

# Does Work Have to Make Sense? Work Engagement in a Group of Micro-Entrepreneurs. The Mediating Role of Coherence at Work.

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## Abstract

There is increasing interest in psychological research concerning sense of coherence and its associations with psychological functioning in workplace. In an attempt to confirm and extend previous knowledge on this topic, in a three wave study, we investigated the relationships between coherence at work, job satisfaction and work engagement. The final sample consisted of 80 business owners (micro-entrepreneurs) operating in Poland and Germany. Women accounted for 48.75% of respondents. Either a high level of job satisfaction, coherence at work, and work engagement are being observed in the examined study. Meaningfulness of work, manageability at work, and job satisfaction are most closely related to work engagement. Meaningfulness of work represents the most essential indicator of work engagement. Results suggest that coherence at work is a mediator between job satisfaction and work engagement.

**Keywords:** sense of coherence, work engagement, job satisfaction, meaningfulness of work, micro-entrepreneurs

The objective of this article is to describe the links between work engagement (the dependent

variable), job satisfaction (independent variable), and the coherence at work (mediating variable) in a group of micro-entrepreneurs. According to the Job Demands-Resources model (Demerouti et al., 2001), the characteristics of work environments can be shaped by job demands and job resources. The authors of this model assume that job demands are the physical, social or organizational aspects of the job that require sustained physical and psychological effort and are associated with physiological and psychological costs. Job demands can lead to burnout, especially among medical personnel (Gleason et al., 2020; Xian et al., 2020). Job resources are the physical, social or organizational aspects of a job that are functional in achieving work-related goals and reducing job demands (Xanthopoulou et al., 2007). In this paper, the focus is on resources and their relationship with work engagement.

Contemporary research suggest that job resources are associated with work engagement (Albrecht & Marty, 2020). In this article the job resources are: job satisfaction and coherence at work, as research demonstrates that both variables can be understood as job resources (Ghanayem et al., 2020; Masanotti et al., 2020). For our research we chose a sample based on micro-entrepreneurs. Micro-entre-

preneurs are owners of businesses that employ ten or less employees. This group has not yet been the subject of systematic psychological research in Poland. Thus, we investigated whether job satisfaction is a predictor of work engagement and whether this correlation is mediated by coherence at work. Our aim was to answer the following questions: Are both job satisfaction and coherence at work predictors of work engagement in a group of micro-entrepreneurs? Is the correlation between job satisfaction and work engagement mediated by coherence at work?

## Work Engagement

Work engagement is defined as an affective-cognitive attitude to duties, people, and work-related objects (Schaufeli & Bakker, 2004). Work engagement consists of three components: 1) vigor: a high level of energy, the will to invest effort and perseverance at work, especially in the face of difficulties; 2) dedication: identification with one's work, a sense of its importance, a sense of enthusiasm and pride in its performance; and 3) absorption: concentration at work, a sense of time at work passing by rapidly. It is implied that work engagement may be treated as a personal trait (Schaufeli & Salanova, 2007) or as a state (Sonnentag,

2011). It represents a relatively constant phenomenon depending on the time of day, available resources, autonomy (Sonnentag et al., 2010) or support given by colleagues (Xanthopoulou et al., 2009). The approach adopted in this study (Dalal et al., 2008) is to view work engagement as a construct containing a component similar to the trait (dedication) and components similar to the state (vigor, absorption).

A vast amount of research has been devoted to explaining other psychological variables based on work engagement (Eldor et al., 2020; Kim et al., 2019). Most research into work engagement has been conducted on teachers (Zeng & Xu, 2020), medical personnel (Baka & Derbis, 2012), or random employees (Geldenhuis et al., 2014). In the presented research, the sample is comprised of Polish and German micro-entrepreneurs that own companies employing fewer than ten employees. This professional group is a specific sector of managers whose have not yet been examined by empirical research.

Literature indicates that work engagement often is reflected through organizational and leadership-related factors (Mostafa & Abed El-Motalib, 2020) or job characteristics and perceived organizational support (Saks, 2019). Other significant organizational-related predictors of engagement are role clarity and growth opportunities (Duraisingam et al., 2020). Research results indicate that personal resources may also have a positive relationship with

the tendency to engage (Contreras et al., 2020). Within the classical concept of work engagement, Kahn (1992) assumed that individual characteristics and the perception of the work environment determine work engagement. In this concept, work engagement is based on three psychological conditions: reasonableness, safety, and possibilities. Work engagement is determined by the answers to three questions: Does the professional role make sense to the employee? Does the job give them a sense of security? Are they able to perform work-related tasks? Despite the well-established position of this theory in psychology, more studies investigating work engagement based on personal factors are not of prevalent in research databases.

