
Employee Engagement in Organisations During a Pandemic

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Abstract:

Purpose: The purpose of this paper is to present the results of a study on employee engagement in organisations during the COVID-19 pandemic.

Design/Methodology/Approach: The paper presents the results of a survey conducted during the pandemic among 123 employees working for organisations of various kinds. The questionnaire survey was carried out using the computer-assisted web interviewing (CAWI) methodology. The process was based on certain claims of grounded theory. Statistical analysis was carried out using basic methods of descriptive statistics, statistical tests and selected methods of multivariate statistics, including the Kaiser-Meyer-Olkin Measure of Sampling Adequacy, Bartlett's Test of Sphericity.

Findings: The overall level of organisational engagement in organisations that operated during the pandemic was rated as moderate by the respondents, with the most favourably assessed issues including communication between employees and supervisors, sense of job stability, concern for the fate of the organisation, mutual inspiration to work, and employees' sense of satisfaction with being part of the organisation. The results also revealed statistically significant correlations between the different elements of organisational engagement.

Practical Implications: The practical implications that arise from the results obtained in the study concern mainly the role of organisational engagement for effective operations of an organisation, including during a crisis situation, such as the COVID-19 pandemic. The results show that taking action to improve communication and cooperation, promoting the policy of equal opportunities and capabilities, fair treatment and evaluation of employees and many other instruments can foster the development of employee engagement, which brings results in the form of higher level of job satisfaction, stability and efficiency, thus improving the operations of the organisation.

Originality/Value: This paper is an attempt at filling the gap in the area of the status, role and value of organisational engagement during this pandemic, which may prove to be relevant for companies given the current circumstances, as well as possible future unpredictable challenges.

Keywords: Human Resource Management, engagement, COVID-19, pandemic, crisis.

JEL Classification: J2, J5, O1, M1.

Paper Type: Research Paper

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1. Introduction

Human capital, as part of an organisation's intellectual capital (Smiriti and Das, 2017), constitutes a strategic resource in an organisation (Batra, 2009; Kot-Radojewska and Timenko, 2018) and determines its competitive advantage in the market (Pedrini, 2007; Backer *et al.*, 2008; Ferlie and Shortell, 2003; Øvretveit and Gustafson, 2002). The main aim of the organisations is to build engaged, effective and cooperating teams, which are conducive to the effective functioning of companies and their growth (Hys, 2015; Łochnicka, 2015; Dacko-Pikiewicz and Walancik, 2016).

Employee engagement becomes particularly important in the times of crisis, such as the COVID-19 pandemic, which – as a new and unprecedented phenomenon (Borucka and Łagowska, 2020) – brought about some dramatic changes in the functioning of individuals and communities around the world. Leaders have had to respond to the impacts of the crisis with little head start, while having to work in a constantly changing environment (Ahern and Loh, 2020) where high uncertainty (Sus and Puszko, 2020) posed a challenge in terms of decision-making process, requiring them to adapt rapidly to turbulent circumstances (Gopichandran *et al.*, 2020). In many companies, employees had to switch to working from home overnight, others – despite fears for their health and the health of their loved ones – still had to work on premises, while many may have felt a sense of danger of being laid off or furloughed. One should note that any change, especially an unexpected one, can generate negative emotions and stress, which consequently can affect the level of employee engagement (Oreg *et al.*, 2011).

This paper outlines the results of a study designed to explore employees' opinions concerning engagement in their organisations during the ongoing pandemic. It may seem that the lack of control and possibility to verify the actions of employees, usually working on premises or in an office, may result in the engagement dropping. The results of the study were supposed to verify the above assumptions.

2. Literature Review

Employee engagement improves the effectiveness of teams and the effective management of employees, while forming the basis for promoting proper values and attitudes. (Jończyk, 2010; Bugdol, 2007) It has a positive impact on employees' job satisfaction, better mood and higher quality of life (Szabowska-Walaszczyk *et al.*, 2011), a sense of job security, flexibility and fast adaptation to changes, team innovation, acquisition of new knowledge and competences (Szczepańska-Woszczyna, 2021), as well as reduction of absenteeism (Schaufeli and Salanova, 2011) and employee turnover. (Ayers, 2006; Simpson, 2009; Xanthopoulou *et al.*, 2009) The analysis of the results of some of these studies allows the authors to conclude that there is a beneficial effect of engagement on the psychophysical health of employees, including the reduction of pain and stress (Innstrand *et al.*, 2012).

