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Working conditions and their impact on work satisfaction in migrating and non-migrating workers. Factor structure of the Polish version of the Working Conditions Questionnaire

BACKGROUND

The study compares the impact of working conditions and wages as predictors of work satisfaction of Poles, working in Poland and abroad. Although the work environment plays a crucial role in determining the work satisfaction of migrants, most mention higher income abroad as the main migration motive. The increased income may not boost the work satisfaction however, because during migration the wage reference point changes. Based on those observations, it was assumed that working conditions will have a greater impact on migrants' work satisfaction than nominal earnings. Additionally, migrants, while having higher nominal wages, should subjectively judge them as lower.

PARTICIPANTS AND PROCEDURE

Two samples – 351 subjects working in Poland, and 158 working in the UK and Germany – were analyzed. Everyone filled in an online survey including questions about their work environment and income, the Polish versions of the Working Conditions Questionnaire and the Work Satisfaction Scale. The results of the structural analyses (EFA and CFA) and between-sample measurement invariance of the Working Conditions Questionnaire were obtained. Migrants and stayers were compared using a Kruskal-Wallis ANOVA. The impact of working conditions and wages on work satisfaction was analyzed with multiple linear regression.

RESULTS

The factorial structure of the Working Conditions Questionnaire in the Polish version is comparable to the Spanish original. Additionally, the nominal wages were perceived as higher for migrants than stayers. The reverse was true for subjective wage evaluations. Some working conditions were shown to have a significant impact on work satisfaction.

CONCLUSIONS

The Polish version of the Working Conditions Questionnaire is an internally consistent and reliable tool for measuring work properties. Higher nominal wages of migrants do not lead to their higher work satisfaction. Working conditions are a better predictor of work satisfaction than wages for all analyzed groups.

KEY WORDS

job satisfaction; work migration; wage evaluation

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Since the acceptance of Poland into the Europe-

an Union in 2004, a big wave of Poles has left the

Radosław B. Walczak, Macarena Vallejo-Martín country, seeking better work opportunities abroad. It is estimated that there are currently more than two million Poles, working abroad, with the biggest groups in Germany and the United Kingdom (about 700,000 in each of those countries; Kostrzewa & Gudaszewski, 2019). The sheer number of emigrants raises the question what the motives for the decision to migrate are. A good base to use when evaluating contemporary migration is the transnationalism perspective (Portes et al., 1999). It suggests a broad look at the whole migration process, as it is nowadays relatively easy to be almost simultaneously in two worlds, working and living in one country while maintaining the social relations and cultural values of the home country. This perspective can be extended by the classical microeconomic theory of migration (Sjaastad, 1962; Massey et al., 1993), which suggests that the main reason for going abroad to work is the desire to obtain higher wages, as compared to those attainable in the home country. The interesting aspect of this theory is that it assumes that people will include other costs of migration in their deliberations. Those costs include limiting the social ties in the home country and potentially rebuilding them in the host country or the cost of adaptation to the new work environment. Those and other factors (see Massey et al., 1993 for a review) are in turn influenced by individual differences, which may cause different evaluations of similar migration conditions between different people. What is important, the list of psychological factors influencing the evaluation of a decision to migrate is not closed. Massey and colleagues (1993) indicate that the psychological conditions may outweigh the differences in earnings between home and host countries, but they do not specify which psychological elements may be taken into considerations. This opens a possibility to extend the microeconomic theory, specifying the importance of different psychological and social aspects of migration's evaluation.

One of the early attempts to go beyond money as the main driver for migration was made by Winchie and Carment (1989). They asked a group of 380 Indians applying for a Canadian visa to rank their reasons for migrating. The top three reasons (from a list of 17) were in order: a lack of opportunities for advancement, a lack of suitable employment, and only in the third place an inadequate income. Such an order of factors suggests that money, while being important, is not the primary motive for seeking a job abroad. Therefore it might be interesting to look at all other remaining work properties, to find the true reasons for the choice of country to work in.

