



## Individual differences in the relationship between satisfaction with job rewards and job satisfaction

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### ABSTRACT

Although previous research often showed a positive relationship between pay satisfaction and job satisfaction, we dispute the universality of this finding. Cluster-wise regression analyses on three samples consistently show that two types of individuals can be distinguished, each with a different job reward–job satisfaction relationship. For the first person type, job satisfaction relates to financial and psychological reward satisfaction, whereas for the second person type job satisfaction relates to psychological reward satisfaction only. In addition, between-person type differences were found for the work value financial security but not for recognition, which suggests that differences in work values may lie at the basis of between-person differences in the rewards–satisfaction relationship. Moreover, person types 1 and 2 differ in turnover intention and affective organizational commitment, which implies that differences in the rewards–satisfaction relationship relate to important organizational outcomes as well. Theoretical and practical implications of these findings are discussed.

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### 1. Introduction

Job satisfaction is without doubt one of the most studied outcomes in organizational research (Spector, 1997). One of the reasons is probably its intuitive link with a wide range of important employee behaviors such as turnover, absenteeism, and performance (Schleicher, Hansen, & Fox, 2010). Therefore, the research on job satisfaction is widespread.

Traditionally, job rewards are considered a major determinant of job satisfaction. For example, according to the equity model of Adams (1965) people compare their input/output ratio – which reflects the rewards they receive in return for the work they perform – to that of a comparison person to determine whether they feel satisfied in their job. Similarly, in the discrepancy model of Porter and Lawler (1968) people's job satisfaction is determined by a comparison of their current job conditions (including the rewards they receive) to their ideal job. Apart from its role in theories on job satisfaction, the centrality of job rewards is also obvious when screening instruments that are utilized to measure job satisfaction. In particular, the two most important instruments, the Job Descriptive Index (JDI) and the Minnesota Satisfaction Questionnaire (MSQ) both include a subscale referring to satisfaction with job rewards (see Schleicher et al., 2010).

From the above, one would conclude that job rewards are indispensable for job satisfaction. However, important theories on job satisfaction conjecture that job rewards do not (always) affect job satisfaction. In particular, Herzberg's (1959) two-factor theory conceptualizes pay as a hygiene factor rather than a satisfier. Hence, it is predicted that satisfaction with pay does not affect job satisfaction. A similar conclusion can be drawn from self-determination theory (Deci & Ryan, 1985, 2002), which posits

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that satisfaction results from intrinsic motivation, and that intrinsic motivation is not or even negatively influenced by extrinsic rewards (for example by providing financial rewards Gagné & Forest, 2008).

In sum, conflicting views on the role of job rewards in relation to job satisfaction exist. In the present study, we argue that both views should not exclude one another. Rather, depending on the individual under consideration, the one or the other may apply. In other words, we suggest that there are individual differences in the link between job rewards and job satisfaction in that for some people extrinsic rewards do indeed relate to satisfaction, whereas for other people this is not the case. In what follows, we will elaborate on this point. First we distinguish between two categories of job rewards; second we argue why individual differences in the relationship between rewards and job satisfaction are expected on the basis of existing work on work values, and finally we argue that these individual differences relate to other job-outcomes as well.

### 1.1. Categories of job rewards

Rewards are key components of the exchange relationship between employee and employer (Armstrong, 2010; Cropanzano & Mitchell, 2005; White & Drucker, 2000). Hence, rewards are used as a tool to guide behavior and performance in an attempt to attract and retain the best-qualified employees and keep them satisfied and motivated (Bellenger, Wilcox, & Ingram, 1984; Bratton & Gold, 2003; Rynes, Gerhart, & Minette, 2004). Because of this reason, the research and theorizing on rewards is widespread and has a long history (e.g., Currall, Towler, Judge, & Kohn, 2005; Heneman & Judge, 2000; Williams, Brower, Ford, Williams, & Carraher, 2008).

