Abstract
The paper deals with employees’ self-organization as a modern form of organizing a company’s activities in a remote work environment, which was eventual and challenging in the pandemic, but, undoubtedly, is being further developed in companies due to perceived benefits. The aim of the paper is to analyze the self-organization of remote employees. For research methodology, a quantitative approach, a survey of 196 working remotely employees in various Lithuanian companies by size, industry or sector was conducted using a questionnaire to analyze their self-organization activities and capabilities at the individual, group and organizational level. The survey data were statistically processed and analyzed, indicating percentages, means, medians, standard deviations, and correlations. It was found that for the vast majority of employees (79-91% in different components), self-organization is most developed at the level of individual work while working remotely. This allows employees to achieve a work-life balance and greater job satisfaction. However, the involvement of remote employees via self-organizing of group activities and decision-making as well as solution of problems important to the company in a competitive environment, is not sufficiently developed. In practice, this means that self-organization of their individual work can be delegated to employees, but more efforts are needed to involve remote employees in management processes.

INTRODUCTION
After a good impetus by the Covid-19 pandemic, employees’ demands in the labor market are changed irreversibly. Several years ago, a few could imagine that employees would be accustomed to remote working and the independence associated with it. However, with the onset of the pandemic in 2019, the labor market was forced to employ remote work, as this was the only safe way to organize work to protect others and prevent the virus from spreading. At the same time, it has been very helpful for organizations that have planned to encourage employees to work remotely or in a hybrid way, because when there was no other choice, you were forced to learn to work that way.

However, the transition to working remotely poses a variety of challenges, and the employees are no longer always in the office, where they can easily ask for help from colleagues, discuss work matters, or even have a chat. All this had to be self-organized by the employee. An employee had to engage in self-organization of his or her activities independently from organization – routines, planning, decision-making, taking into account his or her individual needs, because when working remotely, it is difficult for some people to draw precise boundaries between personal life and work.
Even though many studies have recently been conducted in the field of remote work due to its relevance in a pandemic period (Beno, 2021; Wontorczyk & Roznowski, 2022; Stankevičienė & Grincevičienė, 2021; Aciénė, 2020; and others) and before (Beauregard et al., 2019; Narayan et al., 2017; Tavares, 2017; Nakrošienė & Butkevičienė, 2016; Allen et al., 2015; and others), there is still a lack of clarification on how to manage the challenges of remote work and take advantage of the new freedom-related opportunities for remote work, as well as evidence from companies’ employees on how they organize their activities remotely, leadership left behind the screen.

1. LITERATURE REVIEW

The concept of self-organization is commonly found and used in the analysis of processes in biology in which systems of different components form stable structures with many interactive connections that transmit energy, materials, and information at various nodal points. The term “self-organization” in Parkinson (2006) is interpreted as decision-making without other instructions or guidance. Self-organizing systems are formed without any basic intention (Chertov & Ehrenfeld, 2012). Hudson (2005) defines self-organization at work as the ability to create systems, with low environmental involvement, to create and develop new orders and forms of organization. It is also important to emphasize that self-organization is formed as a result of bottom-up initiatives, which help to manage the complexity of the environment more easily and adapt more flexibly, qualitatively and competitively to changing environmental conditions (Grumadaitė & Jucevičius, 2017).

Self-organization can be at the individual and group level. Individual self-organization is when each employee individually addresses problems and solutions to implement a project, and group self-organization is when employee responsibilities and power are shared and everyone is responsible for the success of the project (Eseryel et al., 2020).

However, employee self-organization is particularly important in the modern world, as it is the foundation of a modern, strong organization because it accelerates creative thinking, new structures, and ideas (Buck & Endenburg, 2010). Self-organization as a way of structuring organizations has many attractive features. It gives employees more individuality, autonomy, and decision-making power at the organizational level. There evidence of success (or failure) could be found in increasing employee engagement, equity, or productivity, this could lead to a wider adoption of such practices (Martela, 2019). Also, self-organization encourages creativity, accelerates adaptation to change, promotes leadership and self-discipline.

