, 63% were women. The average age of the respondents is 30.89 while the minimum age is 20 and the maximum age is 62.

To conduct the study, we developed a questionnaire aimed at identifying socio-demographic and some biographical data of respondents. We also used the questionnaire 'Creative environment of the company', developed on the basis of the 'Creativity Development Quick Scan (CDQS)' method, which allows one to evaluate the creative potential of the work environment. In addition, respondents were asked to fill in the methodology 'Utrecht Work Engagement Scale (UWES)' and the methodology 'The Warwick-Edinburgh Mental Well-being scale (WEMWBS)'. For further information, we conducted a semi-structured

interview with the head of the company or department. Further, all the indicators were entered in a single table, and were subjected to mathematical and statistical processing.

To process the data, we used: the verification of the normality of the distribution by asymmetry and the excess, the verification of the reliability of the test by the Cronbach alpha method, correlation analysis and regression analysis. Also, content analysis and frequency analysis were conducted.

6. Findings

Let us give the main findings obtained in the course of the study.

Summarizing the data of content analysis, the vision of the creative environment by company employees can be defined as follows: the creative environment is an environment characterized by a special atmosphere that gives freedom of creativity, a chance to suggest and implement new ideas, the opportunity to go beyond the usual.

The conducted content analysis of responses to the question 'How do you understand what a creative environment is?', 94 responses were received. All the answers were analysed, therefore the categories used by the respondents were used to describe the conditions of the creative environment: creativity, freedom, growth and development, team, ideas, novelty (as an opportunity to propose new solutions), 'realization' (refers to the realization of the potential), 'aims and objectives', 'implementation of ideas and achievement', 'motivation', 'leisure', 'atmosphere', 'rejection of stereotypes and going beyond the usual' (for example, 'Environment free from stereotypes'), 'opportunities', 'innovations', and 'initiative'. In total there were 196 semantic units. After the procedure for classifying responses was completed, a frequency analysis was conducted.

More than 70% of the concepts used to describe the creative environment belong to such categories as 'ideas', 'creativity', 'rejection of stereotypes and going beyond the usual', 'the implementation of ideas and achievement', 'novelty (new)', 'atmosphere', 'freedom'.

The results of the psychometric quality control of the questionnaire developed on the basis of the 'Creativity Development Quick Scan' methodology showed that this questionnaire can be used to measure the creative potential of the environment: the Cronbach alpha test revealed high internal consistency ($\alpha = 0.87$), its scales are consistent, which is an indirect indicator of the reliability of the instrument.

Thus, the questionnaire can be used to assess the level of the creative potential of the work environment.

The analysis of the concept of an ideal creative environment has shown that all its components have a rating within the limits of average values (in the range $\mu + \sigma$). The respondents consider the components of the company social and organizational environment to be more important than the physical environment; the highest score is in the indicators of autonomy in work, manager-mentor and time for reflection

The complete profile of the ideal creative environment for our respondents is presented in the table below (Table 1).

Table 01. Parameters of the ideal creative environment of respondents (average values)

Environment	Parameters	Average values	Average values
Socio-organizational environment	1. Challenging work	5.66	5.62
	2. Team work	5.47	
	3. Tasks variety	5.18	
	4. Autonomy in work	5.99	
	5. Manager-mentor	5.79	
	6. Time for reflection	5.70	
	7. Creative tasks	5.49	
	8. Recognition of creative ideas	5.64	
	9. Encouraging creative results	5.63	
Physical environment	10. Furniture	4.71	4.85
	11. Indoor plants	4.04	
	12. Restful colours	3.93	
	13. Inspiring colours	3.79	
	14. Solitude	4.86	
	15. Nature view from the window	4.66	
	16. Some view from the window	4.79	
	17. Lighting intensity	5.47	
	18. Daylight	5.40	
	19. Indoor (physical) microclimate	5.65	
	20. Sounds	5.40	
	21. Smells	5.51	

Another result was that we did not find the relationship between the demographic characteristics (sex and age) of the sample and the indicators of the creative potential of the environment, work engagement and psychological well-being.

Our research showed that the level of the creative potential of the environment is related to the success of the company and the attractiveness of the work environment for employees: companies with a more creative environment demonstrate higher success rates, and employees rate such environment as more attractive.

Table 02. Correlation matrix for indicators of an objective assessment of the creative potential of the environment, the success of the company and the attractiveness of the work environment

Correlations (r-Spearman)				
	KC (κ)	Rating	Success 1	Success 2
KC (κ)	1	0.263*	0.291**	0.407**
Rating	0.263*	1	-0.104	-0.272*
Success 1	0.291**	-0.104	1	0.348**
Success 2	0.407**	-0.272*	0.348**	1

**Correlations that are significant at 0.01 (two-sided)

*Correlations that are significant at 0.05 (two-sided)

The resulting correlation matrix clearly demonstrates the existence of a statistically significant relationship between the indicators of the creative environment and company success. Companies with a more creative environment are characterized by higher rates of income growth, staff increase and wage

levels. At the same time, a more creative environment is rated as more attractive. All this confirms the hypotheses put forward by us earlier.

The level of creative potential of the company environment is associated with work engagement and the psychological well-being of its employees. The relationship between engagement and psychological well-being is proved in the studies of Bakker and Bal (2010), as well as other researchers. Their high correlation is quite expected, although the nature of cause-effect relationships remains unclear. The second indicator – a subjective assessment of the creative potential of the company's work environment - suggests that an increase in this assessment is also accompanied by an increase in the indicators of psychological well-being.

Our correlation analysis showed that the structure of this relationship requires additional clarification by rechecking the reproducibility of the models obtained in other, larger samples.