At the same time, the stream of research on rewards is heavily dominated by studies on the impact of financial rewards (often referred to as 'pay'). This is somewhat surprising given that almost all major motivation and satisfaction theories explicitly stress the importance of alternative types of rewards (e.g., Adams, 1965; Deci & Ryan, 1985, 2002; Herzberg, 1959; Porter & Lawler, 1968). In line with these theories, the total reward management movement has recently conceptualized rewards as any valued outcome an employee receives from the employer in exchange for the employee's effort and contribution (Henderson, 2003). Total reward management hereby acknowledges that it is important to provide the appropriate financial rewards, but stresses the necessity to complement these with other reward types (Armstrong, 2010). To date, there are several total reward categorizations available (e.g., Christofferson & King, 2006; Milkovich & Newman, 2005; Zingheim & Schuster, 2000), but the underlying categorization principle appears to be quite similar. In this study, we focus on two major categories of rewards, that is, financial and psychological rewards. Because several authors have long noted that not the working conditions themselves, but rather how these are experienced and valued (Porter & Lawler, 1968; Vroom, 1964) are more influential (Steel, 2002), we study the satisfaction with these two types of rewards, rather than the rewards themselves.

### 1.2. Individual differences in the link between job rewards and job satisfaction

While there are studies on the relationship between job rewards and employee behaviors and attitudes, they focus almost exclusively on general (or average) patterns. In other words, they do not take individual differences in this relationship into account. The few exceptions that have studied individual differences in (the perception of) job rewards have limited themselves to comparisons between a priori defined groups, such as men and women (e.g., Buchanan, 2005; Graham & Welbourne, 1999; Keaveny & Inderrieden, 2000), people from different cultures (e.g., Fong & Shaffer, 2003), with different educational levels (Klein & Maher, 1966) or from different age groups (Clark, Oswald, & Warr, 1996). Consequently, our understanding of individual differences in the link between reward satisfaction and job satisfaction is limited at best.

At the same time, traditional theories on job satisfaction and motivation do not agree on the role of various categories of rewards. In particular, for equity theory (Adams, 1965) and the discrepancy model of Porter and Lawler (1968) both financial and psychological rewards are expected to relate to job satisfaction, whereas Herzberg's (1959) two-factor theory and self-determination theory (Deci & Ryan, 1985, 2002) state that financial rewards do not satisfy people. We believe that this theoretical disagreement does not imply that one theoretical proposition has to be rejected in favor of the other. Rather, we believe that different theories may hold for different individuals. Therefore, we expect that financial reward satisfaction relates to job satisfaction for only a subset of employees (as there is disagreement as to the impact of this type of reward), whereas the relationship between psychological reward satisfaction and job satisfaction holds for every employee. In other words, we hypothesize that two person types exist, for the first person type both financial and psychological reward satisfaction relate to job satisfaction, whereas for person type two only psychological reward satisfaction does.

### 1.3. Work values as antecedents of individual differences in the reward satisfaction–job satisfaction relationship

The literature on work values provides us with a framework to explain why the link between reward satisfaction and job satisfaction varies from individual to individual. Values are criteria or goals that serve as guiding principles in people's life, thereby transcending specific situations (Schwartz, 1999). Work values are more specific than general values in that they refer to people's working life. As such, they can be considered general and stable goals employees want to realize through working (Nord, Brief, Atieh, & Doherty, 1988). Because work values are relatively stable across time and situations, and because they differ between individuals by definition (e.g., De Cooman et al., 2008; Kalleberg, 1977), they affect the way in which people differentially perceive their working situation. As such, work values can be conceived as antecedents of the predicted individual difference pattern.

Whereas the literature on work values reports a wide variety of them (Zytowski, 1970), a commonly used differentiation is between intrinsic or self-actualization, extrinsic or material, and social or interpersonal work values (De Cooman et al., 2008; Nord et al., 1988). Especially the latter two categories are relevant when studying financial and psychological rewards, and more specifically the work values financial security and recognition. In particular, for individuals who strongly value financial security, it may be logically hypothesized that financial reward satisfaction relates to job satisfaction. Otherwise, individuals who highly value recognition are expected to show a strong link between job satisfaction and psychological reward satisfaction.

#### 1.4. Turnover intention and affective commitment as consequences of individual differences in the reward satisfaction–job satisfaction relationship

Finally, we expect individual differences in the link between job rewards and job satisfaction to relate to two important job-related employee outcomes, that is, turnover intention and affective commitment. A first reason is that it has repeatedly been shown that satisfaction with the rewards one receives affects both turnover intention and affective commitment (De Gieter, De Cooman, Pepermans, & Jegers, 2008; DeConinck & Bachmann, 2005; DeConinck & Stilwell, 2004). Second, from a theoretical point of view, turnover intention and affective commitment are considered a consequence and correlate of job satisfaction respectively (Schleicher et al., 2010; Williams, McDaniel, & Nguyen, 2006). In line with this reasoning, a recent meta-analysis showed high to very high correlations between turnover intention ( $r = -.65$ ) as well as affective commitment ( $r = .60$ ) and job satisfaction (Schleicher et al., 2010).