However, if an organization wants to move to self-organization, careful implementation planning and learning new concepts are required. Initially, implementing this may be more difficult for those employees who are not accustomed to share responsibility for making difficult decisions (Buck & Endenburg, 2010). Lee and Edmondson (2017) propose to use radical methods in the transition to self-organization, to decentralize and eliminate the hierarchical link of accountability between a manager and a subordinate. Such methods give employees complete autonomy and authority to perform the work without a supervisor. Also, the operating structure must be dynamic and flexible (Buck & Endenburg, 2010).

Organizations are complex systems in which the model of self-organization resembles an organically evolving biological ecosystem in a certain geographical area, where actors and connections between them naturally reflect the context and can adapt to it independently (Grumadaitė, 2018). Such organizations can also be distinguished according to their characteristics, such as a network of agents, which can cooperate and compete with each other. This feature has been explained through dynamic management, where different groups work and organize themselves in an organization. Likewise, with individuals who can self-organize themselves without the intervention. Usually there are simple rules, also known as internal models, that provide some references and examples for different solutions to use (Holland, 1995). According to He et al. (2011) actors cannot tell other actors to behave and work according to their desired model because they have no power to do so. Each self-or-
ganizing actor organizes the work according to his own invented norms. As well, the characteristic of self-organization to stand out with a clear identity, with unique values, traditions, competencies, culture should be mentioned (Mason, 2007). Such systems are characterized by fluctuations between order and disorder, due to the positive and negative feedback. Prigogine and Stengers (1984) argue that getting positive feedback encourages you to move toward the edge of chaos, but according to Mason (2007), creativity and innovation are best revealed near the edge of chaos.

In these chaotic times of rapidly evolving information technology, employees are no longer limited by time, space, or location because they usually have access to work at any time and in all locations. This can be defined as a workspace that is remote from the organization’s office (Nekrošienė & Butkevičienė, 2016).

Although Shin et al. (2000) note that there is still no consensus on a common description of the phenomenon of remote work, in general remote work can be described as an alternative way of organizing and performing work by which an employee works outside the employer’s workplace for a significant part of their working time, providing the employer with work outcomes (results) using information technology and data transfer technologies, especially the internet (Narayanan et al., 2017; Wontorczyk & Rożnowski, 2022).

Remote work became significantly more popular in the late 1980s, as work could be planned much more easily with the advent of computers and mobile phones (Tavares, 2017). It is easy to see that there is an increasing choice of remote work lately. Until 2019 regular remote work increased by 216% (Global Workplace Analytics, 2021); during this time, remote work was mostly chosen by those working at their own enterprises. However, the onset of quarantine has further facilitated the spread of remote work, with 69% of U.S. workers working remotely during the peak of the pandemic (Global Workplace Analytics, 2021). The future of remote work is predicted – it is estimated that in 2028, as many as 73% of employees will work part-time. It is also observed that a higher proportion of remote workers are women (EUROSTAT, 2021).

Pre-pandemic research has shown that approximately 80% of workers would like to work remotely, at least in part (Global Workplace Analytics, 2021). Some workers would agree even if their pay were reduced slightly, but they would have the opportunity to work remotely. It is also noticeable that employees who have adapted to remote working more easily are able to work independently and organize their work.

As the advantages of remote work, Allen et al. (2015) highlight higher job satisfaction, organizational commitment, reduced stress, better job performance, pay, and career potential. Tavares (2017) emphasizes that remote work provides a better work-life balance, increases employee flexibility, autonomy, reduces commuting time, and increases productivity (Beauregard et al., 2019). Workplaces that allow working remotely increase an employee’s commitment to the organization, an increase sense of duty and responsibility. Employees feel indebted to the company because it gave them flexibility (Stankevičienė & Grincevičienė, 2021). Beno (2021) conducted a meta-analysis highlighting the pros of remote work: flexibility, productivity and efficiency, greater job satisfaction and less commuting.

Despite the fact that more people are seeing the benefits of flexible working arrangements, almost half of companies worldwide still do not allow them to work remotely. Working remotely reduces managerial support, increases stress levels, social isolation, becomes more tired, and upsets the balance between work and personal life (Stankevičienė & Grincevičienė, 2021). Also, a negative impact on teamwork increases, job satisfaction decreases with longer working remotely, and it is difficult to draw the line between work and leisure (Beauregard et al., 2019). A meta-analysis conducted by Beno (2021) highlights an increased number of conflicts with co-workers and family members, increased stress, depression, and isolation.