A majority of research on the correlation between personality traits and work engagement has been conducted based on the big five model (Smith & DeNunzio, 2020; McCrae & Costa, 1987). Other research, emerging from the concept of conservation of resources (Hobfoll, 2006), has confirmed the mediation role of resources such as self-efficacy (Mérida-López et al., 2020; Liu & Hang, 2019), hardiness (Corso-de-Zúñiga et al., 2020) or self-esteem and optimism (Xanthopoulou et al., 2007) in the correlation between job resources and work engagement.

### **Sense of Coherence at Work**

In the explanation of the variability of work engagement, the concept of the sense of coher-

ence has not yet been given much attention (Antonovsky, 1995). Having a sense of coherence constitutes a personal variable, expressing the degree to which a person has a durable sense of certainty that: “stimuli coming from both the internal and external environment throughout life are structured, predictable, and explainable in character” (Antonovsky, 1995, p. 34). The sense of coherence includes three factors. The first, meaningfulness, reflects “the extent to which the subject feels that life has sense from an emotional viewpoint, where at least part of the problems and requirements that life brings are worth the effort, dedication and commitment” (Antonovsky, 1995, p. 34). Second, comprehensibility, refers to the extent to which persons perceives the stimuli coming from both the internal and external environment as cognitively-sensible, ordered, clear structured, and having a “high probability that everything will work out as well as expected” (Antonovsky, 1979, p. 123). Lastly, manageability, is the extent to which humans perceives the available resources as sufficient in meeting the requirements of the bombarding stimuli (Antonovsky, 1995). Resources are all forms of support that a person has at his or her disposal, in material forms such as a home, car, money, as well as ideology, religion, or beliefs.

Previous studies were concerned with temperamental conditions for a sense of coherence (Szcześniak & Stochalska, 2019). Research indicates that a sense of

coherence is positively associated with efficient work during stressful conditions and that it is a variable akin to a trait, and it does not depend on gender, age of employees, nor seniority (Rębak & Głuszek, 2014). High scores on a sense of coherence scale are a predictor of a reliable practice of a profession (Bracha & Hoffenbartal, 2015). Components of the sense of coherence play an important role in professional-work-related situations (Grødal et al., 2019).

It is worth considering a sense of coherence when explaining work engagement because it represents a construct similar to engagement. Like engagement, it has either cognitive (comprehensibility), instrumental-behavioral (manageability), and emotional-motivational (meaningfulness) aspects. The contemporary and most important theoretical proposition inspired by the salutogenic model is the conception of a work-related sense of coherence (Bauer & Jenny, 2007). Work-related sense of coherence (Work-SoC) is defined as the “perceived comprehensibility, manageability and meaningfulness of an individual’s current work situation” (Vogt et al., 2013, p. 1). In this study, the basis of research is not the modern approach of a sense of coherence (Work-SoC), but an original concept adapted to the work environment. In our view, coherence at work constitutes a personal variable expressing the durable possible degrees of coping with work-related phenomena. Work comprehensibility is important because of the capability to perceive

the profession as cognitive and predictable. Vogt et al. (2013) defined it as a perception of the work situation as structured, consistent, and clear. Manageability at work is conducive to thinking about a difficult situation as an achievable success, thanks to the awareness of the available resources that are sufficient to deal with the problem. In this approach, ‘meaningfulness of work’ is related with ‘perception of the problem as a challenge’. Meaningfulness of work leads to using more resources in job tasks. The continuance of research on the relationship between coherence at work and work engagement is in line with up-to-date research trends in social sciences which aim to better comprehend the positive aspects of human experience (Mittelmark & Bauer, 2017).

### **Relationship Between Job Satisfaction, Coherence at Work and Work Engagement**

Job satisfaction is understood as a construct composed of three dimensions: emotional, cognitive, and behavioral (Hulin & Judge, 2003). Predictors of job satisfaction include: the level of remuneration, the perception of the attractiveness of work, the overall view at work, the possibility of both professional and personal development, as well as the level of stress at work (Jasiński & Derbis, 2019). Research to date has mostly sought out job satisfaction conditions (Walczak, 2019) or its inter-mediating role (Nikolaev et al., 2019; Tarkar et al., 2019). Within this study, job satisfaction consti-

tutes a variable explaining work engagement, suggesting that job satisfaction is a predictor of work engagement and not the other way around (Xanthopoulou et al., 2012; Yalabik et al., 2013).