Along the lines of SDT (Deci & Ryan, 1985, 2002), we suggest that individuals whose satisfaction is determined by satisfaction with their financial rewards are less intrinsically motivated. Therefore we expect these people to be less committed to the organization and to be more inclined to leave.

In sum, this study examines individual differences in the relationship between satisfaction with financial as well as psychological rewards on the one hand and job satisfaction on the other hand. Concerning satisfaction with financial rewards, a large body of studies has shown that people are more satisfied with their job when they experience higher pay satisfaction (see Williams et al., 2006). Moreover, it has been shown that satisfaction with psychological rewards also plays a key role in satisfying people, and is sometimes even more important than pay (De Gieter, De Cooman, Pepermans, & Jegers, 2010). However, individual differences research on the relationship between satisfaction with the two aforementioned types of rewards and job satisfaction remains missing. Therefore, the present study tests (1) the presence of individual differences in the relationship between satisfaction with financial as well as psychological rewards and job satisfaction; (2) the role of the work values financial security and recognition as antecedents of these individual differences; and (3) turnover intention and affective commitment as differential consequences of the individual differences pattern. We believe that this will provide us with a deeper, more profound insight into how satisfaction with different job rewards relates to job satisfaction.

## 2. Method

### 2.1. Sample and procedure

#### 2.1.1. Study 1

Survey data were collected from 365 employees working in a variety of sectors and functions. Among the participants, 60.30% were females. Their mean age was 37.23 ( $SD = 10.60$ ). 42.5% possessed a college degree and 33.2% obtained a university degree. Their mean organizational tenure was 9.69 years ( $SD = 9.56$ ) and their mean job tenure was 7.91 years ( $SD = 8.13$ ).

Respondents were sent a link to an online questionnaire including questions about job satisfaction, financial reward satisfaction, and psychological reward satisfaction. All parts of the questionnaire were randomized. Participation was anonymous and research ethics were respected.

#### 2.1.2. Study 2

Survey data were collected from 231 employees working in a variety of industrial sectors, among which health and pharmacy (43.7%), marketing and advertising (12.3%), and teaching (12.3%). Among the participants, 58% were females, and their mean age was 38.78 ( $SD = 11.99$ ). Their mean organizational tenure was 10.73 years ( $SD = 10.11$ ) and their mean job tenure was 10.49 years ( $SD = 10.13$ ).

Respondents completed an online questionnaire including questions about job satisfaction, financial reward satisfaction, psychological reward satisfaction, work values, affective organizational commitment, and turnover intention. The different parts of the questionnaire were randomized. Similar to study 1, participation was anonymous and research ethics were respected.

#### 2.1.3. Study 3

Survey data were collected from 860 employees working for a variety of Belgian non-profit organizations (e.g., homes for the elderly, hospitals, and schools). Among the participants, 70.12% were females. Their mean age was 39.30 ( $SD = 9.69$ ). 71.40% possessed a college degree and 12.67% obtained a university degree. Their mean organizational tenure was 12.51 years ( $SD = 9.43$ ) and their mean job tenure was 15.69 years ( $SD = 9.74$ ).

A call for voluntarily participation appeared in different electronic newsletters and magazines distributed to subscribed non-profit employees. Respondents were free to complete our questionnaire including questions about job satisfaction, financial reward satisfaction, psychological reward satisfaction, affective organizational commitment, and turnover intention. Again, participation was anonymous and research ethics were respected.

## 2.2. Measures

### 2.2.1. Studies 1, 2, and 3

*Financial reward satisfaction* was measured by a 4-item subscale (i.e., pay level satisfaction subscale) of the Pay Satisfaction Questionnaire developed by [Heneman and Schwab \(1985\)](#). The items (e.g. 'I am satisfied with my current salary') were evaluated on a 5-point scale ranging from 'very dissatisfied' (1) to 'very satisfied' (5).

