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Job crafting among managers. The mediation role of autonomy at work

Abstract: Job crafting is an employees activity aimed to change and improve own work which serves to find the meaning in job. Activities related to job crafting usually occur beyond the superiors' knowledge so the feeling of autonomy of a worker may hinder or encourage them to craft job. The study aimed to determine the correlations between organizational rank and job crafting with respect to a mediating role of autonomy and organizational tenure as a moderator. Study 1 (N = 102) showed that people having managerial positions undertake task crafting more often than non-managers. Managers and non-managers are no different with regards to cognitive and relational crafting. Autonomy mediated the relationship between organizational rank and task crafting. Most of the results in study 2 (N = 99) was a replication of the results of study 1. The differences are probably related to a various length of organizational tenure for a current organization. The results of the presented studies indicate the role of autonomy in undertaking job crafting, what is being discussed in the literature worldwide and Polish studies.

Keywords: autonomy, managers, job crafting, work and organization psychology

Introduction

Researchers have long shown interest in the relationship between a worker and the work environment. The notion was reflected in concepts connected with job enrichment (Herzberg, 1968), job sculpting (Butler & Waldroop, 1999) which are part of the issues determined as job work design (Hackman & Oldham, 1980).

In recent years, the notion of job crafting suggested by Wrzesniewski and Dutton (2001) has become especially significant in the theory and practice of work psychology and positive psychology in organization. The authors determined job crafting as undertaking physical and psychical changes in order to enhance ones work.

Job crafting

Traditional concepts related to the current of job work design were concentrated on the process of a top-down creation of work places for employees by their superiors (Hackman & Oldham, 1980), where managers decide about particular work tasks and required authorizations for their subordinates (Gibson, Ivancevich, & Donnelly, 1994; Greg & Hackman, 2010). On the other hand, Wrzesniewski and

Dutton (2001) claimed that employees may design their work without the participation of the management, on their own initiative. Such a process was determined as job crafting.

Job crafting is based on changing the borders of one's own work as well as changing the way it is carried out (Wrzesniewski & Dutton, 2001; Berg, Dutton, & Wrzesniewski, 2013). It most frequently occurs beyond the superiors' knowledge and is rather informal (Slemp & Vella-Brodrick, 2013). Job crafting is a process that employees constantly and systematically engage in. The employees craft their work so as to make it concordant with their individual interests, resources and values. In their original conceptualization of the construct of job crafting, Wrzesniewski and Dutton (2001) outlined three forms of job crafting. Task crafting – based on changing the number, type and character of the tasks. Relational crafting regarding the changes in the number, type, intensity and style of interactions. The change in the perception of tasks and their meaning was acknowledged as cognitive crafting.

Activities related to job crafting occur at three stages. In the initial phase, motivation and eagerness to change one's work appears in employees. In the second phase,

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employees determine available possibilities of job crafting (e.g. due to the job properties). The third stage involves active implementation of job crafting into one's activities in the work environment (Berg, Dutton, & Wrzesniewski, 2008).

Benefits resulting from job crafting may occur in nearly every job. The latest results of research into notions which had been hardly explored in literature in the past were quoted. The research on Polish population prove that job crafting was related to the organizational commitment (Minda & Kasprzak, 2018). On the other hand, the research by Vanbelle, Broeck and Witte (2017) revealed that active work environment and an active role of employees expressed through job crafting, influenced the readiness to carry on working until retirement. It allows to consider job crafting in terms of a successful strategy for aging employees. Another study showed that job crafting mediated in the relationship between teachers' proactivity and the results of students (Zahoor, 2018) or between feedback and the performance (Srinivas & Ashok, 2018).

Job crafting from the job demands-resources model (JD-R) perspective

The subject literature reveals another operationalization of the notion of job crafting. Tims and Bakker (2010) related job crafting to the changes in physical and social features of environment which take the form of changing requirements at work and resources.

According to the job demands-resources model every work environment has its own specific factors which influence the stress and/or wellbeing of the employees. These factors may be grouped into two categories – demands and resources. Such demands which positively influence the carrying out of work are known as challenging job demands as they contribute to the development of an employee. Other demands which have negative effects on health or the carrying out of work are regarded as hindering job demands. Resources are mainly the possibility of education, autonomy or employee's personal properties.

The authors of this approach focused only on the workers' activities which lead to real changes in the level of job demands and resources (Tims & Bakker, 2010). In this respect, job crafting is defined as changes to which employees may contribute in order to achieve balance between their job demands and resources and their personal capacities and needs (Tims & Bakker, 2010). Employees may craft their job through increasing job resources: structural and social job resources, challenging job demands as well as decreasing hindering job demands (Tims, Bakker, & Derks, 2012).

Compared to the original model (Wrzesniewski & Dutton, 2001), the JD-R model sees job crafting as activities aiming at changing the features of work: demands and resources in two areas: performed tasks and shaping relationships. The dispositional, psychological aspect of job crafting, i.e. the cognitive component in the form of changing the way of thinking about work and experiencing work, is omitted.

Who is able to craft their job?

Research suggest that every worker regardless of the position and kind of work is able to craft their jobs (Tims, Bakker, & Derks, 2013).

Lyons (2008) indicated that more than a half of the respondents had been engaged in any form of job crafting. It has been confirmed by the works of Tims et al. (2013). The commonness of job crafting was also appraised in the Polish grounds. Bartkowiak and Krugiełka (2018a) showed that approximately 68% of teachers craft their job, especially with regards to relationships. The representatives of the management boards as well as entrepreneurs from small and medium enterprises undertook activities which lead to adapting their work to their own preferences and giving it a pro-active character including both aims and particular tasks fulfilled by the enterprises (Bartkowiak & Krugiełka, 2018b). These results suggest that any job consists of certain job demands and resources which may be increased and/or decreased.

