

How reward satisfaction affects employees' turnover intentions and performance: an individual differences approach

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Human Resource Management Journal, Vol 25, no 2, 2015, pages 200–216

We challenge the assumption that satisfaction with rewards has the same effect on the behaviour and attitudes of every employee, and hypothesise that there are individual differences in the effects of (satisfaction with) financial, material and psychological rewards on turnover intentions and task performance. Survey data from 179 employees are combined with supervisor-rated task performance data and analysed with cluster-wise regression analysis. As for task performance, no employee types or individual differences were found. However, we identified three different employee types revealing a unique relationship pattern between satisfaction with financial, material and psychological rewards and turnover intentions. These employee types also differed in socio-demographic characteristics and work values. Our findings illustrate that to be able to fully understand the underlying relationship between rewards and employee outcomes, scholars need to adopt an individual difference perspective and methodology. Implications for practice, limitations and opportunities for future studies are discussed.

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Keywords: rewards; pay satisfaction; turnover intention; performance; individual differences

INTRODUCTION

Rewarding employees is a key component of organisations' human resource management (Dulebohn and Werling, 2007). Drawing on seminal motivation theories such as Vroom's Expectancy Theory (1964), Adams's Equity Theory (1965), and Lawler's Discrepancy Theory (1971), it has often been demonstrated that rewards – and in particular satisfaction with these rewards – stimulate desirable employee behaviours and attitudes (e.g. performance, commitment) and discourage unfavourable ones (e.g. turnover, absenteeism; Williams *et al.*, 2006). Nevertheless, research on reward outcomes has two major shortcomings. First, the focus has traditionally been on financial rewards, whereas recently both scholars and practitioners have highlighted the added value of focusing on non-financial rewards (e.g. Chiang and Birtch, 2011; Hofmans *et al.*, 2013). Second, scholars have traditionally attempted to unravel the relationship between rewards, reward satisfaction and employee outcomes for the 'average' employee, thereby disregarding potential individual or between-employee differences in this relationship. As a result, important questions such as 'Do financial rewards have the same effect on the turnover intentions of all employees?' remained unanswered.

This study addresses both shortcomings by examining individual differences in the relationship between satisfaction with different reward types and two important employee outcomes: turnover intentions and supervisor-rated task performance. In doing so, we contribute to research on rewards by providing a fuller understanding of the relationship between reward satisfaction and employee behaviours and attitudes. From a practical point of

view, our study reveals that it is important for organisations to gain a better understanding of individual differences in the way in which different rewards affect employees' turnover intentions and performance; especially in light of the increasing economic pressure for efficiency and the war for talented employees (McDonnell, 2011).

THEORETICAL FRAMEWORK

Reward types and reward satisfaction

Reward management is the process of designing and implementing strategies to reward employees fairly with the goal to attract, motivate and retain those employees that are believed to help facilitate the realisation of organisational goals (Dulebohn and Werling, 2007). In the past, both HR practitioners and reward scholars focused almost exclusively on financial rewards. Yet, many organisations are experiencing difficulties in attracting and retaining talented employees due to a combination of demographic, economic and societal changes (e.g. ageing workforce, budget restrictions, war for talent; McDonnell, 2011). This caused managers to rethink their reward policies and stimulated the trend towards 'total reward management': considering a reward as any valued outcome an employee receives from the employer in exchange for his/her performance. Hence, total reward management acknowledges that it is important to provide the appropriate financial rewards, but stresses the necessity of complementing these with other reward types (Chiang and Birtch, 2011).

To date, there are several categorisations of rewards available (e.g. De Gieter *et al.*, 2008; Chiang and Birtch, 2011), applying similar categorisation principles. In the present article, we differentiate between three reward types. First, financial rewards (e.g. base pay, bonuses) derive their motivating potential from their instrumental value: money can be exchanged for desired goods and services. Second, material rewards or benefits (e.g. training opportunity, health insurance) are considered as tangible rewards without necessarily benefiting the employees in a monetary way, although having a monetary value. Third, psychological rewards (e.g. recognition from supervisor, compliment from a colleague) do not imply a monetary cost for the organisation; instead, they are positively evaluated outcomes of the exchange relationship between an employee and his/her supervisor, colleagues or clients (De Gieter *et al.*, 2008).

Although the key premise of reward management is that rewards drive employee behaviours and attitudes, this relationship is not a direct one. Instead, it is the value that employees attach to those rewards (e.g. Vroom, 1964), or even more, the satisfaction with these rewards (Lawler, 1971) that influences their behaviours and attitudes. Within reward research, 'pay satisfaction' is defined as the degree to which an employee is satisfied with his/her pay (Williams *et al.*, 2006) – similar definitions apply to satisfaction with material and psychological rewards – and this is typically measured by using a bipolar scale ranging from 'totally dissatisfied' to 'totally satisfied'. In the present article, we set out to examine the effect of satisfaction with financial, material and psychological rewards on employees' turnover intentions and performance. In doing so, we contribute to the recent shift from satisfaction with financial rewards (Williams *et al.*, 2006) towards multidimensional 'reward satisfaction' (Williams *et al.*, 2008).

Relating reward satisfaction to turnover intentions and performance

Many studies have shown that the more employees feel dissatisfied with their financial rewards, the higher the risk they leave the organisation (e.g. DeConinck and Stilwell, 2004; Currall *et al.*, 2005; Williams *et al.*, 2006). This negative relationship has been found for a variety

of employees. Despite the dominant focus on financial rewards, there is limited evidence that satisfaction with the other reward types is also related to turnover intentions (DeConinck and Stilwell, 2004; Williams *et al.*, 2008; De Gieter *et al.*, 2012). For these alternative reward types, the same logic holds: the more dissatisfied employees are with their material and psychological rewards, the more likely they will leave the organisation.

