Functional meaning of rewards and interpersonal deviance in the workplace: The moderating role of basic psychological needs satisfaction

Konstantinos Papachristopoulos School of Psychology, Aristotle University of Thessaloniki AUTH Campus, GR-54124 Tel: +30 2108811686

Email: papachristopouloskostas@gmail.com

Despoina Xanthopoulou School of Psychology, Aristotle University of Thessaloniki AUTH Campus, GR-54124 Tel: +30 2310997216

Email: dxanthopoulou@psy.auth.gr

Abstract

In this paper, we used self-determination theory to argue that the satisfaction of the basic psychological needs for autonomy, competence, and relatedness may act as a boundary condition that determines when and how functional meaning of rewards (i.e., when individuals perceive work-related rewards as informational or controlling) relates to interpersonal deviant behavior in the workplace. We hypothesized that informational meaning of rewards will relate negatively and controlling meaning of rewards will relate positively to interpersonal deviant behavior. Also, we expected that the former relationship will be stronger when needs satisfaction is higher (vs. lower), and the latter relationship will be weaker when needs satisfaction is higher (vs. lower). Hypotheses were tested by means of a cross-sectional study with a heterogeneous sample of 265 Greek employees. Results of hierarchical regression analyses showed that both controlling and informational meaning of rewards related positively to deviant behavior. Also, relatedness need satisfaction moderated the relationships between informational and controlling meaning of rewards with deviant behavior in a way that both facets of rewards related positively to deviant behavior in conditions of lower relatedness need satisfaction, while they were unrelated to deviant behavior in conditions of higher relatedness need satisfaction. These results suggest that the role of the functional meaning of rewards for interpersonal deviance depends on whether employees' need of relatedness is satisfied or not in the workplace.

Keywords: functional meaning of rewards, interpersonal deviant behavior, psychological needs satisfaction, self-determination theory

Acknowledgements: This research was supported by the act "Support of Postdoctoral Researchers" of the European Program "Human Resources Development, Education and Lifelong Learning", 2014—2020, which was implemented by the State Scholarships Foundation (IKY) and was co-funded by the European Social Fund and the Hellenic State.

We thank Anais Thibault Landry for her useful comments during the preparation of this paper.

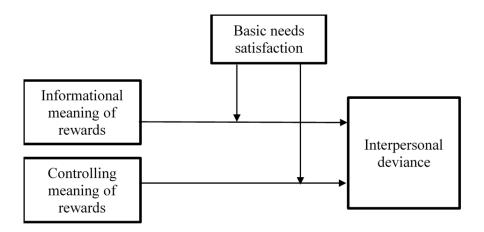
1. INTRODUCTION

Pay is a core element of any human resources system and compensation constitutes one of the most significant costs of an organization (Berber, Morley, Slavić, & Poór, 2017). Nevertheless, empirical evidence on the role of compensation rewards for employee work-related behaviors has been relatively scarce, and only during the past decade there have been several calls for more research on the topic (Gagné & Forest, 2008; Gupta & Shaw, 2014; Thibault Landry, Gagné, Forest, Guerrero, Seguin & Papachristopoulos, 2017a). This is mainly because the existing evidence on the effects of financial incentives and rewards on employees is controversial (e.g., Cerasoli, Nicklin, & Ford, 2014). On the one hand, studies have shown that financial rewards increase employees' efforts to contribute to organizational goals (e.g., Condly, Clark, & Stolovitch, 2003). On the other hand, studies in laboratory (e.g., Johnson, Dickson and Huitema, 2008) and organizational settings (e.g., Kuvaas, 2006) highlighted the detrimental consequences that financial incentives may have for performance (Cerasoli et al., 2014). Thus, there is still much debate around whether financial incentives are «good» or «bad» for employee functioning at work.

In this paper, we follow the approach of Thibault Landry, Forest, Zigarmi, Houson, and Boucher (2017b) on the functional meaning of financial rewards and propose that one way to understand the inconsistent findings regarding the role of rewards is by recognizing that cash rewards can be perceived differently by employees and determine their behavior, respectively. Hence, we account for the distinction between informational (i.e., when rewards are perceived as supportive and encouraging of individuals' participation in their work) and controlling (i.e., when rewards are perceived as a mean to control individuals' behavior; Deci, Eghrari, Patrick, & Leone, 1994) meaning of rewards in the context of self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000), in order to explain how rewards contribute to a pervasive workplace behavior, interpersonal deviance (Ferguson & Barry, 2011).

Also, we aim to understand under which conditions different meanings of rewards may be more or less prominent for deviant behavior. To this end, we explore the moderating role of the satisfaction of the basic psychological needs for autonomy (i.e., enhanced sense of volition), competence (i.e., increased sense of mastery), and relatedness (i.e., heightened sense of connection) at work (Ryan & Deci, 2008) on the relationship between informational and controlling meaning of rewards and interpersonal deviant behavior. Empirical evidence so far has mainly focused on whether rewards satisfy or frustrate employees' basic psychological needs (Del Vecchio & Wagner, 2011; Thibault et al, 2017a). Also, a recent study by Thibault Landry et al. (2017b) showed that basic psychological needs mediate the relationship between functional meaning of rewards and organizational deviance. To shed more light on the role that basic needs satisfaction plays in explaining the outcomes of functional meaning of rewards, we argue that the degree to which basic needs are satisfied at work may determine the strength of the relationship between functional meaning of rewards and interpersonal deviant behavior. Figure 1 depicts the hypothesized model.

Figure 1. The hypothesized model



Our study contributes to the literature in the following ways. First, we contribute to the study of cash rewards for interpersonal deviant behavior by recognizing that rewards are not received only as a mere transaction. Rather, monetary rewards may have relational aspects that may play a role for interpersonal behaviors such as interpersonal deviance. Focusing on the functional meaning of rewards could help determine which perceptions of rewards are likely to increase or reduce the risk for such behaviors. Second, by introducing the moderating role of psychological needs satisfaction on the relationship between functional meaning of rewards and interpersonal deviance we advance previous studies on the direct impact of rewards on needs satisfaction. Our approach allows understanding whether employees' levels of needs satisfaction is a boundary condition that determines when functional meaning of rewards are likely to promote deviant behavior. This has implications for theory (since it unravels the conditions under which functional meaning of rewards may be more likely to relate to deviant behaviors) and for practice (since satisfying employees' basic needs organizations may be proven able to mitigate the detrimental effects of rewards on employee behaviors).