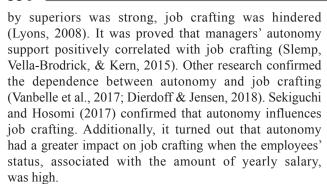
People who work in hardly autonomous jobs or experience significant job routine are also able to initiate changes that influence their organizational tenure (Berg, Wrześniewski, & Dutton, 2010; Tims et al., 2013; Wrzesniewski & Dutton, 2001). In practice, however, job crafting more frequently became a disposition of workers on positions characterized by a high level of autonomy. The research by Roczniewska and Puchalska-Kamińska (2017) showed that managers more often than non-managers craft their jobs, mainly through increasing structural job resources and seeking job challenges.

The role of autonomy in the job crafting process

Autonomy was defined as a degree of independence and freedom of an individual's activities in a workplace which determines certain flexibility in making decisions about the realization of a given task. An employee controls activities (and their results) within the range of delegated work tasks (Kożusznik, 2011). Autonomy increased the worker's readiness to undertake any activities (Organ, Podsakoff, & MacKenzie, 2006). People characterized by high autonomy frequently integrated more tasks and of diversified content related to their workplace (Morgeson, Delaney-Klinger, & Hemingway, 2005). Employees with a high level of autonomy revealed proactive behavior through undertaking initiatives and crafting their jobs (Grant & Ashford, 2008).

According to Wrzesniewski and Dutton's (2001) model, high autonomy at work ought to provide the possibility of successful change in physical and psychical aspects of work. Increased autonomy results in employees greater possibility to establish specific work procedures and set tasks (Hackman & Oldham, 1980), which inspires them to rethink their work. In this case, it seems that employees conduct changes in its cognitive representation.

It has been acknowledged that autonomy is an essential, initial condition for job crafting (Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012). When the supervision



The latest research emphasized the significance of leadership in the process of job crafting. Contemporary leaders more and more frequently provide their associates with a great deal of autonomy. Hetland, Hetland, Bakker and Demerouti (2018) proved that the leaders' transformation behaviour observed by his or her workers positively correlated with job crafting in the form of increasing structural and social resources. Employees aiming at promotion positively intensified this relationship. Additionally, Thun and Bakker (2018) showed that empowerment leadership was also positively correlated with job crafting (lack of relationship in the dimension of decreasing work impediments). The research conducted by Wojtczuk-Turek (2017) underlined the influence of the human resources managing system on job crafting.

Research into autonomy as a factor which contributes to job crafting was also conducted in Polish grounds. Managers with shorter work experience used their autonomy to reduce job requirements (Roczniewska & Puchalska-Kamińska, 2017) which conformed with the assumptions of Berg et al. (2010).

The present study is a conceptual replication of the study of Roczniewska and Puchalska-Kamińska (2017). Schmidt (2009) suggests distinguishing the basic level between two concepts of replication. The first, narrow concept of replication refers to the repetition of an experimental procedure step by step (direct replication). The second term concerns the so-called broader replication, i.e. repetition of the study, hypothesis or the result of previous studies using various methods. Similar distinction is also made by authors of earlier publications such as Lykken (1968), according to which conceptual replication means any attempt to reproduce research results using a different procedure and is therefore associated with the broader concept of replication. Other authors have proposed similar or slightly different names for replication, e.g. exact, partial and conceptual replication (Hendrick, 1990) or concrete and conceptual replication (Sargent, 1981).

As indicated by Crandall and Sherman (2016), the operationalization of the phenomenon, independent and dependent variables, the type and design of the study and the sample of participants can vary significantly in conceptual replication. A similar position is presented by Budzicz (2015) pointing out that the intentional change of certain elements in the study, e.g. the way of operationalization, procedures or stimuli are part of the activities of conceptual replication. This study used a different way of operationalizing the concept of

job crafting using a tool that was created to measure job crafting in accordance with the original model Wrześniewski and Duttton (2001). Efforts were made to ensure that the samples were equivalent in terms of demographic variables, however, due to the lack of access to raw data from the original article, it was not possible to maintain the equivalence of all variables (statistically significant difference in the case of organizational tenure and age). It was also decided to carry out two separate studies (Study 1, Study 2) modeled at Roczniewska and Puchalska-Kamińska (2017).

The issue of position, job crafting and the role of autonomy is yet to be fully determined. In this respect, this study aims to establish the connections between a organizational rank and job crafting considering the role of autonomy as a mediator (H1-H2; study 1) as well as work experience organizational tenure in an institution as a moderator (H3; study 2).

The following research hypotheses were formed:

- H1. People having managerial position more often craft job than non-managerial ones through (a) task crafting (TC), (b) cognitive crafting (CC), (c) relationships crafting (RC).
- H2. The relationship between one's rank in the organizational hierarchy and job crafting is mediated by autonomy at work.
- H3. Only in case of workers of relatively short organizational tenure autonomy mediates the relationship between managerial position and job crafting.

Study 1

Method

Participants and procedure

The study was conducted in a group of 102 workers and used online Google Form. 33 (32.4%) respondents had managerial positions. The sample consisted of 39 men (38.2%) and 63 women (61.8%). The average age of the respondents was 29.37 (SD = 7.6). The sample was diversified with regards to the market sectors (69.6% – private, 30.4% – public). The average work experience was 7.05 (SD = 7.52) and the experience in a given organization – 8.81 (SD = 3.88).

Measures

Job crafting was measured with *Job Crafting Questionnaire* (JCQ) by Slemp and Vella-Brodrick in the Polish adaptation by Kasprzak, Michalak and Minda (2017). The tool consists of 15 items, 5 for every subscale of job crafting: task crafting, cognitive crafting and relational crafting. The frequencies of particular behaviour are marked on a six-degree scale, where 1 equals – hardly ever, and 6 – very often. The answers are summed up in particular subscales regarding job crafting as well as the global result (the sum answers to all questionnaire items).