The relationship between reward satisfaction and performance is more ambiguous as performance is a multidimensional concept, including both task performance, and extra role performance (Williams and Anderson, 1991). Furthermore, the different performance types can be operationalised in different ways: self-rated, other-rated or objective performance (e.g. sales figures). With regard to this distinction, the meta-analysis of Williams *et al.* (2006) reported a statistically significant, yet weak positive relationship between satisfaction with financial rewards (*i.e.* pay level satisfaction) and self-rated or supervisor-rated task performance ($\rho = 0.03$ and $\rho = 0.04$, respectively), whereas they found a moderate positive relationship with objective task performance ($\rho = 0.25$). Research on the relationships between satisfaction with the other two reward types and performance is almost non-existent. We know of only one study (De Gieter *et al.*, 2008) that showed that satisfaction with psychological rewards relates positively to self-rated task performance. Nevertheless, the specificity of the non-profit sample does not allow the generalisation of these findings to the general population. In the present study, we exclusively focus on the role of reward satisfaction on supervisors' ratings of employees' task performance, which we from now on refer to as task performance.

Individual differences in the effect of reward satisfaction

As mentioned above, previous studies found a negative relationship between satisfaction with rewards and turnover intentions (e.g. Williams *et al.*, 2006, 2008), and a positive one between reward satisfaction and task performance (e.g. Williams *et al.*, 2006; De Gieter *et al.*, 2008). However, there is a lack of agreement about the strength of these relationships, which seems to vary across studies and samples. Moreover, little is known about possible between-employee differences in these relationships. As a result, it remains an open question whether the effect of satisfaction with financial, material and psychological rewards on turnover intentions and task performance is invariant across employees or whether there exist individual differences in these relationships.

Although individual differences in these relationships have largely been neglected, there is tentative support for their existence. First, according to needs theories, individuals differ in their levels of certain needs (Maslow, 1943; Luthans and Kreitner, 1975), which suggests that the need for a particular reward type or the corresponding value attached to this reward type may vary (Mitchell and Mickel, 1999). Consequently, satisfaction with a particular reward type may have a different effect on the behaviours and attitudes of different employees. Second, Vandenberghe *et al.* (2008) have shown that employees' personality affects the attractiveness of a variety of reward types. For example, employees scoring high on agreeableness are more attracted by the rewards 'quality of work and relationships' and 'indirect pay'. If these reward preferences are linked to stable person characteristics, satisfaction with these reward types might have different effects on the turnover intentions and task performance of different employees. Third, some studies have found differences between groups of employees in their preferences for certain rewards, depending on employment level (Kovach, 1995; Dubinsky *et al.*, 2000) and personal characteristics such as age (Von Bonsdorff, 2011). In sum, the results of these studies clearly illustrate that the more important a reward type is for an employee, the more we can expect that satisfaction with this reward type will influence the employee's behaviours and attitudes.

Building on these findings, we challenge the basic assumption that the relationship between satisfaction with different reward types and employee outcomes is the same for every employee. More specifically, we hypothesise that:

Hypothesis 1: The effect of satisfaction with financial, material and psychological rewards on turnover intentions will differ significantly between employees.

Hypothesis 2: The effect of satisfaction with financial, material and psychological rewards on task performance will differ significantly between employees.

To test these hypotheses, we chose not to start from a priori defined groups of employees (e.g. based on employment level; Kovach, 1995; Dubinsky *et al.*, 2000). Instead, we examined whether there is evidence in our data for the existence of different subgroups that show different relationship patterns between satisfaction with the three reward types and turnover intentions and task performance, respectively. The reason for this is that behaviour is determined by the unique combination of all the individual's characteristics, which implies that focusing on one isolated characteristic alone does not allow capturing the full range of individual differences. After examining the presence of different employee subgroups, we will identify these subgroups using a set of socio-demographic characteristics and personal work values.

We believe that the existence of individual differences in the relationship between reward satisfaction and employee outcomes can (partly) be explained by individual differences in work values. Work values are considered as goals that employees desire and expect to realise through working (De Cooman *et al.*, 2008). They play an important role in an individual's vocational choice and influence work-related attitudes (Roe and Ester, 1999; Hofmans *et al.*, 2013). Whereas work values are relatively stable across time and situations within an individual, they by definition differ between individuals (De Cooman *et al.*, 2008). Because work values affect the importance that employees attach to different reward types (Roe and Ester, 1999), we believe that individual differences in work values will help us to explain individual differences in the effect of satisfaction with the different reward types. In this study, we focus on three particular work values, being financial security, recognition and interpersonal contact. First, 'financial security' represents the importance of having the resources to support a certain standard of living now and in the foreseeable future. Second, employees who value 'recognition' want to have the feeling that their work is appreciated by others. Finally, 'interpersonal contact' illustrates the importance employees attach to being able to develop and maintain valued relationships with others through working. Employees clearly differ in their longing to achieve financial security through working (De Cooman *et al.*, 2008). We expect that satisfaction with financial rewards has a larger impact on the behaviour and attitudes of those employees who desire financial security. For example, an employee who truly wants financial security is more likely to leave his/her employer when feeling dissatisfied with his/her current financial rewards. As such, we hypothesise that:

Hypothesis 3: The effect of satisfaction with financial rewards on (a) turnover intentions and (b) task performance is significantly stronger for employees who score high on financial security.

Furthermore, there are also individual differences in the importance employees attach to recognition and interpersonal contacts (De Cooman *et al.*, 2008). Both work values can be (at least partly) met through receiving adequate psychological rewards (De Gieter *et al.*, 2008). We expect that work situations in which employees do not receive psychological rewards at all, or

feel very dissatisfied with their psychological rewards, will be detrimental for the functioning of employees who attach a lot of meaning to recognition and interpersonal contacts. Therefore, we hypothesise that:

Hypothesis 4: The effect of satisfaction with psychological rewards on (a) turnover intention and (b) task performance is significantly stronger for employees who score high on recognition.