2. LITERATURE REVIEW

2.1. Functional meaning of rewards and deviant work behavior: The SDT perspective

Workplace deviance refers to voluntary individual behaviors that violate organizational norms and threaten the well-being of the organization and its employees (Bennett & Robinson, 2000). Workplace deviance encompasses different organizational (e.g., working slowly, taking long breaks, internet loafing) and interpersonal (e.g., harmful remarks, incivility) behaviors and it has been found to be extremely costly for organizations worldwide (Ones, 2002). Interpersonal deviance -the focus of this study- refers to deviant acts directed towards individuals within the organization, such as managers, coworkers, and subordinates (Bennett & Robinson, 2000). Interpersonal deviance has detrimental consequences for both target individuals and organizations since it is associated with lower psychological well-being and increased stress (e.g., Cortina, Magley, Williams, & Langhout, 2001), as well as reduced affective commitment, and heightened turnover intentions (Hershcovis & Barling, 2010). Research has also shown that negative interpersonal behaviors and conflicts associate positively with reduced information-sharing and task performance (Kammeyer-Mueller, Simon & Rich, 2012; Porath & Pearson, 2010).

While previous research explored the relation between cash rewards and performance (Cerasoli et al., 2014), the relationship between financial rewards and interpersonal deviance is relatively understudied. Nevertheless, there are indications that, when organizations focus on cash rewards, employees are prompted to adopt an "end-justifies-the-means" mentality (Thibault Landry et al., 2017b), and may manifest competitive behaviors or aggressive actions towards others (Garcia, Tor, & Schiff, 2013). Thus, it is important to understand whether and when the impact of financial incentives is relevant for interpersonal deviant behaviors.

Research evidence suggests that offering money does not always constitute the best way to enhance optimal work behaviors (Deci, 1972; Gagné & Forest, 2008; Ryan & Deci, 2011; Vansteenkiste, Neyrinck, Niemiec, Soenens, Witte, & Broeck, 2007). This is because the boosting effect of financial rewards seems to affect mainly the quantity and not always the quality of employees' behavior, while it seems to be merely temporary (e.g., Deci, Koestner, & Ryan, 1999a,1999b). It has been argued that the role of financial rewards for work behaviors stems from a motivational shift, whereby individuals may engage in an activity either for the external, financial gain, or for its own sake and enjoyment (Frey & Jegen, 2001; Krug & Braver, 2014). Thus, it is of relevance to use motivational theories to understand the meaning employees give to their cash rewards and how this determines their behavior. In this context, SDT (Ryan & Deci, 2000; Ryan & Deci, 2008) posits that financial incentives take on an informational meaning when they are perceived as supportive and encouraging of individuals' participation in their work, leading to autonomous motivation and optimal functioning at work (Moller & Deci, 2014). In contrast, rewards take on a controlling meaning when they are presented as oppressive and aiming to control individuals' behavior (Deci, Connell, & Ryan 1989, Deci et al., 1994).

Research in a variety of contexts (e.g., sales, sports, education) has shown that stressing financial incentives as a mean to achieve a goal can increase problematic work behaviors such as dishonesty, manipulative sales, cheating in order to get the reward offered (Aguinis, Joo, & Gottredson, 2013; Kouchaki, Smith-Crowe, Brie, & Sousa, 2013; Madhani, 2014; Thibault Landry et al., 2017b). When employees are offered rewards in a pure transactional way, they may be more prone to interpersonal deviant behavior. As Festinger (1954) suggested, people in a unidirectional push upwards (i.e., a controlling condition), are likely to react with competitive behavior to protect their threatened superiority or reduce others' success. Thus, a context of controlling rewards that promotes competition

and transactional culture may motivate interpersonal deviant behavior (Gläser & Van Quaquebeke, 2017). In contrast, based on social exchange theory (Blau, 1964), we argue that when employees perceive their rewards from the organization as informational (i.e., supportive and encouraging of their participation and effort), they are more likely to reciprocate for this recognition by avoiding behaviors that may harm the organization. Based on the above, we hypothesize:

Hypothesis 1: Informational meaning of rewards will relate negatively with interpersonal deviant behavior.

Hypothesis 2: Controlling meaning of rewards will relate positively with interpersonal deviant behavior.

2.2. The moderating role of basic psychological needs satisfaction

A central assumption of SDT (Deci & Ryan, 2000) is that employee attitudes and behaviors are dependent on whether the activities they engage in at work contribute to the satisfaction of the three basic psychological needs for autonomy, competence and relatedness. These basic psychological needs can be more or less fulfilled depending on the work contexts, and greater satisfaction of these needs leads to better outcomes (Ryan & Deci, 2008), including greater task performance, enjoyment, and vigor, and less organizational deviance (e.g., De Cooman, Stynen, Van den Broeck, Sels, & De Witte, 2013; Olafsen, et al., 2015; Vansteenkiste et al., 2007; Van de Broeck, Vansteenkiste, De Witte, Soenens, & Lens, 2010). To satisfy the need for autonomy, individuals must feel that the activity they are pursuing is congruent with their personal values and have a sense of volition when exercising it (Ryan & Deci, 2008). To satisfy the need for competence, individuals should feel that they have all skills required so as to influence their environment and achieve their goals (Deci & Ryan, 2000). To satisfy the need for relatedness, individuals must feel that they are and can be emotionally connected to other people in their (work) environment (Baumeister & Leary, 1995).