The autonomy was measured with *Work Design Questionnaire* by Morgeson and Humphrey adapted to Polish version by Hauk (2014). The subscale of auton-



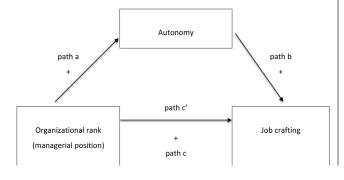
omy comprises 4 items. The answers are marked on a five-degree scale, where 1 - I completely disagree, and 5 - I completely agree. The answers to particular items are summed up.

The respondents were also asked whether they were having any managerial position at the particular time. The answers were coded as: 0 = No and 1 = Yes.

Data analysis

Regarding the fact that the research is of a replication character, the conducted statistical analyses conform with those conducted by Roczniewska and Puchalska-Kamińska (2017). In order to verify the hypotheses concerning the relationship between having (or not) managerial function and job crafting with respect to the mediating role of job autonomy SPSS statistical packet with PROCESS (Model 4; Hayes, 2013) was used. The bootstrap method was used to test the significance of the mediation effect (Preacher & Hayes, 2008). 5000 samples were drawn and 95%-confidence intervals were estimated for the values of direct and indirect effects. A confidence interval that does not include zero indicates that the particular mediation of moderation was statistically significant (Preacher & Hayes, 2008). According to Hayes' (2013) recommendations non-standardized values correlation coefficient were presented in the text. The examined relationships between the variables in the suggested model are shown in figure 1.

Figure 1. The model of the expected relationship between having a organizational rank and job crafting mediated by autonomy at work.



Results and discussion

Table 1 presents mean values, standard deviations and correlations between the examined variables. The internal integrity coefficients for particular variables are indicated.

The analysis revealed a positive average correlation between having a organizational rank and autonomy as well as positive weak correlation with TC. No significant correlations between organizational rank and CC or RC were observed. The authors noted a positive average correlation between autonomy and TC as well as weak positive correlation with RC. No significant correlation between autonomy and CC was observed. Neither a significant correlation between TC and CC as well as between CC and RC were observed. A positive average correlation was noted between TC and RC.

Table 2 shows the regression analysis results. The analysis verified the relationship between organizational rank and three areas of job crafting concerning the mediating role of autonomy.

The obtained results revealed a positive average correlation between organizational rank and TC. No significant correlation between organizational rank and the remaining forms of job crafting – CC and RC (path c). Hypothesis 1a was confirmed while 1b and 1c were not.

It is assumed that crucial for mediation is the occurrence of statistically significant paths a and b (Hayes, 2013). The correlation between organizational rank and autonomy was positive and very high (path a). Subsequently, the correlation between autonomy and the three forms of job crafting was verified (path b). The analyses showed a positive average correlation between autonomy and TC and positive weak correlation with RC. No significant correlation between autonomy and CC was noted.

Path a proved to be significant in each of the tested dependencies while path b was significant only in two cases. It accounted for conducting two mediation analyses. The correlation between organizational rank and TC and RC after introducing the mediator of autonomy was verified with the regression test. The analysis revealed that organizational rank stopped significantly influencing

Table 1. Mean values (M), standard deviations (SD) and correlations between particular variables in study 1 (N = 102)

	Descr	iption		(Correlations				
	M	SD	R	A	TC	CC	RC		
Organizational Rank (R)	_	_	_						
Autonomy (A)	15.20	3.96	.37***	(.88)					
Task crafting (TC)	21.80	4.90	.22*	.40*	(.82)				
Cognitive crafting (CC)	20.85	5.25	.05	01	.16	(.79)			
Relational crafting (RC)	19.90	5.55	02	.22*	.47***	.14	(.79)		

The measurement reliability for particular variables with Cronbach α internal integrity coefficient is presented diagonally.

^{***} p < .001; * p < .05.

Table 2. The analysis of the mediating role of job autonomy with respect to the relationship between organizational rank and job crafting

A A (N.D.		Organizational rank (X)	
Autonomy (M)	TC (Y)	CC (Y)	RC (Y)
$X \rightarrow M(a)$.78***	.78***	.78***
	CI [.39–1.17]	CI [.39–1.17]	CI [.39–1.17]
$M \rightarrow Y(b)$.36***	04	.29*
	CI [.16–.55]	CI [2619]	CI [.06–.52]
$X \rightarrow Y(c)$.46*	.10	05
	CI [.06–.86]	CI [3454]	CI [5142]
$X(M) \rightarrow Y(c')$.18	.13	28
	CI [2259]	CI [35–5.11]	CI [7721]
Indirect effect	.28*	.03	.23*
	CI [.09–.50]	CI [2317]	CI [.02–.47]

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X – predictor (organizational rank); M – mediator (autonomy); Y – dependent variable (job crafting); a–c' – paths; CI – confidence interval.

TC and RC while autonomy turned out to be their only significant predictor. The indirect effects were significant for both TC and RC (table 2). The described mediation effects were additionally confirmed with Sobel tests (TC: test value 2.63; p < .01; RC: test value 2.05; p < .05). Hypothesis 2 was confirmed with regards to the job position and TC and RC. In case of these variables, the correlations were mediated by job autonomy.

The results showed that people having managerial position more frequently than people having non-managerial ones craft tasks in the jobs. Managers and non-managers, however, did not differ with regards to CC and RC.

Berg et al. (2010) indicated that higher rank workers who perceive themselves as highly interrelated with others focused on their own work rather than on others facing a challenging job task. The researchers referred to the fact that higher rank workers are more often observed, therefore the pay more attention to the message carried by their words and behaviour (Weick, 1995) which does not contribute to cognitive or relational crafting. Due to the public character of their activities, such workers are not eager to impose job crafting on others or are afraid that modifying the use of their time may hinder concentration on particular goals. At the same time, the less public character of the lower rank workers' job gives them more opportunities of job crafting. The research by Berg et al. (2010) suggested that the position of lower rank workers may contribute to adapting job environment to detecting, creating and using possibilities of job crafting.