Hypothesis 5: The effect of satisfaction with psychological rewards on (a) turnover intention and (b) task performance is significantly stronger for employees who score high on interpersonal contact.

METHODS

Sample

To control for a number of confounding variables (e.g. remuneration system, organisational reward policies), we sampled employees from a limited number of departments in one organisation: the back office of a Belgian financial institution. All participants performed similar administrative jobs in which they were responsible for the entire file-handling process. The organisation applied the same reward policies to all participants. A total of 179 employees (68% women) participated in our study (response rate of 71.6%). Our respondents were 39.9 years old on average [standard deviation (SD) = 12.6], ranging between 21 and 65 years. From these respondents, 64% had completed higher education (i.e. master's or bachelor's degree). Their average work experience was 13.1 years (SD = 13.8). According to their annual task performance evaluation score, 48.6% of the respondents performed 'good', 40.2% performed 'very good' and 11.2% performed 'poor'.

Procedure

Our survey containing all research variables (except task performance) was sent to 250 employees of the financial institution's back office. Respondents received an e-mail from their corresponding HR officer informing them about the purpose of the study and asking them to participate by completing the online survey. Participation was discretionary, and responses were treated with confidentiality.

Besides the survey data (collected in February–March 2011), we also obtained supervisor-rated annual task performance data from the previous year (December 2010), which were linked with the questionnaire data.

Measures

Satisfaction with financial rewards (Cronbach's $\alpha = 0.97$) was assessed by a four-item subscale (i.e. pay level) of the Pay Satisfaction Questionnaire (Heneman and Schwab, 1985). Respondents scored the items (e.g. 'I am satisfied with my current salary') on a five-point scale ranging from very dissatisfied (1) to very satisfied (5).

Satisfaction with material rewards (Cronbach's $\alpha = 0.93$) was measured using another four-item subscale (i.e. benefits) of the Pay Satisfaction Questionnaire (Heneman and Schwab, 1985), which had to be answered using a five-point scale ranging from very dissatisfied (1) to very satisfied (5). A sample item is 'I am satisfied with my benefit package'.

Satisfaction with psychological rewards (Cronbach's $\alpha = 0.95$) was measured using the four-item Psychological Reward Satisfaction Scale (De Gieter *et al.*, 2008). Items like 'I am satisfied with

the compliments I receive from my supervisor for doing my job' had to be scored on a five-point scale ranging from very dissatisfied (1) to very satisfied (5).

Turnover intentions (Cronbach's $\alpha = 0.92$) was measured with a three-item scale based on earlier measures (e.g. DeConinck and Stilwell, 2004; Currall *et al.*, 2005; De Gieter *et al.*, 2012). The items (e.g. 'During the last six months, I have given it some serious thought to look for a job in another organisation') were scored on a seven-point scale ranging from totally disagree (1) to totally agree (7).

Work values were assessed using three four-item subscales of the reduced Dutch version of the Work Importance Study instrument (De Cooman *et al.*, 2008). We examined financial security (Cronbach's $\alpha = 0.86$), recognition (Cronbach's $\alpha = 0.73$) and interpersonal contact (Cronbach's $\alpha = 0.77$). Items such as 'It is important to me to have a permanent employment' had to be rated on a seven-point scale ranging from totally disagree (1) to totally agree (7).

As for *task performance*, we obtained the annual performance evaluation score of each participant, assigned by the direct supervisor. Every year, the HR department instructs the supervisors to evaluate the task performance of each of their subordinates during the previous 12 months. This task performance score ranges between very poor, poor, good and very good.

Data analyses

First, we performed two multiple regression analyses. In the first one, turnover intentions were modelled as a function of satisfaction with financial, material, and psychological rewards. In the second regression analysis, the same predictors were used to predict task performance. Whereas we performed a standard multiple linear regression in the case of turnover intentions, the latter regression model was a logistic one because of the categorical nature of the task performance data.

Second, for both turnover intentions and task performance, we fitted a series of cluster-wise regression models to test whether there were individual differences in the relationships between satisfaction with the three reward types and both dependent variables. Cluster-wise regression refers to a family of methods that capture heterogeneity (or individual differences) of regression functions in a data set (Brusco *et al.*, 2008). Similar to traditional regression analysis, the dependent variable is modelled as a function of a set of independent variables. The difference is that cluster-wise regression relaxes the assumption that the data originate from one homogeneous population by testing the presence of (unknown or latent) clusters or subgroups in the data (DeSarbo and Cron, 1988). When different subgroups are present, a separate regression function is identified per subgroup, together with an estimate of subgroup membership for each respondent. When applied to our data, this results in a grouping of employees with similar relationships between (a) turnover intentions and satisfaction with financial, material and psychological rewards, and (b) task performance and satisfaction with financial, material and psychological. This is exactly what is needed to test our hypothesis that the population of employees consists of various subgroups, each with different relationships between satisfaction with the three reward types and turnover intentions and/or task performance. For turnover intentions, we estimated a series of traditional linear cluster-wise regression models, whereas task performance – being a categorical variable – was modelled using a series of logistic cluster-wise regression models. These analyses were performed in MPlus version 6 (Muthén and Muthén, 1998–2010).

Because the number of employee subgroups in the cluster-wise regression model is not known or not defined a priori, we fitted a series of models with an increasing number of subgroups (from 1 to 7) and compared their model fit (e.g. Brusco *et al.*, 2008). For each of these models, we performed 1,000 random restarts to minimise the risk of converging to a local

maximum (e.g. Leisch, 2004). To compare these models, we made use of the Bayesian Information Criterion (BIC), which is a model selection criterion based on the likelihood function (i.e. the probability of the sample data given the model parameters). Because one may improve the likelihood by simply adding parameters to a model (i.e. over fitting the model), the BIC introduces a penalty term for the number of parameters. By doing so, the BIC balances model fit and model parsimony. In terms of model selection, a model with a lower BIC value is preferred over a model with a higher BIC value.

