Original Article

Evaluations of One's Own and Others' Financial Rewards

The Role of Trait Positive Affectivity

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Abstract. Previous research indicates that trait positive affectivity (PA) directly and indirectly influences individuals' evaluations of reward sizes. However, research shows conflicting results on the direction of PA's moderating influence. Furthermore, past studies fail to differentiate evaluations of one's own rewards versus rewards for others, which is particularly important as reward systems are designed from a third-person perspective. Our experimental design confirms PA's direct and moderating effects on the evaluation of one's own rewards, finding stronger positive relationship for small-to-moderate rewards but weaker positive relationship for moderate-to-large rewards. These evaluation processes further show that individuals high (low) in PA perceive their own rewards as being larger (smaller) than rewards for others. The discussion addresses the implications for designing reward systems in organizations.

Keywords: reward size, incentives, perspective, subjective magnitude, trait positive affectivity

Although the classic assumption that financial incentives generally enhance work motivation and performance (Lawler, 1971; Vroom, 1964) receives strong empirical support (Wegge et al., 2010), it has been shown that, additionally, individual differences influence the perception of rewards (e.g., Cadsby, Song, & Tapon, 2007). In particular, research has demonstrated that positive affectivity plays a moderating role in the relationship between reward sizes and evaluations (Shaw, Duffy, Jenkins, & Gupta, 1999; Shaw, Duffy, Mitra, Lockhart, & Bowler, 2003). Following this line of research, we will clarify how trait positive affectivity (PA) influences perceptions of different reward sizes, but we also extend the research by considering whether PA plays a different role in evaluations of one's own rewards and others' rewards. We explicitly focus on PA, which prior research demonstrates to be a marker of sensitivity to reward signals (Shaw et al., 1999, 2003), but we omit trait negative affectivity (NA), which has no bearing on reactions to rewards (Begley & Lee, 2005; Larsen & Ketelaar, 1991).

To date, previous research has provided contradictory findings on PA's moderating role in the relationship between reward size and perceptions of size (e.g., from small to large) of financial incentives. Following Mitra, Gupta, and Jenkins (1997), we refer to these perceptions as the subjective magnitude of the reward. On one hand, recent research has found evidence that positive affect increases evaluations of moderately large rewards, but not of very small rewards (Erez & Isen, 2002). On the other hand, research based on signal sensitivity theory states that high-PA individuals, who generally experience more positive moods and emotions within their lives, are more sensitive to reward signals and will, therefore, react more dramatically to small-reward signals, but that they will react similarly to low-PA individuals to large-reward signals (Shaw et al., 1999, 2003). Thus, current research provides contradictory results with regard to the moderating influence of PA. The goal of this research is to identify an explanation for these differences by showing that they can result from different reward sizes implied in these studies. Erez and Isen's (2002) laboratory study used relatively small rewards of \$0 to \$25 compared with experiments on large rewards that used amounts above \$100 (Ariely, Gneezy, Loewenstein, & Mazar, 2009). Shaw et al.'s (1999) field research of full-time university hospital employees examined relatively high rewards: an average of approximately \$20,000, and an average of 5% merit pay raises, which recipients may have interpreted as reward signals, whatever the actual amount (Shaw et al., 2003). Thus, besides the different underlying tasks, which generally influence how rewards are judged (Adams, 1963), we expect that differences in the absolute reward levels cause seemingly contradictory findings. Based on this assumption, we predict that high-PA individuals, compared with low-PA individuals, will show a stronger positive relation between reward size and subjective magnitude for small-to-moderate rewards, but a weaker relation for moderate-to-large rewards.

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Furthermore, research has focused exclusively on PA as it influences individuals' perceptions of rewards that they received for themselves. Thus, we know little about the determinants of reward evaluations from a third-person perspective, although in organizational settings it is common practice to design pay scales for others. For example, human resource managers select contingent reward schemes, which greatly impact overall organizational performance (Becker & Gerhart, 1996; Bowen & Ostroff, 2004), and can damage employees psychologically and materially if wrongly defined (Kopp & Schuler, 2003). Existing research has two divergent assumptions about the interplay between PA and perspective: On one hand, researchers expect high-PA individuals to see the world generally through rose-colored glasses (Lyubomirsky, 2001). On the other hand, high-PA individuals apparently exhibit positivity bias when they judge themselves, but not when they judge others (Myers & Diener, 1995). In sum, the influence of perspective (on the relation between PA and perceptions of reward size) has not yet been examined. Based on mood maintenance theory, this research aims to show that high-PA individuals are more likely to perceive own rewards as larger than others' rewards.