The lack of differences in relational crafting may be explained with reference to the notion of the power distance (Hosftede, Hofstede, & Minkov, 2010). In organizations with a high power distance, the subordinates expect their superiors to delegate tasks for them. It is typical

that managers reveal high distance from their workers who undergo constant supervision and appraisal and the privileges and marks of status are commonly accepted. Hostfede et al. (2010) showed Poland as a country with high power index.

Job autonomy mediated in the relationship between managerial position and TC and RC. Autonomy support by direct superior is a significant socio-contextual factor which strongly predicates the behaviour of workers (Gagne & Deci, 2005). It is connected with the fact that the perceived autonomy influences autonomic motivation and auto-determination of behaviour (Slemp et al., 2015).

Study 2

Method

Participants and procedure

The study was conducted in a group of 99 workers and used an online Google Form. Managerial position was taken by 18 respondents (18.2%). The sample group consisted of 44 men (44.4%) and 55 women (55.6%). The mean age of the respondents was 41.01 (SD = 12.88). The sample group was diverse with regards to market sectors (56.6% – private; 43.4% – public). The mean work experience was 18.29 (SD = 12.57). The mean experience in the present job was 10.75 (SD = 10.13).

Measures

Job crafting was again measured with *Job Crafting Questionnaire (JCQ)* by Slemp and Vella-Brodrick adapted to the Polish version by Kasprzak, Michalak and Minda (2017). Autonomy, like in study 1, was measured with *Work Design Questionnaire* by Morgeson and Humphrey adapted to Polish version by Hauk (2014). The participants were asked if they currently had any managerial position.

^{*} *p* < .05; **** *p* < .001.

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Table 3. Mean values (M), standard deviation (SD) as well as correlations between particular variables in study 2 (N = 99)

	Descr	iption			Corr	elations		
	M	SD	K	A	S	TC	CC	RC
Organizational Rank (R)	_	_	_					
Autonomy (A)	14.08	4.52	.27***	(.86)				
Job experience (S)	10.75	10.13	.02	.11	_			
Task crafting (TC)	20.00	5.95	.32***	.39***	.16	(.84)		
Cognitive crafting (CC)	19.95	5.85	.05	.11	.08	.16	(.87)	
Relational crafting (RC)	19.30	5.06	.16	.27***	09	.48***	.48***	(.74)

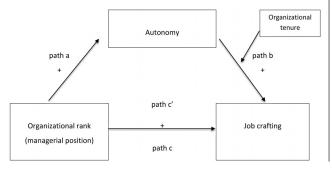
The reliability of the measurement of particular variables with Cronbach α internal integrity method is presented diagonally.

The answers were marked in two categories: 0 = No and 1 = Yes. Also the respondents had to specify how long they had been employed in a given organization. Employees whose experience was shorter than half a year were not taken into consideration in the analysis.

Statistic analysis

The hypothesis concerning the moderating role of the time of employment in a given organization for the previously observed relationships was verified with moderated mediation analysis, where having a managerial function worked as a predictor, areas of job crafting - as dependent variables and job autonomy - as a mediator. The time of employment moderated path b (conf. picture 2). In this respect, a moderated mediation analysis with PROCESS macro for SPSS was used (Model 14; Hayes, 2013). 5000 samples were drawn and 95%-confidence intervals were estimated for indirect effects with changing values of the moderator. In order to asses mediation moderation, the indicators of the moderated mediation were analyzed (Hayes, 2015). When the confidence interval excluded zero, it was assumed that the relationship between the indirect effect and moderator was different from zero which proved the moderated mediation. Conversely, a confidence interval including zero left no evidence for the moderated mediation (Hayes, 2015).

Figure 2. Organizational tenure in an organization as a moderator in the relationship between autonomy and job crafting



Results and discussion

Table 3 presents mean values, standard deviations and correlations between the examined variables. Internal integrity coefficients have been marked for particular variables.

The correlation analysis between the examined variables showed a positive weak relationship between organizational rank and autonomy as well as positive average correlation with TC. No significant correlations between organizational rank and organizational tenure, CC or RC were observed. A positive average correlation between autonomy and TC as well as a positive weak correlation with RC were noted. Autonomy did not significantly correlate with organizational tenure or CC. No significant correlation between organizational tenure and TC, CC or RC was observed. A positive average correlation between TC and RC was observed. There was no significant correlation between TC and CC whereas CC and RC showed a positive average correlation.

Eventually, the authors analyzed the indices of moderated mediation. In case of CC, the moderated mediation index was statistically significant and proved that organizational tenure moderated the relationship between position and CC which, in turn, was mediated by job autonomy. In this respect, it may be assumed that the existence or the power of the mediating effect depends on the level of moderator. In the remaining areas of job crafting the index was not statistically significant (TC and RC) (conf. Roczniewska & Puchalska-Kamińska, 2017). Therefore, in these cases the effect was not moderated by organizational tenure. The results of the analysis of the moderated mediation are presented in table 4.

The analysis showed that with growing organizational tenure (moderator), the mediating role of autonomy in the relationship between position and particular areas of job crafting also increases. With regards to TC, in case of the organizational tenure of at least 8 yrs, the mediating role of autonomy was statistically significant. In case of the two remaining areas of job crafting, the relationship became significant when the organizational tenure reached at least 18 yrs. Therefore, the longer organizational

^{***} p < .001; * p < .05.

Table 4. Moderated mediation indices for the effect of job position on job crafting with mediating autonomy and organizational tenure as a moderator

Dependent variable	Index	SE	CI (95%)
TC	.015	.010	[004037]
CC	.022	.012	[.002046]
RC	.011	.008	[004028]

SE = standard error; CI = confidence interval.

tenure, the stronger and more statistically significant was the mediating effect of autonomy. Hypothesis 3 was not confirmed as autonomy mediated in the relationship between organizational rank and job crafting only in case of employees with relatively long organizational tenure in a given organization. The results of the analysis are presented in table 5.