Finally, after we identified the best cluster-wise regression model for both turnover intentions and task performance separately, we performed contrast analyses to test whether employees from different subgroups differed on a series of socio-demographic variables and work values.

RESULTS

Table 1 presents the descriptives for the total sample. Turnover intentions related positively to satisfaction with all three types of rewards, whereas task performance related negatively to satisfaction with financial rewards only. Moreover, people who were more satisfied with the financial rewards they received were also more satisfied with the material rewards. Similarly, a positive relationship was found between satisfaction with material and psychological rewards. Finally, people who were more satisfied with their material rewards scored higher on the work values recognition and interpersonal contact, whereas individuals who were more satisfied with their psychological rewards scored higher on recognition.

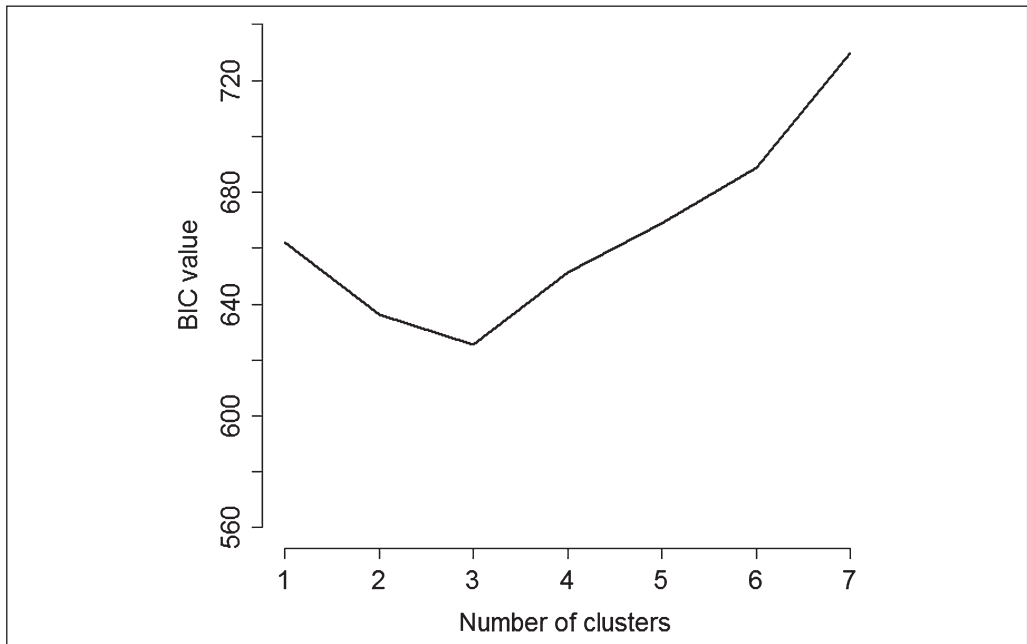
Turnover intention

The standard regression model predicting turnover intentions from satisfaction with financial rewards, material rewards, and psychological rewards accounted for 18.7% of the variance in employees' turnover intentions [$F(3, 175) = 13.39; p < 0.001$]. Satisfaction with financial rewards ($\beta = -0.50; p < 0.001$) and psychological rewards ($\beta = -0.41; p < 0.001$) were negatively related, whereas satisfaction with material rewards was unrelated to turnover intentions ($\beta = -0.27; ns$).

TABLE 1 Means, standard deviations and correlations for the total sample

| <i>N</i> = 179 | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|----------|-----------|----------|----------|---------|---------|--------|--------|------|
| 1. Turnover intentions | 2.57 | 1.59 | | | | | | | |
| 2. Task performance | 3.29 | 0.66 | 0.04 | | | | | | |
| 3. Satisfaction with financial rewards | 3.30 | 0.83 | -0.34*** | -0.26*** | | | | | |
| 4. Satisfaction with material rewards | 3.76 | 0.59 | -0.28*** | -0.10 | 0.44*** | | | | |
| 5. Satisfaction with psychological rewards | 3.66 | 0.90 | -0.30*** | 0.09 | 0.14 | 0.27*** | | | |
| 6. Financial security | 4.45 | 0.50 | -0.24** | -0.21** | 0.09 | 0.09 | 0.07 | | |
| 7. Recognition | 4.21 | 0.58 | 0.02 | 0.07 | -0.01 | 0.16* | 0.20** | 0.20** | |
| 8. Interpersonal contact | 3.67 | 0.66 | -0.17* | -0.14 | 0.10 | 0.16* | 0.11 | 0.17* | 0.14 |

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Figure 1 Bayesian Information Criterion (BIC) values for turnover intentions models

To test the existence of individual differences in the relationship between satisfaction with the three reward types and turnover intentions, we performed cluster-wise regression analyses and tested a series of models (ranging from 1 to 7 subgroups). Figure 1 presents the best BIC value for each model, showing that the BIC is minimal (*i.e.* the best model fit-model parsimony balance) when the regression model includes three clusters or employee subgroups (supporting Hypothesis 1).

Next, we examined the unique relationship pattern between turnover intentions and satisfaction with financial, material and psychological rewards within each of the subgroups.

Table 2 shows the subgroup-specific regression function for all subgroups. For employees belonging to subgroup 1 (9%), a significant negative relationship existed between satisfaction with financial rewards, material rewards and psychological rewards and turnover intention. Because of this reason, we call this group the *turnover by reward package group*. In subgroup 2 (49.2%; *i.e.* *turnover by psychological rewards group*), only satisfaction with psychological rewards was significantly related to turnover intention, whereas satisfaction with financial rewards and material rewards were unrelated to turnover intention. Finally, the turnover intentions of employees in subgroup 3 (41.8%) related negatively to satisfaction with financial rewards only (*i.e.* *turnover by financial rewards group*). Descriptives of the three separate subgroups can be found in the Appendix.