Based on these results, the first hypothesis is: H1. Job satisfaction is a predictor of work engagement. Nowadays, most research has been focused on the concept of meaningfulness of work which is defined as the perception of one’s work as being more exciting, emotionally positive, and helpful in encouragement (Aguinis & Glavas, 2019; Bibby, 2001). Meaningfulness of work is reached when employees perceive their work as purposeful and significant (Oldham & Hackman, 2010). Meaningful work has three components: a high passion for work, high sense of engagement in work, and a high connection to a sense of meaning in life. Results show that having a positive affect as a component of job satisfaction is a significant predictor of all meaningful work components. (Matz-Costa et al., 2019). The concept of sense of coherence at work is less popular but is a good theoretical basis for empirical research. Research that directly focuses on the role of the sense of coherence at work either has indicated a direct positive correlation between the sense of coherence with motivation to return to work (Leino-Loison et al., 2004), a healthy work pattern (Sharaf & Taha, 2019), and work engagement (Malagon-Aguilera et al., 2019). Additionally, research confirms the mediating role of a

sense of coherence in the burn-out–work engagement relationship (Bezuidenhout & Cilliers, 2010). More recent research shows that coherence at work is related to future work engagement but not with job satisfaction (Grødal et al., 2019).

Based on the previous theoretical analysis, we hypothesized: H2. Coherence at work is a predictor of work engagement. The results of previous research have proved that job resources, such as autonomy or social support, can contribute to the development of a general sense of coherence and coherence at work (Broetje et al., 2019). The mediation role of work meaningfulness was proven in previous study (Chaudhary & Akhouri, 2019). This study is the first attempt in testing all components of coherence at work as mediators between job satisfaction and work engagement in a group of micro-entrepreneurs. Thus, our final hypothesis: H3. Coherence at work is a mediator in the relationship between job satisfaction and work engagement.

**Method**

**Participants**

Analysis consisted of 80 business owners (micro-entrepreneurs) operating in Poland and Germany, all of which were full-time employees. Data about ethnicity and culture of participants was not collected. Women accounted for 48.75% of respondents, and men 51.25%. The average age of respondents was ( $M =$

29.5,  $SD = 6.82$ ), years of work experience ( $M = 5.13$ ,  $SD = 4.8$ ). In the year preceding the first measurement (2017), companies employed an average of 3.05 people ( $SD = 2.39$ ). Taking into account the number of independent variables, the final sample size allows for the detection of at least the average size of the effects for the relationships under study (Cohen, 1992; Van Voorhis & Morgan, 2007). The majority of companies were active in the professional, scientific, technical, and trade sectors. A detailed description of the sample is provided in Table 1.

**Data Collection and Procedure**

Data collection was implemented from March 2018 to May 2019. Participation in the research was voluntary and individuals could opt-out at any time. All respondents provided informed written consent to participate. No remuneration was provided for participating in the research. The questions were administered online. Participants were recruited online using publicly stated company’s addresses emails.

The study had three rounds. In the first round of the study (T1), job satisfaction was measured. Moreover, a question-

Table 1  
Demographic data

Trade	% (N = 80)
Commerce	37.5
Construction and finishing work	40
Professional, scientific and technical activities	18.75
Industry	3.75
Country	
Poland	58.75
Germany	41.25
Education	
Completed high school	30
Bachelor's degree	58.75
Master's degree	11.25
Number of employees	
one	35
two	23.75
three	10
four	6.25
five	8.75
six	2.5
seven	5
eight	5
nine	3.75

naire was used that contained questions about gender, age, education, length of business running, number of employees, industry, and country of operation. Six months later, in the second stage (T2), data was collected about coherence at work. For the following six months (May 2019), 80 people took part in the third stage (T3), and completed the work engagement questionnaire. 446 entrepreneurs participated in the study via invitation. The final sample was 80 respondents. The response rate was 17.93%. We did not observe any significant differences between the individuals who completed the study and the remaining 366 who dropped out.



