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Can you buy work engagement? The relationship between pay, fringe benefits, financial bonuses and work engagement

Konrad Kulikowski[1] · Piotr Sedlak[2]

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Abstract
What role do financial rewards play as predictors of work engagement? To address this question, based on the Job Demands-Resources Theory (JD-R), the relationship between financial rewards and work engagement on a large sample ($N = 1201$) of multi-occupational employees was investigated. Through three steps of hierarchical regression, salary, fringe benefits, and bonuses were added to a JD-R model predicting work engagement via job resources and job demands; however, this did not lead to any significant improvement in model fit, and all new predictors were not significant. It may be concluded that financial rewards do not explain an additional amount of variance in work engagement over job demands and job resources. These results offer insights into the relationship between financial rewards and work engagement, and suggest that there is insufficient evidence to claim that pay, benefits, and bonuses are related to employee work engagement level.

Keywords Rewards · Work engagement · Pay · Job demands-resources · Salary · Benefits

Introduction

Why Work Engagement may be Important

The attention of occupational scientists and human resource management (HRM) specialists has been focused on work engagement due to the increasing body of research demonstrating that it may lead to increase in employee performance, health, and wellbeing (see Bakker and Bal 2010; Shantz et al. 2012; Shimazu et al. 2015; Shimazu et al. 2012; Xanthopoulou et al. 2009), and nowadays it seems clear that work engagement has a sizeable impact on organizational business outcomes (Harter et al. 2002; Harter et al. 2010). Although there are many ways of defining work engagement (Macey and Schneider 2008; Shuck 2011; Shuck et al. 2013) the most accepted and popular current definition (Saks and Gruman 2014) is derived from the work of Schaufeli and colleagues (Schaufeli et al. 2002) who define work engagement as a positive work-related state of mind, characterized by vigor, dedication, and absorption (Schaufeli and Salanova 2011). Importantly, Schaufeli's notion of work engagement may be located in the well-established theoretical framework of the Job Demands-Resources theory (JD-R), a model which attempts to predict work engagement using two broad sets of conditions: job demands and job resources (Bakker et al. 2011; Bakker and Demerouti 2014; Demerouti and Bakker 2011). Job demands trigger stress, consume an employee's energy, generate strain, impact employee's health, and eventually lead to burnout (Ceschi et al. 2016; Maslach et al. 2001). Conversely, job resources trigger motivational processes, act as an "energy reservoir", and are a positive force, facilitating the successful completion of work tasks and decreasing the psycho-physiological costs of job demands, while also helping to fulfill psychological needs. As a result, job resources are predictors of positive attitudes and organizational behaviors, such as work engagement (Bakker et al. 2003; Schaufeli et al. 2009). The JD-R is currently the most prevalent theoretical model in work engagement research, and its validity in predicting work engagement has found an empirical support in a large number of studies (e.g. Bakker et al. 2004; Schaufeli and Bakker 2004), as well as in meta-analysis reports (Crawford et al. 2010; Halbesleben 2010; Nahrgang et al. 2011); therefore, Schaufeli's notion of work engagement and the JD-R theory have been chosen as a theoretical framework for our analysis.

✉ Konrad Kulikowski
konrad.kulikowski@doctoral.uj.edu.pl

Piotr Sedlak
sedlakp@uek.krakow.pl

[1] Institute of Psychology, Jagiellonian University, Ingardena 6, 30-060 Kraków, Poland

[2] International Management Department, Cracow University of Economics, Rakowicka 27, 31-510 Kraków, Poland

Are Financial Rewards Related to Work Engagement?

To attract, retain, and motivate employees, organizations all over the globe offer non-financial and financial rewards (Rynes et al. 2004; Condly et al. 2008; Gerhart and Fang 2014; Shaw and Gupta 2015; Ceschi et al. 2017). Financial rewards, which represent rewards with monetary value, might take the form of direct financial rewards (e.g. fixed and variable pay) and indirect financial rewards (e.g. fringe benefits), whereas non-financial rewards encompass all forms of organizational rewards which have no easily identified monetary value but are desirable to employees, such as appreciation, job security, and promotion (Antoni et al. 2017).