Next, we performed a series of follow-up analyses with the goal to describe the three different employee subgroups. First, we tested whether the three subgroups differed in terms of socio-demographic characteristics using ANOVAs. These revealed that the subgroups differed with respect to age [$F(2, 176) = 20.92$; $p < 0.001$] and tenure [$F(2, 176) = 6.64$; $p = 0.002$]. In particular, people belonging to the *turnover by financial rewards group* were significantly younger (mean age = 33.40 years) and had less tenure (mean tenure = 8.81 years) than the other

TABLE 2 Parameter estimates of the regression models for turnover intentions

| | Turnover by reward package group (n = 16; 9%) | | | Turnover by psychological rewards group (n = 88; 49.2%) | | | Turnover by financial rewards group (n = 75; 41.8%) | | | | | |
|--|--|------|---------|--|----------|------|--|---------|----------|------|---------|---------|
| | Estimate | SE | t-value | p-value | Estimate | SE | t-value | p-value | Estimate | SE | t-value | p-value |
| Intercept | 10.40 | 0.02 | 635.97 | <0.001 | 2.09 | 0.70 | 2.97 | 0.003 | 7.20 | 0.96 | 7.47 | <0.001 |
| Satisfaction with financial rewards | -0.54 | 0.01 | -102.89 | <0.001 | 0.06 | 0.19 | 0.30 | 0.762 | -0.46 | 0.17 | -2.69 | 0.008 |
| Satisfaction with material rewards | -1.50 | 0.01 | -160.19 | <0.001 | -0.06 | 0.17 | -0.34 | 0.735 | -0.32 | 0.28 | -1.14 | 0.256 |
| Satisfaction with psychological rewards | -0.56 | 0.01 | -42.53 | <0.001 | -0.17 | 0.07 | -2.26 | 0.024 | -0.28 | 0.19 | -1.46 | 0.145 |
| SE, standard error. | | | | | | | | | | | | |

TABLE 3 Distribution of educational levels across subgroups for turnover intentions

| | Turnover by reward package group | Turnover by psychological rewards group | Turnover by financial rewards group | Total |
|------------------------|-------------------------------------|--|--|-------|
| Secondary school level | 6 | 56 | 20 | 82 |
| Bachelor level | 10 | 27 | 38 | 75 |
| Master level | 0 | 5 | 17 | 22 |
| Total | 16 | 88 | 75 | 179 |

two groups (mean age = 45.44 and 44.44 years; mean tenure = 16.94 and 16.03 years for the *turnover by reward package group* and the *turnover by psychological rewards group* respectively). The finding that there were large similarities in the results for age and tenure is of course not surprising as both variables were highly correlated ($r = 0.69$; $p < 0.001$). Moreover, the three subgroups differed in terms of their educational level [$\chi^2(4) = 29.65$; $p < 0.001$]. From Table 3, it can be seen that people with a secondary school degree belonged primarily to the *turnover by psychological rewards group*, in which satisfaction with psychological rewards related significantly to turnover intention. People with a bachelor's degree were spread out across the three subgroups, and people with a master's degree were mostly found in the *turnover by financial rewards group*. Finally, we also tested whether the three subgroups differed with regard to gender, but this appeared not to be the case [$\chi^2(2) = 2.31$; *ns.*].

Second, we tested whether the three subgroups differed in their average level of satisfaction with the three types of rewards. This appeared to be the case for financial rewards [$F(2, 176) = 7.84$; $p < 0.001$], but not for material rewards [$F(2, 176) = 2.41$; *ns.*] and psychological rewards [$F(2, 176) = 2.71$; *ns.*]. For financial rewards, post-hoc tests showed that the *turnover by psychological rewards group* (mean satisfaction = 3.55) and the *turnover by financial rewards group* (mean satisfaction = 3.06) differed significantly from each other but not from the *turnover by reward package group* (mean satisfaction = 3.14). This implies that the people for whom satisfaction with their financial rewards relates to turnover intentions were the least satisfied with their financial rewards.

Third, we examined whether the subgroups differed in their average turnover intentions. An ANOVA indeed revealed individual differences [$F(2, 176) = 149.90$; $p < 0.001$]. In particular, individuals belonging to the *turnover by financial rewards group* (mean turnover intentions = 4.05) had a significant higher turnover intentions than individuals belonging to the *turnover by reward package group* (mean turnover intentions = 1.77) and the *turnover by psychological rewards group* (mean turnover intentions = 1.45).

In a final step, we tested whether individual differences in the reward satisfaction–turnover intentions relationship could be explained by work values, by means of a series of contrast analyses. In a first contrast analysis, we tested whether people for whom satisfaction with their financial rewards influenced their turnover intentions (*i.e.* *turnover by reward package group* and *turnover by financial rewards group*) scored higher on the work value financial security (Hypothesis 3). This hypothesis was not confirmed; instead, the reversed pattern was found [$t(177) = -2.00$; $p < 0.05$] with people belonging to the *turnover by reward package group* and the *turnover by financial rewards group* scoring significantly lower on financial security than people belonging to the *turnover by psychological rewards group* (means of 4.38 and 4.53, respectively). Subsequently, we tested whether individuals whose psychological rewards influenced their turnover intentions (*i.e.* *turnover by reward package group* and *turnover by psychological rewards group*) scored on average higher on the work values recognition (Hypothesis 4) and