There are many definitions of organisational engagement in subject literature. According to some, organisational engagement is calculated and involves an economic exchange relationship between the employee and the organisation (Becker, 1960), while others point out the emotional aspects of organisational engagement (Mowday *et al.*, 1979). Engagement is “the harnessing of organisation members' selves to their work roles” (Kahn, 1990), it is an affective attachment to the company to its goals and values (Buchanan, 1974). It is not only a symptom of taking the organisation's mission and values as one's own, but also an expression of the desire to belong to the organisation and readiness to act within its structures. (Wojtczuk-Turek, 2009). It is equated with an inner passion to act in a way that enables the organisation to achieve its goals (Wiener, 1982).

An engaged employee can be categorised from the point of view of four key aspects – stability (striving to be a part of the organisation), identification (understanding the goals of the organisation), effective action for the benefit of the organisation and passion (working consistently with the interests and predispositions of the employee) (Juchnowicz, 2010).

Łochnicka (2015) distinguishes organisational engagement into several categories, namely *engagement*, *involvement* and *commitment*. *Commitment* refers to an employee's attachment and belonging to the organisation. This understanding of engagement is reflected in the theory of Allen and Meyer (1991), according to which organisational engagement is an employee's mental state that determines the relationship between the employee and the organisation as well as their behaviours. According to the theory, there are three types of engagement: affective (long-term and authentic emotional attachment to the organisation, which results in increased efficiency), continuance (instrumental – the need to continue working for the organisation results from the employee's fear of losses associated with leaving the company; as such it does not affect efficiency and satisfaction) and normative (work in the organisation is treated as a duty, that needs to be fulfilled). *Involvement* is related to the concept of employee participation and is expressed in the inclusion of employees in the decision-making processes in the company (Secord, 2003), which affects the better satisfaction of their higher-order needs, such as self-fulfilment or recognition (Mikuła and Potocki, 1997), integration with the organisation, increased engagement and employee initiative (Chyłek, 2011). *Engagement* - refers to organisational engagement expressed in the employee's emotional connection to the organisation, identification with the company, its goals and values (Vance, 2006) and responsibility for its results (Britt, 1999).

Engaged employees are characterised by their positive attitude towards the company's products and services, the company itself and the work they carry out, respect towards other members of the organisation, willingness to work in a team, keeping knowledge up to date, believing in opportunities for development and growth, entrepreneurial attitude, focusing not only on their own responsibilities, but on a bigger picture of the organisation, as well as striving to take other actions for the good of the organisation (Robinson *et al.*, 2004).

All the types of organisational engagement presented are relevant (in the case of *commitment* - *affective commitment*) and interact with each other. *Affective commitment* seems to be the closest to the definition of *engagement*. *Involvement*, on the other hand, affects growth of *affective commitment* and *engagement*. In the studies to date, most scholars focused on organisational engagement defined as engagement, while numerous studies indicate that this concept has the greatest impact on more effective operations and functioning of organisations (Lochnicka, 2015).

3. Methods and Materials

3.1 Methods

Employee engagement was assessed using a scale consisting of 16 items, each measured on a seven-point Likert scale, which – compared to a five-point scale – enabled respondents to offer more diverse responses, where 1 means “strongly disagree” and 7 means “strongly agree”, and the higher the score, the higher the engagement.

The scale developed for the this study is an original way of measuring engagement in organisations; although it was based on one of the most popular engagement measurement methods – a questionnaire of twelve questions developed by the Gallup Institute. The scale developed for this study encompasses blocks of statements concerning organisational culture (statements regarding the belief in the overarching culture of equal opportunities and possibilities, sense of pride in being a part of the organisation, satisfaction with the salary policy, satisfaction with working for the organisation, awareness of the stability of the employee’s job and position, taking interest in the fate of the organization), as well as cooperation, communication and relations within the organisation (statements regarding satisfaction with the division of tasks in the organisation, conviction that the requirements are clearly defined, sense of fair treatment and evaluation, collaboration or communication with supervisors, feeling of adequacy of one's own work performance in relation to the requirements), as well as taking responsibility and a sense of agency (statements regarding encouraging respondents to make decisions in the organisation, confidence in one’s own competence and skills in relation to the requirements set by the organisation, inspiring one another to do tasks in the best possible way or feeling that respondents were properly trained for their work).