*Psychological reward satisfaction* was assessed with the Psychological Reward Satisfaction Scale ([De Gieter et al., 2008, 2010](#)) consisting of four items (e.g., 'I am satisfied with the recognition I receive from my supervisor for doing my job'). Respondents answered the items on a 5-point scale ranging from 'very dissatisfied' (1) to 'very satisfied' (5).

Two items based on the work of [Hackman and Oldham \(1975\)](#) were used to measure general *job satisfaction*: 'Generally speaking, I am satisfied with my job' and 'I am generally satisfied with the kind of work I do in my job'. Respondents scored these items on a 7-point scale ranging from 'totally disagree' (1) to 'totally agree' (7).

Besides gender and age, we also asked participants to report organizational tenure and job tenure as *socio-demographical variables*.

### 2.2.2. Studies 1 and 2

To study antecedents of the individual differences that were observed in the first part of the study, we related person type membership to the work values 'financial security' and 'recognition'. To do this, we performed independent sample t-tests with the two work values as dependent variables, and cluster membership as the independent variable. The results reveal that for study 1 both person types do not differ on the work value financial security ( $t(363) = .301$ ;  $p = .764$ ;  $M = 6.02$  and  $5.98$ , and  $SD = .80$  and  $.88$  for person types 1 and 2 respectively). For Study 2, however, people whose satisfaction with financial rewards relates to their satisfaction with their job (i.e., people belonging to person type 1) score higher on the work value financial security ( $M = 4.17$ ,  $SD = .55$ ) than people who only take psychological reward satisfaction into account (i.e., people belonging to person type 2) ( $M = 3.94$ ,  $SD = .88$ ) ( $t(228) = 2.12$ ;  $p = .035$ ). Moreover, both in study 1 ( $t(361) = 1.10$ ;  $p = .273$ ) ( $M = 5.85$  and  $5.72$ , and  $SD = .78$  and  $.89$  for person types 1 and 2 respectively) and in study 2 the two person types do not differ on recognition ( $t(228) = .41$ ;  $p = .682$ ) ( $M = 3.89$  and  $3.84$ , and  $SD = .60$  and  $.72$  for person types 1 and 2 respectively).

The work values *financial security* and *recognition* were measured using the two corresponding 4-item subscales of the reduced version of the Work Importance Study of [Coetsier and Claes \(1990\)](#). The items were measured on a 7-point rating scale, ranging from 'totally unimportant' to 'very important'. Example items are 'To what extent do you find it important to know that you will always make a living?', and 'To what extent do you find it important that you are recognized for what you accomplish?' for financial security and recognition respectively.

### 2.2.3. Studies 2 and 3

Employees' *turnover intention* was assessed by a three-item scale (e.g., 'I would be happy to spend the rest of my career with this organization') based on previous studies (e.g. [Currall et al., 2005](#); [De Gieter et al., 2010](#); [DeConinck & Stilwell, 2004](#); [Lum, Kervin, Clark, Reid, & Sirolo, 1998](#)). Response format was a 7-point scale ranging from 'totally disagree' (1) to 'totally agree' (7).

*Affective organizational commitment* was measured by the six items developed by [Meyer, Allen, and Smith \(1993\)](#). All items (e.g., 'I really feel as if the organization's problems are my own') were scored on a 7-point scale ranging from 'totally disagree' (1) to 'totally agree' (7).

## 2.3. Individual differences analyses

The aim of this study is to reveal individual differences in the relationship between financial and psychological reward satisfaction on the one hand and job satisfaction on the other. A method that is especially suited for this purpose is cluster-wise regression ([Leisch, 2004](#)). Similar to traditional regression, cluster-wise regression predicts a dependent variable using a set of predictors. The major difference, however, is that cluster-wise regression allows for the identification of subgroups of participants (i.e., person types) with a different predictor–dependent variable relationship; in other words, it allows for the identification of individual differences in the regression function ([Brusco, Cradit, Steinley, & Fox, 2008](#); [DeSarbo & Cron, 1988](#)). In particular, the model simultaneously estimates: (1) for each person  $i$  the probability  $P_{ij}$  that this person  $i$  belongs to person type  $j$ , and (2) a separate regression function for each of the  $j$  person types. As a result, when applied to our data, cluster-wise regression results in a grouping of employees/respondents with a similar reward satisfaction–job satisfaction relationship, which is exactly what is needed to answer our research question. In our analyses we used the R package FlexMix ([Leisch, 2004](#)).