When investigating the role of rewards in work engagement it is advisable to start by taking a look at motivational processes leading to work engagement, as described by the JD-R theory. This process assumes that job resources - those aspects of job which are functional in achieving work goals, reducing job demands, and stimulating personal development - lead to work engagement, represented by energy and identification (Bakker and Demerouti 2007). Within the framework of JD-R, it is reasonably well documented that non-financial rewards (e.g. supervisor support, opportunities for development, and positive feedback) play the role of job resources, predicting work engagement and mitigating demanding work conditions (Bakker and Demerouti 2014), whereas it is still not clear what role direct (e.g. pay, bonuses) and indirect financial rewards (e.g. fringe benefits) play in predicting work engagement.

In the JD-R theory rewards, such as pay, are presented as a potential predictor of work engagement, job resources 'located at the level of the organization at large' (Bakker et al. 2003; Bakker and Demerouti 2007), but as far as we can ascertain, financial rewards have rarely been studied as a predictor of work engagement in empirical studies. Although a literature abounds with research studies concerning relationships between financial rewards and performance or different operationalizations of motivation (for a review see Shaw and Gupta 2015), according to our best knowledge there are only a few empirical reports on financial rewards - work engagement links.

One such study, by Nthebe et al. (2016), found that rewards in the form of fringe benefits are not a significant predictor of work engagement. In another study, by Hulkko-Nyman et al. (2012), pay levels were not related to dimensions of work engagement (vigor, dedication, and absorption), while fringe benefits were positively related solely to dedication, but not to vigor and absorption. Hu and Schaufeli (2011) report that a positive evaluation of current pay is a positive predictor of work engagement, and Karatepe (2013) suggests that when employees hold the belief that high job performance results in greater rewards, this is positively correlated to work engagement. Some research studies investigating the role of rewards in work engagement simply merge financial and non-financial rewards into one category, labeled rewards (see e.g. Leiter and Maslach 2003, *Areas of Work Life*), which makes it impossible to draw firm conclusions about separate impact of financial and non-financial rewards on work engagement. Law et al. (2011) suggest that job rewards are one of the job resources positively related to work engagement; however, they measured rewards as a sum of financial and non-financial rewards: monetary rewards, esteem and status control. Farndale and Murrer (2015) postulate that financial rewards might act as job resources, but they measured financial rewards by asking whether compensation plans reward outstanding job performance. Therefore, in fact Farndale and Murrer (2015) measured perception of pay for performance level, not direct or indirect financial rewards. Thus, it seems that the currently available research studies provide inconclusive findings about financial rewards-work engagement links. Therefore, systematic empirical analysis in this field might help to gain a new insight and provide us with new knowledge on the role of rewards in work engagement formation. Last but not least, it is worth to notice that although work engagement plays a role in employees work motivation, it is not work motivation but rather a psychological state that mediates an impact of job resources on organizational outcomes (Schaufeli and Bakker 2010). Thus, our study is not another study answering a question: *does financial reward motivate employees,* but it is a novel attempt to investigate relationships between financial rewards and work engagement as "*a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption. Rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior*" (Schaufeli et al. 2002 p. 74).

The Present Study

Given interest in work engagement has rapidly increased over the past decade (Saks and Gruman 2014), but surprisingly little is known about how financial rewards are related to work engagement. Hence, the aim of this study is to investigate the relationship between work engagement and three types of financial rewards commonly used in HR practice: salaries, benefits and bonuses (Gerhart and Rynes 2003).

As mentioned before, Bakker et al. (2003) and Bakker and Demerouti (2007), basing their studies on the JD-R theory, have suggested that financial rewards might act as a potential predictor of work engagement. However, to our knowledge, this prediction has not been rigorously tested in empirical studies so far. To fill this gap in the literature, it has been proposed that financial rewards account for a significant amount of the explained variance in work engagement over

job resources and job demands, usually treated in the JD-R theory as core predictors of work engagement (Schaufeli et al. 2009). To control for job demands and resources influence on work engagement when testing reward – engagement relationships, the following measures of job resources - supervisor support, co-worker support (Karasek 1985), and job demands - organizational constraints, quantitative workload (Spector and Jex 1998) have been added into our analysis. These four job characteristics represent important 'core' resources and demands relevant to most workplaces and significantly related to work engagement (Schaufeli and Bakker 2004). It is worth noting that the aforementioned two types of job resources might also be seen as non-financial rewards. When controlling for supervisor support, co-worker support, organizational constraints and quantitative workload it may be investigated whether financial rewards explain work engagement over these job characteristics. This kind of analysis may contribute to the theory and practice by advancing our understanding of the role of financial rewards in work engagement.