An assessment of employees’ engagement has been preceded by was carried out after first checking analysis of the homogeneity and reliability of used (described earlier) engagement measure. Exploratory factor analysis (EFA) was employed to check whether and which subgroups (subscales) of variables should be distinguished within each scale. After extracting the factors, the reliability of each of the extracted subscales and the overall engagement score were assessed. The Cronbach's alpha coefficient was used, whose values are in the range [0; 1] – the closer they are to 1,

the greater the reliability of the scale. 0.7 is usually taken as the threshold value, but for shorter scales a value of about 0.5 is sometimes accepted as valid. (Jankowski and Zajenkowski, 2009; Staniec, 2015)³. A split-half reliability was assessed using the Spearman-Brown coefficient and the Guttman Split-Half coefficient. After confirming the reliability of the of the engagement measures – in total and for subscales, the summary indices were determined as the means of points obtained in questions (items) including in the particular subscale of engagement⁴.

Additionally, total summary indicator (*ET*) measured general employee's engagement was calculated (also as the mean of all 16 variables). This approach (using mean instead of sum of points in each item) enabled comparing the distributions of each subscale. Each engagement index (in total and for subscales) have values from 1 to 7, and the higher index the higher employee's engagement.

In statistical analysis also basic methods of descriptive statistics (mean (M), median (Me), standard deviation (SD), skewness coefficient (S)) were used. Additionally, in analysis of interdependence Spearman's rank correlation coefficient (ρ) was applied. All calculations were carried out using the PS IMAGO PRO 5.0 (IBM SPSS Statistics 25.0 software).

3.2 Data

Empirical analysis of the engagement in organisations during the pandemic was conducted on the basis of the sample of 123 employees in the period September-October 2020. The questionnaire survey was carried out using the computer-assisted web interviewing (CAWI) methodology. The original survey questionnaire, including factors that shape engagement, was published on the webankieta website and distributed using e-mail and social media.

Both the sample size and the difficulties in ascertaining its randomness make it necessary to approach any attempts at generalising the survey results with great caution and treat it as a preliminary study of the issue at hand. A relatively low sample size ($n=123$), as well as a random (albeit not fully randomized) selection of respondents do not guarantee that the sample is representative of the general populace. It should be noted that this approach is in line with some of the assumptions of grounded theory (Glaser and Strauss, 2009), which provides a basis for the systematic quantitative studies as well (Konecki, 2000). The assumptions of the grounded theory employed in the study process absolves the scholar from the concern for the representativeness of the research sample in statistical terms.

³*EFA and reliability assessment were applied with using full sample ($n = 123$, there were no missing data for each analysed items/questions).*

⁴*Proposed summary indices are measured on an interval scale, which enables using parametric methods in their analysis. It should be noted, that preliminary normality of each variable (summary index) was assessed (results of the Shapiro-Wilk test confirmed normality of each variables).*

123 people participated in the survey. Women dominated in the group of respondents (2/3 of the sample), as well as people aged 35-45 are the most numerous, making up half of the total number of respondents. 46.3% of the respondents had a university degree. The majority held expert positions (42.3% of the respondents). 28.5% of the total respondents were executives, presidents or owners of companies, while 12.2% were managers. The seniority varied, although $\frac{3}{4}$ of them have been working for more than 10 years and about $\frac{1}{4}$ worked for 3 to 5 years. The respondents worked mainly in private companies (2/3), in organisations of various sizes, with micro-companies being the least popular.

4. Discussion and Results

This paper outlines only selected results of the study conducted by the authors. Employee engagement was assessed using a scale consisting of 16 items, each measured on a seven-point Likert scale (1 - strongly disagree, 7 - strongly agree).