WORKING CONDITIONS

A literature review shows a broad spectrum of factors that, besides money, influence the work evaluation in the eyes of individuals. Wang and Jing (2018) group all factors influencing migrant work evaluation in three areas: work environment, job characteristics, and work-specific personal factors. Work environment pertains to such elements as management practices (Mudor, 2011), work and organization climate (Muchinsky, 1977; Lubrańska, 2011), and social relations at work (Hodson, 1997; Szostek & Glińska-Neweś, 2017). The interaction between those base properties may be related to a range of workplace effects, important for migrant workers, both negative such as workplace discrimination (Wrench et al., 2016) and positive, for example, workplace support (Hombrados-Mendieta & Cosano-Rivas, 2013). In general, the expectations towards a better work environment may be a factor pushing people abroad, especially for people who believe that the home country work environment is suboptimal. The second group of migrants' work conditions mentioned by Wang and Jing (2018) are the job characteristics. They include the often studied characteristics described by Hackman and Oldham (1980), that is skill variety, task identity, task significance, work autonomy and feedback, of which autonomy seems to be most relevant for migrant workers (Itzhaki et al., 2013). Work autonomy plays such an important role because other characteristics mentioned by Hackman and Oldham (1980) may be more dependent on individual expectations towards a given job, rather than country-specific effects (Walczak, 2013). Other work characteristics potentially important for migrant workers include salary, job demands, job control, and development possibilities (Wang & Jing, 2018). Of those, one of the most studied characteristics is of course monetary compensation. Already in the conceptualization of Herzberg (1973) money was included as a hygiene factor, that is a property needed for the lack of dissatisfaction, but not sufficient to increase satisfaction. As discussed previously (Winchie & Carment, 1989) even migrants themselves may not perceive their expected salary as the most important migration factor. Many studies show (Kahneman & Deaton, 2010; Peiró et al., 2010; Walczak, 2016, 2017) that money has a limited effect on work evaluation. It may be important as a basic prerequisite, but after a certain income level is secured, money stops influencing the work evaluation. This threshold level corresponds to a wage slightly higher than the average income, equaling approx. U\$75,000 a year in the USA in 2009 (Kahneman & Deaton, 2010) and approximately 5 000 PLN a month in Poland in 2015 (Walczak, 2016). Since salaries are always nominally higher in the host country compared to the home country, they may still

have some impact on the decision to migrate (Work Service, 2014) and job satisfaction evaluation (see for example Itzhaki et al., 2013). But they should not be the most important factor, when other work characteristics are concerned. On top of that, the reference point for judging monetary compensation differs in the home country and the host country. People who do not migrate can compare their wages with other people working in the same country, in similar positions (Clark et al., 2009; Walczak, 2017). Migrants (and potential migrants) might however have a different point of reference, as they compare the wage levels of two countries. All those considerations point to the fact that the nominal wage level may be of quite a low importance (as low as .15 in job satisfaction evaluation; Judge et al., 2010), especially when compared with relative wages or other work properties.

Wang and Jing (2018) also mention the job demands and job control as important work characteristics for migrant work evaluations. Those properties reflect the skill and effort requirements of a given job, and the perceived ability to influence and manage what is being done. Both dimensions can be well connected with both work satisfaction and other work effects, which is well described in the job demands-resources model (Bakker & Demerouti, 2017; Qin et al., 2014; Baka, 2018). That model states, in short, that both the burdens of work and around it, called work demands, and the work positives, called work resources, have to be taken into account simultaneously, to determine the work effects, that is either satisfaction as the positive consequence, or burnout as the negative. Qin et al. (2014) have used this model to successfully predict home return intentions in Chinese internal migrants, and it may also be helpful to analyze multiple work properties when studying migrants' work evaluation.

The last group of work conditions important for migrants and mentioned by Wang and Jing (2018) comprises the work-specific personal factors. Those include the workers' competency, work-related stress (Yao et al., 2015), organizational commitment (Meyer & Allen, 1991; Bańka et al., 2002) and other work-specific characteristics. Especially competencies may play an important role in migrants' work evaluation. Due to the need for a fresh start in the new country, many migrants may find themselves to be overqualified for the job they are performing in the host country. This in turn may lead to greater work stress, related to the rust-out syndrome (Leider & Buchholz, 1995). All other personal factors may be similarly related to migrant workers' satisfaction. The study of Chan and Qiu (2011) showed, for example, that a greater migrant tenure was related to higher work commitment, which in turn predicted higher work satisfaction.

In summary, the different dimensions of work conditions may play a decisive role in the migrants' work evaluation. In many cases they may have a greater summary effect than just the migrants' wage, leading to differentiated work satisfaction, which will be scrutinized in the next section.

WORK SATISFACTION

Work satisfaction may be defined as a positive evaluation of a person's current occupation (Spector, 1997; Zalewska, 2003). It can be judged both from an emotional perspective (how do I feel about my job, what kind of emotions do I feel in my job?) and from a cognitive perspective (what do I think about my work, how do I evaluate my job?). Both perspectives are related, but not equal (Weiss, 2002). Researchers have identified many antecedents and consequences of job satisfaction. The determinants can be further divided into situational and dispositional, with the former being represented by various work properties, as described in the previous section, and the later boiling down to the individual psychological differences. Both situational and dispositional determinants have different explanatory power over job satisfaction, with possible interactions among them. In a study by Cohrs et al. (2006) the selected environmental factors were responsible for up to 22% of job satisfaction and the personal variables for up to 12% of the variance. Another study (Pujol-Cols & Dabos, 2019) found however those factors to be comparable, which suggest that the selection and measurement of appropriate indicators may play a decisive role in their mutual comparison.