## Questionnaires

### *Work Engagement*

This study used a shortened version of the Utrecht Work Engagement Scale UWES-9 (Schaufeli & Bakker, 2003). The instrument serves for measuring the three components of work engagement and the overall level of commitment. The scale consists of nine items. The respondents provided answers on a seven-point scale (from zero – *never*, to six – *always*) by specifying to what extent the selected theorem describes their daily functioning at work. In the original version, the questionnaire has a reliability coefficient of  $\alpha = .93$  (Baka, 2013). The reliability coefficient in our study was  $\alpha = .90$ .

### *Job Satisfaction*

The Work Description Inventory questionnaire (Neuberger & Allerbeck, 1978) has been used in a previous Polish sample (Zalawska, 2001). The questionnaire examines the cognitive aspect of job satisfaction and allows for measuring in the following elements: Colleagues, Superiors, Contents, Work Conditions, Organization & Management, Development, and Salary. Satisfaction with each of them can be measured with a single-item, and this option has been used in the presented study. This version of the instrument consists of seven items in that check the overall level of job satisfaction. The reliability coefficient in our study was  $\alpha = .87$ .

### *Coherence at Work*

Antonovsky (1995) developed the publicly available Life Orientation Questionnaire (SOC-29), which is used to study the general sense of coherence and its three components. It is comprised of 29 items and respondents rate using a scale of one to seven. For the purposes of the present research, the questionnaire items have undergone modification to refer to functioning at work. Modification was used by researchers with confidence judges' method. For instance: original sentence "When you talk to people, do you happen to sense they do not understand you?", after change "When you talk to people at work, do you happen to sense they do not understand you?", before change "Do you happen to sense that you do not really care about what is going on in your life?", after change "Do you happen to sense that you do not really care about what is going on in your work?", before modification "How often do you experience feelings about life where you do not you know if you exercise control?" after modification "How often do you experience feelings about work where you do not you know if you exercise control?" The reliability coefficient in our study of the whole instrument was  $\alpha = .90$ , and for the scales: meaningfulness of work  $\alpha = .84$ , work comprehensibility  $\alpha = .73$ , manageability at work  $\alpha = .72$ .

### *Data Analysis*

Data analysis was performed using IBM SPSS 21 software and the PROCESS 3.3 bundle (Hayes, 2017). In the beginning, variable distributions were being tested. During the next step, *r*-Pearson's correlation analysis and linear regression analysis were performed. The mediation hypothesis (H3) was tested exploiting the PROCESS method based on regression analysis and the bootstrap procedure (Efron, 1982), which is resistant to breaking down the assumption about the normality of variable distribution in the population and allows for the detection of the indirect effect even with a very minor sample  $n = 20$  (Creedon & Hayes, 2015). To be able to speak of mediation, the  $\beta$  coefficients for *a* and *b* paths and the indirect effect must be statistically significant.

### *Results*

A high level of job satisfaction, coherence at work, and work engagement were observed in the measured sample. Statistically significant correlations between the variables examined have also been observed. Meaningfulness of work, manageability at work, and job satisfaction are most closely related to work engagement.

In order to test hypotheses H1 and H2, a stepwise regression analysis was performed. The results demonstrate that important predictors of work engagement are represented by job satisfaction and meaningfulness of work. Inclu-

Table 2

Descriptive statistics and r-Pearson's correlations

	M	SD	1	2	3	4
1. Job satisfaction	37.73	7.55				
2. Work comprehensibility	49.76	9.1	.38 <i>p</i> = .008			
3. Manageability at work	52.41	7.36	.47 <i>p</i> = .005	.71 <i>p</i> = .007		
4. Meaningfulness of work	45.02	6.78	.47 <i>p</i> = .005	.64 <i>p</i> = .004	.81 <i>p</i> = .004	
5. Work engagement	49.71	9.31	.51 <i>p</i> = .002	.49 <i>p</i> = .006	.58 <i>p</i> = .003	.75 <i>p</i> = .004

sion of coherence at work into the explanatory model has increased the degree of the explained variance from 26%,  $R^2 = .26$ ,  $F(1, 78) = 27.6$ ,  $p < .001$ , to 60%,  $R^2 = .60$ ,  $F(4, 75) = 29.11$ ,  $p < .001$ .