The mean scores ranged between 3.34 (for the item “During the pandemic, employees in my organisation were satisfied with the distribution of tasks in the organisation”) and 4.02 (for the item “During the pandemic, the communication between employees and their managers in my organisation was flawless”). Overall, the general assessment of employee engagement during the pandemic is on the moderate level. In the case of 5 items, the proportion of positive responses (from rather agree to strongly agree, i.e. 5-7 points) was higher than 40%; however it does not exceed 45% for any of them, and only two items with the highest average have a median of 4 – it is equal to 3 in the case of the remaining items. This concerns following items:

- during the pandemic, employees in my organisation were aware that their jobs were stable - 44.7% of responses were affirmative, including 19% strongly positive, as well as 21% strongly negative ones (M = 3.92);
- during the pandemic, the employees in my organisation were really interested in its fate – 43.1% of the responses were affirmative, including approx. 20% strongly positive, as well as approx. 20% strongly negative ones (M = 3.85);
- during the pandemic, employees in my organisation were inspired to do their best work – 42.3% of the responses were affirmative, including approx. 18% strongly positive, as well as approx. 25% strongly negative ones (M = 3.75);
- during the pandemic, employees in my organisation were really happy to work there – 40.6% of the responses were affirmative, including approx. 15% strongly positive ones (M = 3.84).

A high average was also recorded for the item “during the pandemic, employees in my organisation felt that the organisation had trained them properly for the job” – even though the proportion of positive responses was slightly lower (37.4%). In about 1/4 organisations, employees strongly disagreed that tasks and requirements were clearly defined and that their organisation had an equal opportunities policies in place. On the other hand, in 1/5 organisation, employees were clearly dissatisfied

with the distribution of tasks within the organisation, cooperation with superiors as well as with the effectiveness of their work in relation to the requirements. Descriptive statistics for each item of engagement scale were presented in Table 1.

Table 1. Descriptive statistics concerning the assessment of engagement during the pandemic

Description: During the pandemic, employees in my organisation:	M	Me	SD	S
were proud to be a part of it	3.63	3.00	2.11	0.292
were really interested in its fate	3.85	3.00	2.29	0.145
were inspired to do their best work	3.75	3.00	2.31	0.171
were really happy to work there	3.84	3.00	2.10	0.197
were aware that their jobs were stable	3.92	4.00	2.22	0.045
felt that their job performance was adequate, compared to the requirements	3.51	3.00	2.13	0.442
were satisfied with their cooperation with their managers	3.51	3.00	2.10	0.446
were confident that the organisation had a policy of equal opportunities	3.52	3.00	2.07	0.332
were satisfied with the distribution of tasks in the organisation	3.34	3.00	2.04	0.598
felt that tasks and requirements were clearly defined	3.42	3.00	2.07	0.485
felt that communication between the employees and their superiors was flawless	4.02	4.00	2.11	0.053
felt that the organisation encouraged their participation in decision-making	3.60	3.00	2.01	0.303
were satisfied with the remuneration policy	3.71	3.00	1.87	0.390
were confident in their abilities and competences in relation to the requirements	3.73	3.00	2.19	0.368
felt that the organisation had trained them properly for the job	3.81	3.00	2.09	0.263
had a sense of fair treatment and assessment	3.75	3.00	2.08	0.276
M – mean, Me – median, SD – standard deviation, S - skewness				

Source: Own calculations based on the results of a CAWI survey.

The degree of correlation between responses on individual employee engagement issues for each pair of engagement scale items is statistically significant ($p < 0.05$) and rather strong (at least moderate) (Table 2). The correlation is positive, which means that higher scores in one area are accompanied by higher scores in other areas as well. The strongest correlation ($\rho > 0.6$) can be seen for the following items (for listed below engagement scale items, interpretation in the other way around is also adequate):

Table 2. Assessing the relationship between the various dimensions of employee engagement assessment