From the consequences of job satisfaction, we can distinguish organizational and personal ones. Quite an important organizational consequence of job satisfaction is the work performance, which is often labeled as the happy-productive worker hypothesis. Earlier (Vroom, 1967) and more current (Wright & Cropanzano, 2007; Taris & Schreurs, 2009) studies seem to confirm the positive relation of satisfaction and performance, suggesting that this issue may also be important for organizations employing migrants. From the individual consequences of work satisfaction, we should distinguish the quality of life, a general indicator of the good life, of which work is an important part (Hulin, 1969; Judge & Watanabe, 1993; Zdybek & Walczak, 2009). From this perspective, the work satisfaction of migrants should be treated as a partial indicator of their general potential to be happy, and therefore an important argument in the decision whether to migrate or not.

Summing up, the migrants' work satisfaction is an important indicator of the quality of their work, and may have high importance for the whole migration evaluation. Working conditions and work satisfaction in Poland and abroad

SUMMARY AND HYPOTHESES

Work satisfaction seems to be the key work evaluation, highly appropriate as an indicator of the migrant workplace quality. It may be related to various work properties, some of which are significantly different for stayers and leavers. The most often studied work characteristic is the wage, and it seems appropriate to include it as one of the determining variables. On the other hand, most work evaluation models consider multiple parameters as determinants, with a special emphasis on a broad spectrum of work conditions (Herzberg, 1973; Bakker & Demerouti, 2017; Wang & Jing, 2018). Taking this into consideration, we decided to include a broad evaluation of working conditions in our study as well. Based on the studies of Winchie and Carment (1989) and Herzberg (1973), we assumed that wages will not be the most important factor in determining work satisfaction. Specifically, we assumed that other working conditions will have a greater impact on work satisfaction than wages. Additionally, we assumed, based on Clark's studies (Clark et al., 2009; Clark, 2011), that subjectively evaluated wages will be more important than nominal earnings in determining migrants' work satisfaction. On top of that, we assumed that migrants compared to stayers, despite having higher nominal earnings (Work Service, 2014), will perceive them as subjectively lower, due to a different comparison base.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

Two samples were analyzed in the study. Participants in the first sample were recruited by students during the spring term of 2018. All recruiters received partial course credits for their work. There was no incentive given to respondents for taking part in the study. The responses from 627 adults, working in various companies in Poland, were gathered this way. This data set was cleaned, removing all the records with missing data, all records of people working on a less than part-time basis (i.e. less than 20 hours a week), and all records of people declaring wages below the official minimum wage (2100 PLN at the moment of data collection). The resulting sample consisted of 351 employed adults, with a mean age of 32.7 (SD = 9.8) years, and an average of 10.9 (SD = 10.0) years of work experience. There were 197 females and 154 males in the group. This sample will be henceforth referred to as the Polish sample.

The second sample was recruited from the extended social network of the first author during the second half of 2018. Additionally, various associations of Poles working in the UK and Germany were contacted, with the request to forward the study questionnaire to its members. By those means it was possible to gather responses from 216 Poles working abroad. This data set was cleaned similarly as the Polish sample, yielding a sample of 158 people, working in various companies in the UK (n = 93, including 80 females) and Germany (n = 65, including 31 females). The average age was not significantly different between the German sample and the Polish one (M = 34.3, SD = 11.3, Z = 0.82, p = .414, ns vs. PL), but it was slightly higher in the UK sample (M = 33.1, SD = 6.9, Z = 2.09, p = .036). This was also true for work experience, with an average of 12.0 (SD = 11.1, Z = 0.65, p = .514, ns vs. PL) years in the German sample and 11.4 (SD = 6.4, Z = 2.62, p = .009vs. PL) years in the UK sample.

All the research participants were assured about the confidentiality of their responses in the introductory part of the questionnaire. All the information was kept anonymous and no identifying information about the participants was collected.