**Table 1**

Means, standard deviations, alpha coefficients and intercorrelations between financial reward satisfaction, psychological reward satisfaction, and job satisfaction for studies 1, 2, and 3.

		M	SD	1	2	3
Study 1	1. Financial reward satisfaction	3.31	.87	(.96)		
	2. Psychological reward satisfaction	3.12	.94	.32***	(.94)	
	3. Job satisfaction	5.34	1.05	.35***	.41***	(.82)
Study 2	1. Financial reward satisfaction	3.38	.93	(.97)		
	2. Psychological reward satisfaction	3.28	1.02	.23***	(.95)	
	3. Job satisfaction	5.40	1.31	.21***	.34***	(.86)
Study 3	1. Financial reward satisfaction	3.07	.92	(.96)		
	2. Psychological reward satisfaction	2.99	1.06	.21***	(.94)	
	3. Job satisfaction	5.65	1.22	.25***	.40***	(.88)

Note. Alpha coefficients are presented on the main diagonal.

Financial and psychological reward satisfaction are measured on a 5-point scale, job satisfaction is measured on a 7-point scale.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table 2**

Parameter estimates from a linear regression analysis with job satisfaction as dependent and financial and psychological reward satisfaction as independent variables for studies 1, 2, and 3.

		Estimate	Standard error	t-Value	p-Value
Study 1	Intercept	3.23	.22	14.62	<.001
	Financial reward satisfaction	.29	.06	4.88	<.001
	Psychological reward satisfaction	.37	.06	6.69	<.001
Study 2	Intercept	3.43	.36	9.46	<.001
	Financial reward satisfaction	.20	.09	2.19	.030
	Psychological reward satisfaction	.40	.08	4.92	<.001
Study 3	Intercept	3.70	.15	23.99	<.001
	Financial reward satisfaction	.23	.04	5.56	<.001
	Psychological reward satisfaction	.42	.04	11.52	<.001

### 3. Results

#### 3.1. Relationship between financial and psychological reward satisfaction and job satisfaction

The means, standard deviations, bivariate correlations and Cronbach alpha coefficients for the three key variables are shown in Table 1 for studies 1, 2, and 3 respectively. Because of the cross-sectional nature of the data, some of these correlations may be artificially inflated (Podsakoff & Organ, 1986). Therefore, we tested whether the relationships still hold when statistically controlling for common method variance. In particular, we applied the test of Lindell and Whitney (2001) in which all correlations are corrected for the smallest correlation in the correlation matrix (as this correlation is expected to reflect common method variance). Preferably, this is the correlation between two theoretically unrelated variables that are measured at the same time. Because we did not include theoretically unrelated variables in our data collection, we used the correlations between normative commitment and pay level satisfaction<sup>3</sup> to correct for the correlations between the other variables. Note that this is a very conservative test as one may expect both concepts to be related, which implies that the correlation is larger than what is expected if only common method variance is operating. Applying the test of Lindell and Whitney (2001) revealed that all correlations remain significant, which implies that the relationships that are observed in our data reflect substantive relationships.

Subsequently, we performed a multiple linear regression analysis with job satisfaction as the dependent variable, and financial and psychological reward satisfaction as the predictors. In all three studies, the model is statistically significant ( $F(2, 362) = 49.99; p < .001$ ;  $F(2, 228) = 17.96; p < .001$ ; and  $F(2, 857) = 99.24; p < .001$  for studies 1, 2, and 3), thereby predicting 21.6, 13.6, and 18.8% of the variance in job satisfaction respectively. The parameter estimates of these analyses are reported in Table 2. In general, it can be seen that in all studies both financial and psychological reward satisfaction relate positively to job satisfaction. Moreover, and in agreement with previous research, psychological reward satisfaction appears to be a better predictor of job satisfaction than satisfaction with financial rewards.

#### 3.2. Individual differences in the relationship between financial and psychological reward satisfaction and job satisfaction

To test the presence of individual differences in the relationship between financial and psychological reward satisfaction on the one hand and job satisfaction on the other hand, we fitted a series of cluster-wise regression models on the data of the three studies separately. As the number of person types in the data is unknown, the most commonly used approach is to fit models with

<sup>3</sup> Normative commitment was only measured in studies 2 and 3. Hence, the test on common method variance of Lindell and Whitney (2001) was only performed on the data of those studies.