Hypothesis H3 was tested using the PROCESS method. For the mediation analysis, we implemented a bootstrapping procedure with 5,000 new samples taken from our sample, and indirect effects were calculated

(Hayes, 2009). The results led us to conclude that: job satisfaction is significantly related to work comprehensibility  $a_1 = .38$ , BCa 95% CI (-.16; .25),  $p < .001$ , and manageability at work  $a_2 = .23$ , BCa 95% CI (-.55; .14),  $p < .001$ ; meaningfulness of work is significantly related to work engagement when variable job satisfaction is controlling  $b_1 = .75$ , BCa 95% CI (.69; 1.38),  $p < .001$ ; and the indirect effect between job satisfaction

and work engagement – via components of coherence at work – is statistically significant  $a_1 \times b_1 = .31$ , BCa 95% CI (.14; .22),  $p < .001$ . In addition, the direct effect is significant, and job satisfaction is significantly related to work engagement  $c' = .20$ , BCa 95% CI (.15; .46),  $p = .015$ . Hence, we can conclude that coherence at work partly mediates the relationship between job satisfaction and work engagement.

Both the indirect and direct effects are of a statistical significance. It is reasonable to conclude that coherence at work partly mediates the relationship between job satisfaction and work engagement. The indirect effect is more considerable, which suggests that when taking into account coherence at work as a mediator, the correlation between job satisfaction and work engagement becomes stronger.

### Discussion

The main objective of this research was to investigate whether there is a correlation between job satisfaction and work engagement of micro-entrepreneurs and to determine whether the relationship is mediated by coherence at work. The results provide evidence that coherence at work based on original concept of sense of coherence adequately explains work engagement. A relationship between meaningfulness of work and work engagement is stronger than a similar study based on general work-related sense of coherence (Grødal et

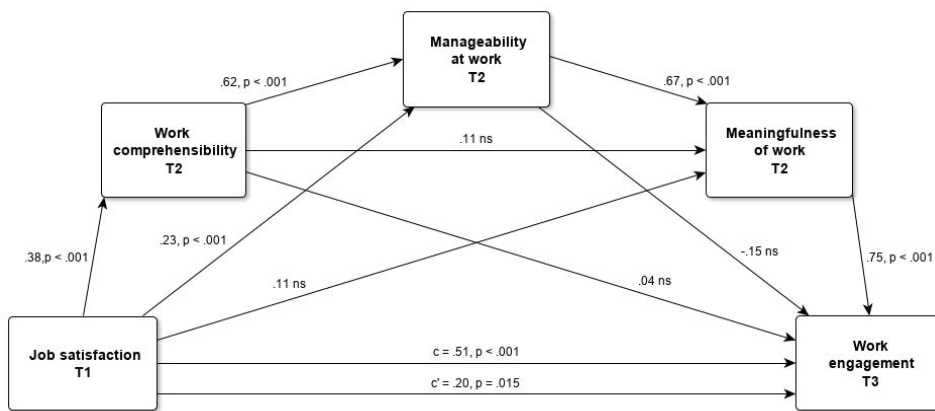


Figure 1. Triple mediation model shows the effect of job satisfaction on work engagement through components of coherence at work. Standardized coefficients are presented, ns = non-significant effects.

Note: Standardized total indirect effect = .31,  $p < .001$ , 95% CI (.14; .22)  $R^2 = .60$ ,  $p < .001$ ,  $F(4, 75) = 29.11$ ,  $p < .001$

al., 2019). The model of coherence at work presented in our study explained more percentage of the variance of work engagement than work-related SoC (cf. Van der Westhuizen, 2018).

The most important research result is that components of coherence at work mediate the job satisfaction relationship with work engagement. It is in line with the results of previous research findings (Derbis & Jasiński, 2018). However, in this study, triple mediation has been carried out, which gives rise to a conclusion that when monitoring work comprehensibility and manageability in the workplace, the meaningfulness of work alone is significantly correlated to work engagement. An indication of the role of meaningfulness of work in Polish employees is important because previous research suggested that Poles value pleasure and safety at work to a higher degree than they do its meaningfulness (Wojciszke & Baryła, 2000).

The results of this research are of a practical importance that brings up further evidence of the important motivational significance of meaningfulness of work (Chalofsky & Krishna, 2009). Increasing meaningfulness of work gives rise to higher engagement, which translates into benefits for both individuals and the organization (Chalofsky, 2003). The research results suggest that employees themselves demonstrate the initiative to seek out the meaningfulness of work, which constitutes a factor conducive to the introduction of optimization in

a company (Kompier, 2005).