Analyzing self-organization in remote work conditions, it can be seen that not everyone is talented, they need to have certain qualities. People who know how to organize remote work find it easier to work remotely and adapt to it (Aciénė, 2020) – the ability to work independently, observe discipline, organize time, tasks, their performance, set and follow goals are needed (Stankevičienė & Grincevičienė, 2021). An employee needs to know their position in the workplace, know what work
they need to do because working remotely makes it harder to control processes (Tavares, 2017). When working in a self-organizing group remotely, team members do not carry out their daily tasks according to someone’s instructions, but with common work patterns and common norms for working and what is high-quality work that is acceptable to that group member (Eseryel et al., 2020). Also, the employee must be emotionally strong and able to separate work from the personal life, able to manage work intensity (Stankevičienė & Grincevičienė, 2021). Structuring theory suggests that self-managing virtual teams should take into account the structure (i.e., rules and resources) and actions within those teams and how they relate to each other. Structure is important because creating a common structure allows team members to determine how to contribute to the overall goal of the team and thus achieve team success. In this way, structure can change routine leadership insofar as it directs individuals’ actions toward desired group outcomes (Eseryel et al., 2020).

It is noticeable that the more the team moves to remote work and the hierarchy within the team decreases, the better the individual employees work. Hoch and Kozlowski (2014) found that hierarchical leadership is less related to team performance as the degree of virtuality increases, but when leadership is shared among team members, team performance increases.

Nevertheless, Zhukova and Shirokaya (2021) found that the level of purposefulness of all respondents decreased after moving to work remotely, which interferes with personal self-organization. This study revealed that it depends on different work styles of different personalities in self-organizing work remotely.

Finalizing, the links between working in self-organized mode in remote way show some signs in scientific research, but further research should be conducted in order to reveal them in detail.

2. AIMS AND HYPOTHESES

The aim of the paper is to analyze the self-organization of employees working remotely in Lithuanian companies.

After the review of the scientific literature on self-organization in working remotely settings, the following research hypotheses were developed:

**H1:** Self-organization of employees at the individual level is related to remote work.

It is based on the premises that employees with high satisfaction independently self-organize their individual work time, place, activities, productivity, quality level when working remotely.

**H2:** Self-organization of employees at the group level is related to remote work.

It is grounded by the premise that employees self-organize their group work taking initiative and leadership striving to accomplish company’s goals in remote work setting.

**H3:** Self-organization of employees for managing the company in a competitive environment is related to remote work.

3. METHODS

It is assumed that remotely working employees self-organize company’s problem solving, decision making, actions in competitive environment.

In order to find out how employees’ self-organization while working remotely is developed, quantitative research is carried out. In this research the statements are verified in case of employees working remotely in Lithuanian companies.

Quantitative research method was selected for data collection, which aims to acquire quantitative information about many research objects (in this case, employees of Lithuanian companies). Respondents were provided with a closed-ended questionnaire. This method is chosen because of the way it quickly collects large amounts of data, processes, compares, and establishes relations. The questionnaire was conducted online, making it easier to share and survey more people and was placed on a survey platform (www.forms.office.com), which was chosen for its simple way of preparing and conducting the survey and convenient way of access to gathered data.
for further statistical analysis. The data of the questionnaire survey were collected from March 28, 2022 to April 10, 2022.

The questionnaire consisted of 12 closed-ended questions and blocks of statements to find out information about the respondents’ self-organization when working remotely. The first and second questions sought to find out the frequency of respondents’ remote work and the location of the organization. The third question seeks to find out training provided to employees in organizations due to work remotely. In the next block of statements, the respondents had to evaluate the aspects of remote working on the Likert scale of five possible answers (had to express their agreement / disagreement), which were formulated according to the scientific literature review presented above (according to studies by Shin et al., 2000; Narayanan et al., 2017; Wontorczyk & Rożnowski, 2022; Tavares, 2017; Allen et al., 2015; Beauregard et al., 2019; Stankevičienė & Grincevičienė, 2021; Beno, 2021; and others). The next block of 19 statements examined what competencies / qualities / activities the respondents themselves use when self-organizing their remote work (analyzed by Chertow & Ehrenfeld, 2012; Grumadaitė & Jucevičius, 2017; Grumadaitė, 2018; Eseryel et al., 2020; Buck & Endenburg, 2010; Martela, 2019; Lee & Edmondson, 2017; and others). The following part of the questionnaire explores demographic information about the respondents (gender, age, education, marital status, workplace, sector, and position).