TABLE 4 Logistic regression analysis for task performance on the total sample

| | Estimate | Standard error | Wald | p-value |
|---|----------|----------------|-------|---------|
| Threshold (performance = 2) | -3.76 | 1.08 | 12.14 | <0.001 |
| Threshold (performance = 3) | -1.13 | 2.04 | 1.18 | 0.277 |
| Satisfaction with financial rewards | -0.71 | 0.21 | 11.87 | <0.001 |
| Satisfaction with material rewards | -0.04 | 0.29 | 0.02 | 0.897 |
| Satisfaction with psychological rewards | 0.25 | 0.17 | 2.23 | 0.135 |

interpersonal contacts (Hypothesis 5) than people for which psychological rewards do not relate to turnover intentions (*i.e.* turnover by financial rewards group). We found support for Hypothesis 5 as employees from the turnover by reward package group and the turnover by psychological rewards group (mean = 3.76) valued interpersonal contacts more highly than employees belonging to the turnover by financial rewards group (mean = 3.55) [$t(177) = 2.10$; $p < 0.05$]. Finally, Hypothesis 4 was not supported [$t(177) = -0.16$; $p = 0.87$].

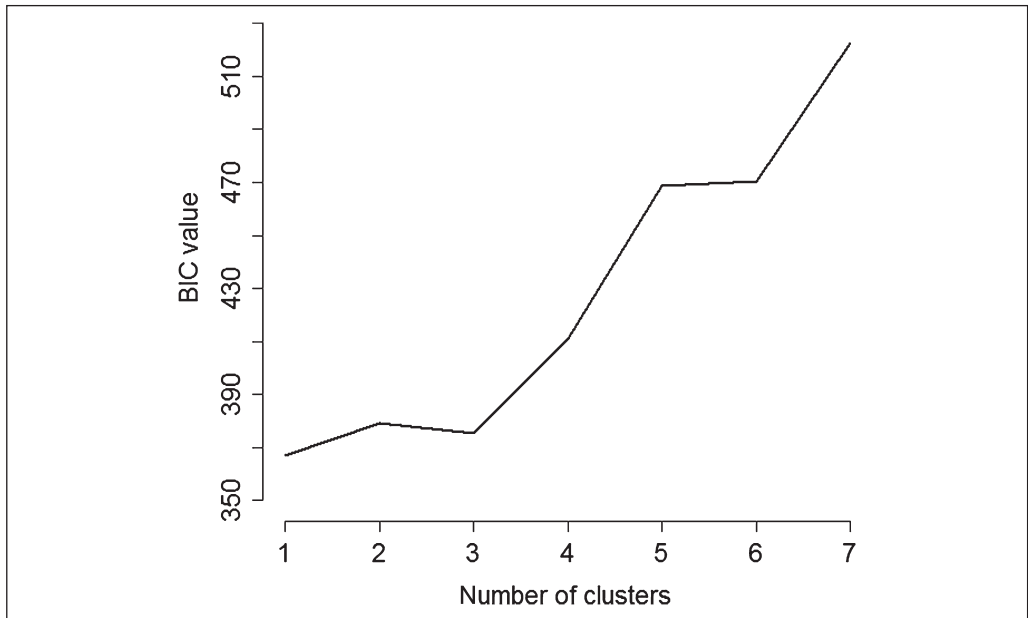
Task performance

We performed a logistic regression analysis on the total sample predicting employees' task performance by satisfaction with financial rewards, material rewards and psychological rewards [$\chi^2(3) = 16.05$; $p < 0.001$]. This analysis revealed that only satisfaction with financial rewards turned out to be a significant and surprisingly negative predictor of task performance ($\beta = -0.71$, $p < 0.001$, see Table 4). In particular, the more satisfied employees are with their financial rewards, the higher the probability of getting a poor performance evaluation.

Subsequently, we examined the existence of individual differences in the reward satisfaction–performance relationship by testing a series of seven logistic cluster-wise models. As can be seen from Figure 2, the BIC was minimal when the regression model included only one cluster. This suggests the absence of individual differences in the current sample of employees, which leads us to reject Hypothesis 2. In general, task performance was negatively influenced by satisfaction with financial rewards, whereas satisfaction with material rewards and psychological rewards did not significantly influence task performance.

DISCUSSION

Previous studies on the relationship between reward satisfaction and employee behaviours or attitudes have traditionally focused on the role of financial rewards. Their main conclusion – which is endorsed by meta-analytic research (Williams *et al.*, 2006) – is that satisfaction with financial rewards weakens employees' turnover intentions, whereas it relates positively to task performance. The present study adds to this knowledge in at least three ways. First of all, we revealed that – besides satisfaction with financial rewards – employee behaviours and attitudes were also affected by their satisfaction with material and psychological rewards, a finding that stresses the need for studies that adopt a broader conceptualisation of rewards and reward satisfaction. Second, our findings revealed that the relationship between reward satisfaction and particular employee outcomes is not necessarily the same for all employees. Although we did not find individual differences in the relationship between reward satisfaction and task performance (rejecting Hypothesis 2), we did find individual differences when it comes to turnover intention (supporting Hypothesis 1). An important implication of this finding is that scholars need to take such individual differences into account if they want to better understand

Figure 2 Bayesian Information Criterion (BIC) values for task performance models

the mechanisms that underlie the relationships between different rewards, satisfaction with these rewards and employee outcomes. Moreover, as suggested in Hypotheses 3, 4 and 5, these differences relate to – among other things – differences in work values. Finally, we found that the influence of satisfaction with different rewards types varies depending on the particular employee outcome under study. In what follows, we will elaborate on these outcome-dependent findings and translate them into suggestions for HR practitioners.