Two recent studies (Thibault Landry et al.,2017a; 2017b) have shown that rewards, when used in a way that acknowledge employees' skills and evoke appreciation (i.e., gain informational meaning), relate to a higher satisfaction of employees' psychological needs, that in turn, associates positively to motivation and commitment and negatively to turnover intentions. Despite these findings suggesting that basic need satisfaction mediates the relationship between functional meaning of rewards and employee behaviors, in the present study, we argue that the satisfaction of basic needs may also moderate this relationship.

In line with social exchange theory (Blau, 1964), when employees perceive their rewards as informational and at the same time feel that their needs for autonomy, relatedness and competence are satisfied at work, they are more likely to feel privileged and favored by the organization thus, reciprocating by avoiding interpersonal deviant behaviors. Thus, the satisfaction of the three basic needs will boost the negative relationship between informational meaning of rewards and interpersonal deviant behavior. Also, we expect that the satisfaction of the three basic needs will buffer the positive relationship between controlling meaning of rewards and deviant behavior. When employees perceive their rewards as controlling but their basic needs are satisfied at work, they will be less likely to exhibit deviant behaviors because their sense of superiority may not be highly threatened in this condition (Festinger, 1954). This is because employees who feel competent to achieve their desired goals and feel that they owe a sense of volition and a sense of belonging will not be substantially influenced by the coercive meaning controlling rewards elicit, which forces them to endorse behaviors (e.g., competing) that are purely accessory to getting the reward. In line with this theorizing and empirical evidence, we hypothesize:

Hypothesis 3a: Need satisfaction will moderate the negative relationship between informational meaning of rewards and interpersonal deviance in the workplace in a way that the negative relationship will be stronger when needs satisfaction is higher (vs. lower; see Figure 2).

Hypothesis 3b: Need satisfaction will moderate the positive relationship between controlling meaning of rewards and interpersonal deviance in the workplace, in a way that the positive relationship will be weaker when needs satisfaction is higher (vs. lower; see Figure 3).

Figure 2. The hypothesized two-way interaction effect between informational meaning of rewards and basic needs satisfaction in explaining interpersonal deviant behaviour

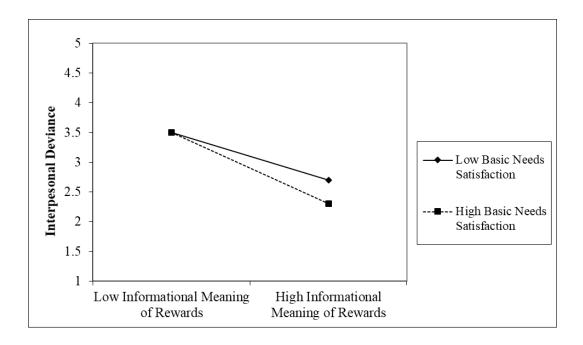
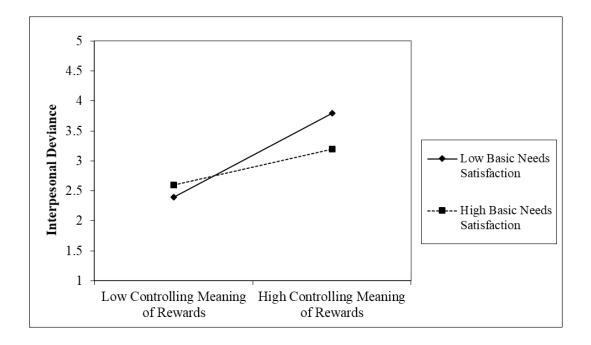


Figure 3. The hypothesized two-way interaction effect between controlling meaning of rewards and basic needs satisfaction in explaining interpersonal deviant behaviour



3. METHOD

3.1. Participants and procedure

This study was conducted in Greece from January to March 2018. Employees working in private and public organizations were approached with the snowball method. They were informed about the research aims and the study procedure and they were reassured that participation was voluntary and that the data they will provide with their answers will be kept confidential. Interested employees could

either complete an online, electronic version or a paper-and-pencil version of the questionnaire. In the case of the online data collection, employees who agreed to participate, received the link to the electronic questionnaire via email. Paper-and-pencil questionnaires were provided to employees by research assistants and were completed right after participants were informed about the study.

One-hundred and seventy questionnaires were completed online, and 95 questionnaires were completed via paper and pencil. The final sample consisted of 265 Greek employees, 49% of whom were working in the public sector and 43% were employed in the private sector. The sample consisted of 168 women and 97 men with a mean age of 37.20 (SD = 9.60) years. Most participants (83%) worked full-time. Participants' average job tenure was 10.08 (SD = 8.87) years. Participants' average individual annual income was 14.240,00 (SD = 8.790) euros.

3.2. Measures

All scales were administered in the Greek language. Original scales were translated from English to Greek using the method of back translation.

Functional meaning of rewards. Informational meaning of rewards was assessed using four items that were adapted by Thibault Landry and colleagues (2017b) from the Perceived Autonomy Support Scale for Exercise Settings (Hagger & Chatzisarantis, 2007). An example item is: "My boss displays confidence in my ability to work, when he gives me cash rewards." The scale was reliable (Cronbach's alpha = .94). Controlling meaning of rewards was assessed with three items from the Controlling Coach Behavior Scale (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011). In the sports setting, this subscale is used to measure the extent to which coaches employ external rewards to motivate their athletes. The three items were adapted to the work setting (e.g., "My boss only uses cash rewards so that I stay focused on tasks during work") by Thibault Landry and colleagues (2017b). The scale was reliable with Cronbach's alpha = .89. All items of both subscales were evaluated on a 7-point scale ranging from (1) = strongly disagree to (7) = strongly agree.

Psychological needs satisfaction was measured with the Work-Related Basic Need Satisfaction Scale developed by Van den Broeck et al. (2010). This scale includes 16 items that measure all three facets of psychological need satisfaction. Namely, autonomy need satisfaction was measured with six items (e.g., "I feel free to do my job the way I think it could best be done"; Cronbach's alpha = .81). Competence need satisfaction was assessed with four items (e.g., "I feel competent at my job"; Cronbach's alpha = .84). Finally, relatedness need satisfaction was assessed with six items such as: "I feel part of a group at work" (Cronbach's alpha = .83). Participants rated the scale items using a 5-point scale ranging from (1) = totally disagree to (5) = totally agree. Three items of the autonomy need satisfaction sub-scale and three items of the relatedness need satisfaction sub-scale that were negatively framed were reversed-coded so that high scores indicated higher need satisfaction.