To investigate the relationship between work engagement and salary we hypothesized that pay as financial reward might possibly play a role of job resources (Bakker et al. 2003; Bakker and Demerouti 2007; Law et al. 2011; Farndale and Murrer 2015) (e.g. by facilitating the achievement of work goals and/or reducing costs of job demands) in a scope of the JD-R theory and be positively related to work engagement. Thus, *Hypothesis 1* has been put forward: *The level of salary is a positive predictor of work engagement.*

Other types of financial rewards commonly offered by organizations to attract, retain, and engage employees are fringe benefits (Dulebohn et al. 2009). The term 'benefits' is vague, and these may take different forms (Muse and Wadsworth 2012), ranging from free gym access cards to support for an employee during a life crisis. In this paper, fringe benefits are defined as additional, non-monetary work rewards offered by an employer to an employee, which are not legally mandated and are a financial cost to the employer. The authors of this article propose that benefits, in a comparable way to salary levels, may possibly play a role of job resources, facilitating the achievement of work goals and reducing job demands. Therefore *hypothesis 2* has been put forward: *Rewards in the form of fringe benefits are positive predictors of work engagement.*

Finally, various types of bonuses are typically used in HRM practices to reward employees. For the purpose of this study, 'bonuses' are deemed to be those financial rewards paid to employees above and beyond any fixed monthly salary. This paper focuses on three types of bonuses: bonuses based on business metrics (additional remuneration that an employee receives based on performance measures, such as meeting targets), discretionary bonuses (a type of financial bonus based on the overall qualitative opinion of a supervisor, rather than on direct performance measures), and annual bonuses (remuneration offered on the basis of the length of time in employment). Although this is a non-exhaustive classification of bonuses used in HRM, these types of bonuses were chosen as they are the ones most commonly offered in Poland (Borkowska 2006). Again, based on the JD-R assumption that rewards might possibly act as job resources, *hypothesis 3* has been put forward: *Rewards in the form of bonuses: discretionary bonuses, bonuses based on business metrics and annual bonuses, are positive predictors of work engagement.*

Method

Procedure and Participants

In order to reach a wide, heterogeneous sample of employees with different types of rewards systems, an anonymous online quantitative survey research was conducted. A homogenous sample, e.g. within one organization, might result in low variability within the remuneration system, and this might prevent the capture of the role of various means of reward for work engagement. The invitation to the survey was sent to email addresses from the subscribers list of *wynagrodzenia.pl* who had previously agreed to receive such messages. The *wynagrodzenia.pl* site is one of Poland's major sources of information concerning levels of salaries for various jobs, and its users work in more than 700 different job positions. The data presented here are a part of the research project "Poles at work", devoted to better understanding Polish employees' work environment; consequently, participants were informed that they were taking part in a research project dedicated to broadening the understanding of work context of Polish employees. After a data-cleaning procedure, full responses from 1201 participants (62% men) were obtained. The mean age of participants was 34.9 years (SD = 8.7) and the average tenure was 5.7 years (SD = 6, median Me = 3). Graduate or postgraduate qualifications were held by 86% of the total. As regards the types of job-holders who responded, 21% of the participants worked in positions termed "ordinary workers", 58% described their job position as "specialists", and 21% worked as "team managers". Those employed in the private sector accounted for 82% of the participants while 18% worked in state-run firms. The mean monthly net salary among the participants was 3906 PLN (approx. €930) (SD = 1945, Me = 3400). All participants were employed on the basis of permanent job contracts.

Measures

Means, standard deviations, Cronbach's α and Pearson's correlations between the study variables are presented in Table 1. *Work engagement* was measured using a shortened version of the Utrecht Work Engagement Scale, UWES-9 (Schaufeli

Table 1 Means, standard deviations, Cornbach's α (on the diagonal) and Pearson's r correlations between the study variables