Turnover intentions

In line with previous findings (e.g. DeConinck and Stilwell, 2004; Williams *et al.*, 2008; De Gieter *et al.*, 2012), one would expect satisfaction with each of the reward types to be negatively related to employees' turnover intentions. Yet, in the current study, this relationship pattern applied to a very small number of participants only (9%, *turnover by reward package group*). Instead, approximately half of the respondents' turnover intentions were exclusively influenced by their satisfaction with psychological rewards (49.2%, *turnover by psychological rewards group*). Employees from this second group attached more value to financial security than employees from the other two groups and felt more satisfied with their financial rewards than the ones from the third group. For the remaining 41.8% (*turnover by financial rewards group*) – by far the youngest employees with the lowest work tenure – satisfaction with financial rewards turned out to be the sole predictor of turnover intention. These employees were less satisfied with their financial rewards and reported stronger turnover intentions than the ones from the *turnover by psychological rewards group*. Moreover, they attached less value to having interpersonal contacts than employees from the other two groups.

Altogether, our results suggest that organisations need to pay attention to individual differences in reward preferences among employees, and keep this in mind when (re)designing their reward policies in order to reduce the level of voluntary employee turnover. Evidently,

one reward type cannot compensate for another reward type, but for some employees, satisfaction with a certain reward type influences their intention to leave, whereas for others, satisfaction with the same reward does not. One possible strategy would be to focus on objective characteristics (e.g. age, tenure, educational background) that differentiate the various employee groups. For example, with regard to age and tenure, our findings suggest that dissatisfaction with financial rewards particularly triggers the idea of leaving in the case of young employees. To counter this, employers could consider leaving the reward system based on tenure behind – which typically pays the lowest salaries to the youngest employees – and consider a reward system in which employees receive a higher salary at the beginning of their career – the life phase in which they need to invest a lot in all life domains (e.g. buying a house, paying child care). As for educational background, the turnover intentions of the lower educated participants – having a secondary school degree – were not influenced by satisfaction with financial and material rewards (68.3%), presumably because they know their financial and material reward options are limited anyway. When trying to reduce the turnover intentions of these employees, organisations could encourage their supervisors to psychologically reward these employees by regularly expressing their recognition, giving compliments, etc.

Nevertheless, objective characteristics such as age and educational background only partially explained individual differences in the relationship between satisfaction with different reward types and turnover intention. Therefore, tailoring an entire reward policy based on these observable characteristics would obviously be insufficient. Instead, a viable option may be to implement a flexible reward policy that has the potential to captivate and stimulate as many employees as possible. When designing such a differentiating reward system, organisations could try to address each of the employee groups in a different way by rewarding them in the way they appreciate most – of course without discriminating employee groups when it comes to base pay. The obvious problem here is that organisations do not know the preferences of individual employees, and therefore, the desirable strategy may be to focus on reward types that have an impact on large numbers of employees. As our results reveal, satisfaction with material rewards only influences the turnover intention of 9% of employees (see Table 2); therefore, investing too much effort and budget in assembling a comprehensive material reward package may not be the most effective approach. Satisfaction with financial rewards and psychological rewards, instead, influences the turnover intentions of many employees. As such, organisations may want to invest in offering a well-balanced financial reward package, and raising their supervisors' awareness of the importance of psychologically rewarding employees by offering them opportunities to train their interpersonal management skills.

Task performance

We found no individual differences in the relationship between satisfaction with financial, material and psychological rewards and task performance (Hypothesis 2). For all participants, task performance was influenced by their satisfaction with rewards in exactly the same way: only satisfaction with financial rewards related to task performance, whereas satisfaction with material and psychological rewards did not. Moreover, whereas previous studies (e.g. Williams *et al.*, 2006) found a positive relationship between satisfaction with financial rewards and supervisor-rated task performance, the opposite appeared to be the case for our participants. This negative relationship ($\beta = -0.71$) suggests that the more satisfied employees are with their financial rewards, the lower their task performance and vice versa. Although this relationship might seem counterintuitive at first, it aligns with insights from Self-Determination Theory (SDT; Deci and Ryan, 2000). According to SDT, employees perform better when their job provides more opportunities to satisfy their basic psychological needs (*i.e.* needs for autonomy,

competence and relatedness). The reason is that need satisfaction stimulates the internalisation of behavioural motives (*i.e.* the transformation of extrinsic to intrinsic and personally endorsed motives). Instead, providing external rewards such as money is hypothesised to push people more towards externalisation of motives (Vansteenkiste *et al.*, 2007). As externalisation is linked to less qualitative performance, SDT predicts that the more importance employees attach to financial rewards obtained through their job, the less qualitative their performance is. The negative relationship between the importance respondents attach to financial security and task performance supports this reasoning. As a result, we recommend organisations to think about ways to help employees satisfy these basic psychological needs – for example by adapting job characteristics such as autonomy and task variety – and consequently become intrinsically motivated for the job (*e.g.* Deci and Ryan, 2000).

It is important to note, however, that we cannot rule out the possibility of reversed causality. An alternative explanation for our findings might be that highly performing employees, who received an excellent performance appraisal from their supervisor, might have felt dissatisfied with their financial rewards (measured 2–3 months later) because they had the feeling that their financial rewards did not correspond (anymore) with their effort and performance. Unfortunately, our data do not allow a test of the causal nature of this relationship.

Reconciling the findings regarding turnover intention and task performance

When combining the results for turnover intention and task performance, the findings regarding satisfaction with financial rewards seem to contradict each other. On one hand, satisfaction with financial rewards related negatively to turnover intention for more than half of the participants (51%). On the other hand, task performance decreased when satisfaction with financial rewards increased. This apparent contradiction suggests that satisfaction with financial rewards can block negative outcomes, but at the same time inhibit positive outcomes. Although it seems inconsistent at first glance, this notion is not new. Some extrinsic rewards can strengthen employees' intrinsic motivation by supporting the feeling of being competent without actually undermining their feeling of self-determination (Amabile, 1993). However, financial rewards are typically seen as non-synergistic external motivators, suggesting that they stimulate extrinsic, but not intrinsic motivation (Deci and Ryan, 2000) and relate to dissatisfaction, but not to satisfaction (Herzberg, 1966). As a result, satisfaction with financial rewards can block negative outcomes and yet not stimulate positive outcomes.