Targeting the first research gap, we will show that for rewards going to the self, PA has a positive main effect on subjective magnitude as it relates to reward size and a differentiated interaction effect on reward size as it relates to subjective magnitude. Targeting the second research gap, we will show that for rewards going to others, PA fails to influence subjective magnitude, whatever its form. Next, we outline our hypotheses on the influence of reward size, PA, and perspective on subjective magnitude of rewards.

Hypotheses Development

We expect that as the reward size increases so will the mental labels used to describe the size of the rewards (e.g., small, moderate, large) both within the self- and other perspective (Mitra et al., 1997). Concerning PA's influence on individuals' subjective magnitudes of own rewards, we base our hypotheses on signal sensitivity theory (Gray, 1970; Shaw et al., 1999, 2003). Gray's (1970) work concerned individual differences toward reward and punishment. Gray argued that high-PA individuals are more sensitive to reward signals, whereas high-NA individuals are more sensitive to punishment signals (also see Larsen & Ketelaar, 1991). Signal sensitivity theory therefore expects that PA, but not NA, is positively related with pay satisfaction because individuals high in PA will more rapidly detect reward signals (Shaw et al., 1999). Following this argument, we expect PA to be positively related with subjective magnitude of received rewards.

> *Hypothesis 1*: PA will be positively related to the subjective magnitude of rewards received for oneself.

Furthermore, signal sensitivity theory postulates that PA exerts a moderating effect (Shaw et al., 1999, 2003): high-PA individuals may be more sensitive to financial rewards and therefore more likely to react positively even to small rewards. In contrast, low-PA individuals are likely to react positively to large rewards only. Consequently, for larger rewards, existing research expects that differences will decrease between low-PA and high-PA individuals, and PA's positive influence will be ameliorated at high reward levels (resembling a ceiling effect). Research applying signal sensitivity to rewards has so far focused on between-subject predictions within the context of overall pay levels and merit pay increases. Both are characterized by relatively high rewards, so we lack explicit predictions about PA's influence when rewards are small. To extend existing theory, we again borrow from signal sensitivity theory (Gray, 1970), which expects that PA and NA amplify certain stimulus signals. With PA amplifying reward signals, we expect high-PA individuals to show stronger positive relationships between reward sizes and subjective magnitudes. Thus, rather than contradicting existing hypotheses on PA's influence on perceptions of financial rewards (Shaw et al., 1999, 2003), we specify small rewards: that high PA will amplify the relationship between reward size and subjective magnitude for small-to-moderate rewards. We comply with signal sensitivity theory in expecting that high PA will result in a ceiling effect that serves to weaken the relationship between reward size and subjective magnitude. Thus, for high-PA individuals we expect a stronger positive relationship between reward size and subjective magnitude when rewards are small to moderate, but a weaker positive relationship between reward size and subjective magnitude when rewards are moderate to large.

> *Hypothesis 2*: PA will moderate the relationship between reward size and subjective magnitude of rewards received for oneself. Specifically, when PA is high, the positive relation between reward size and subjective magnitude will be stronger for small-to-moderate rewards but weaker for moderate-to-large rewards than when PA is low.

Note that in Hypotheses 1 and 2 we explicitly assume that PA will have direct and moderating effects only when individuals evaluate their own rewards. When they evaluate rewards for others, we hypothesize that PA will lack influence because evaluators will consider others' rewards irrelevant to their self-interests. Mood maintenance theory hypothesizes that individuals who are enjoying positive moods, which are closely associated with trait positive affectivity (Larsen & Ketelaar, 1991), are motivated to maintain their elevated state (e.g., Aspinwall, 1998; Isen & Simmonds, 1978). Thus, they direct their thoughts and behavior to perceptions that avoid disheartening evaluations and situations, which induce negative affect. With negative self-evaluations being a major source of negative emotions and moods (cf. Tesser, 2001), we expect high PA to increase perceptions of one's own rewards but not that of

other's rewards, thereby making self-other comparisons seem less negative or even positive. In this vein, research has shown that happy people tend to generally see themselves more positively (Myers & Diener, 1995), to have a more positive self-concept (Tarlow & Haaga, 1996), and to show an elevated positivity bias in self-relevant information (Casciaro, Carley, & Krackhardt, 1999). Therefore, we expect that high-PA individuals will see their own rewards as higher than others' rewards.