The findings do not agree with the results obtained by Roczniewska and Puchalska-Kamińska (2017) who proved that the relatively short organizational tenure made the relationship significant. It ought to be mentioned that the mean organizational tenure in the quoted study equaled 5,11, whereas, in the presented study – 10,75, hence only the lowest percentiles may be compared during the analysis, which considerably limited the possibility to conclude.

The causes job crafting by employees with longer organizational tenure may be sought in the fact that they feel certain in the job, know what the may expect and are aware of the possibilities of developing particular aspects of their functioning at work. Employees, who remain in an organization for a long time probably like their job, it is an important part of their lives which may motivate them to craft particular job areas.

Work incentives and skills change with age (Kooij, De Lange, Jansen, & Dikkers, 2013). Consequently, the matching between human and job may alter among older workers with longer work experience. Certain skills and possibilities decrease with age while the level of internal motivation increases. Therefore, employees may find it difficult to fulfill particular requirements, at the same time having knowledge about what makes their functioning at work easier, which they are going to use.

The notion of stability and mobility of career may also be referred to in this respect. Previous research have

confirmed that Poles pursuit stable and immobile careers (Kasprzak, 2013; Mudło-Głagolska, Lewandowska, & Kasprzak, 2018). The fact that Poles pursuit stable careers suggests that workers are more prone to remain at a current job which causes potential human-work mismatch (Kanfer, Beier, & Ackerman, 2013). Moreover, stability and immobility of a career suggests that the job position hasn't changed, hence duties remained unchanged. Older workers, who have been doing the same work, which was once motivating and challenging, for a long time may find it routine and boring (Robson & Hansson, 2007). In this respect, the feeling of mismatch may result in motivation for job crafting. Task crafting allows older workers to seek opportunities they find interesting and change the way they do their job so as to make it concordant with their values. Besides, they can change, improve or minimize interactions with others at work through relational crafting in order to adapt them to personal possibilities and needs (Wong & Tetrick, 2017).

The moderated mediation index was not statistically significant in case of TC and RC. Therefore, following Roczniewska and Puchalska-Kamińska (2017), the authors verified whether the mediation effect observed in study 1 may be replicated here. A simple mediation was tested (model 4). Table 6 presents the results of regression analysis. The analysis concerned the relationship between having a managerial function and three aspects of job crafting with respect to the mediating role of autonomy.

The obtained results showed positive, nearly complete correlation between organizational rank and TC. No significant correlation between organizational rank and CC or RC (path c) appeared.

The results showed that people having managerial positions more often craft their job tasks than people who do not have a managerial position (non-managers). However, managers and non-managers did not differ with regards to CC or RC. It conforms with the result obtained in study 1. The difference lies in the strength of the correlation between the variables. In study 1, the correlation was average while in study 2, it was nearly complete. The cause of such a difference may be sought in the difference in work experience which was higher in sample 2 (M = 10.75) than in sample 1 (M = 3.81). The conducted analyses allowed to conclude that longer experience results in a higher tendency to craft tasks (conf. table 5).

The correlation between organizational rank and autonomy was positive and very high (path a). Eventually,

Table 5. The indirect effect of autonomy on the relationship between job position and particular areas of job crafting moderated by organizational tenure

Evnoviones		TC			CC	C		RC	7
Experience -	PE	SE	CI	PE	SE	CI	PE	SE	CI
1a	.110	.143	[151409]	143	.158	[474159]	.079	.131	[177347]
8 ^b	.215	.121	[.012475]	.014	.110	[202237]	.152	.098	[022363]
18 ^c	.396	.173	[.114–.784)	.183	.142	[.025– .579]	.279	.108	[.092513]

Percentile = a16, b50, c84; PE = point estimation; SE = standard error; CI = confidence interval (95%).

Table 6. The analysis of the mediation of job autonomy in the relationship between organizational rankand job crafting

Autonomy (M) \longrightarrow $X \to M$ (a)	Organizational rank (X)						
	TC (Y)	CC (Y)	RC (Y)				
	.79*** CI [.22–1,36]	.79*** CI [.22–1,36]	.79*** CI [.22–1,36]				
$M \to Y(b)$.34***	.11	.22*				
	CI [.15–.54]	CI [1133]	CI [.04–.40]				
$X \to Y(c)$.98*	.15	.43				
	CI [.40–1,57]	CI [4676]	CI [0995]				
$X(M) \rightarrow Y(c')$.71*	.06	.25				
	CI [.13–1,29]	CI [5770]	CI [2878]				
direct effect	.27*	.09	.17*				
	CI [.07–.53]	CI [0931]	CI [.03–.36]				

X – predictor (organizational rank); M – mediator (autonomy); Y – dependent variable (job crafting); a–c' – paths; CI – confidence interval.

the authors tested the correlation between autonomy and the three areas of job crafting (path b). The analyses revealed a positive average correlation between autonomy and TC and weak positive correlation with RC. No significant correlation with CC was observed.

Path a turned out to be significant in each of the tested relationships, whereas path b – only in two cases. The result confirmed the findings of study 1. The correlation between organizational rankand TC and RC was tested again after introducing a mediator: autonomy, into the regression equation. The analysis of the values of Sobel test allowed to conclude that organizational rankstopped significantly influencing TC and autonomy turned out to be its only significant predictor (TC: test value 2.17; p < .05, RC: test value 1.81; p = .06). The indirect effects were significant in case of TC and RC. Similarly, autonomy mediated the relationship between a position and TC. Particular results are shown in table 6.

The majority of the results obtained in study 2 are a repetition of those obtained in study 1. The differences are probably caused by a different work experience in a given organization. Again, the results showed that people having managerial positions craft their tasks more often than non-managers. Managers and non-managers are no different with regards to CC or RC. Autonomy mediated the relationship between position and TC. It ought to be noticed that in case of autonomy mediating between position and RC, the correlation was on the border of significance (p = .06).