From the practical point of view, our findings suggest that organisations need to make sure that employees are not dissatisfied with their financial rewards, as this state may lead to increased turnover intentions. However, we would not advice organisations to overly focus on financial rewards, as satisfaction with this type of rewards does not enhance performance. Instead, we suggest that organisations may provide job resources that allow employees to feel competent – such as increasing the level of autonomy or task variety – and therefore enhance employees' chances of satisfying their basic psychological needs. The result of this strategy may be an environment that stimulates intrinsic motivation and, subsequently, performance. As mentioned before, organisations may benefit from training their supervisors to design challenging and need-fulfilling working conditions and to provide their employees with a diverse package of rewards, without putting the emphasis on financial rewards.

Study limitations and future research

Although it contributes to our knowledge on individual differences, this study is not without limitations. First, our findings cannot be generalised to all employees. We studied employees from one particular organisation (*i.e.* the back office of a large financial sector institution),

making it impossible to draw conclusions about the reward satisfaction–employee outcome relationship for employees outside this organisation or – even more general – outside the financial sector. Further tests on the presence of individual differences in a variety of organisations and sectors are required. A second limitation of this study is that we only examined the effects of satisfaction with three reward types, whereas satisfaction with a variety of alternative rewards may be important as well (Dubinsky *et al.*, 2000). In addition to this, we ought to examine the underlying mechanism – *i.e.* possible moderators and mediators – causing the negative relationship between satisfaction with financial rewards and task performance. Moreover, whereas we found individual differences in the relationship between reward satisfaction and turnover intention, the relationship between reward satisfaction and performance was the same for all employees in our sample. This finding illustrates the need to go beyond the two employee outcomes studied here, and explore the relationship – and possible individual differences therein – between reward satisfaction and other relevant employee outcomes (*i.e.* organisational citizenship behaviour, counterproductive behaviour) in a variety of samples. Finally, we used a restricted set of socio-demographic variables and work values to describe employees from different subgroups. Other employee (*e.g.* personality), task (*e.g.* job characteristics) and organisation (*e.g.* culture, organisational fairness) characteristics may also be useful in understanding individual differences across subgroups.

CONCLUSION

We found support for the presence of individual differences in the relationship between satisfaction with different reward types and turnover intentions (but not task performance). Therefore, it seems inappropriate to assume that all rewards have the same influence on the behaviours and attitudes of every single employee. When aiming to fully understand the relationship between rewards and desired or unfavourable employee outcomes, reward research ought to adopt an individual differences perspective and methodology.

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APPENDIX

Descriptive Statistics for Turnover Intention Groups

| | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 |
|---|----------|-----------|----------|---------|--------|--------|-------|-------|
| <i>Turnover by reward package group – n = 16 (9%)</i> | | | | | | | | |
| 1. Turnover intentions | 1.77 | 1.23 | | | | | | |
| 2. Satisfaction with financial rewards | 3.14 | 0.85 | –0.62* | | | | | |
| 3. Satisfaction with material rewards | 3.84 | 0.52 | –0.86*** | 0.36 | | | | |
| 4. Satisfaction with psychological rewards | 3.81 | 0.96 | –0.73** | 0.13 | 0.46 | | | |
| 5. Financial security | 4.42 | 0.60 | –0.35 | 0.10 | 0.41 | 0.22 | | |
| 6. Recognition | 4.22 | 0.54 | –0.26 | –0.16 | 0.10 | 0.62** | 0.37 | |
| 7. Interpersonal contact | 3.77 | 0.64 | 0.08 | –0.12 | –0.19 | 0.17 | 0.06 | 0.61* |
| <i>Turnover by psychological rewards group – n = 88 (49.2%)</i> | | | | | | | | |
| 1. Turnover intentions | 1.45 | 0.48 | | | | | | |
| 2. Satisfaction with financial rewards | 3.55 | 0.65 | –0.01 | | | | | |
| 3. Satisfaction with material rewards | 3.84 | 0.52 | –0.06 | 0.56*** | | | | |
| 4. Satisfaction with psychological rewards | 3.78 | 0.88 | –0.30** | 0.13 | 0.11 | | | |
| 5. Financial security | 4.53 | 0.43 | –0.22* | –0.05 | 0.01 | 0.11 | | |
| 6. Recognition | 4.20 | 0.57 | –0.02 | 0.06 | 0.21* | 0.20 | 0.22* | |
| 7. Interpersonal contact | 3.76 | 0.62 | 0.02 | 0.03 | 0.16 | 0.01 | 0.14 | 0.18 |
| <i>Turnover by financial rewards group – n = 75 (41.8%)</i> | | | | | | | | |
| 1. Turnover intentions | 4.05 | 1.30 | | | | | | |
| 2. Satisfaction with financial rewards | 3.06 | 0.94 | –0.23* | | | | | |
| 3. Satisfaction with material rewards | 3.65 | 0.66 | –0.24* | 0.34** | | | | |
| 4. Satisfaction with psychological rewards | 3.47 | 0.90 | –0.21 | 0.08 | 0.34** | | | |
| 5. Financial security | 4.37 | 0.55 | –0.18 | 0.11 | 0.05 | –0.05 | | |
| 6. Recognition | 4.22 | 0.60 | 0.08 | –0.04 | 0.13 | 0.13 | 0.15 | |
| 7. Interpersonal contact | 3.55 | 0.69 | –0.16 | 0.12 | 0.18 | 0.15 | 0.18 | 0.03 |
| * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. | | | | | | | | |