Interpersonal deviance was assessed with the 7-item scale developed by Bennett and Robinson (2000). An example item is 'During the last 3 months how often did you act rudely toward someone at work?' Items were answered on a scale ranging from (1) = never to (7) = every day. The scale was reliable (Cronbach's alpha = .81).

3.3. Strategy of analysis

To test for the proposed main and moderating effects we performed hierarchical regression analyses. Main and interaction effects were tested simultaneously in separate analyses for each meaning of reward and each type of need satisfaction. Thus, hypothesized effects were tested in six sets of analyses. Predictor and moderating variables were standardized prior to calculating the cross-product interaction terms (Aiken & West, 1991). In the first step of the regression, we controlled for age, gender, and sector. In the second step, the predictor (each of the two functional meaning of rewards) and moderator (satisfaction of each of the three needs) variables were entered to the regression equation, followed by the interaction of the two in the third step. The incremental variance accounted for by the interaction term represents the effect size of the interaction. Significant interaction effects were probed with the simple effects approach and were plotted by using +/- 1 SD of the moderating variables (Preacher, Curran, & Bauer, 2006).

4. RESULTS

4.1. Descriptive results

Table 1 presents means, standard deviations and correlations between the study variables. In contrast to expectations, both informational meaning (r = .20, p < .01) and controlling meaning (r = .36, p < .01) of rewards were positively associated with interpersonal deviance. As concerns the satisfaction of basic needs, only relatedness need satisfaction correlated negatively and significantly with

interpersonal deviance in the workplace (r = -.14, p < .05). Age correlated negatively with informational meaning of rewards (r = -.12, p < .05), and with autonomy (r = .17, p < .01) and competence need satisfaction (r = .19, p < .01). Gender correlated negatively with interpersonal deviance (r = -.29, p < .01), indicating that women reported lower interpersonal deviance. Also, women reported lower levels of controlling meaning of rewards (r = -.16, p < .01). Job sector (public vs. private) correlated positively and significantly with both aspects of the functional meaning of rewards. Participants' annual income did not correlate significantly with any of the study variables. Therefore, we controlled for age, gender, and sector in all subsequent analyses. Although job tenure correlated significantly with autonomy and relatedness need satisfaction, it also correlated highly with age (r = .78, p < .01). Thus, to avoid multicollinearity issues, we controlled only for age in our analyses, and not for job tenure.

Table 1 shows that informational and controlling meaning of rewards correlated highly with each other (r = .74, p < .01). To empirically support that these two factors are related but distinct, we performed Confirmatory Factor Analyses (CFAs) and we compared a two-factor model (where each meaning of rewards was represented as a latent factor with the respective items as indicators and where the two latent factors were allowed to covary), to a one-factor model (where all items of both scales loaded on one latent factor). Results provided support for the empirical distinctiveness of the two constructs since the two-factor model fit significantly better to the data than the one-factor model [$\Delta\chi 2$ (1) = 184.29, p < .001].

4.2. Main analyses

According to Hypothesis 1 informational meaning of rewards was expected to relate negatively with interpersonal deviant behavior. As shown in Models 2 and 3 of Table 2, Hypothesis 1 was rejected since in all three tests, informational meaning of rewards related positively and significantly with deviant behavior (β = .20, p < .01). According to Hypothesis 2, controlling meaning of rewards was expected to relate positively with deviant behavior. Results provided support for Hypothesis 2, since in all three tests of this relationship, controlling meaning of rewards related positively and significantly with deviant behavior (.29 < β < .34, p < .01; see Models 2 and 3 of Table 2).

According to Hypothesis 3a, the satisfaction of the psychological needs for autonomy, relatedness and competence was expected to moderate the negative relationship between informational meaning of rewards and interpersonal deviance in the workplace in a way that the negative relationship would be stronger when needs satisfaction was higher (vs. lower). As shown in Table 2 (Model 3), only the interaction effect of informational meaning of rewards with relatedness need satisfaction was significant (β = -.13, p < .05) explaining 2% of additional variance in deviant behavior. This significant interaction effect is depicted on Figure 4. The simple slopes test showed that the relationship between informational meaning of rewards and deviant behavior was positive and significant only when relatedness need satisfaction was lower (-1SD: estimate = .22, t = 3.69, p < .01), while the relationship was not significant when relatedness need satisfaction was higher (+1SD: estimate = -.01, t = -.24, p = .82). These results are not in line with Hypothesis 3a, since they suggest that higher relatedness need satisfaction buffers the positive relationship between informational meaning of rewards and deviant behavior.

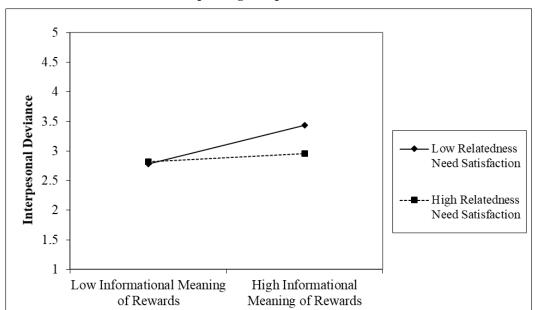
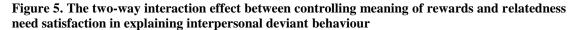
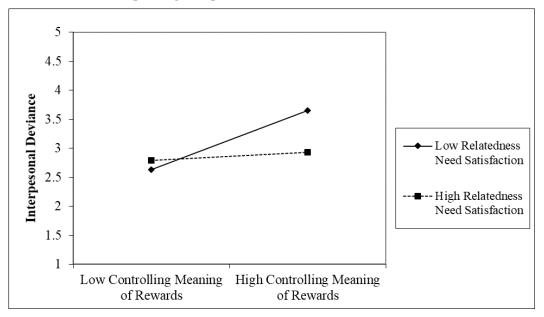