Study 2 showed no correlation between managerial position and seniority at the current workplace. This result is consistent with the result obtained in the studies of Roczniewska and Puchalska (2017). However, the justification for the lack of a relationship between these variables can be found in factors of the environment, and more specifically in the modern labor market in which

there is a high staff turnover and thus the seniority of employees is not too high. The report of the Research Institute (2019) indicates that the turnover rate in Poland was 25% (first quarter of 2019) and is one of the highest in Europe. Recently, Polish employees have been very willing to change employers, looking not only for better working conditions, but also for work that allows them to develop and achieve their own goals. It should also be pointed out that this indicator is the highest among young people aged 18-34. Younger generations are ready to change, because they are aware of their employee competences (Lubrańska, 2008) and have specific expectations for work: it should ensure development, broaden ideological horizons and be a source of satisfaction (Gałaj, 2014). Therefore, it seems that currently the employee's competences are more important in performing the managerial function, and not his/her experience in the current workplace. Contemporary graduates of universities or schools receive the basis for managerial functions. Current education programs contain a lot of content related to work with people (Wołk, 2017). In turn, employers in the recruitment process for managerial positions are looking for people who have the right skills, knowledge, specific attitudes and personality traits in order to be able to achieve specific organizational goals.

General discussion

Seeking explanation of the difference between the results obtained in the presented study and those obtained by Roczniewska and Puchalska-Kamińska (2017) refer to the fact that the tools chosen by the authors for measuring job crafting are based on different operationalizations of this notion. The tool used by Roczniewska and Puchalska-Kamińska (2017) is based on the job requirements and resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), whereas the questionnaire used

^{*} *p* < .05; **** *p* < .001.



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in the presented study – on the concept suggested by Wrzesniewski and Dutton (2001). In the first approach, job crafting is concerned with respect to increasing job resources and decreasing requirements. In the second approach, apart from task and relational crafting there is also one which refers to the component of cognitive crafting.

The added value of current research is the fact that they allow to increase the right to generalize effects related to the issue of work shaping and autonomy at work. It can also be mentioned, as Budzicz (2015) indicates, that conceptual replications allow to strengthen the initial hypothesis. It was decided to repeat the study due to the fact that the research question regarding the relationship between job crafting and autonomy reveals an important aspect of human behavior at work, contributing to the development of job crafting theory and bringing important practical implications. Moreover, thanks to this study, the results can be generalized to a larger population and the basic hypothesis of an earlier research result can be verified. According to Schmidt (2009), both of these functions fulfill one of the more important replication objectives, apart from the most general one, which is simply the verification of knowledge, hence the decision was made to conceptual replicate the study of Roczniewska and Puchalska-Kamińska (2017).

It is worthwhile to look into the issue of factors which moderate the relationship between the level of autonomy and job crafting. Other studies showed that according to higher-rank employees, the lack of job crafting results from the conviction about the lack of possibility of job crafting. The lower-rank employees pointed at the expectations and requirements related to position as the source of problems with job crafting (Berg et al., 2010). Such a result does not as much prove the key role of autonomy for undertaking changes as emphasized various factors which may moderate the correlation between the level of autonomy and job crafting. Together with autonomy, a worker has to be convinced about the possibility of changing work which is expected in an organization. It has been indicated that managers more often craft their tasks which may result form the fact that managers have a greater control of their work environment and frequently experience a higher level of autonomy than lower-rank workers. Eventually, it allows them to modify certain aspect of their job to a greater extent. Lower-rank workers, in turn, claim they have relatively less freedom in creating workplaces as job crafting at their position limits itself to the recommended aims and means resulting from the requirements imposed by the superior.

The notion of control may account for an explanation of the differences concerning the effect of moderation of work experience of the correlation between managerial position and job crating with mediating autonomy. Wong and Tetrick (2017) refer to the theory of a long-life development to describe the process of maintaining the human-work match with respect to job crafting. According to this theory, people use their basic and secondary controlling strategies to maintain balance for the entire

life (Hekhausen, Wronch, & Shulz, 2010). The basic control includes activities which are aimed at changing the environment and adapting it to the expectations and needs of an individual. Secondary control aims to change the internal ego so that is conforms with the environment. Cognitive crafting accounts for a secondary controlling strategy which enables employees to change their own perception of work. Despite the fact that the motivation to strive for the basic control remains stable, people's possibilities of doing so decrease with age due to internal and environmental limitations. Then, the secondary control becomes more important. Secondary control increases with age. Workers with a shorter experience aim to craft job through changing environment (Roczniewska & Puchalska-Kamińska, 2017). Workers with a longer experience, however, cognitively craft their jobs which was probed by the results of the presented study.

A solution that influences the readiness of lower-rank workers to craft their job is managers' supporting their subordinates through building the climate of trust and kindliness (Wang, Demerouti, & Bakker, 2016). It may account for a key element of development of the staff and the whole organization as managers are able to model certain behaviour among their workers.

It ought to be emphasized that an employee who crafts their job is valuable for the organization. Such an employee wants to invest more effort in the development of the company identifying themselves with its values and ideas. Displays willingness to remain in an organization and reveals stronger bond and, therefore, organizational commitment (Meyer, Allen, & Smith, 1993; Minda & Kasprzak, 2018). The organizational commitment leads to internal motivation which encourages employees to set goals and improve their results. Such workers are more eager to undertake activities from the scope of job crafting. Job crafting is a prove of undertaking own initiative by employees in order to improve their work conditions (Meyer et al., 1993).