No.	Description: During the pandemic, employees in my organisation:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	were proud to be a part of it		0.635**	0.496**	0.508**	0.353**	0.513**	0.493**	0.475**	0.448**	0.473**	0.474**	0.518**	0.301**	0.373**	0.403**	0.470**
2	were really interested in its fate	0.635**		0.643**	0.459**	0.517**	0.564**	0.442**	0.406**	0.493**	0.388**	0.520**	0.440**	0.240**	0.490**	0.446**	0.469**
3	were inspired to do their best work	0.496**	0.643**		0.491**	0.426**	0.553**	0.371**	0.398**	0.343**	0.399**	0.511**	0.390**	0.312**	0.407**	0.428**	0.350**
4	were really happy to work there	0.508**	0.459**	0.491**		0.433**	0.488**	0.578**	0.457**	0.354**	0.293**	0.447**	0.334**	0.466**	0.467**	0.416**	0.427**
5	were aware that their jobs were stable	0.353**	0.517**	0.426**	0.433**		0.404**	0.368**	0.465**	0.288**	0.303**	0.396**	0.388**	0.374**	0.291**	0.382**	0.431**
6	felt that their job performance was adequate, compared to the requirements	0.513**	0.564**	0.553**	0.488**	0.404**		0.591**	0.408**	0.374**	0.403**	0.506**	0.393**	0.243**	0.496**	0.493**	0.453**
7	were satisfied with their cooperation with their managers	0.493**	0.442**	0.371**	0.578**	0.368**	0.591**		0.528**	0.361**	0.436**	0.536**	0.530**	0.279**	0.411**	0.229*	0.451**
8	were confident that the organisation had a policy of equal opportunities	0.475**	0.406**	0.398**	0.457**	0.465**	0.408**	0.528**		0.558**	0.417**	0.372**	0.563**	0.291**	0.402**	0.405**	0.645**
9	were satisfied with the distribution of tasks in the organisation	0.448**	0.493**	0.343**	0.354**	0.288**	0.374**	0.361**	0.558**		0.535**	0.398**	0.567**	0.262**	0.532**	0.339**	0.465**
10	felt that tasks and requirements were clearly defined	0.473**	0.388**	0.399**	0.293**	0.303**	0.403**	0.436**	0.417**	0.535**		0.445**	0.465**	0.293**	0.414**	0.268**	0.466**
11	felt that communication between the employees and their superiors was flawless	0.474**	0.520**	0.511**	0.447**	0.396**	0.506**	0.536**	0.372**	0.398**	0.445**		0.438**	0.368**	0.466**	0.390**	0.520**
12	felt that the organisation encouraged their participation in decision-making	0.518**	0.440**	0.390**	0.334**	0.388**	0.393**	0.530**	0.563**	0.567**	0.465**	0.438**		0.276**	0.464**	0.390**	0.566**
13	were satisfied with the remuneration policy	0.301**	0.240**	0.312**	0.466**	0.374**	0.243**	0.279**	0.291**	0.262**	0.293**	0.368**	0.276**		0.406**	0.450**	0.291**
14	were confident in their abilities and competences in relation to the requirements	0.373**	0.490**	0.407**	0.467**	0.291**	0.496**	0.411**	0.402**	0.532**	0.414**	0.466**	0.464**	0.406**		0.473**	0.471**
15	felt that the organisation had trained them properly for the job	0.403**	0.446**	0.428**	0.416**	0.382**	0.493**	0.229*	0.405**	0.339**	0.268**	0.390**	0.390**	0.450**	0.473**		0.442**
16	had a sense of fair treatment and assessment	0.470**	0.469**	0.350**	0.427**	0.431**	0.453**	0.451**	0.645**	0.465**	0.466**	0.520**	0.566**	0.291**	0.471**	0.442**	

In the table rho Spearman coefficient values were presented; * $p < 0.05$, ** $p < 0.01$

Source: Own calculations based on the results of a CAWI survey.

- no. 8 and no. 16 ($\rho = 0.645$) - the more the employees believed that the organisation had an equal opportunities policy, the stronger their sense of fair treatment and assessment was;
- no. 3 and no. 2 ($\rho = 0.643$) – employees were more inspired to do their best work if they were more interested in its fate;
- no. 1 and no. 2 ($\rho = 0.635$) - employees who were proud to be part of the organisation were more interested in the organisation's fate.

A strong positive correlation was also observed in the case of items:

- no. 6 and no. 7 ($\rho = 0.591$) – if the employees believed that their job performance was adequate, compared to the requirements, they were more satisfied with their cooperation with their managers;
- no. 4 and no. 7 ($\rho = 0.578$) – if the employees were satisfied with their cooperation with their managers during the pandemic, working for that particular organisation was also satisfying.

As the authors have already pointed out, this rather strong (at least moderate) positive correlation applies to most items of the engagement scale. The least correlated in relative terms is the level of satisfaction with remuneration policies throughout the pandemic, as well as the issue of training (Employees in my organisation felt that the organisation had trained them properly for the job”).