To assess the reliability of the questionnaire and the internal consistency of the scale, Cronbach’s alpha coefficient (0.666) was calculated, which is based on the correlation of individual questions in the questionnaire and assesses whether all scale questions adequately reflect the scale. This criterion showed that the internal consistency of the questionnaire is acceptable.

Determining the test sample, data of Bite Lietuva survey in 2020 on remote work in Lithuania was used, according to which 40% of employees in Lithuania worked remotely during the quarantine. According to the statistical data of SoDra, 1,455,000 employees were working in Lithuania in 2021. So, it can be assumed that in the last reporting year 582,000 employees worked in Lithuania remotely. The sample of the study was calculated using the RoaSoft tool. With the probability ratio of 95%, and the error of 7%, the required sample size is 196 respondents, so this number of respondents was surveyed (after collecting 226 answers, 30 completed questionnaires were rejected because the respondents chose the answer that they do not work remotely, which does not correspond to the target audience of the survey) to assure the representativeness of the survey.

To find out more about the sample, demographic data was collected. Of the 196 respondents surveyed, women (72%) were more active, and men accounted for 28%. Young people are accounting for 58.2%. The majority, 69.4%, are graduates, 29.1% have a secondary education, and only 1.5% have a basic and vocational background. Almost half of the respondents are in a relationship and live in a couple – 41.3%, 20.9 percent are single, with children only, 19.4%.

The majority of respondents work in the private sector (75.6%), 22.4% in the governmental, and only 2% in non-governmental institutions. The largest part of respondents (29.1%) works in administration and services, followed by trade (19.9%). The lowest number of respondents works in accommodation and food service activities and agriculture, both by 1.5% each. Holding position of specialists were 41.3%, management specialists – 19.9%, managers – 16.2%, workers – 14.8%, service staff – 8%.

The study data were processed and analyzed using the SPSS software. Mean values (M), medians (MD), standard deviation (SD) were calculated and analyzed. Data are cross-checked and the employees’ self-organization working remotely in Lithuanian companies is analyzed according to the demographic characteristics of the respondents and their workplace companies. According to the Kolmogorov-Smirnov test, the data is not normally distributed, as well, measured on a rank scale, therefore, Spearman correlation coefficient (when p < 0.05) for data analysis was used to check the correlation between the self-organization and remote work aspects, as well as employee and organization characteristics. The values of 0 < |r| ≤0.3 are weakly dependent, if 0.3 < |r| ≤0.7 are moderately dependent, and 0.7 < |r| ≤1 is strong.
ly dependent. The correlation coefficient is positive when one value increases and another increases, and negative – when one value increases and the other decreases. When the significance level was \( p < 0.05 \), the difference in symptoms between the study groups was considered statistically significant. The results are presented in diagrams and tables.

4. RESULTS

To find out what competencies, attributes and activities are used to self-organize work remotely, see Figure 1. The majority of respondents agree that they plan their activities and work independently (91% totally agrees or agrees with; M = 4.36 from 5, MD = 5, SD = 0.814), make their own routine and simple decisions independently (83%; M = 4.16, MD = 4, SD = 0.877), take responsibility for the activities performed (81%; M = 4.12, MD = 4, SD = 0.945), solve problems independently (79%; M = 3.99, MD = 4, SD = 0.908), respect their individual needs (79%; M = 4.11, MD = 4, SD = 1.006), think creatively (74%; M = 3.98, MD = 4.00, SD = 0.922), while the least agree with initiatives to lead team-work (37%; M = 3.15, MD = 3, SD = 1.171), analyze the competitive environment (40%; M = 3.30, MD = 3, SD = 0.983), initiate change (46%; M = 3.36, MD = 3, SD = 1.065).