References

- Bartkowiak, G., Krugiełka, A. (2018a). Job Crafting wśród nauczycieli Szkół Podstawowych i Gimnazjów [Job Crafting Among Primary and Secondary School Teachers]. Research Papers of the Wroclaw University of Economics/Prace Naukowe Uniwersytetu Ekonomicznego We Wrocławiu, 512, 13–25, doi: 10.15611/pn.2018.512.0
- Bartkowiak, G., Krugiełka, A. (2018b). Job crafting wśród polskich przedsiębiorców i przedstawicieli kadry kierowniczej [Job crafting among Polish employees and entrepreneurs]. *Journal of Manage*ment and Finance, 16(1), 19–34.
- Berg, J. M., Dutton, J. E., Wrzesniewski, A. (2013). Job crafting and meaningful work. *Purpose and Meaning in the Workplace*, 81–104, doi: 10.1037/14183–000
- Berg, J. M., Wrzesniewski, A., Dutton, J. E. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior*, 31, 158–186.
- Berg, J., Dutton, J., Wrzesniewski, A. (2008). What is Job Crafting and Why Does It Matter? http://www.bus.umich.edu/Positive/POS—Teaching—and—Learning/ListPOS—Cases.htm [online: 29.01.19].
- Budzicz, Ł. (2015). Wartość poznawcza badań empirycznych w psychologii społecznej. [The epistemic value of empirical research in social psychology. http://repozytorium.amu.edu.pl:8080/bitstream/10593/



- 14025/1/Wartosc_poznawcza_badan_empirycznych.pdf, [online: 11.08.2019].
- Butler, T., Waldroop, J. (1999). Job Sculpting: The Art of Retaining Your Best People. *Harvard Business Review*, 77(5), 144–152.
- Crandall, C. S., Sherman, J. W. (2016). On the scientific superiority of conceptual replications for scientific progress. *Journal of Experimental Social Psychology*, 66, 93–99. doi: 10.1016/j.jesp.2015.10.002
- Demerouti, E., Bakker, A. B., Nachreiner, F., Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512, doi: 10.1037/0021–9010.86.3.499
- Dierdorff, E., Jensen, J. (2018). Crafting in Context: Exploring When Job Crafting Is Dysfunctional for Performance Effectiveness. *Journal of Applied Psychology*, 103(5), 463–477. 10.1037/apl0000295.
- Gagné, M., Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362, doi: 10.1002/job.322
- Gałaj, W. (2014). Pokolenie Z na rynku pracy. [Generation Z on the labor market]. In Rogozińska-Pawełczyk A. (red.), *Pokolenia na rynku* pracy [Generations on the labor market]. Łódź, Wydawnictwo Uniwersytetu Łódzkiego.
- Gibson, J., Ivancevich, J., Donnelly, J. (1994). *Organizations: Behavior, Structure, Processes*, 8. Boston, MA: Irwin.
- Grant, A. M., Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in organizational Behavior*, 28, 3–34.
- Greg, R., Hackman, J. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, 31(3), 463–479.
- Hackman, J. R., Oldham, G. R. (1980). Work redesign. Reading, MA: Addison Wesley
- Hauk, M. (2014). Kwestionariusz Cech Pracy opracowanie polskiej wersji narzędzia do badania cech pracy i środowiska zawodowego. Wstępne wyniki badań. [The work design questionnaire – developing polish version of a measure for assessing job characteristics and work environment. Preliminary results]. Folia Psychologica, 18,129–145.
- Hayes, A. (2015). An index and test of linear moderated mediation. Multivariate Behavioral Research, 50, 1–22.
- Hayes, A. F. (2013). Methodology in the social sciences. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York, NY, US: Guilford Press.
- Heckhausen, J., Wrosch, C., Schulz, R. (2010). A motivational theory of life-span development. *Psychological Review*, 117(1), 32–60, doi: 10.1037/a0017668
- Hendrick, C. (1990). Replications, strict replications, and conceptual replications: are they important? *Journal of Social Behavior and Personality*, 5(4), 41.
- Herzberg, F. (1968). One more time: How do you motivate employees? Harvard Business Review, 46(1), 53–62.
- Hetland, J., Hetland, H., Bakker, A. B, Demerouti, E. (2018). Daily transformational leadership and employee job crafting: The role of promotion focus, *European Management Journal*, 36(6), 746–756, doi: 10.1016/j.emj.2018.01.002.
- Hofstede, G., Hofstede G. J., Minkov, M. (2010). *Cultures and organizations: Software of the mind*. Revised and Expanded 3rd Edition. New York: McGraw-Hill.
- Kanfer, R., Beier, M. E., Ackerman, P. L. (2013). Goals and motivation related to work in later adulthood: An organizing framework. European Journal of Work and Organizational Psychology, 22(3), 253–264, doi: 10.1080/1359432X.2012.734298
- Kasprzak E. (2013). Poczucie jakości życia pracowników realizujących różne wzory kariery zawodowej. [Quality of life for employees pursuing various career patterns]. Bydgoszcz: Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Kasprzak, E., Michalak, M., Minda M. (2017). Kwestionariusz kształtowania pracy KKPracy. Polska adaptacja narzędzia. [The Job Crafting Questionnaire: Polish adaptation]. *Psychologia Społeczna*, 4(43), 459–475, doi: 10.7366/1896180020174308
- Kooij, T. A. M., De Lange, A. H., Jansen, P. G. W., Dikkers, J. S. E. (2013). Beyond chronological age: examining time and health as age—related mediators in relations to work motives. *Work & Stress*, 1, 88–105.
- Kożusznik, B. (2011). Zachowania człowieka w organizacji. [Human behavior in the organization]. Warszawa: Polskie Wydawnictwo Ekonomiczne.