Figure 4. The two-way interaction effect between informational meaning of rewards and relatedness need satisfaction in explaining interpersonal deviant behaviour





According to Hypothesis 3b, the satisfaction of the basic psychological needs was expected to moderate the positive relationship between controlling meaning of rewards and interpersonal deviance in the workplace, in a way that this positive relationship would be weaker when needs satisfaction was higher (vs. lower). As shown in Table 2 (Model 3), again, only the interaction effect of controlling meaning of rewards with relatedness need satisfaction was significant ($\beta = -.22$, p < .001) explaining 4% of additional variance in deviant behavior. This significant interaction effect is depicted on Figure 5. The simple slopes test showed that the relationship between controlling meaning of rewards and deviant behavior was positive and significant only when relatedness need satisfaction was lower (-1SD: estimate = .39, t = 6.45, p < .001), while the relationship was not significant when relatedness need satisfaction was higher (+1SD: estimate = -.03, t = -.48, p = .65). These results provide support for Hypothesis 3b since they suggest that high relatedness need satisfaction mitigates the positive relationship between controlling meaning of rewards and deviant behavior. It is important to note that results were similar, even when control variables were excluded from the analyses.

Table 1: Means, Standard Deviations and Correlations between the study variables (N = 265)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Controlling meaning of rewards	2.21	1.48	-									
2. Informational meaning of rewards	2.68	1.79	.74**	-								
3. Relatedness need satisfaction	3.63	.82	06	04	-							
4. Autonomy need satisfaction	3.08	.74	.02	.03	.35**	-						
5. Competence need satisfaction	4.10	.61	09	.01	.18**	.23**	-					
6. Interpersonal deviance	1.87	.92	.36**	.20**	14*	01	04	-				
7. Age	37.90	9.60	03	12*	.11	.17**	.19**	00	-			
8. Tenure	10.08	8.80	.01	06	.04	.14*	.22**	.12	.78**	-		
9. Gender (1 = Male; 2 = Female)	-	-	16**	07	.05	.03	19	29**	05	09	-	
10. Sector (1 = Public; 2 = Private)	-	-	.15*	.17**	03	00	.00	.01	29**	27**	06	-
11. Annual Individual Income (Euro)	14240,00	8.790	.03	.00	.05	.12	.06	.01	.32**	.19**	12	17**

Note. * p < .05, ** p < .01.

Table 2: Main and Interaction Effects Explaining Interpersonal Deviance (N = 265)

Variable	Model 1				Model 2		Model 3			
	В	SE	β	В	SE	β	В	SE	β	
Gender	.58	.17	30**	56	.11	29**	56	.11	29**	
Age	00	.00	03	00	00	01	.00	.00	00	
Sector	03	09	02	07	.09	05	06	.09	04	
Autonomy need satisf.				.00	.07	.00	.01	.07	.00	
Inform. Meaning of Rewards				.10	.07	.20**	.10	.03	.20**	
Inform. Meaning x Autonomy							.08	.05	.08	
R^2		.09					.14			
F change		8.26*	**	5.69**			1.96			
Gender				56	.11	29**	55	.17	29**	
Age				00	00	00	00	.00	.00	
Sector				06	.09	05	06	.09	05	
Inform. Meaning of Rewards				.10	.03	.20**	.10	.03	.20**	
Competence need satisf.				06	.09	04	07	.09	04	
Inform. Meaning x Competence							01	.05	02	
R^2				.13			.13			
F change					5.95**		.078			
Gender				55	.11	28**	51	.11	26**	
Age				.00	.00	.00	00	.00	01	
Sector				06	.08	05	07	.08	05	
Inform. Meaning of Rewards				.10	.03	.20**	.10	.03	.20**	
Relatedness need satisf.				13	.07	12	13	.06	11	
Inform. Meaning x Relatedness							11	.05	13*	

R ² F change		.14 7.77 **	.16 5.11*						
Gender	47	.11	25**	48	.11	25**			
Age	00	.00	03	00	.00	03			
Sector	10	.08	07	10	.08	07			
Control. Meaning of Rewards	.21	.04	.33**	.21	.04	.34**			
Autonomy need satisf.	.00	.07	.00	.01	.07	.00			
Control. Meaning x Autonomy				.08	.05	.09			
R^2			.19			.20			
F change		16.53	2.36						
Gender	47	.11	24**	47	.11	25**			
Age	00	.00	02	00	.00	03			
Sector	09	.08	07	97	.08	07			
Control. Meaning of Rewards	.20	.04	.33**	.20	.03	.33**			
Competence need satisf.	00	.08	00	00	.08	00			
Control. Meaning x Competence				.01	.05	.01			
R^2		.20			.20				
F change		16.52***			2.36				
Gender	46	.11	24***	41	.10	21***			
Age	.00	.00	02	00	.00	04			
Sector	09	.08	07	10	.08	07			
Control. Meaning	.20	.04	.33***	.18	.03	.29***			
Relatedness need satisf.				15	.06	14*			
Control.Meaning x Relatedness				21	.06	22***			
R^2		.21			.25				
F change		18.38***				14.76***			

Note. * p < .05, ** p < .01, *** p < .001

5. DISCUSSION

The main aim of this study was to investigate how the functional meaning (i.e., informational or controlling) of rewards relates to interpersonal deviant behavior in the workplace, and whether the satisfaction of the basic psychological needs for autonomy, competence and relatedness moderate these relationships. Based on the main assumptions of SDT (Deci & Ryan, 1985; Ryan & Deci, 2000), we hypothesized that informational meaning of rewards will relate negatively, while controlling meaning of rewards will relate positively to interpersonal deviant behavior. Also, based on social exchange theory (Blau, 1964), we expected that the satisfaction of the basic psychological needs will moderate these relationships. As expected, results showed that controlling meaning of rewards related positively with interpersonal deviance at work. However, contrary to expectations, informational meaning of rewards was also found to associate positively with interpersonal deviance. Furthermore, relatedness (but not autonomy and competence) need satisfaction buffered the positive links between both informational and controlling meaning of rewards with interpersonal deviance in the workplace. In what follows, we discuss the theoretical and practical implications of these findings.