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.
1.Age	34.92	8.74	–							
2.Tenure	5.73	6.17	.65*	–						
3.Salary(log)	3.54	0.20	.15*	.08*	–					
4.Organizational constraints	2.62	1.19	.02	.00	−.04	*.74*				
5.Workload	3.83	1.16	.05	.05	.02	.48*	*.83*			
6. Co-worker support	3.99	0.74	−.21*	−.14*	.07*	−.31*	−.19*	*.85*		
7. Supervisor support	3.23	1.09	−.19*	−.19*	.17*	−.39*	−.16*	.43*	*.87*	
8.Work engagement	3.48	1.21	.02	.03	.17*	−.26*	.08*	.36*	.43*	*.88*

N = 1201 *$p < .05$

et al. 2006). Following Salanova and Schaufeli (2008) and Schaufeli et al. (2009), two scales covering the core of work engagement - vigor and dedication - were used; thus, six items from UWES-9 were utilized. The sample item for vigor is: 'At my job, I feel strong and vigorous', and for dedication: 'My job inspires me', participants answered using a 7-point frequency scale, ranging from 0 = never to 6 = always/every day. A total score for work engagement was computed instead of two separate scores for vigor and dedication, because, in line with other authors (Balducci et al. 2010; Seppälä et al. 2009), multifactorial work engagement indicators are more suited to structural equation modeling with latent variables (SEM), whereas here hierarchical multiple regression was used. In addition, due to the highly significant correlation between the two dimensions of work engagement (vigor and dedication) ($r = 0.73$ in our sample), a total score could be more easily interpreted. In order to measure job resources, items from the Polish version of the Karasek Job Content Questionnaire, JCQ (Żołnierczyk-Zreda and Bedyńska 2014) were used. In all the items concerning job resources, participants were asked to decide on a 5-point Likert-type scale their level of (dis)agreement with the statements presented (1 = totally disagree, 5 = totally agree). *Supervisor support* was assessed with three statements, e.g. 'My supervisor cares about his subordinates'. *Co-worker support* was assessed with four statements, e.g. 'The people I work with are friendly towards me'. To measure *job demands* four items from the Polish version of the Spector and Jex *Organizational Constraints Scale* (Baka and Bazińska 2016) (e.g. 'How often do you find it difficult or impossible to do your job because of poor equipment or supplies?') and four items from the Spector and Jex *Quantitative Workload Inventory* (Baka and Bazińska 2016) (e.g. 'How often does your job leave you with little time to get things done?') were used. This measure has a 7-point response scale (from 0 = less than once a month or never, to 6 = always/every day). Although the abovementioned measures used in this study have well-established psychometric properties and are commonly used in work and organization psychology, in order to test their validity in the context of our study an exploratory factor analysis (EFA) was conducted. We introduced 21 items from all five measures into a single analysis and the results of the EFA with varimax rotation confirmed the existence of five distinct factors, thus supporting the validity of our measures. Additionally, as expected by the JD-R theory, job demands and job resources measures were negatively correlated (see Table 1).

To assess *salary level*, participants were asked to declare their average monthly net salary using an open-ended question, and then participants were asked to declare if they received *fringe benefits* in compensation by clicking 'yes' or 'no' as an answer to the question: *Do you receive benefits in your compensation?* (76% answered 'yes'). In the description, the term 'benefits' was explained as additional non-monetary benefits from work. Next, to assess what types of bonuses (if any) the employee receives, three direct Yes/No questions were asked. The different kinds of bonuses were described very precisely to ensure that the employees being surveyed clearly understood the options. The official term (in labor law), as well as commonly used terms for these kinds of bonuses, were used. For each question, the participant indicated whether he or she receives annual bonuses (23% responded in the affirmative), discretionary bonuses (24% responded in the affirmative), and bonuses based on business metrics (27% responded in the affirmative). It is important to remember that we measured subjective opinions of employees about their rewards. In our opinion, this is probably employee's opinion if he or she receives such a reward rather than a sentence 'objectively' written down in a payroll regulation which might possibly be related to work engagement. We also collected socio-demographic information: age, gender, education level (university degree/lower), position in organization (ordinary worker/ specialist/ manager), and work tenure with their current employer.