MEASUREMENTS

In both samples, the research participants were asked to fill a similar set of questionnaires, posted on the Google Forms platform. After responding to a set of sociodemographic questions concerning both the research participants and their work, all participants indicated their current monthly salary and were asked to compare it with two reference groups: friends and colleagues (1) and other people doing a similar job (2). The scale for wage comparison ranged from 1 to 10 and was labeled "I earn decisively less than..." at the low end and "I earn decisively more than..." at the high end. Afterward, the research participants filled in a set of standardized tools, slightly different in both samples. For the analysis in the current study, the following scales were considered:

The Working Conditions Questionnaire (Blanch et al., 2010) in the Polish adaptation by the authors. Before administration, the scale was translated into Polish by the first author and back-translated by a professional translator. Afterward, the second author compared both versions and proposed improvements, which were consulted with the translator and implemented in the final version. Details on the psychometric parameters of the scale will be given in the results section. It is important to note that the Working Conditions Questionnaire was slightly shortened in the international sample. Specifically, the questions from the adjustment to changes subscale were not asked. The reason for the change was the problematic role of the Poland vs. abroad work transition. Because some of the questions in the adjustment to change subscale could be understood as both concerning changes in the current organization and changes between work in the home and host country, the subscale was not used in the migrant sample.

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Two scales measuring work satisfaction by Zalewska (2003), and the Polish version of the Work Satisfaction Scale (Warr et al., 1979). The scales were highly correlated in the Polish sample (r = .73). In the international sample, the research participants filled in only the Work Satisfaction Scale by Warr et al. (1979). The internal consistency results for the work satisfaction scales used (Cronbach's α) were very high: .96 and .97 for the Warr et al. (1979) scale in the Polish and international sample, and .93 for Zalewska's Work Satisfaction Scale in the Polish sample.

ANALYTICAL APPROACH

There were two principal aims of the analysis: first, to check whether the structure of the working conditions scale in the Polish version is consistent with the theoretical assumptions made by Blanch et al. (2010); second, to compare the working conditions' and wages' impact on work satisfaction, both in Poland and abroad. To achieve those aims, in the first step, exploratory (EFA) and confirmatory (CFA) factor analyses were conducted for the Polish sample's results of the working conditions questionnaire. The EFA was conducted with the Statistica software package (v. 13), using the principal components extraction method and varimax rotation of the factors. A six-factor structure was assumed, as in the study of Blanch et al. (2010). The CFA was conducted using R software (R Core Team, 2013), using the lavaan package (Rosseel, 2012). In the second step, measurement invariance for the Working Conditions Questionnaire and the Work Satisfaction Scale was assessed using the R software with the lavaan package, for the sake of comparison of results between stayers and migrants. Afterward, objective and subjective wages, working conditions and job satisfaction of migrant and stayers' samples were compared using a multivariate ANOVA (in the Statistica software). Finally, the impact of working conditions and wages on work satisfaction was analyzed with a multiple linear regression, separately for workers in each country (again in Statistica software).

Working conditions and work satisfaction in Poland and abroad

RESULTS

EXPLORATORY FACTOR ANALYSIS OF THE WORKING CONDITIONS QUESTIONNAIRE

In the first part, the results of the exploratory factor analysis of the Polish version of the working conditions questionnaire are presented (Table 1).

Table 1

EFA factor	loadings of the	Working Conditions	Questionnaire

ltem		I	Factor lo	oadings		
	1	2	3	4	5	6
1. Odpowiada moim zainteresowaniom [Satisfies my interests]	.76	.11	.17	.09	.14	.13
 Wymaga ode mnie zgodnie z moimi umiejętnościami [Demands of me according to my abilities] 	.70	.09	.17	.11	.02	.12
3. Odpowiada moim potrzebom [Corresponds with my needs]	.79	.16	.13	.22	.05	.11
 Jest zgodna z moimi oczekiwaniami [Agrees with my expectations] 	.79	.16	.21	.22	.05	.10
5. Pasuje do moich aspiracji [Fits with my aspirations]	.81	.11	.21	.11	.04	.10
6. Jest zgodna z moimi wartościami [Conforms with my values]	.71	.20	.14	.13	.06	.11
 Zapewnia, że moje zasługi są sprawiedliwie doceniane [Assures that my qualities are justly appreciated] 	.71	.12	.25	.16	.15	.23
8. Stymuluje moje zaangażowanie w pracę [Stimulates my work engagement]	.78	.17	.21	.05	.06	.17

(Table 1 continues)