The findings of this study complement previous empirical evidence on the importance of the functional meaning of rewards for understanding work-related behaviors (e.g., Deci et al, 1999, Deci, Olafsen, & Ryan, 2017, Ryan & Deci, 2017, Thibault Landry et al., 2017b). As recent empirical studies have shown (e.g., Kushlev, Dunn, & Lucas, 2015, Thibault Landry et al., 2016), money is more likely to be a symbol that takes on different functional meanings that result in differential behaviors at work. For instance, Thibault Landry and colleagues (2017b) showed that only controlling (but not informational) meaning of rewards related positively with organizational deviant behavior. However, and against our expectations, we found that both informational and controlling meaning of rewards to associate positively with interpersonal deviance.

These unexpected findings may be attributed to the context, where the study took place -that is Greece in the aftermath of the global financial crisis. Greece has been amongst the countries that were hit harder by the economic recession. According to Eurofound (2019), wages have been cut down in both the public and the private sectors, and Greece has been the only EU country where a 22% nominal reduction of the minimum wage (32% for young people under 25) was imposed in 2012. Furthermore, youth unemployment was 43.6% in 2017, while the EU average for this group was 16.8%. In such an insecure environment, it may be quite ambiguous for employees to distinguish between rewards as a signal of appreciation and rewards as a signal of instrumentality and coercion, while any perceived sign of reward may evoke competitive tendencies that can lead to interpersonal and organizational deviance (Garcia et al., 2013). Also, in contexts where bonuses and pay-for-performance schemes are not widespread (such as in Greece), any reference to additional pay may induce social comparison processes and counterproductive interpersonal behavior. The fact that our findings are different to those of Thibault Landry and colleagues (2017b), who conducted their study in the Canadian context that was affected less by the global financial crisis, implies that future studies should investigate whether the financial environment moderates the relationship between functional meaning of rewards and interpersonal deviance in the workplace.

Next to the main effects of functional meaning of rewards, the results of this study suggest that the way personal and professional relationships are structured and perceived in the workplace moderate the relationship between functional meaning of rewards and deviant behavior. In this deed, it seems that basic need satisfaction, and particularly relatedness need satisfaction, apart from being an explanatory mechanism between rewards and work-related outcomes (Olafsen et al., 2015), may also function as a boundary condition that mitigates the positive relationship between controlling and informational meaning of rewards and interpersonal deviance. These findings can be explained by SDT (Ferris, Brown, & Heller, 2009; Deci & Ryan, 2000), which suggests that when basic needs are satisfied, individuals have more emotional and cognitive resources to self-regulate their behavior in the workplace. Also, when employees fulfil their natural tendency to seek for coherent and meaningful relationships (Baumeister & Leary, 1995), their need for social comparison might not be of high importance to them when presented with rewards, preventing interpersonal deviance (Garcia et al., 2013).

Our findings contribute to a more concrete understanding of the role of functional meaning of rewards for workplace behaviors in the context of SDT (Ryan & Deci, 2017) in at least two ways. First, our results extend previous findings that provided support for the mediating role of autonomy and competence need satisfaction in the relationship between functional meaning of rewards and organizational deviance (Thibault Landry et al., 2017b), by highlighting that the satisfaction of the basic psychological needs in the workplace and particularly the satisfaction of the need of relatedness may also buffer the detrimental impact of functional meaning of rewards on interpersonal deviance. In

this way, our findings suggest that basic need satisfaction is not only the underlying psychological mechanism that explains the link between functional meaning of rewards and employee behaviors but may also be the boundary condition that determines when the outcomes of functional meaning of rewards may be particularly detrimental. Second, taking into consideration that previous studies focused solely on the role of competence and autonomy need satisfaction in rewards-related research (e.g., Bureau et al., 2018, Gerhart & Fang, 2015; Moller & Deci, 2014; Thibault Landry et al., 2017b), our study highlights the important role of relatedness need satisfaction. It may be the case that autonomy and competence need satisfaction may better explain why rewards lead to individual outcomes such as task performance, since they are directly targeted by current compensation practices (Del Vecchio & Wagner, 2011; Houlfort, Koestner, Joussement, & Lekes, 2002; Thibault et al, 2017b). Nevertheless, when it comes to work outcomes related to employees' relationships), relatedness need satisfaction may play a more crucial role.

5.1. Practical implications

Our research has several managerial implications in a period, where collaboration and creativity are significant prerequisites for organizational growth (George, 2007), and interpersonal deviance may severely undermine these work characteristics. In contrast to expectations and previous findings (Thibault Landry et al., 2017b), our findings suggest that both informational and controlling meaning of rewards may elicit deviant behaviors in employees but only when employees feel that their need to relate with others at work is not satisfied. This finding has important implications for practice because it suggests that it is not how employees perceive their rewards per se that determines their behavior. Rather, the work environment and whether it satisfies their basic needs is the boundary condition that determines whether and in which way functional meaning of rewards form employee behavior. Based on our findings, organizations should make sure to promote work environments that facilitate the satisfaction of the basic psychological needs and particularly, the need for relatedness, since the satisfaction of this need buffers the positive relationship of functional meaning of rewards on employee deviant behaviors. To this end, specific examples of workplace interventions have been developed in the context of SDT that have been proven effective in promoting basic need satisfaction in the workplace (e.g. Baard, Deci, & Ryan, 2004, Hardré & Reeves, 2009; Williams et al., 2014

5.2. Limitations and future research

There are several limitations that need to be considered when interpreting the study results. First, the study was cross-sectional, and thus one should be wary of making any causal inferences. Future studies that employ longitudinal designs may investigate whether the relationship between functional meaning of rewards and deviant behavior is long-lasting, and whether relatedness need satisfaction may also mitigate this relationship over the course of time. Moreover, to overcome the inherent shortcomings of self-reporting, it would be important to conduct research that uses other-rating of employee behaviors. Moreover, since rewards have effects at both the individual- and the team-level (e.g., through social comparison), future research may want to employ multi-level approaches to shed light on the connection between competitive climate, team cohesiveness and individual perceptions of rewards. Future research should also take into account personal characteristics such as extrinsic or intrinsic values (Kasser, 2016), financial contingency of self-worth (Park, Ward, & Naragon-Gainey, 2017) or trait competitiveness (Gläser & Van Quaquebeke, 2017) that may associate with the way employees perceive and make projections related to the rewards presented to them.