Table 3. *Exploratory factor analysis results – employee engagement during the pandemic*

Description: During the pandemic, employees in my organisation:	Factor		Communities
	E1	E2	
were satisfied with the distribution of tasks in the organisation	0.932	-0.151	0.692
felt that the organisation encouraged their participation in decision-making	0.903	-0.126	0.669
felt that tasks and requirements were clearly defined	0.818	-0.105	0.559
had a sense of fair treatment and assessment	0.773	0.031	0.633
were confident that the organisation had a policy of equal opportunities	0.728	0.069	0.606
were satisfied with their cooperation with their managers	0.483	0.312	0.543
were proud to be a part of it	0.468	0.343	0.564
were confident in their abilities and competences in relation to the requirements	0.428	0.347	0.514
were satisfied with the remuneration policy	-0.240	0.845	0.485
were really happy to work there	-0.044	0.829	0.638
felt that the organisation had trained them properly for the job	-0.043	0.759	0.532
were inspired to do their best work	0.050	0.718	0.569
were aware that their jobs were stable	0.035	0.629	0.429
felt that their job performance was adequate, compared to the requirements	0.248	0.579	0.600
were really interested in its fate	0.320	0.495	0.570
felt that communication between the employees and their superiors was flawless	0.381	0.397	0.516
% of variance explained	50.0	7.0	x
Cumulative % of variance explained	50.0	57.0	x
Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)	0.875		

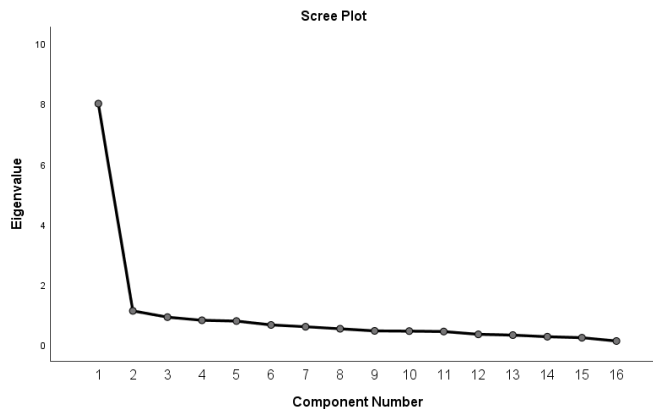
Bartlett's Test of Sphericity	$\chi^2 (120) = 1104.08, p < 0.001^{**}$		
Reliability			
Cronbach's alpha (α -C)	0.897	0.873	x
Spearman-Brown coefficient	0.893	0.857	x
Guttman Split-Half Coefficient	0.893	0.854	x

Source: Own calculations based on the results of a CAWI survey.

As highlighted, the assessment of engagement during the pandemic was done using a scale consisting of 16 items, each measured on a seven-point Likert scale. Using exploratory factor analysis, the homogeneity of this scale was first examined. Both the KMO = 0.875 and the results of Bartlett's sphericity test ($p < 0.001^{**}$) confirm that the set of variables was adequate for conducting a factor analysis. The common variability extraction was carried out using principal components analysis. Communalities (last column in Table 3) indicate the high importance of each variable. In Table 3 main results of EFA (with Promax rotation) were presented.

The number of factors was determined using the Kaiser and Cattell criteria, which point to two factors (eigenvalues higher than 1 for two factors and the scatter plot – Figure 1 – confirm this approach). Together, these two factors explain 57% of the variance in the latent variable – the overall employee engagement score (Table 3).

Figure 1. Scatter plot for the engagement measurement



Source: Own calculations based on the results of a CAWI survey.

The first group, explaining 50% of the variance of the latent variable (and therefore the most important in terms of explaining its variability) includes eight items, concerning the fact that during the pandemic workers: (1) were satisfied with the distribution of tasks in the organisation, (2) felt that the organisation encouraged their participation in decision-making, (3) felt that tasks and requirements were clearly defined, (4) felt that they were fairly treated and assessed, (5) believed that the organisation had an equal opportunities policy, (6) were satisfied with their cooperation with managers, (7) were proud to be part of their organisation, and (8)

were confident in their abilities and competencies in relation to the requirements. Note that for three variables the factor loadings are slightly lower than 0.5, nevertheless the decision was made to leave them as part of the set. The second factor also includes eight items concerning employees: (1) they are satisfied with the remuneration policy, (2) they are satisfied with the fact that they work for the organisation, (3) they feel that the organisation has trained them properly for the job, (4) they were inspired to do their best work, (5) they were aware that their job was stable, (6) they felt that their job performance was adequate, compared to the requirements, (7) they were genuinely interested in the fate of the organisation they worked for, and (8) they felt that their communication with their superiors was flawless. The last variable has a rather low factor loading, but was the highest-rated aspect of employee engagement, hence the decision to include it in the overall index. The correlation between these two factors is strong (correlation coefficient 0.706).