Thus, the obtained model confirms the hypothesis about the connection between psychological well-being and the creative potential of the environment, however, due to its low explanatory power, it needs additional verification for reproducibility.

Analysis of the structure of companies' creative environment revealed a number of components that have the greatest impact on the level of the creative potential of the environment. The most important in assessing the creative potential of the company's environment is the characteristics of the business tasks that are set for the employees. That is, the greatest resource for the creativity of workers among other social and organizational factors is diverse, creative work tasks. Among the physical characteristics, the most important ones are the sound background and the possibility of solitude. The analysis of respondents' understanding of the "creative environment" concept, ideas about the ideal creative environment and the structure of the evaluation of the creative potential of the company's work environment showed that the parameters of the social and organizational environment and the parameters of the physical environment, in which they work, are also important for respondents. This indirectly confirms the model of understanding the structure of the creative environment of companies (Dul & Ceylan, 2011). Being a social being, a person is subject to the influence of the social environment, in particular, the team and the leader. Therefore, it is important that these contacts leave the employee with a sufficient degree of autonomy, provide support in contrast to the suppression of a man and his creative potential, and be resourceful for solving creative tasks. On the other hand, comfortable office conditions are important for employees. They can serve as a source of inspiration, also provide resources, and influence the satisfaction of employees.

The data analysis of the respondents' ideal creative environment made it possible to conclude that all its components are important for employees as supporting their creativity; however, the indicators of the social and organizational environment of the company are more important for employees.

It is interesting to note that the structure of the ideal creative environment (that is, the assessment of environmental indicators by importance for maintaining creativity) and the structure of the overall assessment of the company did not fully coincide. If in the structure of the ideal creative environment, the components of the social and organizational environment predominate among the most important components (autonomy, manager-mentor, time for reflection), then in assessing the real situation in the company, the most important indicators were creative tasks, sound background, indoor plants, variety of work tasks, the possibility of solitude and daylight. That is, the real conditions of the work environment are

assessed mainly not according to the same criteria that are subjectively evaluated as the most important. Perhaps, these differences are explained by different levels of creativity of the work itself: the respondents, describing the environment most conducive to their creativity, imagine an ideal of their professional activity that can differ significantly from the real one, which, being much less creative, needs other environmental resources.

The data obtained during the analysis allow us to state that the level of the company's creative environment is really connected with the work engagement and the psychological well-being of the employees. The environment is an important resource for employees, enabling them not only to find effective solutions to work tasks, but also to show their individuality, contributing to personal development. The creative environment, characterized by a richness of diverse and creative tasks and the provision of some freedom of action, is a space that provides a person with the opportunity for spontaneous manifestations, clashes with new tasks, and therefore the need to develop new skills, expand their competencies. From this point of view, the company's creative environment is an important resource for personal growth. At the same time, providing the opportunity for personal growth positively affects the well-being of employees.

The analysis of the relationship between the creative potential of the company's work environment and the staff's evaluation of its attractiveness and the success of the companies revealed a reliable interrelation of these indicators. This result is largely explained by the reasons considered above.

Being a resource for personal development, the environment is seen by the employees as more attractive than other companies' less creative environments, where conditions do not allow showing spontaneity and individuality in approach to solving work tasks, and creativity is not supported.

In addition, increased work engagement entails increasing its effectiveness (Bakker & Bal, 2010). Thus, the company's success increases. Another mechanism for increasing success is to reduce staff turnover by strengthening the staff commitment of to the company. The dedicated employees are ready to stay in the company even, for example, in a difficult financial situation, to help the company by making efforts for its development. Also, commitment is a factor in "retaining" employees within the company by providing comfortable work conditions, which are often a stronger factor than finance.

The companies' managers also notice the relationship of the work environment with the success of the company. In one of the interviews conducted within the framework of the study, I talked with the head of the company who had experience of changing the company's office. The head drew attention to the fact that even a change in the physical environment had a strong impact on the employees. Moreover, this change affected the social and organizational environment: the interaction between employees improved, the head responded that the quality of the company's decisions had changed.

7. Conclusion

The obtained data allowed us to confirm the initial hypotheses of the research, as well as to reveal a number of features of the creative environment of companies, understanding of this phenomenon by employees. Theoretical analysis of sources and research of respondents' views on the creative environment made it possible to reveal that:

- Company employees define the creative environment as an environment characterized by a special atmosphere that gives freedom of creativity, the opportunity to offer and implement new ideas, the opportunity to go beyond the usual.
- The structure of the creative environment includes the characteristics of both the socio-organizational and physical environment. The most important components of the creative potential of the company environment are the diversity and creativity of work tasks, the sound background, the possibility of solitude, indoor plants, and daylight.

In general, we can talk about the existence of a relationship between the level of the company's creative environment with engagement and the psychological well-being of its employees, which is associated with the important role of the environment as a resource for personal development. However, it should be borne in mind that the characteristics of the creative environment make a different contribution to the overall assessment of its creative potential, and it is also possible that other factors not included in this study will influence.

The work environment, which has great creative potential, is perceived by employees as more attractive by virtue of its ability to provide conditions for the spontaneous manifestation and development of the creative potential of the individual.

The level of the creative potential of the environment is related to the success of the company, since, by influencing the employee engagement, it increases the efficiency of their work and enhances commitment to the company.

The questionnaire developed on the basis of the "Creativity Development Quick Scan" methodology can be used in companies as a diagnostic tool; however, for further scientific use it is recommended that the methodology be fully adapted to the Russian sample.

In the future, a more detailed study of the structure of the relationship between the creative potential of the environment and engagement and the psychological well-being of the company's employees is required. The obtained models are subject to verification for the reproducibility of the results on more numerous samples.

The results of the research can be used in practice by company managers or personnel department specialists to optimize the company's work environment.

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