Statistical Analysis

In order to test the research hypotheses, hierarchical multiple regression (Petrocelli 2003) was conducted in IBM SPSS 24.0. In hierarchical regression, the focus is on the change in

R^2 between models on introducing additional predictors. For instance, we can introduce salary as a new predictor into the regression model accounting for work engagement by job resources (supervisor support, co-worker support) and job demands (organizational constraints and quantitative workload), then observe how this new predictor changes the model R^2. If salary is a statistically significant predictor of work engagement above job resources and job demands, and the F statistic for R^2 change is significant, we might then conclude that salary is a predictor of work engagement over and above predictors already existing in an earlier model. The hierarchical regression may allow for verification of our hypotheses and give insights into any relationship between rewards and work engagement when controlling for job demands and job resources. In regression models for bonuses and fringe benefits, dummy coding was used: 1 for a 'Yes' response and 0 for a 'No' response. As dichotomous 0/1 coding was used, the interpretation of regression weight for rewards and benefits could be carried out in terms of the expected change in work engagement levels between employees receiving certain rewards and those not receiving them, when all other variables in a regression model are set constant. Monthly salary was log transformed prior to analysis (see Kahneman and Deaton 2010). Because some predictors have been correlated (see Table 1 for details), an analysis of the variance inflation factor (VIF) was conducted to control for collinearity (O'Brien 2007). The highest value of VIF observed was 1.6 (in the case of supervisor support) which indicates a negligible collinearity issue in our dataset.

Results

The detailed results of the hierarchical multiple regression conducted in order to verify the research hypotheses are presented in Table 2. In the first step of the analysis, based on the JD-R theory, a model with only job resources and demands to predict work engagement was created. It occurs that, as predicted by the JD-R theory, supervisor support (unstandardized regression weights b = .35; $p < .001$), co-worker support (b = .41; p < .001), workload (b = .25; p < .001) and organizational constraints (b = −.18; $p < .001$) were significantly related to work engagement. Additionally, the demographic variables age (b = .01; $p = .019$), gender (b = .09; $p = .151$), length of tenure (b = .01; $p = .093$), position in organization hierarchy (b = .15; $p = .002$) and level of education (b = .18; $p = .040$) were controlled. As expected from the JD-R, this initial model explains about 31% of variance in work engagement and fits the data well: F = 58; $p < .001$.

In the second step, to test *hypothesis 1*, salary levels were introduced into the initial regression model. Adding salary level as a successive predictor of work engagement in the second step of hierarchical regression did not result in significant changes in the initial model fit ($\Delta R^2 = .001$) and salary level was not a statistically significant predictor of work engagement (b = .250; $p = .153$); thus, *hypothesis 1* cannot be confirmed. In the third step of analysis, to test *hypothesis 2*, fringe benefits were introduced into the model, but this showed that employees receiving fringe benefits do not differ from those not receiving benefits in terms of levels of work engagement (b = −.046; $p = .518$) and introducing benefits as a predictor did not result in significant change in the explained variance in work engagement ($\Delta R^2 < .001$); therefore, *hypothesis 2* cannot be confirmed. In the fourth step of hierarchical regression, to test *hypothesis 3,* discretionary bonuses, bonuses based on metrics, and annual bonuses were introduced into the model. All three new predictors were shown to be non-significant in predicting work engagement and the amount of explained variance in work engagement does not change ($\Delta R^2 = .003$, $p = .191$); thus, based on this result, *hypothesis 3* cannot be confirmed. In a final model, which comes as a result of four steps of hierarchical multiple regression (see Table 2), significant predictors of work engagement were demographic variables: age (b = .01; $p = .023$), position in organization (b = .12; $p = .028$), job resources: co-worker support (b = .41; p < .001) and supervisor support (b = .35; p < .001), job demands: workload (b = .25; p < .001), and organizational constraints (b = −.18; p < .001), whereas salary (b = .30; $p = .098$), discretionary bonuses (b = −.08; $p = .252$), bonuses based on metrics (b = −.12; $p = .083$), annual bonuses (b = .06; $p = .380$), and fringe benefits (b = −.03; $p = .682$) showed no evidence of being significant predictors of work engagement. It might then be concluded that there is not enough evidence to claim that salary, bonuses, and benefits are related to work engagement above and beyond job resources and job demands.