A strong sense of coherence at work helps in strengthening a positive correlation between job satisfaction and work engagement. Neither work comprehensibility nor manageability at work mediates in the correlation between satisfaction and engagement.

The mediation effect can be described by three consecutive conditions:

1. Work must be personally comprehensible (cognitive aspect), this belief gives a sense of security related to professional role;
2. Employee has the resources necessary to cope with the professional role (instrumental-behavioral aspect), it is associated with a sense of professional effectiveness or resourcefulness at work;
3. The work seems to be a sensible effort that is worth investing in, which, owing to understanding the responsibilities and having resources to perform thereof, is perceived as an investment in acquiring new resources.

The research findings indicate that job satisfaction is a predictor of work comprehensibility, which is a predictor of manageability at work, which, in turn, has a strong positive correlation with the meaningfulness of work (whose high level is a very strong predictor of work engagement). The results call attention to the crucial role that meaningfulness of work plays in explaining the variation of work engagement when

monitoring job satisfaction, work comprehensibility, and manageability at work.

These conclusions are consistent with previous theoretical intuitions (Kahn, 1992), wherein it is difficult to imagine perceiving one's work as sensible without prior understanding of it and the feeling that one can do it. To summarize: if a micro-entrepreneur is happy with their work and, therefore, more engaged in the work, they are increasingly likely to 1) know what it is about (scope of duties), 2) have the tools needed to do it (scope of skills) and 3) see its sense (purpose range). Our findings suggest that researchers and entrepreneurs promote a labour environment conducive to work engagement.

### Practical Implications

The results of this study supports the importance of resources in work engagement of micro-entrepreneurs where the work environment is highly specific. Our findings indicate that an adequate level of resources can result in higher work engagement in this group. Based on the theoretical contributions and previous literature, we can say that these findings can be applied to daily working life. Due to a close relationship between coherence at work and work engagement and its implications, social policy analysts should consider promoting the important economic role of micro-entrepreneurs. This promotion will likely have positive effects on the meaningfulness of work, which

is the important predictor of work engagement.

Promotion and flourishing of work engagement should be an important goal of researchers and managers because this variable is shown to be a valuable resource. Previous research has demonstrated that work engagement in turn predicts job performance (Tisu et al., 2020), creativity at work and innovativeness (Bakker et al., 2020; Sharma & Nambudiri, 2020). On the other hand, work engagement is negatively related with counterproductive work behaviors (Derbis & Filipkowski, 2018).

### Limitations and Further Research

The sample size creates one limitation. The relatively small size is likely caused by the choice of methodology. Typically, collecting data through a three round method is associated with a considerable reduction in the sample size with successive measurements (Hofmann et al., 2012). It is possible that the final sample size was influenced by the large six month intervals between subsequent measurements. The relatively small sampling and use of the bootstrapping in the mediation analysis raises a potential concern with overfitting the regression model. At most, the findings may be cautiously referred to entrepreneurs from the micro sector (employing up to nine employees). Relatively little research has, to date, been devoted to this professional group,

which hinders regarding in a more general context.

We suggest that future research with a greater number of respondents be carried out using alternative statistical methods. Moreover, the lower accuracy of the presented results may be affected by the questionnaire which was used to measure coherence at work. In future research, it is worth making a Polish adaptation of the work-related sense of coherence scale (Bauer et al., 2015). The original version has nine items. In Norwegian validation, the questionnaire has eight items and very good psychometric properties (Grødal et al., 2018). This measure was effectively used outside of Europe (Van der Westhuizen & Ramasodi, 2016).

Future research should also examine not only owners of micro-enterprises, but their employees to. The perspective and scope of work engagement may differ from one another, depending on whether we are dealing with an employee-employer or employee-contractor.

### Conclusion

The hypotheses regarding the correlation between job satisfaction and coherence at work with work engagement have been confirmed. Research results demonstrate the mediating role of coherence at work in the job satisfaction–work engagement relationship. It turns out that meaningfulness of work represents an essential predictor of work engagement where monitoring

job satisfaction, manageability at work and work comprehensibility explain 60% of the variability of the dependent variable. The relationships described herein can be seen as beneficial both to the individuals and organizations. They allow for the development of this sector of enterprises in Poland and Germany. The study has been conducted on a small sample; hence the scope of their generalization is limited. In the end, it is worth repeating this research to provide additional support for our findings and whether the level of work engagement depends only on the meaningfulness of work or on all components of the sense of coherence.

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