**Table 3**

Parameter estimates for the regression models of both person types with job satisfaction as the dependent variable for studies 1, 2, and 3.

		Estimate	Person type 1			Estimate	Person type 2		
			Standard error	t-Value	p-Value		Standard error	t-Value	p-Value
Study 1	Intercept	3.32	.42	7.98	<.001	3.42	.78	4.38	<.001
	Financial	.43	.07	5.93	<.001	-.08	.21	-.36	.718
	Psychological	.25	.09	2.78	.005	.55	.19	2.87	.004
Study 2	Intercept	4.66	.46	10.22	<.001	2.18	.81	2.68	<.001
	Financial	.21	.08	2.46	.014	-.02	.23	-.07	.944
	Psychological	.16	.09	1.82	.069	.65	.20	3.33	<.001
Study 3	Intercept	4.75	.21	22.83	<.001	1.96	.42	4.69	<.001
	Financial	.18	.04	4.66	<.001	.28	.11	2.50	.012
	Psychological	.26	.04	6.54	<.001	.63	.09	7.12	<.001

an increasing number of person types and to compare them regarding model fit (De Gieter, Hofmans, & Pepermans, 2011; Haivas, Hofmans, & Pepermans, in press). To this end, for each study cluster-wise regression models with 1 to 7 person types were fitted. Moreover, for each model, 20 random restarts were performed in order to minimize 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 an information criterion that weighs both model fit and parsimony (Schwarz, 1978). In all three studies, the largest decrease in BIC (i.e., the elbow) showed up when going from one to two person types. Moreover, the first person type containing 84.4%, 82.7%, and 79.5% of the respondents for studies 1, 2, and 3 respectively. This reveals that the distribution of the respondents across person types is highly similar in the three studies.

Furthermore, the person types differ substantially in terms of how financial and psychological reward satisfaction relate to job satisfaction, and these differences replicate across studies (see Table 3). In particular, for people belonging to person type 1, both satisfaction with financial and psychological rewards relate to overall job satisfaction (note that in study 2 the relationship between psychological reward satisfaction and job satisfaction is only marginally significant). Moreover, the regression coefficients for financial and psychological reward satisfaction are similar in size. In particular, a test for the equality of regression coefficients (Clogg, Petkova, & Haritou, 1995) reveals the regression coefficients for financial and psychological reward satisfaction do not differ significantly ( $z = 1.41, p = .159$ ;  $z = .42, p = .675$ ; and  $z = 1.41, p = .159$  for studies 1, 2, and 3 respectively). In contrast, for person type 2, financial reward satisfaction is unrelated to job satisfaction (note that in study 3 there is a small but significant effect of financial reward satisfaction), whereas psychological reward satisfaction is. The differential effect of financial and psychological reward satisfaction is reflected in the fact that in all studies the regression coefficient of psychological reward satisfaction is significantly larger than that of financial reward satisfaction ( $z = 2.22, p = .026$ ;  $z = 2.20, p = .028$ ; and  $z = 2.46, p = .014$  for studies 1, 2, and 3 respectively).

### 3.3. Work values as antecedents of individual differences in the link between job rewards and job satisfaction

To study antecedents of the individual differences that were observed in the first part of the study, we related person type membership to the work values 'financial security' and 'recognition'. To do this, we performed independent sample *t*-tests with the two work values as dependent variables, and cluster membership as the independent variable. The results reveal that for Study 1 both person types do not differ on the work value financial security ( $t(363) = .301, p = .764, M = 6.02$  and  $5.98$ , and  $SD = .80$  and  $.88$  for person types 1 and 2 respectively). For Study 2, however, people whose satisfaction with financial rewards relates to their satisfaction with their job (i.e., people belonging to person type 1) score higher on the work value financial security ( $M = 4.17, SD = .55$ ) than people who only take psychological reward satisfaction into account (i.e., people belonging to person type 2) ( $M = 3.94, SD = .88$ ) ( $t(228) = 2.12, p = .035$ ). Moreover, in Study 1 ( $t(361) = 1.10, p = .273$ ) ( $M = 5.85$  and  $5.72$ , and  $SD = .78$  and  $.89$  for person types 1 and 2 respectively) and in Study 2 both person types do not differ on recognition ( $t(228) = .41, p = .682$ ) ( $M = 3.89$  and  $3.84$ , and  $SD = .60$  and  $.72$  for person types 1 and 2 respectively).