Discussion

According to the JD-R theory rewards might possibly act as job resources - fostering work goals attainment and reducing job demands and, thus, at least on a theoretical level, might be positively related to work engagement (Bakker et al. 2003; Bakker and Demerouti 2007). However, as far as we can ascertain, in the literature only a few empirical studies investigate the relationship between financial rewards used by HRM specialists and work engagement, and the results of these studies give mixed conclusions (see Hu and Schaufeli 2011; Hulkko-Nyman et al. 2012; Karatepe 2013; Nthebe et al. 2016). Therefore, the main aim of this study was to investigate the relationship between types of rewards most commonly used in HRM practice - salary, benefits, and bonuses - and work engagement on a large sample of multi-occupational employees when controlled for job resources and job demands. This attempt might help to clarify the relationship

Table 2 Results of hierarchical regression analyses: effect of job resources, job demands, and financial rewards on work engagement

	Step 1 β	Step 2 β	Step 3 β	Step 4 β
Age	.08* (.01)	.08* (.01)	.08* (.01)	.07* (.01)
Tenure	.05# (.01)	.06# (.01)	.06# (.01)	.06# (.01)
Gender[S]	.04 (.09)	.04# (.11)	.04# (.11)	.04# (.11)
Position	.08* (.15)	.06* (.12)	.06* (.11)	.06* (.12)
University degree[d]	.05* (.18)	.04# (.16)	.04# (.16)	.04 (.13)
Organizational constraints	−.18** (−.18)	−.18** (−.18)	−.18** (−.18)	−.18** (−.18)
Workload	.24** (.25)	.24** (.25)	.24** (.25)	.24** (.25)
Co-worker support	.25** (.41)	.25** (.40)	.25** (.40)	.25** (.41)
Supervisor support	.31** (.35)	.31** (.34)	.31** (.35)	.31** (.35)
Salary log		.04 (.25)	.05 (.28)	.05# (.30)
Fringe benefits[d]			−.02 (−.05)	−.01 (−.03)
Discretionary bonuses[d]				−.03 (−.08)
Bonuses based on metrics[d]				−.04# (−.12)
Annual bonuses[d]				.02 (−.06)
R^2	.307	.308	.308	.311
ΔR^2	–	.001	.000	.003
F for ΔR^2	58.5**	2.1	.4	1.60

β standardized regression weights; unstandardized regression weights in brackets

** p < .001; * p < .05; # p < .1; S: 0 = men, 1 = women; d: 1 = yes, 0 = no; position: 1 = ordinary workers, 2 = specialists, 3 = team manager; N = 1201

between work-related rewards and work engagement – a positive work-related state of mind.

To test *hypothesis 1*, that salary is a positive predictor of work engagement, using hierarchical multiple regression, salary was introduced into a baseline model in line with JD-R predicting work engagement by co-worker support, supervisor support, workload, and organizational constraints (see Table 2). Incorporating salary levels into the regression model did not improve model R^2 and thus it may be concluded that salary is not significantly related to work engagement. To test *hypothesis 2*, that fringe benefits are positive predictors of work engagement, fringe benefits were introduced into the regression model produced from testing *hypothesis 1*. Adding benefits to the regression model did not result in significant improvement in R^2 and so benefits were not seen to be significantly related to work engagement. Finally, to test *hypothesis 3*, that bonuses are positive predictors of work engagement, discretionary bonuses, bonuses based on metrics, and annual bonuses were introduced into the regression model arising from *hypothesis 2* testing; however, these new predictors were not significant and did not significantly change the R^2 of the regression model. To sum up, the results of the study revealed that salary, benefits, and bonuses do not account for a significant amount of explained variance in work engagement over and above supervisor support, co-worker support, workload, and organizational constraints (and controlled socioeconomic variables). These results seem to highlight the vital role of job resources and demands and the neutral role of salary, benefits, and bonuses with regards to work engagement. Although initially it was proposed that financial rewards might act as job resources in the JD-R theory, the lack of significant relationship between financial rewards and work engagement might suggest that financial rewards do not act as job resources.

In the light of these results, it is perhaps a good time to take a step back and rethink the issue of why salary, benefits, and bonuses are offered to employees. Despite the obvious importance of financial rewards in fulfilling basic human needs, this study reveals that their potential to build work engagement might be somewhat limited. Seemingly, money and other financial rewards are not what keeping employees engaged. However, as people generally overestimate the role of money as a predictor of wellbeing (Brickman et al. 1978; Diener and Seligman 2004), it might be the case that managers are offering financial rewards which, counter-intuitively, have little or no relationship to employees' work engagement. The results of our study demonstrated that financial rewards, not being related to work engagement, in all likelihood cannot "buy" work engagement. Instead, the presence of job resources such as supervisor support and co-worker support appears to be a crucial feature of the workplace, especially if an organization's goal is not simply to compensate employees' effort, but also to enhance their work engagement.