Hypothesis 3: High-PA individuals will be more likely to perceive their own rewards as larger than others' rewards, compared with low-PA individuals.

In sum, we expanded signal sensitivity in two important ways. To glean further detail about how PA influences perceptions of financial rewards, we added very small rewards to the existing hypothesis on the moderating effect of PA. Previously PA's moderating effect was proposed and demonstrated for large rewards only, so we extended existing theory. So far, researchers have failed to hypothesize or empirically show an overall curvilinear effect. By adding an additional important variable, we suggest that perspective moderates the relationship; PA influences only perceptions of one's own rewards. Thus, we further extended the understanding of PA's moderating effect by showing that it occurs only when evaluating one's own rewards, but not when evaluating other's rewards.

Method

Data Collection

To test our hypotheses, we devised a hypothetical scenario (cf. Ullrich, van Dick, & Christ, 2009) in which we asked our student participants to help design a scientific experiment. This design allowed us not only to ask for judgments of different reward sizes, but also to introduce different perspectives. Participants were told that the experiment would be conducted in the future, ostensibly to analyze the influence of financial rewards. In this supposed future study, participants were to be rewarded for successfully completing mathematical tasks (cf. Gneezy & Rustichini, 2000), so we explicitly asked them to evaluate reward amounts as if they (self) or another person (other) were participating in the planned experiment. To increase respondents' understanding of the value of the rewards in relation to the task, we asked them to resolve four mathematical tasks from a standard GMAT textbook each requiring approximately 4 min. We wanted to increase participants' understanding of the tasks, but tried to avoid influences from emotional experiences in response to the tasks such as feeling frustrated when not being able to resolve them or feeling elated in the other case. Therefore, the mathematical tasks were accompanied by correct solutions. Following research on pay increases (e.g., Hinrichs, 1969; Mitra et al., 1997), we then asked participants to evaluate a broad range of reward sizes after they completed all four tasks. The instructions were adapted to our purposes, but followed previous research (Hinrichs, 1969) as closely as possible. Therefore, we stated that people will perceive €10 rewards as being *extremely large* for resolving one mathematical question. Simultaneously, they will perceive a €0.05 financial reward as being *extremely small*. Euro amounts between these extremes will be seen as *large, average*, or *small*. We then asked participants to evaluate each of 29 reward amounts as if they themselves (*self*) or an unknown person (*other*) participated in the experiment, before they answered a small questionnaire that included a PA measure. In order to make sure that participants perceived the scenarios as realistic as possible (Karren & Barringer, 2002), we chose and asked participants to perform a task that experimental research has used previously (cf. Gneezy & Rustichini, 2000), selected reward sizes comparable to past studies (Ariely et al., 2009; Gneezy & Rustichini, 2000), and provided a cover story. In general, research has shown that results from hypothetical scenarios resemble those obtained with other methodological approaches (e.g., McGraw, 1987; Rudolph, Roesch, Greitemeyer, & Weiner, 2004). Furthermore, research comparing decision making under hypothetical and real rewards has shown that hypothetical choices are often comparable to real choices (Kühberger, Schulte-Mecklenbeck, & Perner, 2002).

Sample

We conducted our experiment at a German university during lectures and on campus, mainly in the university library. First we explained that our purpose was to get help in designing a future experiment in which participants would be paid for solving mathematical tasks. Students who agreed to participate completed a paper-and-pencil questionnaire and were distributed randomly and equally into experimental conditions. The final data set included 280 participants. Of the approximately 400 distributed questionnaires, several were not returned, and we excluded some returned questionnaires due to a large rate of missing values and because manipulation checks, which assessed whether participants had a correct understanding of perspective and amount of base wage, indicated that some participants did not read our instructions. Fifty percent of participants were female. Participants were on average 23.44 years old and came from various fields of study, with management (21.79%) being the most prevalent.

Design

We used a 29 (levels of reward size: €0.05–€10.00) × 2 (Perspective: self vs. other) × 2 (Participant sex: male vs. female) × 5 (Base wage: €2 vs. €6 vs. €10 vs. €14 vs. €18) × 2 (Order of reward presentation: ascending vs. descending) experimental mixed-design with the first as a within-subjects factor and the last four as between-subjects factors. We chose this design to induce different levels of our independent variables (reward size and perspective) and to methodologically control for potentially important covariates.

Reward Size

Each participant received a list of 29 reward sizes ranging from €0.05 to €10.00 (with equal steps of €0.05 between €0.05 and €1.00 and equal steps of €1.00 between €1.00 and €10.00 in) for every successfully resolved mathematical task. At the time of data collection, €1.00 was approximately $1.37.