6. CONCLUSION

Based on the main assumptions of SDT about the functional meaning of rewards (Ryan & Deci, 2000), in this study we showed that both informational and controlling meaning of rewards relate positively to deviant behavior but only when the need for relatedness is not satisfied in the work environment. In contrast, the positive relationship between functional meaning of rewards and deviant behavior was non-existent when employees' need of relatedness is satisfied. These results extend theorizing on the role of rewards in the context of SDT by putting forward the moderating role of basic needs satisfaction on the rewards-behaviors relationship, and by unraveling the boundary conditions under which functional meaning of rewards may be more likely to relate to deviant behaviors. Our findings imply that organizations should focus on how to support a climate of relatedness among employees since this may mitigate the detrimental effects of rewards on employee behaviors.

REFERENCES

- Aguinis, H., Joo, H., & Gottredson, R. K. (2013). What monetary rewards can and cannot do: How to show employees the money. Business Horizons, 56, 241-249.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park: Sage.
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. Journal of Applied Social Psychology, 34, 2045-2068.
- Balkins, D. B., Roussel, P., & Werner, S. (2015). Performance contingent pay and autonomy: Implications for facilitating extra-role creativity. Human Resource Management Review, 25, 384-395.
- Bartholomew, K. J., Ntoumanis, N., Ryan, R. M., Bosch, J. A., & Thøgersen-Ntoumani, C. (2011). Self-determination theory and diminished functioning: The role of interpersonal control and psychological need thwarting. Personality and Social Psychology Bulletin, 37, 1459-1473.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117, 497-529.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. Journal of Applied Psychology, 85, 349–360.
- Berber, N., Morley, J.M., Slavić, A., & Poór, J. (2017). Management compensation systems in Central and Eastern Europe: a comparative analysis. The International Journal of Human Resource Management, 28, 1661-1689.
- Blau, P. M. (1964). Exchange and power in social life. NY: John Wiley & Sons.
- Bureau, J., Mageau, G., Alexandre M., Gagné, M., Forest, J., Papachristopoulos, K., Lucas, A., Thibault Landry, A., & Parenteau, C. (2018). Promoting autonomy to reduce employee deviance: The mediating role of identified motivation. International Journal of Business and Management, 13, 61-71.
- Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis. Psychological Bulletin, 140, 980-1008.
- Condly, S. J., Clark, R. E., & Stolovitch, H. D. (2003). The effects of incentives on workplace performance: A meta-analytic review of research studies 1. Performance Improvement Quarterly, 16, 46-63.
- Cortina, L.M., Magley, V.J., Williams, J.H., & Langhout, R.D. (2001). Incivility in the workplace: Incidence and impact. Journal of Occupational Health Psychology, 6, 64-80.
- De Cooman, R., Stynen, D., Van den Broeck, A., Sels, L., & De Witte, H. (2013). How job characteristics relate to need satisfaction and autonomous motivation: Implications for work effort. Journal of Applied Social Psychology, 43, 1342-1352.
- Deci, E. L. (1972). The effects of contingent and non-contingent rewards and controls on intrinsic motivation. Organizational Behavior and Human Performance, 8, 217-229.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum Press.
- Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11, 227-268
- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. Journal of Applied Psychology, 74, 580-590.
- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. Journal of Personality, 62, 119-142.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999a). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. Psychological Bulletin, 125, 627-668.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999b). The undermining effect is a reality after all—Extrinsic rewards, task interest, and self-determination: Reply to Eisenberger, Pierce, and Cameron (1999) and Lepper, Henderlong, and Gingras (1999). Psychological Bulletin, 125, 692-700.

- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. Annual Review of Organizational Psychology and Organizational Behavior, 4, 226-242.
- DelVecchio, S., & Wagner, J. (2011). Motivation and monetary incentives: A closer look. Journal of Management and Marketing Research, 7, 1-13.
- Eurofound (2019). Living and working in Europe 2015–2018. Publications Office of the European Union, Luxembourg.
- Ferguson, M., & Barry, B. (2011). I know what you did: The effects of interpersonal deviance on bystanders. Journal of Occupational Health Psychology, 16, 80-94.
- Ferris, D. L., Brown, D. J., & Heller, D. (2009). Organizational supports and workplace deviance: The mediating role of organization-based self-esteem. Organizational Behavior and Human Decision Processes, 108, 279–286.
- Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 117–140.
- Frey, B. S., & Jegen, R. (2001). Motivational interactions: Effects on behaviour. Annales d'Économie et de Statistique, 63, 131-153.
- Gagné, M., & Forest, J. (2008). The study of compensation systems through the lens of self-determination theory: Reconciling 35 years of debate. Canadian Psychology/Psychologie Canadienne, 49, 225-232.
- Garcia, S. M., Tor, A., & Schiff, T. M. (2013). The psychology of competition: A social comparison perspective. Perspectives on Psychological Science, 8, 634–650.
- George, J. M. (2007). Creativity in organizations. The Academy of Management Annals, 1, 439–477.
- Gerhart, B., & Fang, M. (2014). Pay for (individual) performance: Issues, claims, evidence and the role of sorting effects. Human Resource Management Review, 24, 41-52.
- Gläser, D., van Gils, S., & Van Quaquebeke, N. (2017). Pay-for performance and interpersonal deviance: Competitiveness as the match that lights the fire. Journal of Personnel Psychology, 16, 78–91.
- Gupta, N., & Shaw, J. D. (2014). Employee compensation: The neglected area of HRM research. Human Resource Management Review, 24, 1-4.
- Hagger, M. S., & Chatzisarantis, N. L. (2007). Intrinsic motivation and self-determination in exercise and sport. Champaign, IL: Human Kinetics.
- Hardré, P. L., & Reeve, J. (2009). Training corporate managers to adopt a more autonomy-supportive motivating style toward employees: An intervention study. International Journal of Training and Development, 13, 165-184.
- Hershcovis, M. S., & Barling, J. (2010). Towards a multifoci approach to workplace aggression: A meta-analytic review of outcomes from different perpetrators. Journal of Organizational Behavior, 31, 24–44.
- Houlfort, N., Koestner, R., Joussemet, M., Nantel-Vivier, A., & Lekes, N. (2002). The impact of performance-contingent rewards on perceived autonomy and competence. Motivation and Emotion, 26, 279-295.
- Johnson, D. A., Dickinson, A. M., & Huitema, B. E. (2008). The effects of objective feedback when individuals receive fixed and individual incentive pay. Performance Improvement Quarterly, 20, 53–74.
- Kammeyer-Mueller, J. D., Simon, L. S., & Rich, B. L. (2012). The psychic cost of doing wrong: Ethical conflict, divestiture socialization, and emotional exhaustion. Journal of Management, 38, 784–808.
- Kasser, T. (2016). Materialistic values and goals. Annual Review of Psychology, 67, 489-514.
- Kouchaki, M., Smith-Crowe, K., Brief, A. P., & Sousa, C. (2013). Seeing green: Mere exposure to money triggers a business decision frame and unethical outcomes. Organizational Behavior and Human Decision Processes, 121, 53-61.
- Krug, M. K., & Braver, T. S. (2014). Motivation and cognitive control: Going beyond monetary incentives. In E. Bijleveld, & H. Aarts (Eds.), The psychological science of money (pp. 137-162). New York, NY: Springer.

- Kushlev, K., Dunn, E. W., & Lucas, R. E. (2015). Higher income is associated with less daily sadness but not more daily happiness. Social Psychological and Personality Science, 6, 483-489.
- Kuvaas, B. (2006). Work performance, affective commitment, and work motivation: The roles of pay administration and pay level. Journal of Organizational Behavior, 27, 365-385.
- Madhani, P. M. (2014). Compensation, ethical sales behavior and customer lifetime value. Compensation & Benefits Review, 46, 204-218.
- Moller, A. C., & Deci, E. L. (2014). The psychology of getting paid: An integrated perspective. In E. Bijleveld, & H. Aarts (Eds.), The psychological science of money (pp. 137-162). New York: Springer.
- Olafsen, A. H., Halvari, H., Forest, J., & Deci, E. L. (2015). Show them the money? The role of pay, managerial need support, and justice in a self-determination theory model of intrinsic work motivation. Scandinavian Journal of Psychology, 56, 447-457.
- Ones, D. S. (2002). Introduction to the special issue on counterproductive behaviors at work. International Journal of Selection and Assessment, 10, 1–4.
- Park, L. E., Ward, D. E., & Naragon-Gainey, K. (2017). It's all about the money (for some): Consequences of financially contingent self-worth. Personality and Social Psychology Bulletin, 43, 601–622.
- Porath, C. L., & Pearson, C. M. (2010). The cost of bad behavior. Organizational Dynamics, 39, 64-71.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. Journal of Educational and Behavioral Statistics, 31, 437-448.
- Ryan, R. M., & Deci, E. L. (2008). Self-determination theory and the role of basic psychological needs in personality and the organization of behavior. In O. P. John, R. Robins, & L. A. Lawrence (Eds.), Handbook of personality: Theory and research (3rd ed.; pp. 654-678). New York: Guilford Press.
- Ryan, R. M., & Deci, E. L. (2011). A self-determination theory perspective on social, institutional, cultural, and economic supports for autonomy and their importance for well-being. In V. I. Chirkov, R. Ryan, & K. M. Sheldon (Eds.), Human autonomy in cross-cultural context (pp. 45-64). Netherlands: Springer.
- Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. New York, NY, US: Guilford Publications.
- Thau, S., Aquino, K., & Poortvliet, P. M. (2007). Self-defeating behaviors inorganizations: The relationship between thwarted belonging and interpersonal work behaviors. Journal of Applied Psychology, 92, 840–847.
- Thibault Landry, A. T., Kindlein, J., Trépanier, S. G., Forest, J., Zigarmi, D., Houson, D., & Brodbeck, F. C. (2016). Why individuals want money is what matters: Using self-determination theory to explain the differential relationship between motives for making money and employee psychological health. Motivation and Emotion, 40, 226-242.
- Thibault, Landry., A., Gagné, M., Forest, J., Guerrero, S., Seguin, M., & Papachristopoulos, K. (2017a). The relation between financial incentives, motivation, and performance: An integrative SDT based investigation. Journal of Personnel Psychology, 16, 61-76.
- Thibault Landry, A., Forest, J., Zigarmi, D., Houson, D., & Boucher, É. (2017b). The Carrot or the stick? Investigating the functional meaning of cash rewards and their motivational power according to self-determination theory. Compensation & Benefits, 49, 9–25.
- Van den Broeck, A., Vansteenkiste, M., Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the work-related basic need satisfaction scale. Journal of Occupational and Organizational Psychology, 83, 981-1002.
- Vansteenkiste, M., Neyrinck, B., Niemiec, C. P., Soenens, B., Witte, H., & Broeck, A. (2007). On the relations among work value orientations, psychological need satisfaction and job outcomes: A self-determination theory approach. Journal of Occupational and Organizational Psychology, 80, 251-277.
- Williams, G. C., Halvari, H., Niemiec, C. P., Sorebo, O., Olafsen, A. H., & Westbye, C. (2014). Managerial support for basic psychological needs, somatic symptom burden and work-related correlates: A self-determination theory perspective. Work & Stress, 28, 404-419.