- Lubrańska, A (2008). Wiek a gotowość do zmiany. [Age and readiness to change]. In L. Golińska, B. Dudek B (red.), *Rodzina i praca z perspektywy wyzwań i zagrożeń*. [Family and work from the perspective of challenges and threats]. (pp. 157–164). Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Lykken, D. T. (1968). Statistical significance in psychological research. Psychological Bulletin, 70(3,1), 151-159. http://dx.doi.org/10.1037/ h0026141
- Lyons, P. (2008). The crafting of jobs and individual differences. *Journal of Business and Psychology*, 23(1–2), 25–36, doi: 10.1007/s10869-008-9080-2
- Meyer, J. P., Allen, N. J., Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of three–component conceptualization. *Journal of Applied Psychology*, 78, 538–551.
- Minda, M., Kasprzak, E. (2018). Czynniki kontekstu pracy i kształtowanie pracy jako predyktory przywiązania do organizacji. [Factors of the work context and job crafting as predictors of organizational commitment]. Organizacja i Kierowanie, 3(182), 145–161.
- Morgeson, F. P., Delaney-Klinger, K. A., Hemingway, M. A. (2005). The importance of job autonomy, cognitive ability, and job-related skill for predicting role breadth and job performance. *Journal of Applied Psychology*, 90, 399–406.
- Mudło-Głagolska, K., Lewandowska, M., Kasprzak, E. (2018). Charakterystyka formalna karier młodych Polaków. [Formal Characteristics of the Careers among Young Polish People]. *Humanizacja Pracy*, 1, 29–45.
- Organ, D. W., Podsakoff, P. M., MacKenzie, S. B. (2006). Organizational citizenship behavior: Its nature, antecedents, and consequences. Thousand Oaks: SAGE Publications.
- Petrou, P., Demerouti, E., Peeters, M. C. W., Schaufeli, W. B., Hetland, J. (2012). Crafting a job on a daily basis: contextual correlates and the link to work engagement. *Journal of Organizational Behavior*, *33*(8), 1120–1124, doi: 10.1002/job.1783
- Preacher, K. J., Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior Research Methods. 40, 879–891
- Randstad raport Instytutu Badawczego (2019). [Randstad report of the Research Institute]. https://www.randstad.pl/strefa-pracownika/centrum-prasowe/monitor-rynku-pracy-rekordowa-satysfakcja-pracownikow-rekordowe-oceny-szans-na-zatrudnienie/, [online: 10.08.2019].
- Robson, S. M., Hansson, R. O. (2007). Strategic self-development for successful aging at work. The International Journal of Aging & Human Development, 64(4), 331–359, doi: 10.2190/Q303-171U-7686-8517
- Roczniewska, M. A., Puchalska-Kamińska, M. (2017). Are managers also 'crafting leaders'? The link between organizational rank, autonomy, and job crafting. *Polish Psychological Bulletin*, 48(2), 198–211.
- Sargent, C. L. (1981). The repeatability of significance and the significance of repeatability. European Journal of Paransychology, 3, 423–433.
- Schmidt, S. (2009). Shall we really do it again? The powerful concept of replication is neglected in the social sciences. Review of General Psychology, 13(2), 90–100.
- Sekiguchi, T., Li, J., Hosomi, M. (2017). Predicting job crafting from the socially embedded perspective: The interactive effect of job autonomy, social skill, and employee status. *Journal of Applied Behavioral Science*. doi: 10.1177/0021886317727459
- Slemp, G. R., Vella–Brodrick, D. A., Kern, M. L. (2015). Workplace well-being: The role of job crafting and autonomy support. *Psychology of Well-being*, 5, 7, doi: 10.1186/s13612-015-0034-y
- Srinivas, S. S., Ashok, K. (2018). The Role of Job Crafting in Feedback– Performance Relationship: A Study of Supervisors and Managers of the Indian Railways. *IUP Journal of Organizational Behavior*, 17(4), 58–76. http://search.ebscohost.com/login.aspx?direct=true&db=bth &AN=133631152&lang=pl&site=ehost-live [dostep: 14.04.2019]
- Thun, S., Bakker, A. B. (2018). Empowering Leadership and Job Crafting: The Role of Employee Optimism. Stress and Health 34, 573–581.
- Tims, M., Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *Journal of Industrial Psychology*, 36(2), 1–9, doi: 10.4102/sajip.v36i2.841
- Tims, M., Bakker, A. B., Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173–186, doi: 10.1016/j.jvb.2011.05.009



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- Tims, M., Bakker, A. B., Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology*, 18, 230–240. doi: 10.1037/a00 32141
- Vanbelle, E., van den Broeck, A., De Witte, H. (2017). Job Crafting: Autonomy and workload as antecedents and the willingness to continue working until retirement age as a positive outcome. *Human Resources Psychology / Psihologia Resurselor Umane*, 15(1), 25–41. doi: 10.24837/pru.2017.1.3
- Wang, H., Demerouti, E., Bakker, A. B. (2016). A review of job crafting research: The role of leader behaviors in cultivating successful job crafters. In S. K. Parker, & U. K. Bindl (Eds.), *Proactivity at work*. London: Routledge
- Weick, K. E. (1995). Sensemaking in organizations. Thousand Oaks, CA: Sage.

- Wojtczuk-Turek A. (2017). Kreowanie różnorodności w pracy poprzez transgresję jej granic – analiza efektu mediacji i moderacji, [Creation of diversity at work through transgressing its boundaries – the analysis of mediation and moderation effect]. Organizacja i Kierowanie, 3, 25–43.
- Wołk, Z. (2017). Kultura pracy profesjonalisty. [Professional work culture]. Warszawa: Difin.
- Wong, C. M., Tetrick, L. E. (2017). Job crafting: Older workers' mechanism for maintaining person-job fit. Frontiers in Psychology, 8, doi: 10.3389/fpsyg.2017.01548
- Wrzesniewski, A., Dutton, J. E. (2001). Crafting a Job: As Active Employees Revisioning Crafters of Their Work. The Academy of Management Review, 26(2), 179–201, doi: 10.2307/259118
- Zahoor, A. (2018). Teacher Proactivity Influencing Student Satisfaction and Loyalty Role of Job Crafting and Work Engagement. *Vikal-pa*, 43(3), 125–138, doi: 10.1177/0256090918785046