Perspective

For the main independent variable we introduced two perspectives: evaluation of one's own rewards (self) and of another's rewards (other). In the self-condition, the questionnaires indicated that we would ask the student to participate in the planned experiment later. In the other-person-condition, the questionnaire indicated that someone else would participate in the future experiment. We introduced the two different perspectives on the first page of the questionnaire and reiterated the perspectives several times in the direct instructions for evaluating the rewards.

Sex

Men and women have been shown to react differently to wage and financial rewards (e.g., Croson & Gneezy, 2009), so we controlled for sex methodologically by balancing this variable within our research design.

Base Wage

Researchers have argued that guaranteed minimum wages might influence reactions to financial incentives (Cadsby et al., 2007). We therefore controlled for different base wages, explaining that they would be given merely for participation, not for performance. Base wage included five conditions: €2, €6, €10, €14, or €18.

Order

To control for potential response order effects (cf. Krosnick, 1999), we sorted the 29 reward sizes in ascending order in one condition and descending order in the other. The conditions were equally distributed and participants were randomly assigned to one of the two conditions.

Measures

Subjective Magnitude

For the dependent variable of subjective magnitude of rewards, participants were given predefined cognitive labels for classifying the hypothetical rewards, an approach that research examining pay increases has been well established (e.g., Hinrichs, 1969; Mitra et al., 1997).

Participants evaluated each of the 29 reward sizes using two 5-point Likert-type scales as follows. The first set was scaled (1) *extremely small financial incentive*, (2) *small financial incentive*, (3) *neither large nor small financial incentive*, (4) *large financial incentive*, and (5) *extremely large incentive*. Second-set participants classified each reward as (1) *minimal*, (2) *small*, (3) *appropriate*, (4) *high*, or (5) *very high*, presented in ascending order. We used the mean of both categorizations for our analyses (across all reward levels: Cronbach's $\alpha = .96$; mean of all Cronbach's alphas calculated separately for each reward size = .77).

Trait Positive Affectivity

We measured PA using a short form (Thompson, 2007) of the positive and negative affect schedule (PANAS; Watson, Clark, & Tellegen, 1988). Participants indicated how often they generally experience five positive emotions on a scale from one (never) to five (always) (Cronbach's $\alpha = .73$).

Control Variables

In addition to the experimentally manipulated control variables, we assessed trait NA as covariate. As with PA (see above) we measured NA using five items from the short form (Thompson, 2007) of the PANAS (Cronbach's $\alpha = .65$). Furthermore, we controlled for business students as it is generally assumed that they are more attracted to pay than other students (Frey & Meier, 2003).

Analytical Strategy

Only 0.38% of data points were missing within the final data set. We tested missing data for complete randomness using Little's MCAR test, as missing completely at random can be considered a prerequisite of a dependable imputation (e.g., Gadbury, Coffey, & Allison, 2003; Schafer & Graham, 2002). This test was not significant, so we could assume MCAR and imputed the missing values using expectation maximization.

Controlling for the within-person variance of the reward evaluations, we followed Green and Vavreck's (2008) suggestion and used the robust cluster estimation method of STATA 11 in our regression models. This approach accounts for the fact that one person's reward evaluations are not independent from another's and controls for individual's unobservable characteristics. We grand mean standardized all independent variables before calculating interaction variables and entering them into the regression analysis. To test Hypothesis 2 we included the logarithmic term of reward size in the regression analysis, as well as the interaction term of the logarithmic term of reward size and PA. This approach allowed us to test for the hypothesized overall positive influence of PA, which we expected to be stronger for small-to-moderate rewards, and weaker for moderate-to-large rewards. In contrast, the more commonly used quadratic (concave) term would have assumed a positive influence for small-to-moderate rewards, but

Table 1. Descriptive statistics and correlations

	M	*SD*	*SK*	*KU*	1	2	3	4	5	6	7	8
1. Business student	–	–	–	–	–	.03*	.04***	−.00	.01	−.06***	.11***	−.03**
2. Sex	–	–	–	–	.03*	–	.00	.00	.00	−.09***	−.17***	.02
3. Order	–	–	–	–	.04***	.00	–	.00	.00	.01	−.03**	−.04***
4. Base wage	–	–	–	–	.00	.00	.00	–	.00	−.01	.03*	−.02*
5. Perspective	–	–	–	–	.01	.00	.00	.00	–	.01	.01	.04***
6. NA	2.10	0.51	0.52	0.39	−.04***	−.11***	.00	−.02*	.03**	(.65)	−.17***	−.03*
7. PA	3.64	0.53	–0.67	0.59	.14***	−.18***	−.04**	.03**	.02	−.18***	(.73)	.03*
8. Subjective magnitude	2.63	1.42	0.37	–1.22	−.03**	.02	−.05***	−.02	.04***	−.03*	.02*	(.96)