The assessment of reliability of each of the distinguished groups of variables, carried out using the Cronbach's alpha coefficient and the analysis of split-half reliability (Table 3), confirms the high reliability of both subscales. For E1 α -C = 0.897, and for E2 – 0.873, more than 0.7, and also Spearman-Brown and Guttman Split-Half coefficients are at the high level. Thus, summary variables were created, based on the mean of the scores within a given subscale. With this approach, each of the indicators can take values from 1 to 7, and the higher its value, the higher the score within a given area. Also summary engagement measure (*ET*) (which was created as the mean of points in all 16 items) has high reliability. Cronbach's alpha coefficient is 0.933, and the split-half coefficient is similarly high - Spearman-Brown coefficient equals 0.898, with Guttman Split-Half Coefficient at 0.896.

The distribution of individual summary indicators characterising the descriptive statistics is shown in Table 4.

Table 4. Distribution of summary indices of employee engagement assessment during the pandemic

Description	<i>E1</i>	<i>E2</i>	<i>Engagement total (ET)</i>
Minimum	1.00	1.00	1.13
Maximum	7.00	7.00	7.00
Mean	3.56	3.80	3.68
Median	3.25	3.50	3.44
Standard deviation	1.59	1.56	1.49
Skewness	0.829	0.590	0.793

Source: Own calculations based on the results of a CAWI survey.

On average, the engagement measurement index (*E1*) equals 3.56 (SD = 1.59), with half of the individuals assessing it at no higher than 3.25 (when the maximum 7). The *E2* index is assessed by the respondents at a higher level, with a mean of 3.80 and median of 3.5, with a similar degree of differentiation of assessments and moderate skewness of distribution. The overall engagement index value (based on

16 variables) averaged at around 3.68, with half of the respondents assessing it at no lower than 3.44 points. The variability and skewness are at the moderate level.

5. Conclusions

In the summary of the results of the study, one should note that the overall level of engagement was rated at a rather moderate level by the respondents (M=3.68; Me=3.44). The most positive assessments concerned communication between employees and their managers, as well as the sense of job stability, concern for the fate of the organisation, mutual inspiration to do their best work, as well as the feeling of satisfaction with being part of the organisation. Some correlations were also identified, the strongest of which indicates that employees' belief that the organisation has an equal opportunities policy translated into their stronger sense of fair treatment and assessment.

In a similar vein, employees were inspired to do their best work if they took more interest in the fate of their organisation, while employees who felt proud to be part of the organisation took more interest in its fate. What is more, if employees felt that their job performance was adequate, compared to the requirements, they were more satisfied with their cooperation with managers, and if they were satisfied with their cooperation with their managers during the pandemic, they were also satisfied with working in that particular organisation. The weakest correlation is seen in the case of remuneration policy and proper employee training.

This survey and study, although it cannot be generalised to the entire population, points to the importance of engagement in modern companies, in particular those operating in the wake of the crisis. This study may serve as a starting point and a contribution to a broader study concerning engagement, as well as its impact on job satisfaction, work performance and – as a consequence – better bottom line results, as the organisation weathers the crisis.

One should note that given the above, it is important for managers to take appropriate actions to foster engagement in the organisation. Some of the most important activities in this respect include empowerment – giving employees the ability to own their processes and make decisions, supporting their independence and autonomy, fostering their engagement, strengthening the belief that they are important for the organisation (Zeffane and Zarooni, 2012).

It is certain that engagement has a tangible economic value and affects the companies' bottom lines; which is why it should be based on actions, not words and empty declarations. Lack of engagement increases staff turnover, decreases productivity and profitability of the organisation. Although managers play a major role in building a culture of engagement, in practice all members of the organisation own this process.

6. Limitations

One of the limitations, which cannot be questioned in the case of the study at hand, is the sample size and the difficulties concerning ensuring its randomness. The low response rate, as well as the non-randomised selection of respondents participating in the survey do not guarantee the representativeness of the sample, therefore they cannot be generalised in order to draw conclusions concerning the entire population. The survey can be treated as preliminary study into the subject at hand, a starting point for a broader in-depth study. However, it should be pointed out that referring to grounded theory in the study process absolves the scholar from the concern for the representativeness of the research sample in statistical terms.

7. Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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