It is important to clarify that the conclusion that financial rewards cannot buy work engagement does not mean that financial rewards are not related to work performance. It

should be emphasized that in this study we are interested in work engagement as a positive work-related state of mind characterized by vigor and dedication, which represent vital aspects of employees' wellbeing (Schaufeli et al. 2002). Although work engagement might be closely related to employees' performance it is not a performance level, but rather a positive work-related state of mind which constitutes work engagement. A wide body of literature suggests that financial rewards may have a positive impact on organizations by increasing employees' performance (Combs et al. 2006; Condly et al. 2008; Garbers and Konradt 2014). However, we suppose that HRM specialists should be focused not only on improving organizations' performance and effectiveness, but also on increasing and maintaining individual employees' work-related wellbeing. Thus, our results should be interpreted as providing a new insight into factors related to work engagement as an aspect of work-related wellbeing.

Daniels et al. (2016) called for more research on compensation practices such as benefits and individual-based incentives; this paper may be one of the answers to this call and will hopefully enrich current HMR knowledge. Firstly, our results contribute to the HMR literature by empirically testing the proposition based on the JD-R theory that financial rewards might act in a manner comparable to job resources. Our results suggest that when control for coworkers support, supervisor support, workload and organizational constrains pay, benefits and bonuses are not significant predictors of work engagement. Thus, probably financial rewards do not act as a job resource within JD-R theoretical framework. Although the JD-R theory is one of the most meaningful theoretical framework explaining work engagement, still little is known about a role of financial rewards for work engagement. Thus our study significantly broadens a current state of knowledge about factors related to work engagement. Secondly, our results may be of practical use as it seems that HRM specialists might perceive financial rewards as being among the most important predictors of work engagement (see e.g. Scott and McMullen 2010: "*more than 40% of the respondents believe that base salary, base salary increases, and benefits and perquisites have a* "*high*" *or* "*very high*" *impact on employee engagement*"), whereas our results suggest that the relationship between financial rewards and work engagement (operationalized as the UWES score) may be without practical meaning when controlled for job resources and demands. In other words, our research seems to indicate that there is not enough evidence to state that financial rewards are related to work engagement over job resources and demands. In this study, it has been proposed that the financial rewards-engagement relationship perceived by some HRM specialists might be a result of bias caused by spurious correlation resulting from the confounding influence of job resources. Such a spurious correlation might be caused by the fact that financial rewards are correlated with job resources, e.g. generally employees receiving higher salaries, bonuses, and more attractive benefits have also more complex jobs and higher positions, providing them with more job resources. Thus, these are job resources but not financial rewards that are related to work engagement. In other words, financial rewards and work engagement seem to be related because the increase in financial rewards entails increase in job resources. Therefore, when we do not control for job resources we might have the illusion that financial rewards are related to work engagement. In line with this reasoning it is worth noting that our results did show that when not controlling for job resources and demands, there is a correlation between salary level and work engagement (see Table 1), but this relationship was not significant once controlled for job resources and demands in the JD-R regression model (see Table 2). Our results appear to indicate that if HRM specialists wish to enhance employee work engagement, more attention should be paid to building supportive and resourceful job environments, e.g. by JD-R intervention aimed at increasing personal and job resources (Wingerden et al. 2016; Costantini et al. 2017)

Finally, it must be remembered that financial rewards are a vital and significant part of every job and, as such, have a tremendous role to play as HRM tools, especially in fulfilling employees' basic needs, attracting and retaining the best employees, increasing performance, or showing appreciation towards teams and individuals (Shaw and Gupta 2015). However, though remuneration packages might be useful tools, they might not be a one-size-fits-all solution for the purposes of HRM, and here our study seems to suggest that financial rewards are weakly related to work engagement. As interest in the idea of work engagement has rapidly increased, our efforts to investigate how salaries, benefits, and bonuses are related to work engagement may feed this interest and affect HRM decision-making.