Notes. SK = Skewness; KU = Kurtosis; NA = Trait Negative Affectivity; PA = Trait Positive Affectivity, n = 8,120; i.e., 280 participants made 29 evaluations, business student was coded with 1 (business student) and 0 (no business student), sex was coded with 1 (females) and 2 (males), perspective was coded with 1 (self) and 3 (other), order was coded with 1 (ascending) and 2 (descending). Because most skewness and kurtosis values are within or close to the recommended range of −1.00 and +1.00 (Muthén & Kaplan, 1985), parametric analyses seemed justified. However, because of some deviation from normality for subjective magnitude, we additionally computed Spearman's nonparametric rank correlations, which overall were very similar to Pearson's correlation, indicating that these deviations do not severely influence the parametric indicators of the association. Pearson's correlations are presented above the main diagonal, whereas Spearman's correlations are shown below the main diagonal. Cronbach's α is shown in the values in parentheses in the main diagonal. *$p < .05$. **$p < .01$. ***$p < .001$.

negative influence for moderate-to-large rewards (Meyer, 2009). We analyzed the overall sample of 8,120 subjective magnitudes (2 × 2 × 5 × 2 × 29, with seven participants in each of the 40 resulting cells), as well as the subsamples of own-person and another-person rewards each containing 4,060 subjective magnitudes.

Results

Descriptive statistics of all between-person variables including mean, standard deviation, skewness, kurtosis, and correlations are presented in Table 1.

We first tested Hypotheses 1 and 2 about PA's direct and indirect effects on subjective magnitude. Note that we formulated these hypotheses only for rewards for the self, expecting that these hypotheses will not apply to rewards for others.

According to Hypothesis 1, we expected PA to positively and directly affect subjective magnitude when individuals evaluated their own rewards. As Table 2 depicts, regressing PA on subjective magnitude of own rewards including all control variables showed a significantly positive main effect for PA (i.e., model 2: $\beta = 0.10$, $p < .01$).

When we analyzed evaluations of others' rewards, PA's positive main effect was no longer significant (model 3: $\beta = -0.04$, *ns*). The 95% coefficient interval (cf. Kelley, 2007) for PA in model 2 was (0.03, 0.16), whereas it was (−0.11, 0.03) in model 3. Although intervals slightly overlapped, regression coefficients were outside the 95% coefficient interval of the respective other coefficient. Furthermore, results of the examination containing both perspectives showed a significant two-way interaction effect of PA and perspective (model 1: $\beta = -0.06$, $p < .05$), but no significant direct effect of PA (model 1: $\beta = 0.03$, *ns*). Consequently, results mainly support Hypothesis 1.

Hypothesis 2 stated that with high PA, compared with low PA, the positive relationship between reward size and subjective magnitude will be stronger for small-to-moderate rewards, but weaker for moderate-to-large rewards.

According to Table 3, the interaction of the logarithmic term of reward size and PA was significant (model 7: $\beta = 0.10$, $p < .01$)[1] and the graph in Figure 1 confirms the hypothesized relationship.

When examining evaluations of rewards for another person, the moderating influence of PA was not significant for the interaction of the logarithmic term of reward size and PA (model 11: $\beta = -0.05$, *ns*). Examining rewards for the self and for others simultaneously (results are depicted in Table 4), the interaction effect of the logarithmic term of reward size, PA, and perspective (model 14: $\beta = -0.07$, $p < .01$) was significant. In contrast, neither PA's main effect (βs = 0.03, *ns* in models 13 and 14) nor the interaction effects including PA but not perspective (reward size and PA: βs = −0.02, *ns* in models 13 and 14; log(reward size) and PA: $\beta = 0.03$, *ns* in model 13 and $\beta = 0.02$, *ns* in model 14) were significant. Overall, these results support Hypothesis 2.

Hypothesis 3 stated that high-PA individuals will be more likely to perceive their own rewards as being larger than others' rewards. As reported, the interaction between PA and perspective was significant (model 1: $\beta = -0.06$, $p < .05$).