(Table 1 c	ontinued)
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	ltem			Factor I	oadings		
	-	1	2	3	4	5	6
	9. Pozwala mi pracować tak, jak lubię [Allows me to work how I like]	.72	.14	.04	.38	.09	.15
Radosław	10. Motywuje mnie do pracy [Motivates me to work]	.73	.14	.13	.23	.11	.18
B. Walczak, Macarena Vallejo-Martín	 Daje mi poczucie swobody [Gives me a sense of liberty] 	.64	.14	.01	.35	.13	.18
5	12. Pozwala mi na rozwój osobisty [Allows for my personal development]	.80	.15	.14	.14	.09	.15
13. Pozwala mi na rozwój moich umiejętności zawodowych [Allows me to develop my professional competencies]	.81	.13	.12	01	.10	.10	
	14. Daje mi poczucie tożsamości [Gives me a sense of identity]	.80	.20	.00	.13	.09	.18
	15. Pozwala mi czuć się użytecznym [Allows me to feel useful]	.76	.21	.02	.07	.19	.18
	16. Czas pracy (grafik, rytm, przerwy itp.) [Work time (schedule, rhythm, breaks, etc.)]	.19	.08	.21	.73	.16	.13
	17. Ogólna organizacja pracy [General work organization]	.31	.08	.32	.53	.16	.27
	18. Wynagrodzenie [Financial compensation]	.38	.03	.48	.09	.02	.06
	19. Obciążenie pracą [Workload]	.29	.07	.21	.71	05	.07
	20. Jakość umowy o pracę [Quality of work agreement]	.27	.04	.46	.29	.05	.01
	21. Równowaga praca – życie osobiste i rodzinne [Work-life balance]	.19	.03	.13	.76	.17	.07
	22. Dostosowuję się do zasad pracy [I adapt myself to the workplace policy]	.19	.75	.06	.11	.11	02
	23. Przyjmuję wartości kierownictwa [I accept the values of the management]	.20	.67	.12	.04	01	.23
	24. Akceptuję, kiedy mi mówią, jak mam wykonywać moją pracę [I accept when they tell me how should I do my work]	.13	.75	.11	05	08	.12
	25. Łatwo przyswajam obowiązujące w firmie normy [I easily embrace the guidelines established in my organization]	.13	.77	.13	.02	.15	04
	26. Utożsamiam się z duchem proponowanych zmian [I identify with the spirit of proposed changes]	.27	.61	.20	.11	.08	.22
	27. Stosuję firmowe procedury w przypadku wątpliwości o charakterze etycznym [I apply the company's protocol in case of any moral dilemma]	.17	.69	.12	.04	.07	06

(Table 1 continues)

⁽Table 1 continued)

ltem		Factor loadings						
	1	2	3	4	5	6		
28. Dostosowuję się do ustalonego grafiku i rytmu pracy [I adapt the work schedule and rhythm]	.06	.77	02	.06	.14	.04		
29. Koleżanki i koledzy [Camaraderie]	.10	.07	.10	.17	.74	.00	Wor conc	
30. Szacunek w grupie roboczej [Respect in the workgroup]	.20	.13	.22	.10	.79	.11	and satis in Po	
31. Uznanie własnej pracy przez kolegów [Acknowledgement of own work by colleagues]	.16	.10	.17	.09	.80	.13	and a	
32. Uznanie własnej pracy przez jej odbiorców [Acknowledgement of own work by its recipients]	.13	.18	.28	05	.44	.30		
33. Środowisko fizyczne, maszyny i wyposażenie [Physical environment, machines and equipment]	.14	.18	.78	.16	.18	.14		
 Zasoby techniczne i materiałowe [Technical and material resources] 	.18	.18	.78	.17	.14	.16		
35. Zapobieganie ryzykom zawodowym [Prevention of professional risks]	.17	.16	.74	.17	.16	.24		
 Usługi pomocnicze (czystość, bezpieczeństwo itp.) [Auxiliary services (cleanliness, security, etc.)] 	.10	.20	.76	.18	.25	.14		
37. Autonomia w podejmowaniu decyzji zawodowych [Independence in professional decision-making]	.47	.02	.29	.08	.03	.52		
38. Sprawiedliwość procesu zatrudniania, wynagradzania i awansowania [Fairness in the process of hiring, remuneration and promotion]	.46	.09	.45	.08	.14	.39		
39. Możliwość ciągłego dokształcania się [Possibility of continuous training]	.57	.05	.46	02	.08	.32		
40. Możliwości awansu zawodowego [Possibility of professional advancement]	.57	02	.45	08	.08	.34		
 Uczestnictwo w podejmowaniu decyzji w organizacji [Taking part in organizational decisions] 	.52	.01	.31	08	.04	.56		
42. Relacje z kierownictwem [Relations with the management]	.33	.12	.13	.23	.15	.74		
13. Ocena efektywności pracy [Professional performance assessment by the organization]	.38	.16	.20	.18	.23	.65		
44. Wsparcie otrzymywane od kierownictwa [Support received from the management]	.34	.10	.26	.22	.07	.70		
% of explained variance	25.36	9.58	10.33	6.52	5.85	7.30		

Based on the EFA, a six-factor solution, which explained 64.2% of the total variance, was achieved. The structure resembles to a great extent that of the original (see Blanch et al., 2010), with 6 factors both in original and in Polish solutions. Yet in two cases, a few questions did not load uniquely to the assumed factors (factor loadings below .6), forcing a consideration of a shortened version of the subscales within the CFA. The list of factors with their names (adapted from Blanch et al., 2010) and uniquely fitting questions is presented below.