A statistically significant \((p < 0.05)\) relationship was found by the Spearman correlation, which showed that respect for one’s own needs \((r = -0.212, p = 0.003 < 0.05)\), non-stress due to possible surprises \((r = -0.221, p = 0.002 < 0.05)\); communication with colleagues was significantly more common in younger \((r = -0.193, p = 0.007 < 0.05)\). It should be noted that self-organization of employees does not strongly correlate with the demographic characteristics of the employees or the workplace. The study examined links between remote work and respondents’ gender, age, and education. Meanwhile, no statistically significant relationship was found between the frequency of remote work and gender and education \((p > 0.05)\).

Regarding the place where respondents organize work remotely, the vast majority, 96.4%, named home, while places such as cafes (9.2%), a library (7.1%), nature (8.2%), mobile (6.6%) or coworking

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**Figure 1.** Assessing self-organization components mostly used in remote work
space (1%) are less popular. A statistically significant ($p < 0.05$) relationship between men and remote work was found by the Spearman correlation method, which indicates that men work more often in mobile, but it is noticeable that this correlation was very weak (0.150). No significant correlations were found ($p > 0.05$) with gender, age, and education.

In the next category of statements about organizing when working remotely, 62.3% (M – 3.60, MD – 4, SD – 1.256) of respondents have the opportunity to choose the time and place of remote work (Figure 2). Also, when asked whether the share of remote work depends on the Covid-19 pandemic situation, 59.6% (M – 3.46, MD – 4, SD – 1.374) of respondents agreed with this question. Finally, respondents were asked whether they enjoy working remotely, with the majority expressing agreement at 59.7% (M – 3.60, MD – 4, SD – 1.240).

In the literature review, various aspects were singled out as the benefits or challenges of remote work. The strongest agreement of the respondents is that it saves time traveling to and from work (93%; M – 4.71, MD – 5, SD – 0.694). In disadvantages of a remote work category, respondents most clearly agreed that there was a lack of live communication when working remotely. However, respondents do not agree with all the disadvantages of remote work mentioned in the theory. 51.6% (M – 2.50, MD – 2, SD – 1.161) of respondents do not agree with the statement that working at a distance increases the level of stress, also, 49.5% (M – 2.65, MD – 3, SD – 1.187) of the respondents do not agree that it is faster to get tired when working remotely. A similar number of claims that the place of remote work is uncomfortable, increased noise in the work environment, and the lack of means to perform remote work is similarly not relevant.

A weak but statistically significant ($p < 0.05$) relationship was found by the Spearman correlation, which showed that increased productivity ($r = 0.206, p = 0.004 < 0.05$) and the ability to concentrate better ($r = 0.266, p = 0.000 < 0.05$) are significantly more common in higher education;

| Aspect                                      | Totally disagree | Disagree | Neutral | Agree | Totally agree |
|---------------------------------------------|------------------|----------|---------|-------|---------------|
| Saves time traveling to work                | 6%               | 12%      | 28%     | 81%   | 5%            |
| Lower costs                                 | 4%               | 12%      | 28%     | 81%   | 5%            |
| Possibility to combine work with another act| 8%               | 11%      | 35%     | 44%   | 5%            |
| Lack of live communication                  | 9%               | 11%      | 16%     | 35%   | 28%           |
| Allows choosing the time and place of work  | 9%               | 11%      | 18%     | 34%   | 28%           |
| Prefers work remotely                       | 8%               | 11%      | 21%     | 31%   | 28%           |
| Part of remote work depends on the pandemic | 14%              | 12%      | 14%     | 32%   | 27%           |
| Better work-life balance                    | 8%               | 16%      | 20%     | 30%   | 26%           |
| Social isolation                            | 9%               | 17%      | 19%     | 38%   | 17%           |
| Higher job satisfaction                     | 6%               | 17%      | 31%     | 24%   | 22%           |
| Technical problems                          | 13%              | 17%      | 24%     | 37%   | 9%            |
| Better concentration                        | 11%              | 20%      | 18%     | 25%   | 17%           |
| Lack of control, discipline                 | 17%              | 22%      | 21%     | 25%   | 15%           |
| Increased productivity                      | 10%              | 23%      | 33%     | 23%   | 10%           |
| Tired faster                                | 19%              | 31%      | 24%     | 20%   | 7%            |
| Uncomfortable workplace                     | 20%              | 30%      | 26%     | 19%   | 5%            |
| Lack of tools to do the job                 | 31%              | 29%      | 18%     | 18%   | 5%            |
| Noise in the work environment               | 34%              | 28%      | 24%     | 21%   | 18%           |
| Increased stress levels                     | 23%              | 28%      | 28%     | 30%   | 13%           |