Figure 2 shows that only high-PA individuals perceived own rewards to be slightly higher than others' rewards,

[1] In addition, we tested a model using the quadratic term of reward size. As in the logarithmic term, all coefficients reached significance, however, the quadratic model fit less well than the logarithmic model. Including the logarithmic term increased the adjusted R^2 from 0.60 to 0.71, whereas the quadratic term raised the adjusted R^2 to only 0.67.

Table 2. Estimates for the linear regression results for all samples

Parameter	Both perspectives	Self	Other
	Model 1	Model 2	Model 3
Intercept	2.63***	2.58***	2.69***
Control variables			
Business student	−0.03	−0.05	−0.01
Sex	0.02	0.04	0.00
Base wage	−0.02	−0.03	−0.02
Order	−0.04	−0.07	−0.01
NA	−0.01	0.01	−0.03
Reward size	0.77***	0.76***	0.78***
PA	0.03	0.10**	−0.04
Perspective	0.04	–	–
PA × Reward Size	0.00	−0.01	0.01
PA × Perspective	−0.06*		
Reward Size × Perspective	0.01		
Reward Size × PA × Perspective	0.01		
Adjusted R^2	0.61[a]	0.60[b]	0.61[b]

Notes. [a]n = 8,120 (280 participants, examination of all 29 rewards). [b]n = 4,060 (140 participants, examination of all 29 rewards). Estimates are standardized regression results; business student was coded with 1 (business student) and 0 (no business student), sex was coded with 1 (females) and 2 (males), perspective was coded with 1 (self) and 3 (other), order was coded with 1 (ascending) and 2 (descending). *$p < .05$. **$p < .01$. ***$p < .001$.

whereas individuals with low-PA levels perceived own rewards to be even smaller than others' rewards. Simple slope analyses (Preacher, Curran, & Bauer, 2006) showed a significant slope only for low-PA individuals in the difference between self- and other perspective ($p < .01$). Thus, Hypothesis 3 was supported. In addition to finding that high-PA individuals, compared with low-PA individuals, evaluated their own rewards more optimistically than rewards for others, we also found that this effect was mainly driven by low-PA individuals, who pessimistically evaluated others' rewards as being larger than their own.

Discussion

In this research, we address two main questions. First, we aim to clarify PA's influence on individuals' perceptions

Table 3. Separate hierarchical linear modeling results for the self- and the other perspective including the logarithmic term of reward size

	Subjective magnitude							
	Self				Other			
Parameter	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Intercept	2.58***	2.58***	2.58***	2.58***	2.69***	2.69***	2.69***	2.69***
Control variables								
Business student	−0.05	−0.05	−0.05	−0.05	−0.01	−0.01	−0.01	−0.01
Sex	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00
Base wage	−0.03	−0.03	−0.03	−0.03	−0.02	−0.02	−0.02	−0.02
Order	−0.07	−0.07	−0.07	−0.07	−0.01	−0.01	−0.01	−0.01
NA	0.01	0.01	0.01	0.01	−0.03	−0.03	−0.03	−0.03
Reward size	0.76***	0.18***	0.18***	0.18***	0.78***	0.16***	0.16***	0.16***
PA	0.10**	0.10**	0.10**	0.10**	−0.04	−0.04	−0.04	−0.04
Log(Reward size)		0.67***	0.67***	0.67***		0.71***	0.71***	0.71***
Reward Size × PA			−0.01	−0.09**			0.01	0.05
Log(Reward Size) × PA				0.10**				−0.05
Adjusted R^2	0.60	0.71	0.71	0.71	0.61	0.73	0.73	0.73

Notes. Estimates are standardized regression results; n = 4,060; business student was coded with 1 (business student) and 0 (no business student), sex was coded with 1 (females) and 2 (males), perspective was coded with 1 (self) and 3 (other), order was coded with 1 (ascending) and 2 (descending).*$p < .05$. **$p < .01$. ***$p < .001$.