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- Factor 1: "Personal factors, person-organization fit"; assumed and fitting questions: 1-15.
- Factor 2: "Personal factors, adjustment to change"; assumed and fitting questions: 22-28.
- Factor 3: "Work conditions, technical"; assumed and fitting questions: 33-36.
- Factor 4: "Organizational factors, work regulation"; assumed questions: 16-21, fitting questions: 16, 19, 21.
- Factor 5: "Work conditions, social"; assumed and fitting questions: 29-31.
- Factor 6: "Organizational factors, development potential"; assumed questions: 37-44, fitting questions: 42-44.

CONFIRMATORY FACTOR ANALYSIS OF THE WORKING CONDITIONS QUESTIONNAIRE

The original scale by Blanch et al. (2010) had an assumed two-level structure, with the six factors shown in EFA comprising the first level. On the second level, those factors were grouped in pairs, building a threefactor composition: personal factors (1), organizational factors (2), and work conditions (3), which in turn built the final level of the work conditions total indicator. Because the EFA revealed a 6-factor structure in the Polish sample, such a model was assumed as the base model (1).

The alternative model proposed by Blanch et al. (2010), where the factors converged in pairs, to form a three-factor structure, was assumed as model 2. Additionally, considering that EFA showed a misfit of certain questions to the original factors, an addi-

tional model was assumed, where all the scales were shortened to include only the well fitting items. This approach was named model 3. The CFA results for all the models are shown in Table 2.

Comparing the indicators of the models, we can observe that models 1 and 3 show acceptable fit criteria (Hu & Bentler, 1998), with RMSEA not exceeding .06, SRMR below .08, and CFI above .9. Considering that those indicators should be treated with caution (Kline, 2016), we might note that model 3 performs better than the alternative proposed models, at least in terms of CFI (Chen, 2007), which approaches – but does not exceed – .95. Consequently, this model was used for further analysis.

MEASUREMENT INVARIANCE BETWEEN WORKERS IN POLAND AND ABROAD

To evaluate whether the results obtained in Poland and abroad are comparable, a structural invariance CFA (Byrne & van de Vijver, 2010) was conducted for both samples. Because questions concerning change adjustment were not asked in the migrant sample, the work conditions questionnaire was evaluated in a shortened, five-factor version. The results are shown in Table 3.

The following cut-off criteria, as suggested by Chen (2007), were assumed for model comparisons:

- configural vs. metric invariance: ΔCFI < .010, ΔSRMR < .030, ΔRMSEA < .015;
- metric vs. scalar invariance: $\Delta CFI < .010$, $\Delta SRMR < .010$, $\Delta RMSEA < .015$.

The obtained results suggest that both the Work Conditions Questionnaire and the Work Satisfaction Scale measurement models are comparable between people working in the home country and abroad.

IMPACT OF THE COUNTRY OF WORK ON WAGES, WORKING CONDITIONS AND JOB SATISFACTION

After confirmation of the structural adequacy of the measures, the variables of interest were compared for the analyzed groups. In the first part, the descriptive statistics are presented (Table 4).

Table 2

Alternative CFA models for the Working Conditions Questionnaire

Restriction level	df	χ^2	RMSEA [90%CI]	SRMR	CFI
Model 1 (6 factors, all items)	847	1477.97	.055 [.051060]	.067	.911
Model 2 (3 factors, all items)	853	2295.79	.083 [.079087]	.084	.805
Model 3 (6 factors, limited items)	727	1207.30	.052 [.047057]	.064	.931

Measurement invariance between research participants in Poland and abroad

Restriction level	df	χ^2	RMSEA	90% CI	SRMR	CFI	ΔCFI
Working Conditions Questionnaire							
Base model (PL sample only)	481	1014.71	.055	.051060	.046	.944	
Base model (all samples)	481	1012.33	.056	.051060	.048	.945	.001
Configural invariance	1443	2322.62	.069	.064074	.056	.918	_
Metric invariance	1507	2406.59	.068	.063073	.069	.917	.001
Scalar invariance	1561	2558.32	.069	.064074	.070	.910	.007
Work Satisfaction Scale (Warr et al., 1979))						
Base model	97	255.54	.076	.065087	.036	.958	_
Configural invariance	291	471.61	.078	.065091	.040	.957	_
Metric invariance	321	512.11	.076	.063088	.056	.955	.002
Scalar invariance	351	566.88	.075	.063086	.058	.952	.003