Figure 2. Assessing aspects of remote work

the possibility to combine remote work with other activities is significantly more typical for younger people \((r = -0.242, p = 0.001 < 0.05)\); lack of control and discipline is significantly more common in younger \((r = -0.221, p = 0.002 < 0.05)\) and lower educated individuals \((r = -0.247, p = 0.033 < 0.05)\).

It appears that the most valued advantage of remote work in saving time to and from work, which correlates with lower costs while working remotely \((r = 0.536, p = 0.00 < 0.05)\), does not occur by itself, but is related to the ability of employees to plan their activities and work \((r = 0.311, p = 0.00 < 0.05)\) and is consistent with the ability of employees to combine work with other activities \((r = 0.336, p = 0.00 < 0.05)\).

Those who are able to plan their activities and work while working remotely feel a better work-life balance \((r = 0.304, p = 0.00 < 0.05)\), they are better able to combine remote work with other activities \((r = 0.325, p = 0.00 < 0.05)\).

When employees individually take care of their own interests, they better balance work with personal life \((r = 0.419, p = 0.00 < 0.05)\) and other activities \((r = 0.403, p = 0.00 < 0.05)\), and this is related to their higher job satisfaction \((r = 0.320, p = 0.00 < 0.05)\). Employees’ non-stress due to self-organization is also associated with a better balance in work-life perspective \((r = 0.349, p = 0.00 < 0.05)\) and other activities \((r = 0.340, p = 0.00 < 0.05)\), as well as job satisfaction \((r = 0.320, p = 0.00 < 0.05)\). Remote work does not increase the stress level for employees \((r = -0.401, p = 0.00 < 0.05)\).

Employee self-control while working remotely is associated with increased work productivity \((r = 0.323, p = 0.00 < 0.05)\), better opportunities to concentrate at work \((r = 0.356, p = 0.00 < 0.05)\), and is, therefore, associated with better balance of work and personal life \((r = 0.400, p = 0.00 < 0.05)\), other activities \((r = 0.314, p = 0.00 < 0.05)\), as well as job satisfaction \((r = 0.367, p = 0.00 < 0.05)\).

When employees are independently able to adapt flexibly to the business environment, they also better balance work with personal life \((r = 0.397, p = 0.00 < 0.05)\) and other activities \((r = 0.313, p = 0.00 < 0.05)\), and feel satisfied with work \((r = 0.367, p = 0.00 < 0.05)\), and this is associated with a lower stress level \((r = -0.360, p = 0.00 < 0.05)\). Those who organize their work using creative thinking like to work remotely \((r = 0.335, p = 0.00 < 0.05)\).

Another very important activity for employees is the continuous self-organization of their work quality improvement working remotely, as it is associated with higher productivity \((r = 0.314, p = 0.00 < 0.05)\) and better concentration at work \((r = 0.373, p = 0.00 < 0.05)\), and may also be associated with lower stress level \((r = -0.302, p = 0.00 < 0.05)\).

When working remotely, employees are more concentrated on work, and this is associated with better assessments of work and personal balance \((r = 0.515, p = 0.00 < 0.05)\) and job satisfaction \((r = 0.399, p = 0.00 < 0.05)\), while reverse dependence is observed with stress \((r = -0.372, p = 0.00 < 0.05)\), social isolation \((r = -0.384, p = 0.00 < 0.05)\), fatigue \((r = -0.445, p = 0.00 < 0.05)\), technical problems \((r = -0.330, p = 0.00 < 0.05)\), workplace inconveniences \((r = -0.317, p = 0.00 < 0.05)\) or noise in the working environment \((r = -0.327, p = 0.00 < 0.05)\), lack of live communication is not observed \((r = -0.491, p = 0.00 < 0.05)\), when there is lack of self-discipline \((r = -0.564, p = 0.00 < 0.05)\).