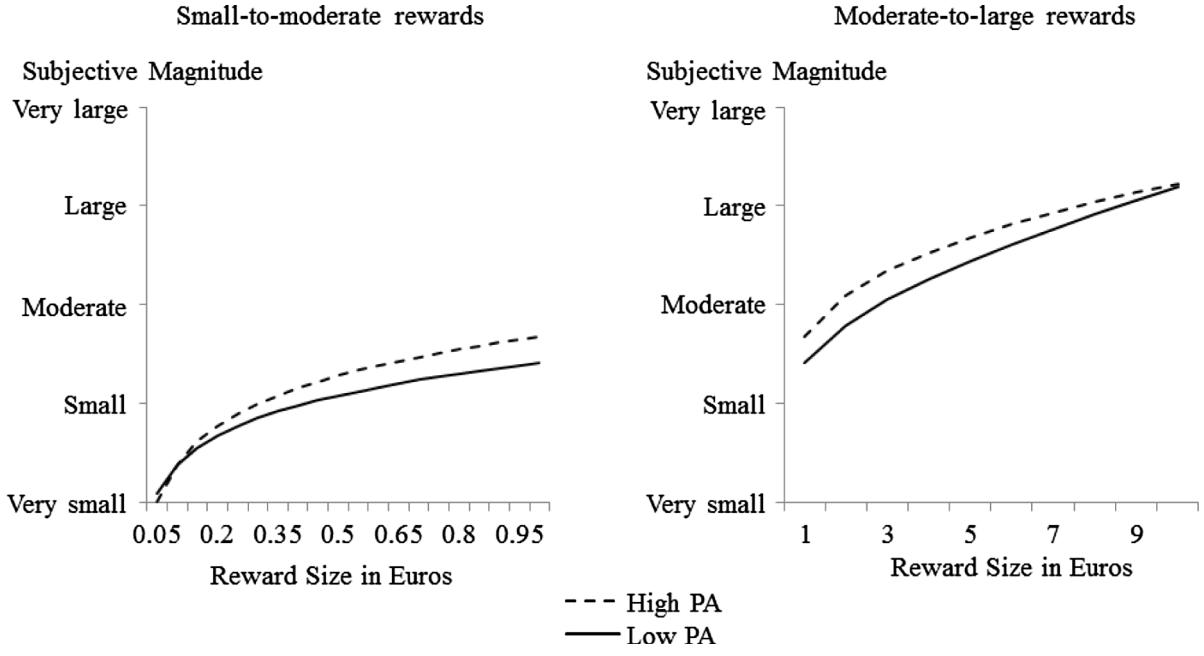

Figure 1. Moderating effect of trait positive affectivity on the relationship between reward size and subjective magnitude for small-to-moderate rewards and moderate-to-large rewards.

of the size of rewards. Second, we examine whether PA differently affects perceptions when individuals evaluate own-person or other-person rewards. In line with our hypotheses we find that when individuals evaluate rewards for themselves, PA significantly and positively influences subjective magnitude and moderates the positive relation between reward size and subjective magnitude. Compared with low-PA individuals, high-PA individuals show a stronger

Table 4. Hierarchical linear modeling results including the logarithmic term of reward size

	Subjective magnitude		
Parameter	Model 12	Model 13	Model 14
Intercept	2.63***	2.63***	2.63***
Control variables			
Business student	−0.03	−0.03	−0.03
Sex	0.02	0.02	0.02
Base wage	−0.02	−0.02	−0.02
Order	−0.04	−0.04	−0.04
NA	−0.02	−0.01	−0.01
Reward size	0.17***	0.17***	0.17***
Log(Reward size)	0.69***	0.69***	0.69***
PA	0.03	0.03	0.03
Perspective	0.04	0.04	0.04
Reward Size × PA		−0.02	−0.02
Reward Size × Perspective		−0.01	−0.01
PA × Perspective		−0.06*	−0.06*
Log(Reward Size) × PA		0.03	0.02
Log(Reward Size) × Perspective		0.03	0.03
Reward Size × PA × Perspective			0.07**
Log(Reward Size) × PA × Perspective			−0.07**
Adjusted R^2	0.71	0.72	0.72

Notes. Estimates are standardized regression results; n = 8,120; business student was coded with 1 (business student) and 0 (no business student), sex was coded with 1 (females) and 2 (males), perspective was coded with 1 (self) and 3 (other), order was coded with 1 (ascending) and 2 (descending). *$p < .05$. **$p < .01$. ***$p < .001$.