In addition, we also tested whether person type membership relates to gender, age, job tenure and organizational tenure in all three samples. In short, none of these socio-demographical data are systematically related to person type membership. The results of those analyses are shown in Table 4.

**Table 4**

Results of tests of the effect of gender, age, job tenure and organizational tenure on person type membership.

	Study 1	Study 2	Study 3
Gender	$\chi^2(1) = .24, p = .628$	$\chi^2(1) = 2.86, p = .091$	$\chi^2(1) = 11.55, p = .001$
Age	$t(363) = 1.18, p = .241$	$t(229) = .77, p = .440$	$t(857) = .38, p = .708$
Job tenure	$t(361) = .87, p = .384$	$t(229) = 2.57, p = .011$	$t(852) = .53, p = .598$
Organizational tenure	$t(361) = .95, p = .339$	$t(229) = .93, p = .352$	$t(849) = 1.09, p = .277$

**Table 5**

Means and standard deviations for affective commitment, and turnover intention for both person types emerging from the cluster-wise regression analysis.

		Person type 1		Person type 2	
		M	SD	M	SD
Study 2	Affective commitment	3.55	1.03	4.45	.90
	Turnover intention	4.43	2.20	2.01	1.47
Study 3	Affective commitment	4.08	1.28	5.24	1.10
	Turnover intention	3.58	1.68	1.99	.05

### 3.4. Turnover intention and affective commitment as consequences of individual differences in the link between job rewards and job satisfaction

Subsequently, we evaluated whether person type membership relates to affective commitment and turnover intention. Therefore we performed a series of independent sample *t*-tests with person type membership as the independent, and the two other variables as dependent variables. The results show that people whose satisfaction with financial rewards relates to their job satisfaction (i.e., people belonging to person type 1) have lower affective commitment ( $t(228) = 5.60$ ;  $p < .001$ , and  $t(838) = 11.98$ ;  $p < .001$  for studies 2 and 3 respectively), and higher turnover intention ( $t(229) = 8.60$ ;  $p < .001$ , and  $t(844) = 13.77$ ;  $p < .001$  for studies 2 and 3 respectively) than people whose satisfaction with the job relates to psychological reward satisfaction only (i.e., people belonging to person type 2). The means and standard deviations of affective commitment and turnover intention are reported in Table 5.

## 4. Discussion

The results of the three studies reveal that there are important individual differences in the relationship between satisfaction with financial and psychological rewards and job satisfaction, in that both reward types relate differently to job satisfaction for different person types. In line with equity theory (Adams, 1965) and the discrepancy model (Porter & Lawler, 1968), and contrary to the two-factor theory (Herzberg, 1959) and SDT (Deci & Ryan, 1985, 2002), we find that financial reward satisfaction relates positively to job satisfaction. However, this relationship holds for a subgroup of participants only. Otherwise, and in line with the two-factor theory (Herzberg, 1959) and SDT (Deci & Ryan, 1985, 2002) satisfaction with psychological rewards relates to job satisfaction for everyone. These findings suggest that there is a need for further theorizing on job satisfaction also including individual differences.

The established pattern of individual differences also associates with individual differences in work values (e.g., De Cooman et al., 2008; Kalleberg, 1977). In particular, in one of two studies, we found that individuals for whom financial reward satisfaction relates to job satisfaction consider financial security as more important. On the other hand, no between-cluster differences were found regarding recognition, which is in line with the expectations since psychological reward satisfaction relates to job satisfaction for both person types.

Finally, our results show that the effects of the individual differences generalize beyond job satisfaction. In particular, employees for whom financial reward satisfaction relates to job satisfaction have a stronger affective commitment and a lower turnover intention. This suggests that the observed individual differences may be due to differences in the mechanisms that drive job satisfaction and related concepts such as affective commitment and turnover intention. However, as this is to our knowledge the first studies on this topic, additional process-based research is required to validate this claim.