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Table 4

Descriptive statistics for the dependent variables analyzed in the study

	Scale	DE (n	= 65)	UK (r	n = 93)	PL (<i>n</i>	= 351)
		М	SD	М	SD	М	SD
Working Conditions total score	1-5	3.71	0.79	3.51	0.85	3.61	0.73
Personal factors: person-organization fit	1-5	3.50	0.93	3.24	1.09	3.38	0.90
Organizational factors: work regulation	1-5	3.63	0.83	3.50	0.78	3.58	0.75
Organizational factors: development potential	1-5	3.54	0.82	3.41	0.94	3.58	0.83
Working Conditions, technical	1-5	3.83	0.85	3.69	0.91	3.76	0.83
Working Conditions, social	1-5	3.98	0.73	3.68	0.75	3.95	0.64
Monthly earnings (in PLN)	2 000+	11 434	7 026	7 778	4 134	3 970	2 323
Subjective wage (vs. others with similar job)	1-10	4.22	1.14	4.19	1.24	5.06	1.88
Subjective wage (vs. friends)	1-10	4.48	1.23	4.43	1.43	5.54	2.06
Warr's Job Satisfaction	1-5	3.66	1.04	3.41	1.06	4.69	1.23

Before the analysis, the distribution of the dependent variables was evaluated. Because for almost all variables the distribution was other than normal, a Kruskal-Wallis rank ANOVA was conducted to compare the groups. Results of the analysis are presented in Table 5.

For the following variables, there was a statistically significant difference between the groups: Working Conditions' social conditions subscale, all earnings measures (nominal and subjective), and the Job Satisfaction Scale.

To verify the hypothesis that despite having higher nominal wages, migrants evaluate them as subjectively lower, a set of pairwise comparisons was conducted. The results are presented in Table 6.

Considering the pattern of results (objective wages higher abroad than in Poland, no significant differences between Germany and the UK in this regard;

Kruskal-Wallis' ANOVA results

		χ ²	р	Λ	Mean Ranl	<
				PL	DE	UK
	Working Conditions total score	3.95	.139	254.48	283.91	236.76
	Personal factors: person-organization fit	3.00	.223	254.57	280.17	239.05
Radosław B. Walczak,	Organizational factors: work regulation	1.33	.514	256.13	268.07	241.60
	Organizational factors: development potential	2.58	.276	260.45	256.71	233.24
Macarena Vallejo-Martín	Working Conditions, technical	0.75	.683	255.50	265.81	245.55
vanejo-/wartin	Working Conditions, social	12.33	.002	263.13	277.92	208.29
	Monthly earnings (in PLN)	184.68	< .001	196.44	416.67	363.03
	Subjective wage (vs. others with similar job)	35.48	< .001	280.53	197.28	198.99
	Subjective wage (vs. friends)	35.93	< .001	280.83	195.68	198.98
	Warr's Job Satisfaction	98.13	< .001	298.08	174.00	149.03

Table 6

Comparison of nominal and subjective wages between stayers and migrants

	PL v	PL vs. DE		s. UK	UK vs. DE	
	Ζ	р	Ζ	р	Ζ	р
Monthly earnings (expressed in PLN)	11.09	< .001	9.71	< .001	2.25	.051
Subjective wage (vs. others with similar job)	4.19	< .001	4.75	< .001	0.07	.930
Subjective wage (vs. friends)	4.28	< .001	4.77	< .001	0.14	.908

both subjective wage evaluations higher in Poland than abroad, with again no differences between Germany and the UK), the hypothesis can be considered confirmed.

In the last step, the impact of working conditions and wages on work satisfaction was analyzed, with linear regression modeling, separately for each group. The results are presented in Tables 7 and 8.

The regression models for all the countries were significant. In each country, neither nominal nor the subjective wage evaluations were significant predictors of work satisfaction. At the same time, in all the countries at least two dimensions of Working Conditions were significant predictors of work satisfaction. In each country, it was the Working Conditions' development potential subscale, plus in Germany the Working Conditions scales' "Personal factor: personorganization fit" subscale, in the UK, the Working Conditions' "Organizational factor: work regulation" subscale. In Poland, all dimensions of the Working Conditions Questionnaire were significant predictors of work satisfaction. This confirms the hypothesis that the working conditions have a greater impact on work satisfaction than the person's nominal earnings.