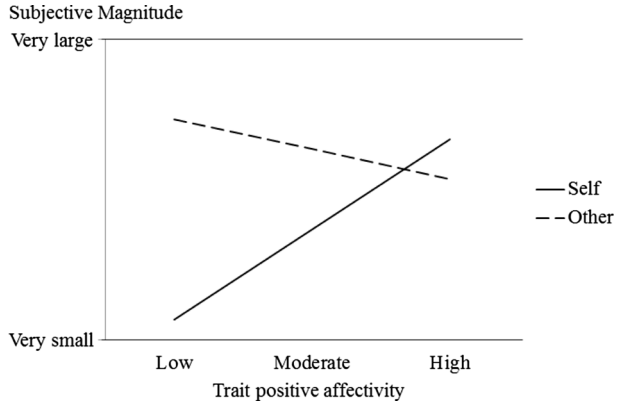

Figure 2. Interaction between perspective (self and other) and trait positive affectivity in predicting subjective magnitude.

positive relationship between reward size and subjective magnitude for small-to-moderate rewards, but a weaker relationship for moderate-to-large rewards. PA's influence diminishes when we examine subjective magnitudes of rewards for others. Comparing the absolute value of the subjective magnitude, we additionally find that especially low-PA individuals evaluate their equally high rewards to be significantly smaller than the rewards going to others.

In addition to the expected positive and linear influence of reward size on subjective magnitude, the logarithmic term of reward size also reached significance. However, the wide range of reward sizes in relation to the task might explain this effect. Participants switched relatively early into higher categories of subjective magnitude, leading to higher increases for small-to-moderate rewards than for moderate-to-large rewards.

We obtained those results even though we quasi-experimentally controlled for variables such as sex, base wage, and order of the displayed reward sizes, all of which failed to yield significant results. The lack of results for base wage is especially surprising because signal sensitivity theory has been shown to apply to overall reward levels (Shaw et al., 1999). Although we explicitly introduced base wage, participants did not weigh it when they rated reward sizes. Being less salient, it may therefore have failed to influence subjective magnitude. Future research is necessary to clarify the relationship between PA and perceptions of base wage.

Previous literature considering PA's influence on the impact of rewards has focused on specific reward ranges. Our results show that the different absolute monetary reward sizes used in laboratory and field studies could explain previous seemingly contradictory findings of positive moderating effects on small rewards (Erez & Isen, 2002) and inverse moderating PA effects (Shaw et al., 1999, 2003). We develop theory to explain the apparent contradictions: using a relatively wide range of rewards in an experimental setting, we replicate both findings and show that for high-PA individuals, reward size positively influences subjective magnitude more strongly for small-to-moderate rewards and more weakly for moderate-to-large rewards.

Additionally, we extend existing research by showing, for the first time, that PA's influence seems limited to reward evaluations from a self-perspective, but fails to affect judgments about rewards for others. Past research has generally shown that affect plays an important role in judgment and decision making (see, e.g., Clore & Huntsinger, 2007). Our results indicate that future research should consider different perspectives when examining PA's influence and affect in general.

We acknowledge that effect sizes are – although significant – rather small. However, we used an objective and thus conservative instrument by asking participants to evaluate the size of rewards. In addition, using a hypothetical scenario in which participants received no money constitutes slight manipulation. Getting significant results despite using minimal manipulation and a conservative measure underlines the importance of these effects (Prentice & Miller, 1992). Furthermore, research has shown substantial consequences of resulting pay (dis-)satisfaction as, for example, performance reductions and intentions to quit (Currall, Towler, Judge, & Kohn, 2005) and the expected conflict which may arise when employees compare their pay levels with each other (Colella, Paetzold, Zardkoohi, & Wesson, 2007). Thus, although effect sizes are comparably small within this experimental design, they probably have far-reaching consequences in organizational settings. Examining mediation models with perceptions of rewards mediating the influence of PA on these consequences seems to be fruitful for future research.

Although critics have charged that trait research is impractical, these results demonstrate limitations and suggestions for those who design pay systems. Recall that human resource managers and organizational leaders evaluate and select rewards to motivate employees and enhance performance, but meta-analytic results have shown pay satisfaction to be weakly related to pay levels (Judge, Piccolo, Podsakoff, Shaw, & Rich, 2010). Thus our research may help practitioners design better reward systems by showing that personality differences influence the relationship, that PA indeed influences individuals to perceive rewards differently. We find that high-PA individuals perceive the size of rewards for themselves to be only marginally larger than rewards going to others, but low-PA individuals perceive the size of given rewards as being significantly smaller than rewards for others. Consequently, managers should recognize that incentive systems will exert weaker motivational forces, especially for individuals low in PA. Whereas we concentrated on situations in which human resource managers design rewards for unknown others, future research should also examine situations in which individuals evaluate rewards of coworkers whom they personally know (cf. Adams, 1963).

In sum, this study underlines the importance of considering PA especially when designing reward systems. Organizations should therefore consider these findings to enhance the value of their reward systems and employee well-being and performance.

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