### 4.1. Theoretical implications

One of the major debates regarding the definition of job satisfaction is whether it should be conceptualized at the global level or at the facet level (George & Jones, 1999; Roznowski, 1989). According to the first approach, job satisfaction is the overall evaluation of the employee's job. Conversely, adepts of the facet level break the job down into different facets, assess satisfaction with each of them, and then integrate these different facets again into one overall concept. To date, the debate on which of both conceptualizations is superior has not yet been settled and both approaches tend to be used in research and practice depending on the preference of the researcher (Schleicher et al., 2010). However, the discussion on the conceptualization of job satisfaction is far from non-committal. In particular, both approaches are exchangeable only under very strict conditions, that is, when the facets contribute to job satisfaction in the same way for everyone. In other words, only if there are no significant individual differences in the link between satisfaction with the different facets and overall job satisfaction, both conceptualizations converge. Our results show that this crucial condition does not hold. Hence, both conceptualizations cannot simply be exchanged, and researchers should bear this in mind when choosing for one of both conceptualizations. In multifaceted scales such as the JDI and the MSQ the final job satisfaction score is always – in part – a function of satisfaction with pay. However, our results clearly show that for a specific person type pay satisfaction and job satisfaction are unrelated. Hence, their final job satisfaction score will be contaminated or biased since an unrelated facet (i.e., pay satisfaction) is included. Our results imply that it seems preferable to ask for an evaluation of the overall job satisfaction, without referring to separate facets. Then, individuals weigh the important domains themselves, which imply that only those domains that matter for job satisfaction are taken into account.

Second, this study also supports the claim of the more recent total rewards perspective emerging in both HR practice and research (Milkovich & Newman, 2005) that rewards include monetary and psychological payments. This conflicts with a lot of previous studies in which rewards were equated with satisfaction with pay or financial rewards. Our findings even go further, by showing that for some individuals not financial reward satisfaction, but rather psychological reward satisfaction has the largest effect on job satisfaction (see also De Gieter et al., 2010). Moreover, only for a subgroup of employees job satisfaction is linked to financial reward satisfaction. This result directly links up with the finding that the importance of satisfaction with pay or financial rewards varies across individuals (Kohn, 1993; Mitchell & Mickel, 1999), and with the fact that some studies report strong nonmonetary orientations (Hansen, Ban, & Huggins, 2003; Von Eckardstein & Brandl, 2004). In sum, these results clearly demonstrate that an operationalization of job rewards in terms of pay alone may be too constrained, and that multiple types of job rewards ought to be taken into account.

#### 4.2. Practical implications

Provided that the role of rewards is to guide behavior and performance in an attempt to attract and retain the best-qualified employees and keep them satisfied and motivated (Armstrong, 2010; Bratton & Gold, 2003; Rynes et al., 2004), the existence of two person types with a different job rewards satisfaction–job satisfaction relationship has important practical implications. In particular, psychological rewards such as recognition, compliments, appreciation, and encouragements are important for all employees and therefore deserve the full attention of the employer. However, this does not mean that optimizing financial reward satisfaction should be ignored, as this has still an important impact for a relevant number of employees. Anyway, the results of this study urge employers to go beyond pay, take on a total rewards perspective and think about the fit between the rewards they provide and the work values of the employee.

#### 4.3. Limitations and future work

A first limitation of this study is that the results are empirically derived. Indeed, cluster-wise regression analysis is foremost an exploratory technique in which the different regression functions (and hence the cluster memberships) are inferred from the data. However, we have shown that the findings are stable by replicating the individual differences structure in three separate studies. Moreover, the results are logically sound, support previous research on work values, and the individual differences relate to other important work-related variables. As such, confidence can be placed on the stability and reliability of the findings.

Second, this study shows that individual differences are an empirical reality. Therefore, such differences should be taken into account when attempting to capture the mechanisms underlying the job rewards satisfaction–job satisfaction relationship. However, this study is only a first initiative in this direction and explores new foundations for extending our knowledge and theory. Therefore, further research is needed to fully grasp the mechanisms underlying these individual differences. Specifically, it would be interesting to study the impact of organizational-level variables on the individual differences structure. For example, does the organizational culture relate to differences in the reward satisfaction–job satisfaction relationship? Or, at a more micro-level, do the individual differences relate to specific job characteristics such as the level of autonomy in the job? Finally, it would be interesting to study alternative antecedents at the level of the individual as well. For example, does the observed individual differences structure relate to individual differences in personality or reward preference?

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