DISCUSSION

The first goal of the study was achieved, as the Working Conditions Questionnaire was proved to have a similar factor structure in the Polish sample as in the original study by Blanch et al. (2010). The only noteworthy difference is that not all items proposed in the original tool fitted uniquely to their initial factors. This may suggest that a shorter version of the tool, without the disputable items, might be more suited for use in future studies. The second part of the study also confirmed the assumed hypotheses to a great extent. The analyzed migrants, despite having a significantly higher level of nominal wages, were less satisfied with their work, as compared with workers in Poland. Two mechanisms can be discussed as explanations for this observation. First,

Regression models' variables, with Work Satisfaction as the dependent variable

	DE			UK			PL		
	β	<i>t</i> (56)	р	β	<i>t</i> (84)	р	β	<i>t</i> (342)	р
Intercept	95	-2.76	.009	53	-1.28	.195	-1.17	-4.97	< .001
Nominal earnings (expressed in PLN)	.00	1.14	.094	.00	1.23	.266	.00	0.26	.379
Subjective wage (vs. others with similar job)	.10	1.22	.160	03	-0.41	.894	.03	1.51	.242
Subjective wage (vs. friends)	10	-1.15	.129	.00	0.01	.696	.03	1.22	.215
Personal factors: person-organization fit	.36	3.22	.021	.15	1.47	.141	.44	6.52	< .001
Organizational factors: work regulation	.24	1.57	.114	.38	2.73	< .001	.28	3.52	< .001
Organizational factors: development potential	.45	3.77	< .001	.44	4.27	< .001	.35	5.70	< .001
Working Conditions, technical	.10	0.89	.805	.09	0.84	.891	.29	5.42	< .001
Working Conditions, social	.11	0.85	.398	.06	0.40	.926	.18	2.80	.004

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migrants use a different frame of reference for the subjective judgments about their wages, which may partially explain why the wages did not impact their work satisfaction (Brown et al., 2008; Clark et al., 2009). Before going abroad, people may see the wages in the other countries as a strong argument to migrate (Work Service, 2014). Yet once there, this wage appears subjectively lower, because it is compared with earnings of other people in that country. This observation should be treated with caution, as subjective wage evaluations were measured with single-item questions, which may potentially limit their reliability (Gardner et al., 1998). The second explanation of the results relates the lower work satisfaction scores of migrants with the worse working conditions as measured with the Polish version of the Working Conditions Questionnaire. To be more specific, the selected working conditions were a significant predictor of work satisfaction for both migrants and stayers, but the differences in evaluations of working conditions were quite small. Indeed, only the UK subjects evaluated their social working conditions (a subscale of the Working Conditions Questionnaire) as worse compared with the Polish (posthoc U-test; Z = 3.28, p = .001) and German (post-hoc U-test; Z = 2.88, p = .003) subjects. Lower UK scores in this subscale, which consisted of such items as "Relations with colleagues", "Respect in the workgroup" and "Acknowledging of own work by supervisors", may be related to the shift in attitudes towards foreigners related to Brexit (Rzepnikowska, 2019). Al-

Table 8

Regression models' parameters for each country, with Work Satisfaction as the dependent variable

	DE	UK	PL
R	.91	.83	.86
R^2	.83	.69	.74
corr. R ²	.81	.66	.73
F	34.38	23.64	119.01
df	56	84	342
р	< .001	< .001	< .001

though Brexit was not analyzed in the present study, it may be safe to assume that worsening relations of British-born citizens towards Polish migrants may influence the social relations at work, and in consequence, have a negative impact on work satisfaction. This observation is worth further inquiries.

The present study has some limitations. Firstly, the study design is cross-sectional, which means that the direction of impact cannot be determined. It is possible that the people with lower internal dispositions for work satisfaction choose to migrate for work, and it is those dispositions that cause their lower work satisfaction, rather than the wage evaluations and working conditions abroad. It seems therefore important to control the internal dispositions of migrants and stayers in further studies. An additional important constraint to the study's conclusions is the nonrandom, snowball sampling method (although comparable for migrants and stayers). The sample in the study is relatively young (33 years old on average) and has an over-representative access to the internet and the social media. The data from non-internet users in the sample is rather anecdotal (a few cases in the Polish and German samples inputted by the respondent's friends). A consequence may be slightly better working conditions and higher wages in the sample, compared with the general population. Although the abovementioned specifics should be true for both samples (migrants and stayers), it may be difficult to verify such an assumption solely on the basis of the present data.

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CONCLUSIONS

The study shows three important things. Firstly, the Polish version of the Working Conditions Questionnaire is an internally consistent and reliable tool for measuring work properties. Secondly, higher nominal wages of migrants do not lead to their higher work satisfaction. Thirdly, working conditions are a better predictor of work satisfaction of migrants and stayers than their wages.

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