Limitations and Further Research

The predictor (financial rewards) and criterion variable (work engagement) were obtained from the same source – the same individuals; therefore, the relationships among these variables may possibly be confounded by common method variance. To minimize any effect of common method variance we follow a set of procedural remedies (Podsakoff et al. 2003). Firstly, different methods to measure predictor and criterion variables were used. Work engagement was measured with six questions on a 7-point frequency scale, whereas bonuses were measured using three "yes/no" questions and salary was measured by one question requiring typing a number reflecting monthly net salary. Additionally, to separate the measurement of the predictor and criterion variables, questions regarding predictors and criterion variables were placed on different

pages in the online questionnaire. In order to build a psychological separation, any explicit connections between predictor and criterion variables were created in a survey instruction, i.e. participants did not know which questions would be merged into one variable and which would be analyzed together. Moreover, conducting online research by independent researchers not connected in any way with participants' employers increased respondents' anonymity and reduced evaluation apprehension. Additionally, the order of questions was counterbalanced, with the questions on subsequent pages of online questionnaire randomly spaced for each participant. Finally, to diagnose any possible instance of common method bias, the so-called Harman's single-factor test was conducted by introducing unrotated EFA on all variables in the study. The results revealed that no general single factor emerged and that the 'strongest' factor explained only 23% in covariance among the measures; this might suggest that a common method variance is not a main source of covariance among the measures used in this study. However, it might be desirable to replicate our findings in further research in which data on financial rewards and work engagement is collected from different sources.

The cross-sectional design and the fact that the research groups consisted mainly of employees with a university degree may mean that any generalization of our findings should be treated with caution, and thus it may be desirable to expand future, longitudinal research to the more general working population, both in Poland and elsewhere. Moreover, this study has shown that there is no statistically significant relationship between rewards and work engagement (i.e. $p > .05$) and non-significant findings are always difficult to interpret. However, as the American Statistical Association suggests: "*Scientific conclusions and business or policy decisions should not be based only on whether a p-value passes a specific threshold*" (Wasserstein and Lazar 2016, p.131), and, in view of this, this study provides a set of analysis which allows us to suggest that there is no evidence to claim that financial rewards are related to work engagement. Firstly, standardized regression weights for salary and other financial rewards in regression models explaining work engagement are close to zero; secondly, less than 1% change in work-engagement-explained variation was observed when introducing financial rewards into our regression model. Finally, given our sample size ($N = 1201$), our analysis has strong statistical power; in other words, the probability that statistical significance will emerge (if it is present) is quite high.

Among possible limitations, it is also worth noting that workload, which, according to the JD-R theory, might be considered as a job demand negatively related to work engagement, in our regression model showed as positively related to work engagement (see Table 2), i.e. among employees on the same level of job resources and work rewards, those with higher workload report higher work engagement. Although explaining this unexpected pattern goes beyond the scope of this article, it is worth addressing this issue in a future empirical analysis.

In this study we look for general relationships between financial rewards and work engagement. Although one may argue that reward might have different relationships with work engagement in organizations of different characteristics (e.g. size, industry etc.) it is important to remember that in our study we control for a wide range of possible confounding variables (see Table 2). Specifically, according to the JD-R theory what might be most strongly related to work engagement are job resources and demands but not specific characteristics of an organization. The organization characteristics might be related to work engagement but probably only to the extent they influence job resources or demands. Thus, controlling for job demands and resources possibly allows us to control for confounding impact resulting from different characteristics of organizations in which participants were working. However, as all empirical findings our results should be carefully replicated in future studies to confirm its validity.

Clearly, our research is not free from limitations; however, in our view, the results might help HRM specialists to understand what factors are and are not related to work engagement, and might spur further debate and investigation into the problem of how different types of rewards may predict work engagement.

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Compliance with Ethical Standards

Conflict of Interest Konrad Kulikowski declares that he has no conflict of interest. Piotr Sedlak declares that he has no conflict of interest. Although the Sedlak & Sedlak company helped the authors to distribute the survey invitations, the research was carried out purely to expand knowledge on the problem of engagement and financial rewards. The Sedlak & Sedlak company did not pay the authors for work on this article, nor expect any particular results.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and also with ESOMAR code of conduct (https://www.esomar.org/uploads/public/knowledge-and-standards/codes-and-guidelines/ICCESOMAR_Code_English_.pdf). Our research is not a medical study conducted with the participation of patients; therefore, the 1964 Helsinki declaration and its later amendments are not applicable here.

Informed Consent This was a fully anonymous online study and the participants were informed about it and agreed to participate by clicking on the link in the invitation e-mail. We did not collect any other forms of informed consent.

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