Conversely, lack of self-control and discipline is associated with increased stress levels \((r = 0.347, p = 0.00 < 0.05)\), social isolation \((r = 0.380, p = 0.00 < 0.05)\), fatigue \((r = 0.515, p = 0.00 < 0.05)\), uncomfortable workplace \((r = 0.356, p = 0.00 < 0.05)\), noise in the work environment \((r = 0.373, p = 0.00 < 0.05)\), even a lack of work equipment is felt \((r = 0.351, p = 0.00 < 0.05)\).

5. DISCUSSION

After conducting research on self-organization of Lithuanian remote employees, it can be stated that employees’ self-organization while working remotely takes place, especially in independently organizing individual remote work activities, taking responsibility, and making decisions related to particular workplace. This correlates with the propositions of Aciénè (2020) on employees’ ability to self-organize independently in a self-disciplined way. The use of creativeness, supported by Buck and Endenburg (2010), is evident in remote work setting by this research results. The
micro-scale self-organization correlates to work-life balance and job satisfaction. This corresponds to propositions of Allen et al. (2015) and Tavares (2017). Also, on the contrary, it associates with reduced stress and obstacles to work productively in remote way, what supports propositions of Martela (2019) on employees’ productivity and self-organization links. It also repeats Grumadaitė (2018) insight that when self-organizing employees can adapt to the environment independently.

It should be noted that the links when employees are working remotely were revealed only with the self-organization of the individual employee’s work, but no strong statistically significant correlations were observed between remote work and employee self-organization when dealing with group or teamwork setting, as explained by Eseryel et al. (2020). Hudson’s (2005) suggestion to create collective systems via self-organizing seems is not spread in remote work setting. For the remote work setting, He et al. (2011) argue that it is not possible to tell group members how to self-organize in their own remote workplaces, which is in line with research results. Thus, remote work cannot be associated with better opportunities for employees to independently organize collaboration with clients, partners, and colleagues, taking leadership in a team. The results of the study also suggest that when working remotely, employees could not be expected to initiate large-scale change initiatives, make important decisions for the company, search for alternatives or exploit opportunities to solve more complex problematic situations common for the company. According to results, failure to carry out these potential collective self-organizing activities does not even stress remote employees.

Spearman correlations were also examined in the Covid-19 pandemic context, but no moderately significant correlations were found, suggesting these changes were not related to self-organization abilities and activities of employees.

It should be noted that the self-organization of employees is not strongly related to the demographic characteristics of the employees or the workplace.

Based on the study results, $H_1$ (Self-organization of employees at the individual level is related to remote work) is confirmed. Most remote employees of the companies in Lithuania independently self-organize their individual work time, place, activities, seeking higher productivity and quality level in correlation with high rates of work-life balance and job satisfaction together with non-willingness to quit remote work.

$H_2$ (Self-organization of employees at the group level is related to remote work) is rejected because employees’ self-organization to collaborate with clients, partners, and colleagues in group level is not developed enough and is not related to remote work setting.

Finally, $H_3$ (Self-organization of employees for managing the company in a competitive environment is related to remote work) is also rejected. In Lithuanian companies, remote employees care more about their individual work than the company’s matters.

CONCLUSION

A review of the scientific literature on employee self-organization in remote work shows that the “new reality” of the prevalence of remote work is driving companies to delegate at least part of the managerial duties to employees, which are complicated when working remotely. A number of arguments are made as to why employee self-organization can help organizations realize their human potential managing companies, and this study aimed to determine whether employee self-organization in a remote work setting can help meet companies’ management challenges.

Employee self-organization appears to be most developed at the individual work level by working remotely, as it allows employees to achieve life-work balance and higher job satisfaction. For the practical
value, this means that a solid part of micro-management can be delegated to individual remotely working employees.

The same cannot be stated on the involvement of remote employees in self-organization of group activities and the decision-making that is important to the company in a competitive environment, as well as in creative and proactive companywide problem-solving. In practice it means that managers of remotely working companies may need more efforts to involve employees in company management processes.

It is likely that cultural differences may be relevant to this research problem, especially from an individualistic and collectivist perspective, thus, similar research in case of different cultural regions could be conducted.

**AUTHOR CONTRIBUTIONS**

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